



## **Staff Report to the Zoning Administrator**

**Application Number: 211190**

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**Applicant:** Nick Tagas, 51 Wireless, LLC

**Agenda Date:** December 03, 2021

**Owner:** Jessie Maragoni Trustee

**Agenda Item #:** 1

**APN:** 051-441-20

**Time:** After 9:00 a.m.

**Site Address:** 2535 East Lake Avenue, Watsonville

**Project Description:** Proposal to construct a 12-foot lattice “top hat” extension on an existing PG&E tower and install new wireless communication equipment, including six new panel antennas and associated equipment on the extension and to construct an adjacent 336 square foot fenced enclosure on a concrete pad with three cabinets, two equipment H-Frames, and a diesel generator. Requires approval of a Commercial Development Permit and a Telecommunications Act Exception.

**Location:** Property located on the northwest side of East Lake Avenue approximately ½ mile northwest of the intersection of East Lake Avenue and Holohan Road (2535 East Lake Avenue).

**Permits Required:** Commercial Development Permit and Federal Telecommunications Act Exception.

**Supervisory District:** District 4 (District Supervisor: Greg Caput)

### **Staff Recommendation:**

- Determine that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- Approve Application 211190, based on the attached findings and conditions.

### **Project Setting**

The 22-acre parcel is located on the northeast side of East Lake Avenue, also known as Highway 152, and located in the CA (Commercial Agriculture) zone district. About 6 ¼ acres are developed with ornamental container plants located inside hoop houses. There is an existing single-family dwelling on the north side of the parcel and three trailers that serve as storage buildings towards the northeast corner of the parcel. Several access roads are interspersed throughout the site. Overhead utility lines cross the subject property on the south-central portion of the site from the northwest to the southeast. An existing 101-foot PG&E transmission tower is situated approximately 150 feet northwest of East Lake Avenue.

Adjacent land uses include a single-family home on a small CA zoned parcel to the northeast and a cemetery to the southwest. Behind the project site is vacant CA-zoned parcel and a portion of the Santa Cruz County Fairgrounds. Directly across East Lake Avenue is a large CA-zoned vacant parcel.

## **Project Description**

The application consists of a proposal to construct a 12-foot lattice “top hat” extension on top of the existing PG&E transmission tower and install new wireless communication equipment, including six new panel antennas with RRUs around the top hat and six RRUs below the conductors just above the existing Verizon antennas on one side. The existing height of the PG & E transmission tower is 101 feet in height. With the additional 12-foot top hat extension, the tower would be 113 feet in height.

Additionally, the applicant proposes to construct a 336 square foot fenced leased area adjacent to the tower on a concrete pad, which would contain three cabinets, two H-Frames, and a diesel generator. Removal of existing hoop houses and clearance of approximately 550 square feet of area will be required for development of the proposed 336 square foot ground equipment lease area, which would be located approximately 30 feet east from the existing tower. The equipment enclosure is proposed to be approximately eighteen feet by seventeen feet in size with a six by five-foot concrete stoop. The equipment enclosure would include three cabinets, two equipment H-frames, and a 30-kilowatt diesel generator with a 132- gallon fuel tank to be operated solely as an emergency backup source. The nearest residential structure is approximately 880 feet from the emergency power source; therefor minimal noise impacts are anticipated.

A Commercial Development Permit is required because the proposed project, to modify an existing wireless communications facility (WCF), constitutes a “substantial change in the physical dimensions” of the existing WCF, thus, the proposed project requires approval of a Level V Commercial Development Permit. The proposal is considered a substantial change because the project includes a twelve-foot extension on top of the existing transmission tower for the antenna array and the additional fenced enclosure for ground equipment needed outside the current tower site.

## **Zoning & General Plan Consistency**

### Telecommunications Act Exception

A Federal Telecommunications Act Exception is needed to allow the location of the proposed wireless communication facility (WCF) on a parcel that is zoned Commercial Agriculture (CA), which is one of the “prohibited” zone districts pursuant to Santa Cruz County Code (SCCC) section 13.10.661(B)(4) which states that WCFs cannot be constructed in “prohibited areas” except as follows:

“If a Telecommunications Act Exception is approved pursuant to SCCC 13.10.668 that allows for siting a wireless communications facility within any of the above-listed prohibited areas, then such facility shall comply with the remainder of SCCC 13.10.660 through 13.10.668, inclusive, and shall be co-located. Applicants proposing new wireless communication facilities in any of the above-listed prohibited areas must submit as part

of their application an alternatives analysis, as described in SCCC 13.10.662(C).”

This section indicates the applicant must submit with their application a minimum of two alternatives that are both technically feasible and viable that are located outside the prohibited zone district that could eliminate or substantially reduce significant gaps in the carrier’s network. If there are fewer than two such alternatives, the applicant must provide evidence establishing that fact.

The proposal is to co-locate new equipment on an existing PG&E tower where wireless communication equipment (WCF) already exists (Verizon Wireless). The applicant submitted information indicating the proposed WCF location is necessary to close a “significant gap” in the carrier’s (AT&T’s) network. Two other sites were considered, one located in the City of Watsonville at the Elks Lodge located at 1005 East Lake Avenue and the other at the Valley Catholic Church of Our Lady Help of Christians located at 2401 East Lake Avenue. The Elks Lodge was disqualified when the Watsonville City Planning Department indicated wireless facilities were not allowed in the zone district. The applicant decided to submit an application to the County proposing a 100-foot-tall wireless communication facility within a 1,600 square foot lease area at the Valley Catholic Church of Our Lady Help of Christians at 2401 East Lake Avenue. After some consideration, County Planning staff indicated that the proposal would not be supported due to the restricted zone district (PF-L), its close proximity to two schools, and the fact that a new facility would result in significant visual impacts as compared to a co-location facility, such as the one proposed. Restricted districts only allow facilities where the project will not result in significantly more visual impacts.

Of the original eleven interest letters that were sent to property owners, the only owner that responded to the letters was the owner of the Elks Lodge. Of the potential alternatives, the proposed site is the only viable and technically feasible macro cell alternative that minimizes visual impacts because it is proposed on an existing utility tower with another wireless carrier and does not require construction of a new wireless tower. Co-location of new wireless communication facilities onto existing facilities is generally encouraged if it does not create significant visual impacts. The proposed twelve-foot lattice top hat will be designed to look like an identical extension of the existing transmission tower. Six panel antennas and associated equipment will be mounted to the sides. The color of the proposed equipment will match the color of the existing transmission tower and blend with the visual character of the structure which will minimize the visual impact.

### Commercial Agriculture Findings

The applicant proposes to install a 12-foot “top hat” extension on top of the existing PG&E tower and place six panel antennas with RRUs around the top hat and six RRUs below the conductors just above the existing Verizon antennas on one side. The proposed project is a conditionally allowed use within the Commercial Agriculture zone district pursuant to SCCC section 13.10.312.

Pursuant to County Code section 13.10.314, prior to approving any use proposed to be located within the Commercial Agricultural zone district that requires a Level V permit or higher, staff is required to make special agricultural findings. These findings require staff to find that the proposed use will “enhance and support the continued operation of commercial agriculture on

the parcel and will not reduce, restrict or adversely affect agricultural resources or the economic viability of commercial agricultural operations, of the area.” Furthermore, the project is required “to remove no land from production (or potential production) if any non-farmable potential building site is available or if this is not possible, to remove as little land as possible from production.”

General Plan Policy 5.13.6 *Conditional Uses on Commercial Agricultural (CA) Zoned Lands* lists specific required conditions for proposed projects on CA zoned parcels. The following two conditions apply to the proposal: (e) “The use is sited to avoid conflicts with principal agricultural activities in the area; and (f) the use is sited to avoid, where possible, or otherwise minimize the removal of land from agricultural production.” Approximately 550 square feet of area currently developed with hoop houses will be removed for development of the proposed 336 square foot ground equipment lease area.

Approximately 6 ¼ acres of the level 22-acre parcel is currently developed with hoop houses. The on-site agricultural use is transient in that container products are constantly being picked up and moved. Any product removed to accommodate the new fenced enclosure will be re-located to another hoop house. The proposed ground equipment lease area is located approximately 30 feet from the existing PG&E transmission tower, thereby minimizing site disturbance to the area and reducing the overall footprint of the wireless lease area and reducing conflicts with the existing agricultural activity. The new equipment area is necessary, as the area within the footprint of the existing transmission tower is currently occupied with ground equipment servicing Verizon’s wireless facility.

The proposed wireless facility will establish, operate, and maintain an interoperable public safety broadband network in the immediate area, which will increase network reliability and make it easier for people to communicate. Increased cell coverage will ultimately benefit local businesses, including the commercial agricultural business at the project site.

## **Design Review**

The proposed wireless facility complies with the requirements of the County Design Review Ordinance. The proposed twelve-foot lattice top hat will be designed to look like an identical extension of the existing transmission tower. Six panel antennas and associated equipment will be mounted to the sides. The color of the proposed equipment will match the color of the existing transmission tower and blend with the visual character of the structure which will minimize the visual impact. The fenced enclosure thirty feet south of the tower will be barely visible from the East Lake Road due to the existing hoop houses adjacent to the enclosure.

## **Radio Frequency Emissions Report**

A radio frequency (RF) radiation emissions report was submitted by a qualified consulting engineer who indicated in the executive summary that the proposed operation with the existing wireless carrier will comply with the FCC guidelines limiting public exposure to RF energy. The report concludes the maximum ambient RF levels for both carriers at ground level of the proposed WCF facility is 14% of the public exposure limit. The maximum calculated cumulative level at any nearby residence is 2.3% of the public exposure limit. The maximum calculated cumulative level at any building at St. Francis Catholic School (1,950 feet southwest), and any



building at Lakeview Middle School (2,400 feet southwest), is 0.47% and 0.30% of the public exposure limit respectively.

## **Environmental Review**

Staff has determined that the proposed project is categorically exempt from the requirements of the California Environmental Quality Act (CEQA) because it qualifies as “New Construction or Conversion of Small Structures” (Class 3, Section 15303) and “Minor Alterations to Land” (Class 4, Section 15304). The CEQA Categorical Exemption form is attached as Exhibit A.

## **Conclusion**

As proposed and conditioned, the project is consistent with all applicable codes and policies of the Zoning Ordinance and General Plan/LCP. Please see Exhibit "B" ("Findings") for a complete listing of findings and evidence related to the above discussion.

## **Staff Recommendation**

- Determine that the proposal is exempt from further Environmental Review under the California Environmental Quality Act.
- **APPROVAL** of Application Number 211190, based on the attached findings and conditions.

**Supplementary reports and information referred to in this report are on file and available for viewing at the Santa Cruz County Planning Department, and are hereby made a part of the administrative record for the proposed project.**

**The County Code and General Plan, as well as hearing agendas and additional information are available online at: [www.sccoplanning.com](http://www.sccoplanning.com)**

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## **Exhibits**

- A. Categorical Exemption (CEQA determination)
- B. Findings
- C. Conditions
- D. Project plans
- E. Assessor's, Location, Zoning and General Plan Maps
- F. Parcel information
- G. Radio Frequency Emissions Report

# CALIFORNIA ENVIRONMENTAL QUALITY ACT

## NOTICE OF EXEMPTION

The Santa Cruz County Planning Department has reviewed the project described below and has determined that it is exempt from the provisions of CEQA as specified in Sections 15061 - 15332 of CEQA for the reason(s) which have been specified in this document.

Application Number: 211190

Assessor Parcel Number: 051-441-20

Project Location: 2535 E. Lake Avenue, Watsonville

**Project Description:** Proposal to construct a 12-foot top hat extension on an existing PG&E tower to include six panel antennas, RRUs, and construct a 336 square foot fenced enclosure on a concrete pad with three cabinets, two equipment H-Frames, and an emergency diesel generator.

**Person or Agency Proposing Project:** Nick Tagas, 51 Wireless

**Contact Phone Number:** (916) 990-1446

- A. ☐ The proposed activity is not a project under CEQA Guidelines Section 15378.
- B. ☐ The proposed activity is not subject to CEQA as specified under CEQA Guidelines Section 15060 (c).
- C. ☐ **Ministerial Project** involving only the use of fixed standards or objective measurements without personal judgment.
- D. ☐ **Statutory Exemption** other than a Ministerial Project (CEQA Guidelines Section 15260 to 15285).
- E. ☒ **Categorical Exemption**

Specify type: Class 3 – New Construction or Conversion of small Structures (Section 15303)  
Class 4 – Minor Alterations to Land (Section 15304)

**F. Reasons why the project is exempt:**

Construction of a wireless communication facility attached to an existing 101-foot PG&E transmission tower with ground equipment enclosure thirty feet east of the tower.

In addition, none of the conditions described in Section 15300.2 apply to this project.

\_\_\_\_\_  
Elizabeth Cramblet, Project Planner

Date:\_\_\_\_\_

**EXHIBIT A**

## **Wireless Communication Facility Use Permit Findings**

1. That the development of the proposed wireless communications facility as conditioned will not significantly affect any designated visual resources, environmentally sensitive habitat resources (as defined in the Santa Cruz County General Plan/LCP Sections 5.1, 5.10, and 8.6.6), and/or other significant County resources, including agricultural, open space, and community character resources; or there are no other environmentally equivalent and/or superior and technically feasible alternatives to the proposed wireless communications facility as conditioned (including alternative locations and/or designs) with less visual and/or other resource impacts and the proposed facility has been modified by condition and/or project design to minimize and mitigate its visual and other resource impacts.

This finding can be made in that the subject property is not located within an area that has been designated as a scenic resource in the County General Plan; therefore, the proposed wireless communication facility (WCF) will not significantly affect any designated visual resources. The proposed project would be located in a rural/agricultural area containing agricultural land uses and agriculturally related structures, including an existing utility tower. The proposed antennas would be located on a twelve-foot lattice top hat extension designed to match the existing utility tower. The color of the proposed equipment will match the color of the existing transmission tower and blend with the visual character of the structure, thereby minimizing the visual impact.

The parcel is not mapped within sensitive habitat. The proposed wireless communication facility (WCF) will be located on an existing PG&E transmission tower; therefore, it will not impact any sensitive habitat resources. There are no other environmentally equivalent and/or superior and technically feasible alternatives to the proposed co-location tower design that would result in less visual and/or other resource impacts.

2. That the site is adequate for the development of the proposed wireless communications facility and, for sites located in one of the prohibited and/or restricted areas set forth in Sections 13.10.661(b) and 13.10.661(c), that the applicant has demonstrated that there are not environmentally equivalent or superior and technically feasible: (1) alternative sites outside the prohibited and restricted areas; and/or (2) alternative designs for the proposed facility as conditioned.

This finding can be made, in that although the proposed wireless communication facility (WCF) would be located in a prohibited zone district, the Commercial Agriculture (CA) district, as listed in Section 13.10.661(B), the proposal consists of a proposal to co-locate the equipment on an existing PG&E tower where an additional WCF already exists (Verizon Wireless). The applicant submitted information indicating the proposed WCF location is necessary to close a “significant gap” in the carrier’s (AT&T’s) network. Two other sites were considered, one located in the City of Watsonville at the Elks Lodge located at 1005 East Lake Avenue and the other at the Valley Catholic Church of Our Lady Help of Christians located at 2401 East Lake Avenue. The Elks Lodge was disqualified when the Watsonville City Planning Department indicated wireless facilities were not allowed in that zone district. The applicant decided to submit an application to the County proposing a 100-foot-tall wireless communication facility within a 1,600 square foot lease area at the Valley Catholic Church of Our Lady Help of

Christians at 2401 East Lake Avenue. After some consideration, County Planning staff indicated that the proposal would not be supported due to the restricted zone district (PF-L), its close proximity to two schools, and the fact that a new facility would result in significant visual impacts as compared to a co-location facility, such as the one proposed. Restricted districts only allow facilities where the project will not result in significantly more visual impacts.

Of the original eleven interest letters that were sent to property owners, the only owner that responded to the letters was the owner of the Elks Lodge. Of the potential alternatives, the proposed site is the only viable and technically feasible macro cell alternative that minimizes visual impacts because it is proposed on an existing utility tower with another wireless carrier and does not require construction of a new wireless tower. Co-location of new wireless communication facilities onto existing facilities is generally encouraged if it does not create significant visual impacts. The proposed twelve-foot lattice top hat will be designed to look like an identical extension of the existing transmission tower. Six panel antennas and associated equipment will be mounted to the sides. The color of the proposed equipment will match the color of the existing transmission tower and blend with the visual character of the structure which will minimize the visual impact.

3. The subject property upon which the wireless communications facility is to be built is in compliance with all rules and regulations pertaining to zoning uses, subdivisions and any other applicable provisions of this title (County Code 13.10.660) and that all zoning violation abatement costs, if any, have been paid.

This finding can be made, in that the existing agricultural use and appurtenant wireless facility and associated structures comply with the requirements of the Commercial Agriculture (CA) zone district and AG (Agriculture) land use designation, and that there are no outstanding or unpaid zoning violation abatement costs.

4. The proposed wireless communication facility as conditioned will not create a hazard for aircraft in flight.

This finding can be made, in that the proposed wireless communication facility is not located within the AIA (Airport Influence Area); therefore, it does not pose a hazard for aircraft in flight.

5. The proposed wireless communication facility as conditioned is in compliance with all FCC and California PUC standards and requirements.

This finding can be made in that a radio frequency (RF) radiation emissions report was submitted by a qualified consulting engineer who indicated in the executive summary that the proposed operation with the existing wireless carrier will comply with the FCC guidelines limiting public exposure to RF energy. The report concludes the maximum ambient RF levels for both carriers at ground level of the proposed WCF facility is 14% of the public exposure limit. The maximum calculated cumulative level at any nearby residence is 2.3% of the public exposure limit. The maximum calculated cumulative level at any building at St. Francis Catholic School (1,950 feet southwest), and any building at Lakeview Middle School (2,400 feet southwest), is 0.47% and 0.30% of the public exposure limit respectively.

Application #: 211190  
APN: 051-441-20  
Owner: Jessie Maragoni Trustee

6. The proposed wireless communication facilities as conditioned are consistent with all applicable requirements of the Local Coastal Program (LCP).

N/A

## Agricultural Development Findings

1. That the establishment or maintenance of this use will enhance or support the continued operation of commercial agriculture of the parcel and will not reduce, restrict or adversely affect agricultural resources, or the economic viability of commercial agricultural operations, of the area.

This finding can be made in that approximately 6 ¼ acres of the 22-acre parcel is developed with ornamental container plants located inside hoop houses. Approximately 550 square feet of area developed with hoop houses will be removed for development of the proposed 336 square foot ground equipment lease area. The subject site is not fully developed. There is ample acreage on the parcel to relocate the removed section of hoop house to another area on the site.

The application consists of a proposal to install a 12-foot “top hat” extension on top of the existing PG&E tower and place six panel antennas with RRUs around the top hat and six RRUs below the conductors just above the existing Verizon antennas on one side. The height of the existing tower is 101 feet in height. Upon construction of the top hat extension, the height of the tower will be 113 feet in height.

The proposed wireless facility will establish, operate, and maintain an interoperable public safety broadband network in this immediate area which will increase network reliability and make it easier for people to communicate which ultimately benefits local businesses.

- 2(a). That the use or structure is ancillary, incidental or accessory to the principal agricultural use of the parcel or that no other agricultural use is feasible for the parcel; or

This finding can be made in that the proposed project is incidental to a principal permitted agricultural use in that wireless facilities are specifically called out as a conditionally allowed use within the Commercial Agriculture zone district pursuant to County Code section 13.10.312.

General Plan Policy 5.13.6 *Conditional Uses on Commercial Agricultural (CA) Zoned Lands* lists specific required conditions for proposed projects on CA zoned parcels. The following two conditions apply to the proposal: (e) “The use is sited to avoid conflicts with principal agricultural activities in the area; and (f) the use is sited to avoid, where possible, or otherwise minimize the removal of land from agricultural production.” Approximately 550 square feet of area, including removal of existing hoop house, will be cleared for development of the proposed 336 square foot ground equipment lease area. Only 6 ¼ acres of the level 22-acre parcel currently are developed with hoop houses. There is ample acreage on this parcel to relocate the removed section of hoop house to another area on the site. Since the proposed fenced lease area would be located close to the existing PG&E transmission tower, minimal site disturbance will be required, thereby reducing conflicts with the existing agricultural activity.

- 2(b). That no other agricultural use is feasible for the parcel; or

This finding does not apply to the project.

- 2(c). That the use consists of an interim public use which does not impair long-term

agricultural viability or consists of a permanent public use that will result in the production of recycled wastewater solely for agricultural irrigation and that limits and mitigates the impacts of facility construction on agriculture consistent with the requirements of SCCC 13.10.635; or

This finding does not apply to the project.

3. That single-family residential uses will be sited to minimize conflicts, and that all other uses will not conflict with commercial agricultural activities on site, where applicable, or in the area.

This finding does not apply to the proposed project since no new single-family dwellings are part of this proposal, and no changes are proposed for the existing single-family dwelling.

4. That the use will be sited to remove no land from production (or potential production) if any non-farmable potential building site is available, or if this is not possible, to remove as little land as possible from production.

This finding can be made in that the proposed project will require removal of approximately 550 square feet of area, including removal of existing hoop house, will be cleared for development of the proposed 336 square foot ground equipment lease area. Approximately 6 ¼ acres of the level 22-acre parcel currently are developed with hoop houses. The on-site agricultural use is transient in that container products are constantly being picked up and moved. Any product removed to accommodate the new fenced enclosure will be re-located to another section of the hoop house. The proposed ground equipment lease area is located approximately 30 feet from the PG&E transmission tower, which will minimize site disturbance to the area and reduce the overall footprint of the wireless site, thus reducing conflicts with the existing agricultural activity. The proposed lease area is necessary in that the lease area within the footprint of the existing transmission tower is currently occupied by ground equipment servicing Verizon's wireless facility.

## **Development Permit Findings**

1. That the proposed location of the project and the conditions under which it would be operated or maintained will not be detrimental to the health, safety, or welfare of persons residing or working in the neighborhood or the general public, and will not result in inefficient or wasteful use of energy and will not be materially injurious to properties or improvements in the vicinity.

This finding can be made, in that although the project is located in a zone district (Commercial Agriculture) that prohibits wireless communication facility (WCF) uses, a Telecommunications Act exception can be granted for the proposed use. County Code section 13.10.661(B)(4) (Exceptions to Prohibited Areas Prohibition) states a “Telecommunications Act exception is approved pursuant to County Code section 13.10.668 that allows for siting a WCF within any of the above-listed prohibited areas, then such facility shall comply with the remainder of County Code section 13.10.660 through 13.10.668, inclusive, and shall be co-located. Applicants proposing new wireless communication facilities in any of the above-listed prohibited areas must submit as part of their application an alternatives analysis, as described in SCCC 13.10.662(C).”

The proposal is to co-locate on an existing PG&E tower where an additional wireless facility already exists, (Verizon Wireless). In addition, a new 336 square foot equipment area is proposed, which would be located 30 feet from the existing tower. The property is not encumbered by physical constraints to development. Construction will comply with prevailing building technology, the California Building Code, and the County Building ordinance to ensure the optimum in safety and the conservation of energy and resources. The proposed improvements will not deprive adjacent properties or the neighborhood of light, air, or open space, in that the structure will meet all current setbacks that ensure access to these amenities.

2. That the proposed location of the project and the conditions under which it would be operated or maintained will be consistent with all pertinent County ordinances and the purpose of the zone district in which the site is located.

This finding can be made, in that the project is located in a zoning district (Commercial Agriculture) that prohibits wireless communication facility (WCF) uses unless a Telecommunications Act exception can be granted for the proposed use. WCFs cannot be constructed in “prohibited areas” except as follows (as per County Code section 13.10.661(B)(4):

“If a Telecommunications Act exception is approved pursuant to SCCC 13.10.668 that allows for siting a wireless communications facility within any of the above-listed prohibited areas, then such facility shall comply with the remainder of SCCC 13.10.660 through 13.10.668, inclusive, and shall be co-located. Applicants proposing new wireless communication facilities in any of the above-listed prohibited areas must submit as part of their application an alternatives analysis, as described in SCCC 13.10.662(C).”

The applicant submitted information indicating that the proposed WCF location is necessary to close a “significant gap” in the carrier’s (AT&T’s) network. Two other sites were considered, one located in the City of Watsonville at the Elks Lodge located at 1005 East Lake Avenue and the other at the Valley Catholic Church of Our Lady Help of Christians located at 2401 East Lake Avenue. The Elks Lodge was disqualified when the Watsonville City Planning Department



indicated wireless facilities were not allowed in that zone district. The applicant decided to submit an application to the County proposing a 100-foot-tall wireless communication facility within a 1,600 square foot lease area at the Valley Catholic Church of Our Lady Help of Christians at 2401 East Lake Avenue. After some consideration, County Planning staff indicated that the proposal would not be supported due to the restricted zone district (PF-L), its close proximity to two schools, and the fact that a new facility would result in significant visual impacts as compared to a co-location facility, such as the one proposed. Restricted districts only allow facilities where the project will not result in significantly more visual impacts.

Of the original eleven interest letters that were sent to property owners, the only owner that responded to the letters was the owner of the Elks Lodge. Of the potential alternatives, the proposed site is the only viable and technically feasible macro cell alternative that minimizes visual impacts because it is proposed on an existing utility tower with another wireless carrier and does not require construction of a new wireless tower.

3. That the proposed use is consistent with all elements of the County General Plan and with any specific plan which has been adopted for the area.

This finding can be made, in that the proposed wireless communication facility (WCF) use is consistent with the Policy 5.13.6 of the General Plan (Conditional Uses on Commercial Agricultural zoned lands) as the project is designed to minimize conflicts with existing agricultural operations and minimizes the amount of land removed for the proposed use.

The proposed WCF will not adversely impact the light, solar opportunities, air, and/or open space available to other structures or properties and meets all current site and development standards for the zone district. The proposal is to co-locate on an existing PG&E transmission tower and to construct a 336 square foot fenced enclosure on a concrete pad that will be only slightly visible from the road due to the existing hoop houses adjacent to the enclosure.

A specific plan has not been adopted for this portion of the County.

4. That the proposed use will not overload utilities, and will not generate more than the acceptable level of traffic on the streets in the vicinity.

This finding can be made, in that the proposed wireless communication facility (WCF) would be constructed on an existing 22-acre agricultural parcel. Additional traffic is not expected to be generated by the proposed WCF project, thus the project will not adversely impact existing roads or intersections in the surrounding area.

5. That the proposed project will complement and harmonize with the existing and proposed land uses in the vicinity and will be compatible with the physical design aspects, land use intensities, and dwelling unit densities of the neighborhood.

This finding can be made, in that the proposed project is located in a rural/agricultural area containing an agricultural land use and agriculturally related structures, including an existing utility tower. The proposed antennas would be located on a top hat extension of an existing utility tower and be designed to be compatible with the existing wireless communication facility (WCF) equipment on the tower and the tower itself. The proposed WCF equipment would

blend-in seamlessly. The proposed equipment enclosure, located approximately thirty (30) feet from the utility tower, would not be visible to surrounding uses because it is blocked by existing hoop houses and therefore would be compatible with the agricultural operation in use.

6. The proposed development project is consistent with the Design Standards and Guidelines (sections 13.11.070 through 13.11.076), and any other applicable requirements of this chapter.

The proposed wireless communication facility (WCF) is designed to comply with the requirements of the County Design Review Ordinance. The proposed twelve-foot lattice top hat will be designed to look like an identical extension of the existing transmission tower. Six panel antennas and associated equipment will be mounted to the sides. The color of the proposed equipment will match the color of the existing transmission tower and blend with the visual character of the structure which will minimize the visual impact. The fenced enclosure thirty feet south of the tower will be barely visible from the East Lake Road due to the existing hoop houses adjacent to the enclosure.

## Conditions of Approval

Exhibit D: Project plans, prepared by Streamline Engineering and Design, Inc, dated 8/10/21.

- I. This permit authorizes the installation of a 12-foot lattice top hat extension on an existing PG&E tower to include six panel antennas and associated equipment and construct a 336 square foot fenced enclosure on a concrete pad with three cabinets, two equipment H-Frames, and a diesel generator as indicated on the approved Exhibit "D" for this permit. This approval does not confer legal status on any existing structure(s) or existing use(s) on the subject property that are not specifically authorized by this permit. Prior to exercising any rights granted by this permit including, without limitation, any construction or site disturbance, the applicant/owner shall:
  - A. Sign, date, and return to the Planning Department one copy of the approval to indicate acceptance and agreement with the conditions thereof.
  - B. Obtain a Building Permit from the Santa Cruz County Building Official.
    1. Any outstanding balance due to the Planning Department must be paid prior to making a Building Permit application. Applications for Building Permits will not be accepted or processed while there is an outstanding balance due.
  - C. Obtain a Grading Permit from the Santa Cruz County Building Official.
  - D. Obtain an Encroachment Permit from the Department of Public Works for all off-site work performed in the County road right-of-way.
- II. Prior to issuance of a Building Permit the applicant/owner shall:
  - A. Submit final architectural plans for review and approval by the Planning Department. The final plans shall be in substantial compliance with the plans marked Exhibit "D" on file with the Planning Department. Any changes from the approved Exhibit "D" for this development permit on the plans submitted for the Building Permit must be clearly called out and labeled by standard architectural methods to indicate such changes. Any changes that are not properly called out and labeled will not be authorized by any Building Permit that is issued for the proposed development. The final plans shall include the following additional information:
    1. A copy of the text of these conditions of approval incorporated into the full-size sheets of the architectural plan set.
    2. One elevation shall indicate materials and colors as they were approved by this Discretionary Application. If specific materials and colors have not been approved with this Discretionary Application, in addition to showing the materials and colors on the elevation, the applicant shall supply a color and material sheet in 8 1/2" x 11" format for Planning Department review

and approval.

3. Final plans shall show the new location of the agricultural container crops needing to be relocated to allow for the 336 square foot fenced enclosure. Any additional removal of agricultural crops in relation to the proposed project beyond this area is prohibited.
  4. Grading, drainage, and erosion control plans.
  5. Details showing compliance with fire department requirements.
- B. Meet all requirements of and pay Zone 7 drainage fees to the County Department of Public Works, Stormwater Management. Drainage fees will be assessed on the net increase in impervious area. Following are additional conditions of approval:
- 1) Provide a completed Project Information and Threshold Determination Form (See the CDC Part 3 Appendix A).
  - 2) Project scope shall be limited to less than 500 square feet of new permanent impervious area due to the installation of the concrete pad within the lease area. As proposed, no additional impervious or semi-impervious surfacing (including expansion of baserock or paving of walkways or driveways) is permitted as part of this permit application.
  - 3) Provide a Final Stormwater Management Plan (SWP) that includes:
    - a. Existing and proposed impervious, semi-pervious, self-treating, disturbed areas.
    - b. Proposed best management practices (BMP).
    - c. Existing and proposed stormwater (drainage) patterns – including areas that drain to/through the project site.
    - d. Details on how stormwater runoff from the proposed impervious areas will be conveyed and controlled.
    - e. Details on how safe stormwater overflow will be conveyed and controlled. Safe stormwater overflow shall be incorporated into the project design and runoff shall not negatively impact neighboring properties or stormwater pathways.
    - f. Accommodation of existing upstream runoff in the project design without impact to upstream properties.
    - g. Details on source control measures to be provided to ensure that the diesel generator will not impact stormwater quality.

- h. Provide impervious area calculations. Since the project is located in Santa Cruz County Flood Control and Water Conservation District 7A, impact fees based on the net increase in permitted impervious area will be assessed based on the current Unified Fee Schedule. The project may be eligible for fee credits for existing impervious areas previously permitted or built prior to the establishment of the flood control zone. To establish credit eligibility, documentation should be submitted with the project plans. Documentation such as assessor's records, survey records, permit records, dated aerial photographs or other official records that will help establish and determine the construction date, structure/impervious area footprint, or to confirm that a permit was previously issued is acceptable. Zone 7A was established in 2005.
  - C. Obtain an Environmental Health Clearance for this project from the County Department of Environmental Health Services. Prior to operation, a Hazardous Materials (HM) Permit shall be required for fuel stored on property. Must submit a complete Hazardous Material Business Plan through CERS within 30 days of start of operation. Contact the Environmental Health HM program at (831) 454-2022.
  - D. Meet all requirements of the Environmental Planning section of the Planning Department.
  - E. Meet all requirements and pay any applicable plan check fee of the Pajaro Valley Fire Protection District.
  - F. Provide required off-street parking for one (1) car. Parking spaces must be 8.5 feet wide by 18 feet long and must be located entirely outside vehicular rights-of-way. Parking must be clearly designated on the plot plan.
- III. All construction shall be performed according to the approved plans for the Building Permit. Prior to final building inspection, the applicant/owner must meet the following conditions:
  - A. All site improvements shown on the final approved Building Permit plans shall be installed.
  - B. All inspections required by the building permit shall be completed to the satisfaction of the County Building Official.
  - C. The project must comply with all recommendations of the approved soils reports.
  - D. Pursuant to Sections 16.40.040 and 16.42.080 of the County Code, if at any time during site preparation, excavation, or other ground disturbance associated with this development, any artifact or other evidence of an historic archaeological resource or a Native American cultural site is discovered, the responsible persons shall immediately cease and desist from all further site excavation and notify the

Sheriff-Coroner if the discovery contains human remains, or the Planning Director if the discovery contains no human remains. The procedures established in Sections 16.40.040 and 16.42.080, shall be observed.

#### IV. Operational Conditions

- A. In the event that future County inspections of the subject property disclose noncompliance with any Conditions of this approval or any violation of the County Code, the owner shall pay to the County the full cost of such County inspections, including any follow-up inspections and/or necessary enforcement actions, up to and including permit revocation.
- B. The exterior finish and materials of the wireless communication facility must be maintained on an annual basis to continue to blend with the existing utilities infrastructure. Additional paint and/or replacement materials shall be installed as necessary to blend the wireless communication facility with the existing utilities infrastructure.
- C. All replacement antennas and other equipment mounted on the tower shall comply with the maximum height as set out in II.A.2 (above) unless the increased height is approved subject to a Variance.
- D. All maintenance activities associated with the WCF, including tests to the generator, shall be between the hours of 8:00 am to 5:00 pm weekdays and shall not occur on any holiday.

#### V. Indemnification

The applicant/owner shall indemnify, defend with counsel approved by the COUNTY, and hold harmless the COUNTY, its officers, employees, and agents from and against any claim (including reasonable attorney's fees, expert fees, and all other costs and fees of litigation), against the COUNTY, its officers, employees, and agents arising out of or in connection to this development approval or any subsequent amendment of this development approval which is requested by the applicant/owner, regardless of the COUNTY's passive negligence, but excepting such loss or damage which is caused by the sole active negligence or willful misconduct of the COUNTY. Should the COUNTY in its sole discretion find the applicant's/owner's legal counsel unacceptable, then the applicant/owner shall reimburse the COUNTY its costs of defense, including without limitation reasonable attorney's fees, expert fees, and all other costs and fees of litigation. The applicant/owner shall promptly pay any final judgment rendered against the COUNTY (and its officers, employees, and agents) covered by this indemnity obligation. It is expressly understood and agreed that the foregoing provisions are intended to be as broad and inclusive as is permitted by the law of the State of California and will survive termination of this development approval.

- A. The COUNTY shall promptly notify the applicant/owner of any claim, action, or

proceeding against which the COUNTY seeks to be defended, indemnified, or held harmless. The COUNTY shall cooperate fully in such defense.

- B. Nothing contained herein shall prohibit the COUNTY from participating in the defense of any claim, action, or proceeding if both of the following occur:
1. COUNTY bears its own attorney's fees and costs; and
  2. COUNTY defends the action in good faith.
- C. Settlement. The applicant/owner shall not be required to pay or perform any settlement unless such applicant/owner has approved the settlement. When representing the COUNTY, the applicant/owner shall not enter into any stipulation or settlement modifying or affecting the interpretation or validity of any of the terms or conditions of the development approval without the prior written consent of the COUNTY.
- D. Successors Bound. The “applicant/owner” shall include the applicant and/or the owner and the successor’(s) in interest, transferee(s), and assign(s) of the applicant and/or the owner.

---

Minor variations to this permit which do not affect the overall concept or density may be approved by the Planning Director at the request of the applicant or staff in accordance with Chapter 18.10 of the County Code.

**Please note: This permit expires three years from the effective date listed below unless a building permit (or permits) is obtained for the primary structure described in the development permit (does not include demolition, temporary power pole or other site preparation permits, or accessory structures unless these are the primary subject of the development permit). Failure to exercise the building permit and to complete all of the construction under the building permit, resulting in the expiration of the building permit, will void the development permit, unless there are special circumstances as determined by the Planning Director.**

Approval Date: \_\_\_\_\_

Effective Date: \_\_\_\_\_

Expiration Date: \_\_\_\_\_

\_\_\_\_\_  
Jocelyn Drake  
Deputy Zoning Administrator

---

Appeals: Any property owner, or other person aggrieved, or any other person whose interests are adversely affected by any act or determination of the Zoning Administrator, may appeal the act or determination to the Planning Commission in accordance with chapter 18.10 of the Santa Cruz County Code.





MARTINELLI

2535 E LAKE AVE

WATSONVILLE, CA 95076

CCL04676

FA LOCATION#: 14494881

USID#: 297973

PACE ID#: MRSFR072553

PTN#: 3701A0VRTV

PACE ID#: MRSFR072578

PTN#: 3701A0VRWK

PACE ID#: MRSFR072539

PTN#: 3701A0VRTR

PACE ID#: MRSFR072575

PTN#: 3701A0VRXR

PACE ID#: MRSFR072538


PTN#: 3701A0VRTC

PACE ID#: MRSFR046902

PTN#: 3701AFBNH

RFDS VER#: 1:00\_03/12/2020

RFDS ID: 4255751

PROJECT DESCRIPTION	VICINITY MAP	CODE COMPLIANCE
<div><div>A (P) AT&amp;T UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF INSTALLING:</div><div><ul style="list-style-type: none"><li>(P) AT&amp;T 336 SQ. FT. FENCED LICENSE AREA W/ CONCRETE SLAB</li><li>(P) 12'-0" TOP HAT ON (E) PG&amp;E TOWER</li><li>(6) (P) ANTENNAS ON (E) PG&amp;E LATTICE TOWER</li><li>(12) (P) RRUS UNITS @ ANTENNAS, (6) RRUS UNITS BELOW CONDUCTORS</li><li>(3) (P) SURGE SUPPRESSORS BELOW CONDUCTORS</li><li>(3) (P) FIBER CABLES &amp; (9) (P) DC POWERCABLES</li><li>(P) GPS ANTENNA</li><li>(P) DC POWER/BATTERY CABINET</li><li>(P) BATTERY CABINETS</li><li>(2) (P) PURCELL CABINETS</li><li>30KW DIESEL GENERATOR ON (P) 132 GALLON UL 2085 RATED FUEL TANK</li></ul></div></div>		<p>ALL WORK &amp; MATERIALS SHALL BE PERFORMED &amp; INSTALLED IN ACCORDANCE WITH THE CURRENT EDITIONS OF THE FOLLOWING CODES AS ADOPTED BY THE LOCAL GOVERNING AUTHORITIES. NOTHING IN THESE PLANS IS TO BE CONSTRUED TO PERMIT WORK NOT CONFORMING TO THESE CODES:</p> <p>2019 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R. 2019 CALIFORNIA BUILDING CODE (CBC), PART 2, VOLUME 1&amp;2, TITLE 24 C.C.R. (2018 INTERNATIONAL BUILDING CODE AND 2019 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R. (2017 NATIONAL ELECTRICAL CODE AND 2019 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R. (2018 INTERNATIONAL MECHANICAL CODE AND 2019 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA PLUMBING CODE (GPC), PART 5, TITLE 24 C.C.R. (2018 UNIFORM PLUMBING CODE AND 2019 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA FIRE CODE, PART 6, TITLE 24 C.C.R. (2018 INTERNATIONAL FIRE CODE AND 2019 CALIFORNIA AMENDMENTS) 2019 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R. 2019 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R. ANSI/ISA-TIA-222-H</p> <p>ALONG WITH ANY OTHER APPLICABLE LOCAL &amp; STATE LAWS AND REGULATIONS</p> <p><u>DISABLED ACCESS REQUIREMENTS</u></p> <p>THIS FACILITY IS UNMANNED &amp; NOT FOR HUMAN HABITATION. DISABLED ACCESS &amp; REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA STATE BUILDING CODE, TITLE 24 PART 2, SECTION 11B-203.5</p>
PROJECT INFORMATION	<div><div>DRIVING DIRECTIONS</div><div><div>FROM: 5001 EXECUTIVE PARKWAY, SAN RAMON, CA 94583</div><div>TO: 2535 LAKE AVENUE, WATSONVILLE, CA 95076</div><div><div><div>1. DEPART TOWARD SUNSET DR</div><div>2. KEEP STRAIGHT ONTO SUNSET DR</div><div>3. TURN RIGHT ONTO BOLLINGER CANYON RD</div><div>4. TAKE RAMP RIGHT FOR I-680 SOUTH TOWARD SAN JOSE</div><div>5. TAKE RAMP RIGHT FOR US-101 TOWARD LOS ANGELES</div><div>6. AT EXIT 365, TAKE RAMP RIGHT AND FOLLOW SIGNS FOR TENNANT AVE</div><div>7. TURN RIGHT ONTO TENNANT AVE</div><div>8. TURN LEFT ONTO BUTTERFIELD BLVD</div><div>9. KEEP STRAIGHT ONTO WATSONVILLE RD</div><div>10. TURN RIGHT ONTO CA-152 / HECKER PASS RD</div><div>11. ARRIVE AT CA-152 / E LAKE AVE</div></div><div><div>0.1 MI</div><div>0.1 MI</div><div>0.3 MI</div><div>34.0 MI</div><div>20.4 MI</div><div>0.4 MI</div><div>0.2 MI</div><div>0.7 MI</div><div>7.4 MI</div><div>10.4 MI</div></div><div><div>END AT: 2535 LAKE AVENUE, WATSONVILLE, CA 95076</div><div>ESTIMATED TIME: 1 HOUR 18 MINUTES</div><div>ESTIMATED DISTANCE: 74 MILES</div></div></div></div></div>	

SITE NAME:	MARTINELLI	SITE #:	CCL04676
COUNTY:	SANTA CRUZ	JURISDICTION:	SANTA CRUZ COUNTY
APN:	051-441-20-000	POWER:	PG&E
SITE ADDRESS:	2535 E LAKE AVE WATSONVILLE, CA 95076	FIBER:	AT&T
CURRENT ZONING:	CA- COMMERCIAL AGRICULTURE	LATITUDE:	N 36° 56' 43.98" NAD 83
CONSTRUCTION TYPE:	I-B	LONGITUDE:	W 121° 44' 16.00" NAD 83
OCCUPANCY TYPE:	U, (UNMANNED COMMUNICATIONS FACILITY)	AMSL:	±86.5
PROPERTY OWNER:	MARAGONI FAMILY TRUST 4358 S DEL REY AVE DEL REY, CA 93616		
APPLICANT:	AT&T 5001 EXECUTIVE PARKWAY SAN RAMON, CA 94583		
SITE ACQUISITION COMPANY:	EPIC WIRELESS 605 COOLIDGE DR, SUITE 100 FOLSOM, CA 95630		
LEASING CONTACT:	ATTN: NICK TAGAS EMAIL: NICK.TAGAS@51WIRELESS.NET (916) 990-1446		
ZONING CONTACT:	ATTN: NICK TAGAS EMAIL: NICK.TAGAS@51WIRELESS.NET (916) 990-1446		
RF ENGINEER:	ATTN: HARPREET SINGH HS357S@ATTI.COM		
CONSTRUCTION CONTACT:	BECHTEL ATTN: KEITH CONNER EMAIL: GKONNER@BECHTEL.COM (480) 306-3801		

FA LOCATION#: 14494881

USID#: 297973

PACE ID#: MRSFR072553

PTN#: 3701A0VRTV

PACE ID#: MRSFR072578

PTN#: 3701A0VRWK

PACE ID#: MRSFR072539

PTN#: 3701A0VRTR

PACE ID#: MRSFR072575

PTN#: 3701A0VRXR

PACE ID#: MRSFR072538

PTN#: 3701A0VRTC

PACE ID#: MRSFR046902

PTN#: 3701AFBNH

RFDS VER#: 1:00\_03/12/2020

RFDS ID: 4255751


MARTINELLI

CCL04676

2535 E LAKE AVE

WATSONVILLE, CA 95076

ISSUE STATUS			
Δ	DATE	DESCRIPTION	BY
	07/04/21	ZD 90%	ISAD
	07/07/21	CLIENT REV	ISAD
	07/27/21	ZD 100%	D.G.
	02/17/21	CLIENT REV	D.G.
Δ	07/22/21	PLAN COMMENTS	C.T.C
Δ	08/10/21	PLAN COMMENTS	C.T.C
DRAWN BY: S. DANIELS			
CHECKED BY: S. SAVIG			
APPROVED BY: -			
DATE: 07/22/2021			



8445 Sierra College Blvd, Suite E Granite Bay, CA 95746

Contact: Kevin Sorensen Phone: 916-660-1930

E-Mail: [Kevin@streamlineeng.com](mailto:Kevin@streamlineeng.com) Fax: 916-660-1941

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PRELIMINARY:  
NOT FOR  
CONSTRUCTION

KEVIN R. SORENSEN  
S4469



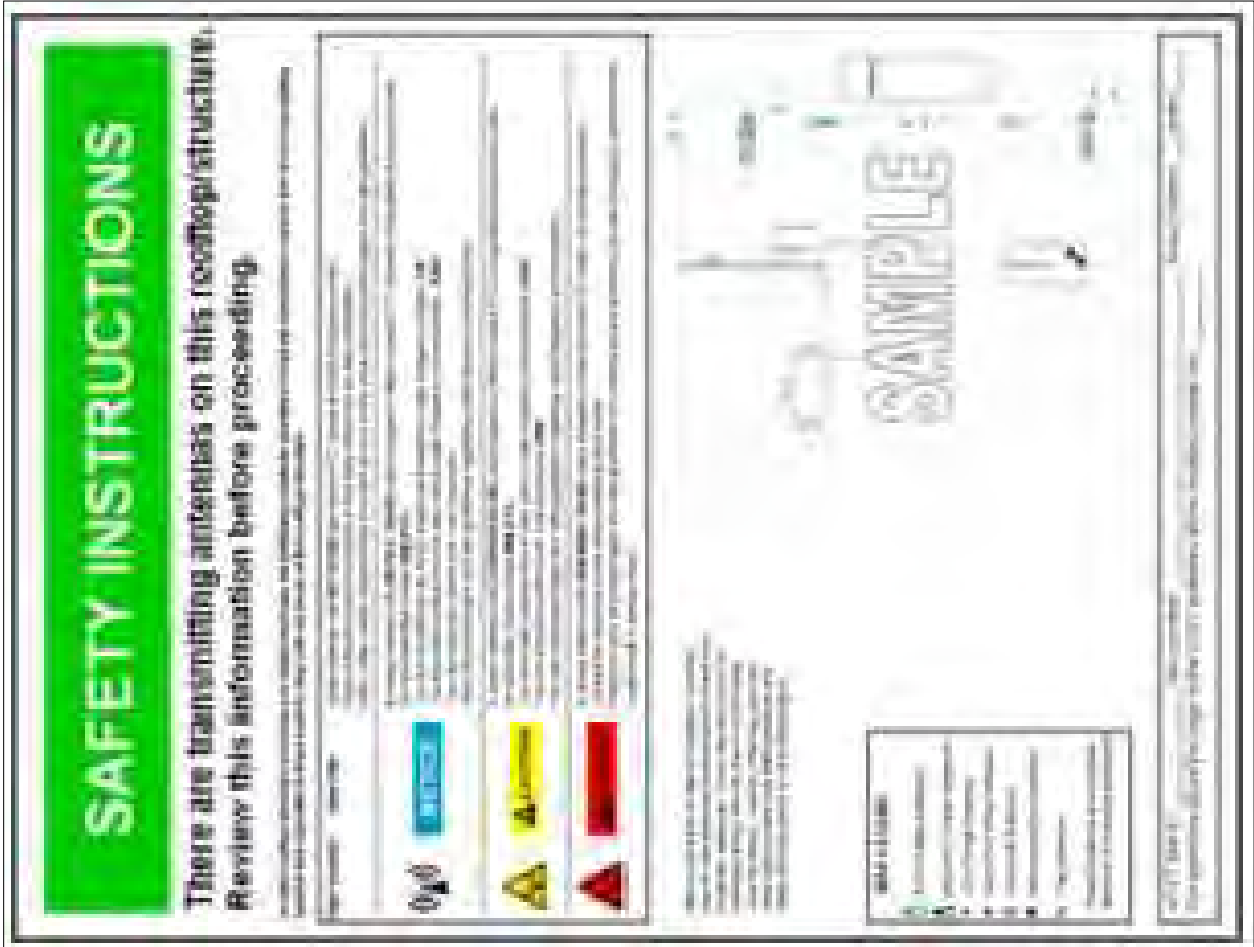


5001 EXECUTIVE PARKWAY

SAN RAMON, CA 94583

SHEET TITLE:
TITLE SHEET
SHEET NUMBER:
T-1





1 SAFETY INSTRUCTIONS SIGN



2 NOTICE SIGN

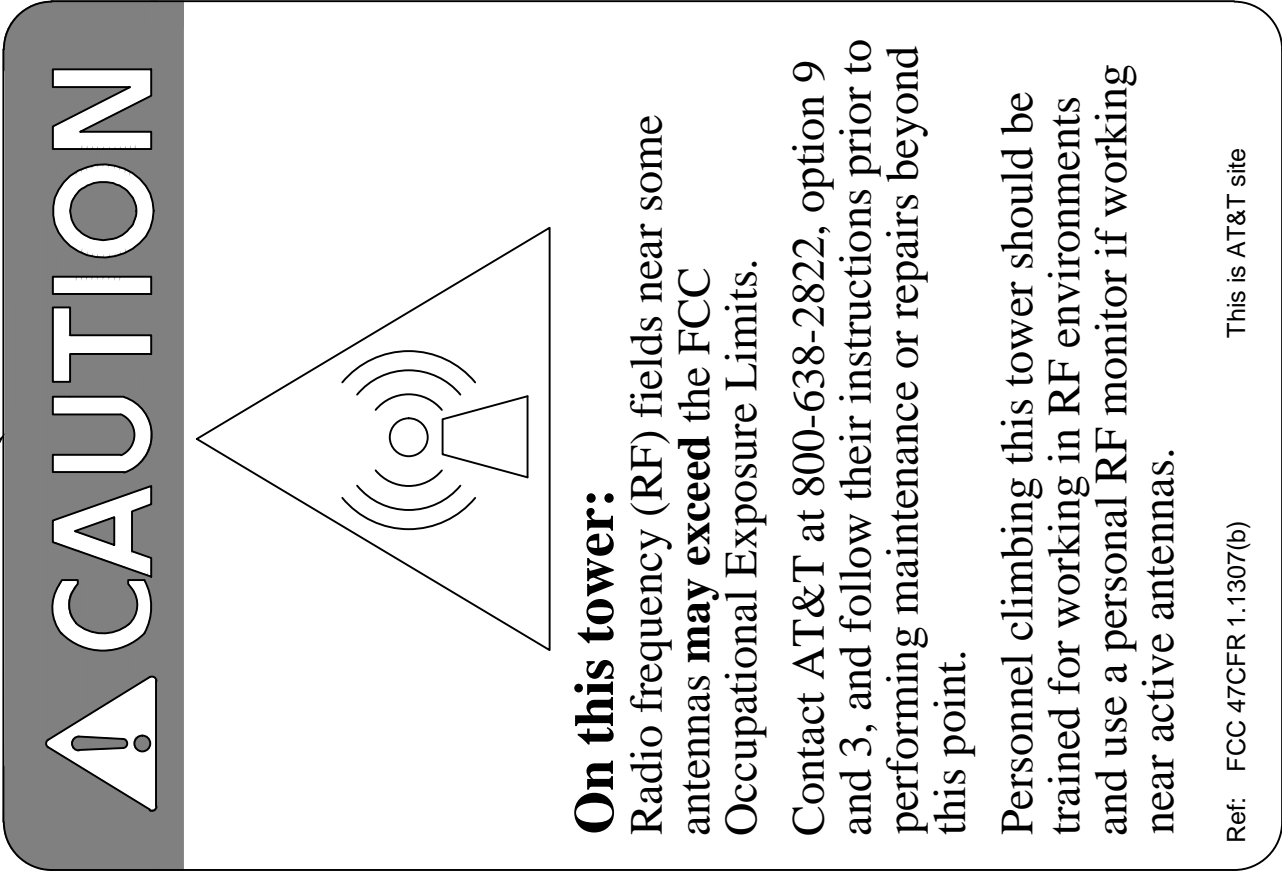
USE CAUTION SIGN 2B TOWER  
8'X12' AT EYE LEVEL AT THE  
BASE OF THE TOWER



4 WARNING SIGN



3 CAUTION SIGN



5 TYPICAL CAUTION SIGN 2B

MARTINELLI

CCL04676  
2535 E LAKE AVE  
WATSONVILLE, CA 95076

ISSUE STATUS			
Δ	DATE	DESCRIPTION	BY
	07/04/21	ZD 90%	S.A.D.
	07/07/21	CLIENT REV	S.A.D.
	07/27/21	ZD 100%	D.G.
	02/17/21	CLIENT REV	D.G.
Δ	07/22/21	PLAN COMMENTS	C.T.C
Δ	08/10/21	PLAN COMMENTS	C.T.C
DRAWN BY: S. DANIELS			
CHECKED BY: S. SAVIG			
APPROVED BY: -			
DATE: 07/22/2021			



Streamline Engineering  
and Design, Inc.

8445 Sierra College Blvd, Suite E Granite Bay, CA 95746  
Contact: Kevin Sorensen Phone: 916-660-1930  
E-Mail: kevin@streamlineengineering.com Fax: 916-660-1941

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PRELIMINARY:  
NOT FOR  
CONSTRUCTION

KEVIN R. SORENSEN  
S4469



at&t

5001 EXECUTIVE PARKWAY  
SAN RAMON, CA 94583

SHEET TITLE:
RF SIGNAGE
SHEET NUMBER:
T-2

DATE OF SURVEY: 11-24-20

SURVEYED BY OR UNDER DIRECTION OF: KENNETH D. GEIL,  
R.C.E. 14803  
LOCATED IN THE COUNTY OF SANTA CRUZ, STATE OF  
CALIFORNIA

BEARINGS SHOWN ARE BASED UPON MONUMENTS FOUND AND  
RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY.  
ELEVATIONS SHOWN ON THIS PLAN ARE BASED UPON U.S.G.S.  
N.A.V.D. 88 DATUM, ABOVE MEAN SEA LEVEL.

N.G.V.D. 1929 CORRECTION: SUBTRACT 2.87' FROM ELEVATIONS  
SHOWN.

CONTOUR INTERVAL: N/A

CONTRACTOR IS RESPONSIBLE TO VERIFY LEASE AREA PRIOR TO  
CONSTRUCTION.

ASSESSOR'S PARCEL NUMBER: 051-441-20-000

OWNER(S):

JESSIE MARICONI  
4358 S DEL REY AVE  
DEL REY, CA 93616

BOUNDARY SHOWN IS BASED ON MONUMENTATION FOUND AND  
RECORD INFORMATION. THIS IS NOT A BOUNDARY SURVEY. THIS  
PLAN SHOWS ONLY THE MONUMENTS FOUND AND THE LINES  
AND EASEMENTS BEING GRAPHICALLY DEPICTED. BASED ON  
INFORMATION GATHERED FROM VARIOUS SOURCES OF RECORD  
AND AVAILABLE MONUMENTATION FOUND DURING THE FIELD  
SURVEY. NO EASEMENTS WERE RESEARCHED OR PLOTTED.  
PROPERTY LINES AND LINES OF TITLE WERE NOT INVESTIGATED  
NOR SURVEYED. NO PROPERTY MONUMENTS WERE SET.

Geil Engineering  
Engineering \* Surveying \* Planning  
1226 High Street  
Auburn, California 95603-5015  
Phone: (530) 885-0426 \* Fax: (530) 823-1309

A.T.& T. Mobility

Project No./Name: CCL04676 / Martinelli

Project Site Location: 2635 E. Lake Avenue  
Watsonville, CA 95076  
Santa Cruz County

Date of Observation: 11-24-20

Equipment/Procedure Used to Obtain Coordinates: Trimble Pathfinder  
Pro XL post processed with Pathfinder Office software.

Type of Antenna Mount: PG&E Tower

Coordinates : N 36° 56' 43.98" (NAD83) N 36° 56' 44.15" (NAD27)

Latitude: N 36° 56' 44.1" 16.00" (NAD83) W 121° 44' 12.05" (NAD27)

Longitude: W 121° 44' 16.00" (NAD83) W 121° 44' 12.05" (NAD27)

ELEVATION of Ground at Structure (NAD83) 99.1' AMSL

STRUCTURE HEIGHT (Top of Tower) 101.1' AGL

OVERALL HEIGHT (Top of Tower) 101.1' AGL

CERTIFICATION: I, the undersigned, do hereby certify elevation listed

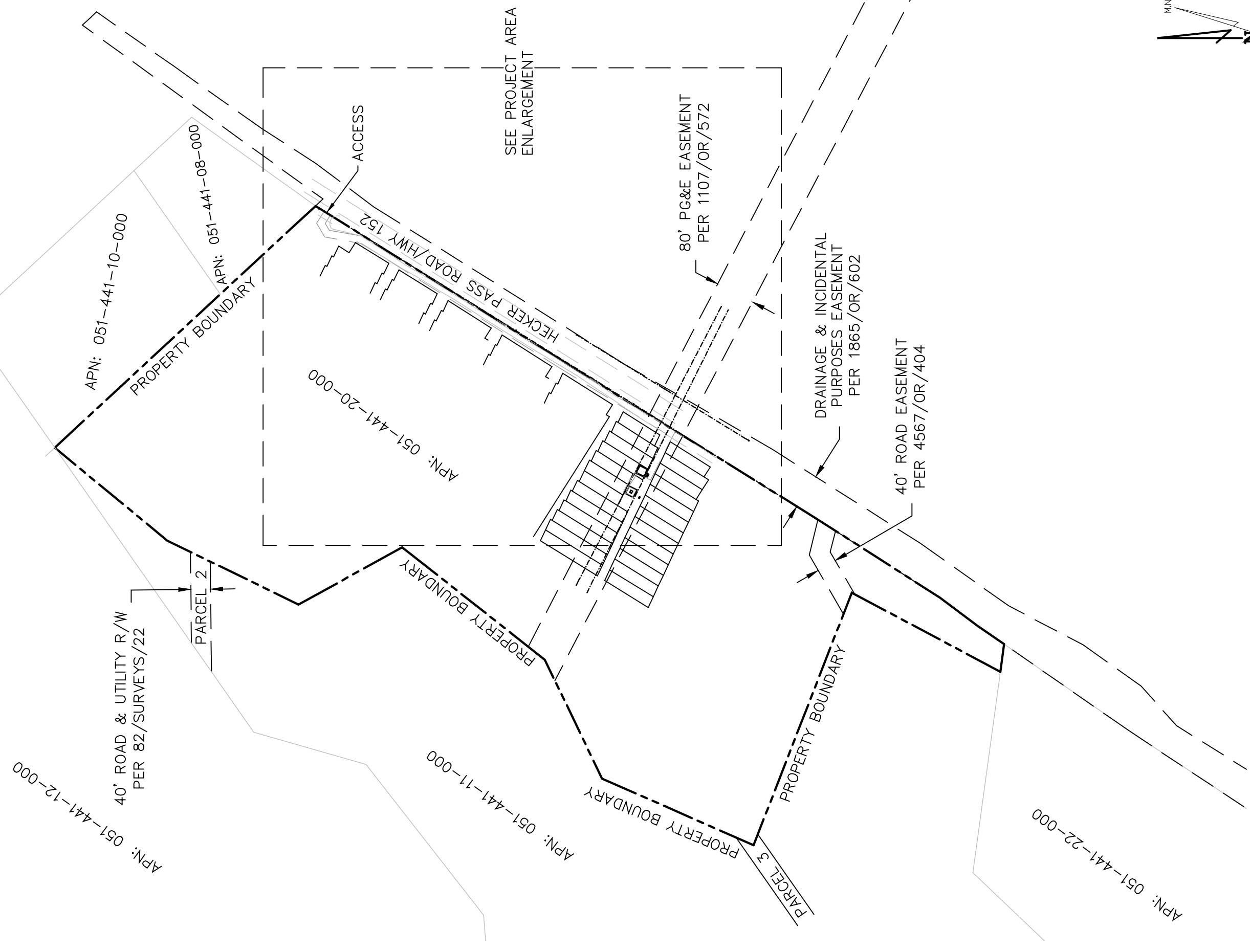
above is based on a field survey done under my supervision and that

the accuracy of these elevations meets or exceeds F.A.A. Standards as

defined in F.A.A. Order of Class 3470.1. I certify that they are

true and accurate to the best of my knowledge and belief.

Kenneth D. Geil California RCE 14803



SCALE 1" = 200'

OVERALL SITE PLAN

#### License Area Description

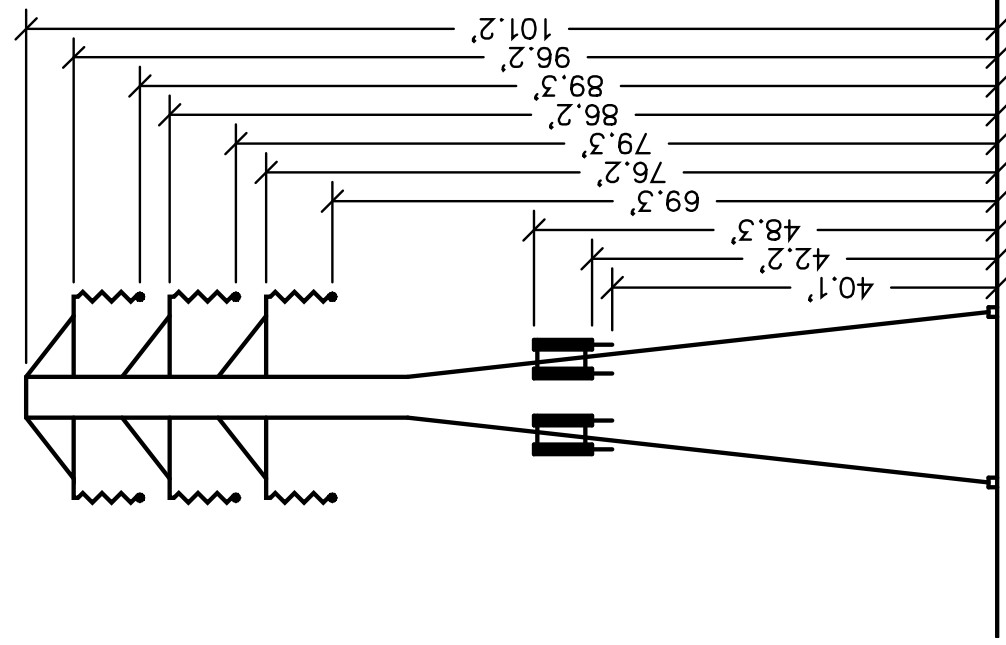
All that certain license area being a portion of that certain parcel of land described in Document No. 2009-0002617, Official Records of Santa Cruz County, State of California, being more particularly described as follows:

Commencing at a 1" Steel Bar set for the Southeast corner of the above referenced parcel, said parcel and Steel Bar also being shown on that certain Record of Survey filed for record at Volume 81 of Maps at Page 32, Official Records, from which a 1" pipe w/ DOT Cap as is shown on that certain Record of Survey filed for record at Volume 61 of Maps at Page 19 bears North 35°37'37" East 304.00 feet; thence from said point of commencement South 38°39'57" West 845.13 feet to the True Point of Beginning; thence from said point of beginning South 27°01'11" West 18.00 feet; thence North 62°58'49" West 8.50 feet; thence South 27°01'11" West 6.00 feet; thence North 62°58'49" West 5.00 feet; thence North 27°01'11" East 6.00 feet; thence North 62°58'49" West 3.50 feet; thence North 27°01'11" East 18.00 feet; thence South 62°58'49" East 17.00 feet to the point of beginning.

Also together with a non-exclusive route for access and utility purposes fifteen feet in width, the centerline of which is described as follows: beginning at a point which bears South 27°01'11" West 26.50 feet from the most Northernly corner of the above described license area and running thence South 62°58'49" East 105.16 feet; thence North 31°48'48" East 93.96 feet to a point hereafter defined as Point "A"; thence East-trending North 31°48'48" East 166.65 feet; thence North 32°08'08" East 478.13 feet; thence North 09°53'51" East 74.12 feet; thence North 59°38'01" East 24.63 feet; thence South 57°51'52" East 24.18 feet more or less to the public right-of-way more commonly known as Hecker Pass Road or Highway 152.

Also together with a non-exclusive route for utility purposes six feet in width, the centerline of which is described as follows: beginning at Point "A" as previously defined and running thence South 58°11'12" East 9.2 feet more or less to the existing utility pole.

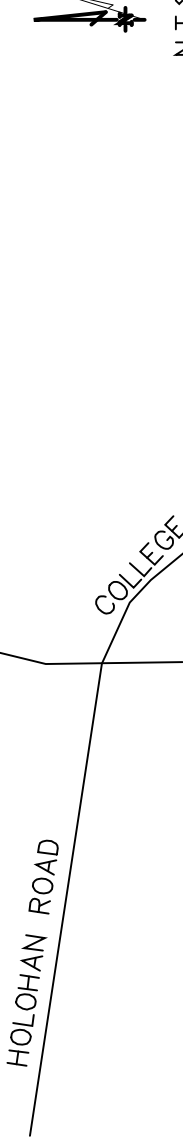
Also together with a non-exclusive route for utility purposes five feet in width, the centerline of which is described as follows: beginning at a point which bears South 27°01'11" West 0.49 feet from the most Northernly corner of the above described license area and running thence North 56°58'16" West 28.60 feet; thence North 62°58'49" West 19.35 feet more or less to the existing utility tower; thence up, over, and upon said tower as is necessary to install, operate, and maintain the necessary communications equipment.



#### TOWER DIAGRAM

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**WATSONVILLE, CA**



#### VICINITY MAP

GEIL ENGINEERING  
1226 HIGH STREET  
AUBURN, CALIFORNIA 95603  
Phone: (530) 885-0426  
Fax: (530) 823-1309

Surveyor

A&C

RE

RF

INT

EE\N

OPS

DEPT

APPROVED

DATE

at&t  
MOBILITY

CCL04676  
MARTINELLI  
2635 E. LAKE AVENUE  
WATSONVILLE, CA 95076  
SITE TOPOGRAPHY  
PLOT PLAN AND

REV	REVISIONS
11-27-20	N. ROLHE
02-26-21	N. ROLHE
02-26-21	LICENSE AREA MOD.
02-26-21	LICENSE AREA MOD.
02-26-21	LICENSE AREA MOD.
02-26-21	LICENSE AREA MOD.
02-26-21	LICENSE AREA MOD.
02-26-21	LICENSE AREA MOD.
02-26-21	LICENSE AREA MOD.
02-26-21	LICENSE AREA MOD.

Sheet  
C-1  
SCALE 1" = 10'  
0 10 20 30  
N

LICENSE AREA ENLARGEMENT





**CCL04676**  
2535 E LAKE AVE  
WATSONVILLE, CA 9507

ISSUE STATUS			
Δ	DATE	DESCRIPTION	BY
	01/04/21	ZD 90%	S.A.D.
	01/07/21	CLIENT REV	S.A.D.
	01/27/21	ZD 100%	D.G.
	02/17/21	CLIENT REV	D.G.
⚠	07/22/21	PLAN COMMENTS	C.T.C
⚠	08/10/21	PLAN COMMENTS	C.T.C
DRAWN BY:		S. DANIELS	
CHECKED BY:		S. SAVIG	
APPROVED BY:		-	
DATE:		07/22/2021	

**Streamline Engineering**  
**and Design, Inc.**  
8445 Sierra College Blvd., Suite E Cranite Bay, CA 95746  
Contact: Kevin Sorensen Phone: 916-660-1930  
E-Mail: [kevin@streamlineinc.com](mailto:kevin@streamlineinc.com) Fax: 916-660-1941

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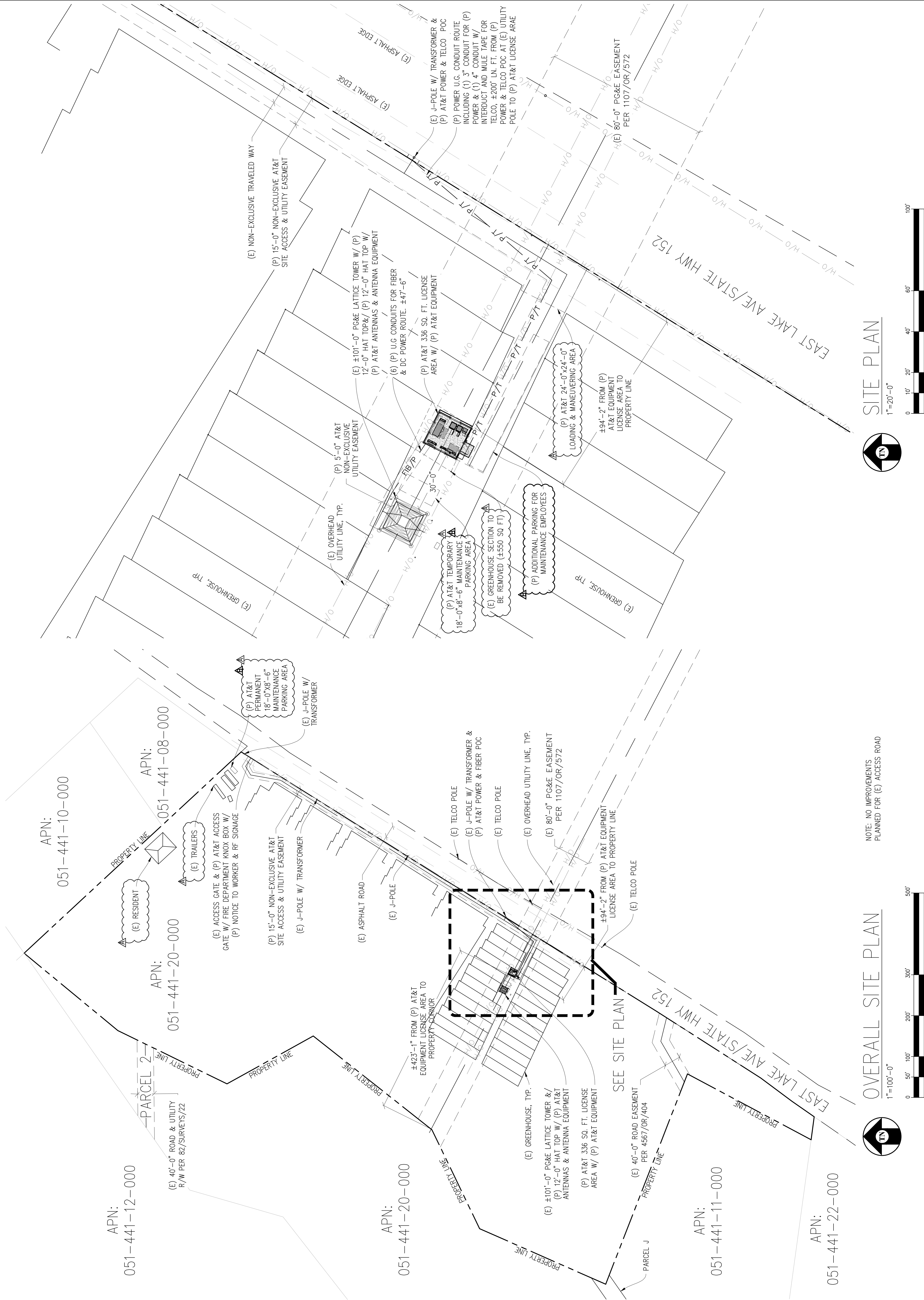
PRELIMINARY:  
NOT FOR  
CONSTRUCTION

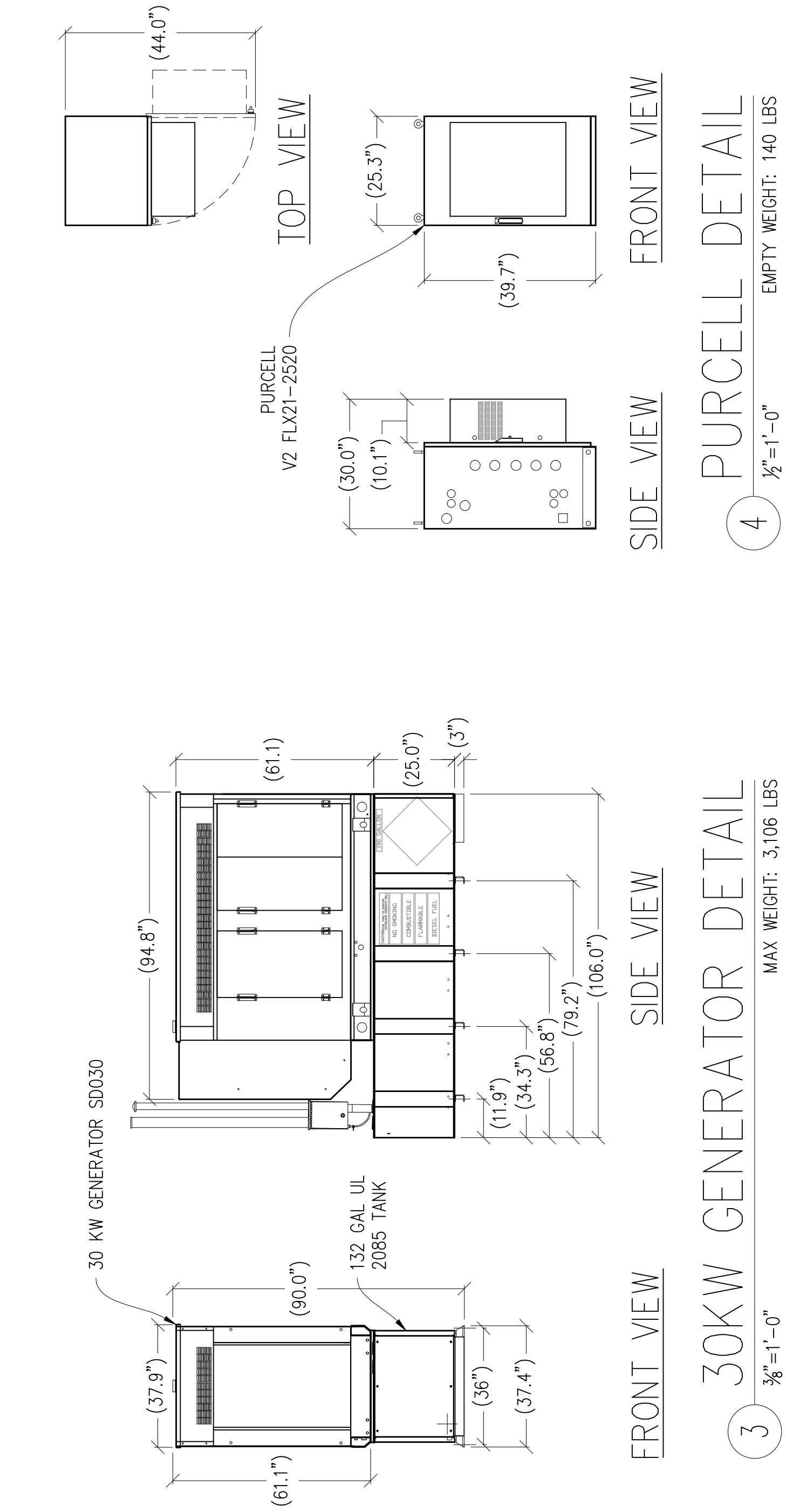
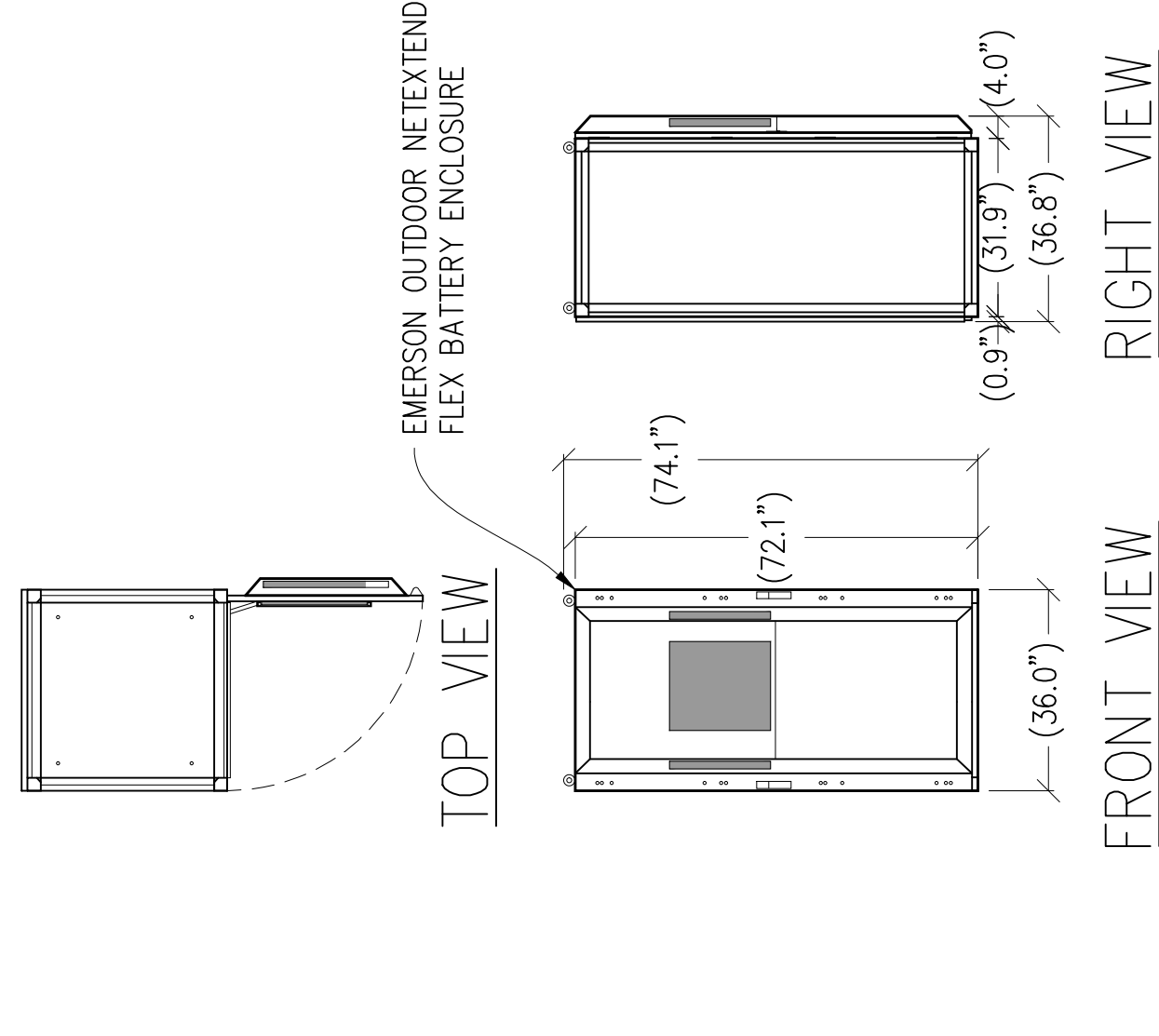
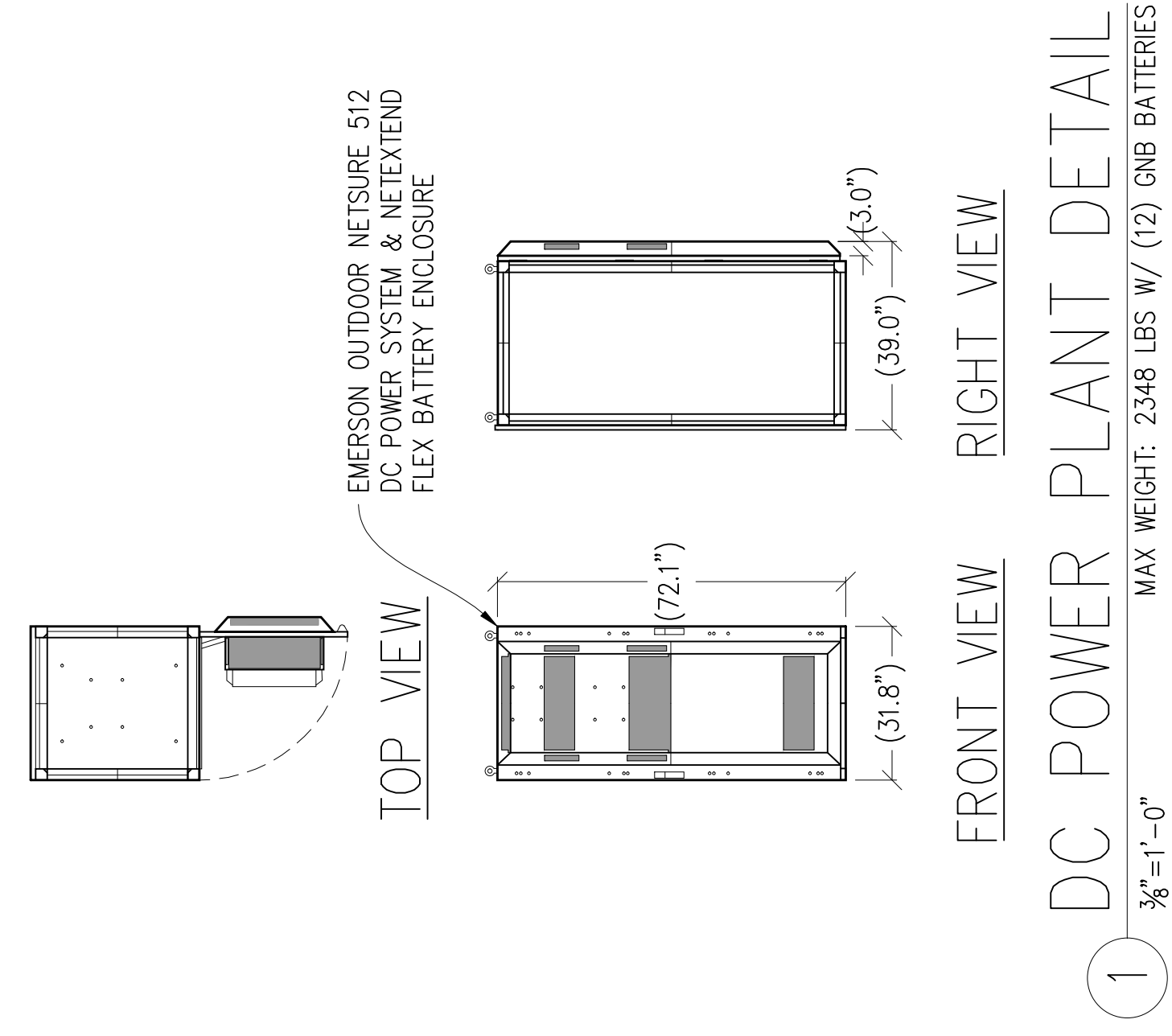
KEVIN R. SORENSEN  
S4469



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SHEET TITLE:  
OVERALL SITE PLAN  
& SITE PLAN  
SHEET NUMBER:  
A-1



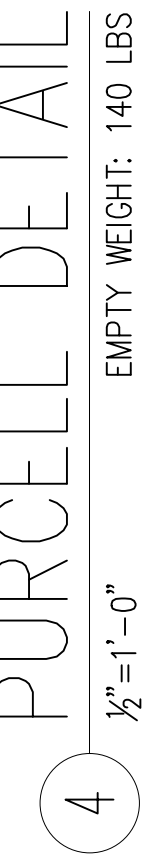
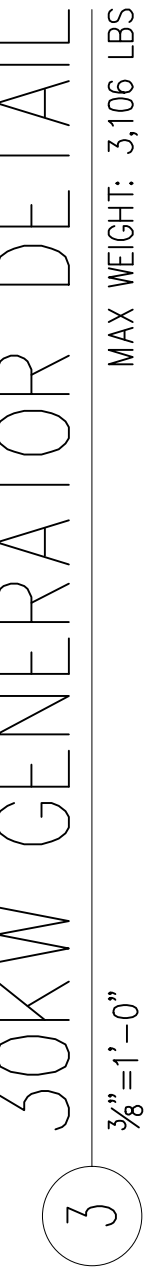
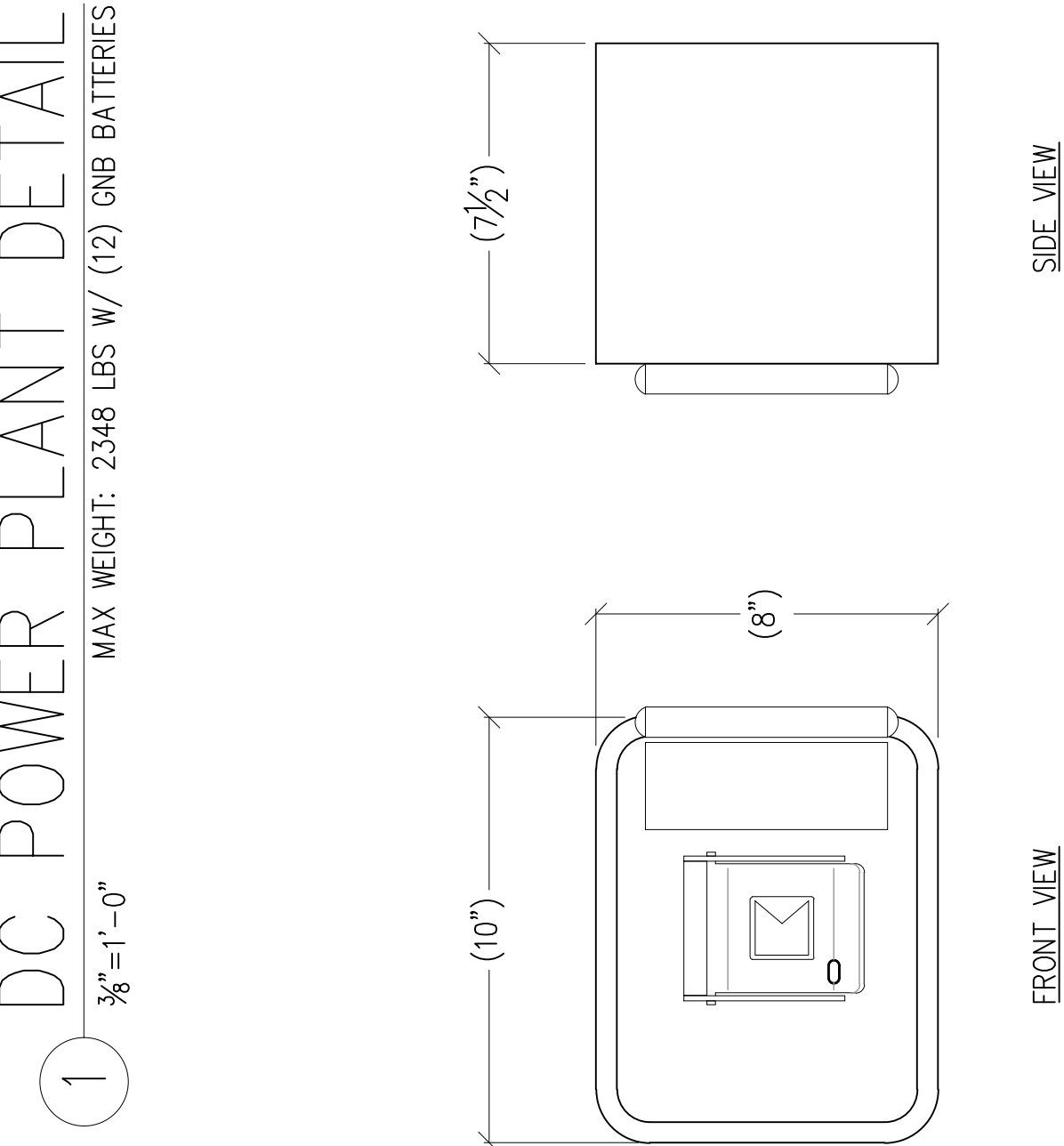


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WATSONVILLE, CA 95076

ISSUE STATUS			
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	07/27/21	ZD 100%	D.G.
	02/17/21	CLIENT REV	D.G.
Δ	07/22/21	PLAN COMMENTS	C.T.C.
Δ	08/10/21	PLAN COMMENTS	C.T.C.
DRAWN BY: S. DANIELS			
CHECKED BY: S. SAMG			
APPROVED BY: -			
DATE: 07/22/2021			



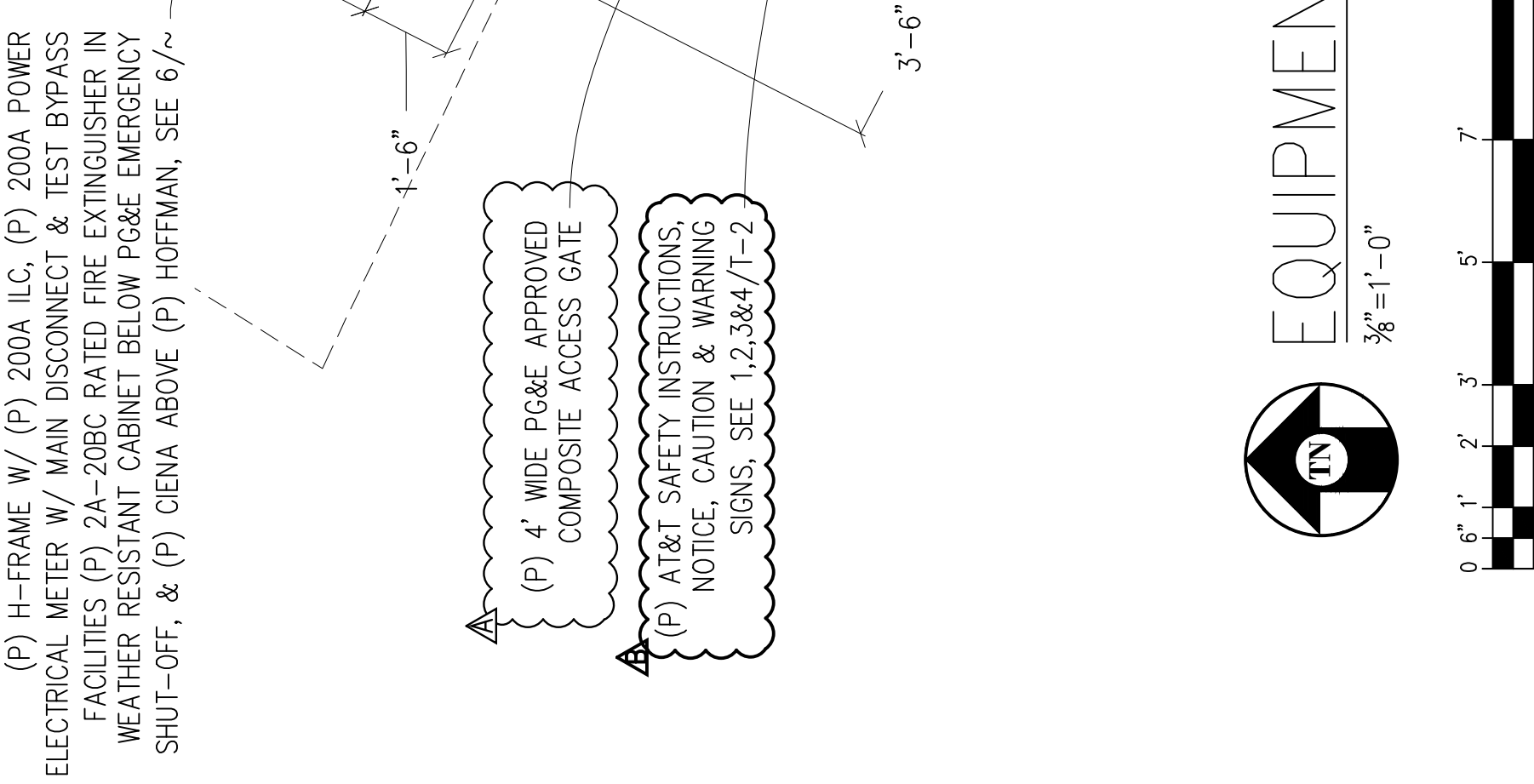
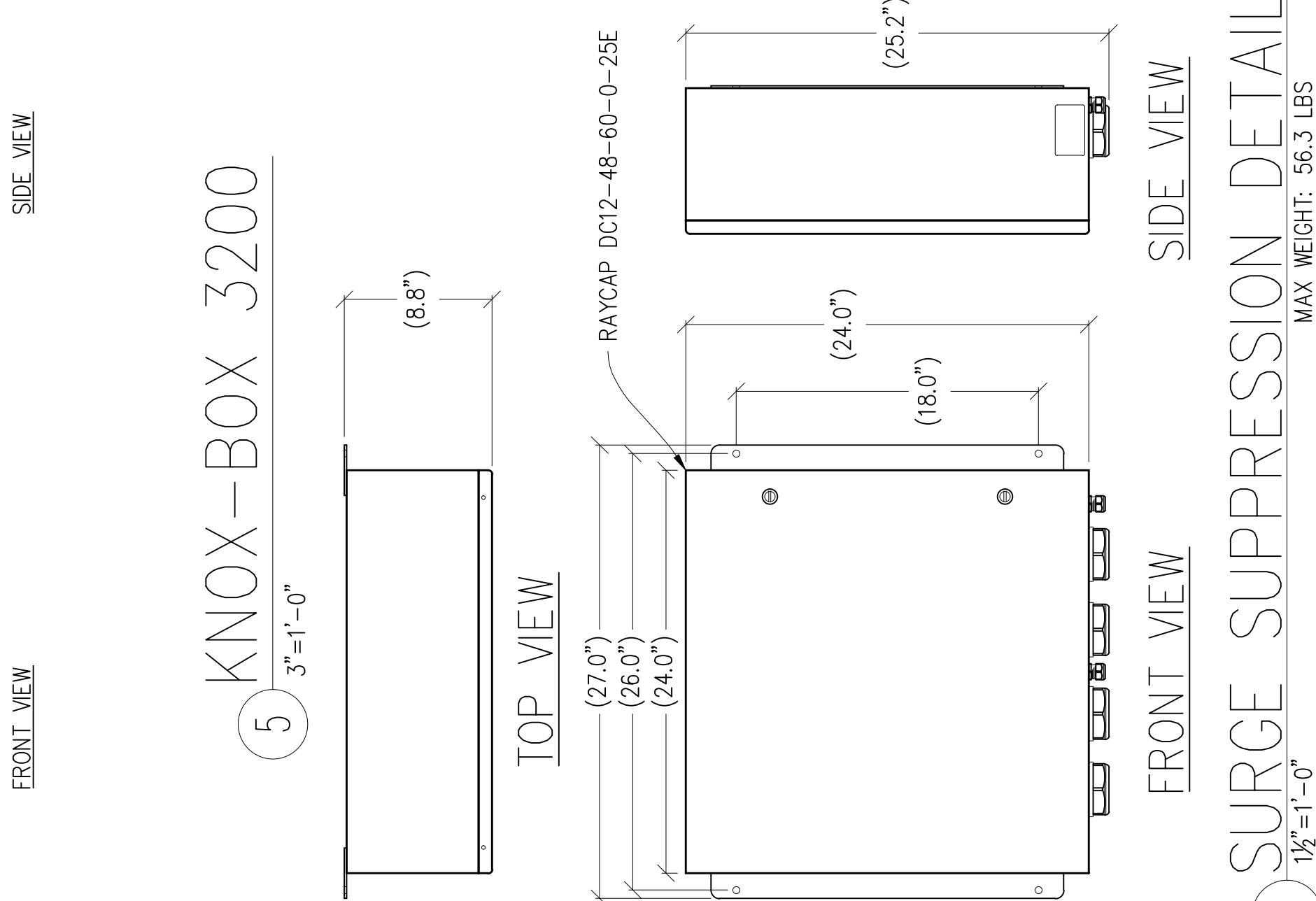
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8445 Sierra College Blvd, Suite E Granite Bay, CA 95746

Contact: Kevin Sorensen Phone: 916-660-1930

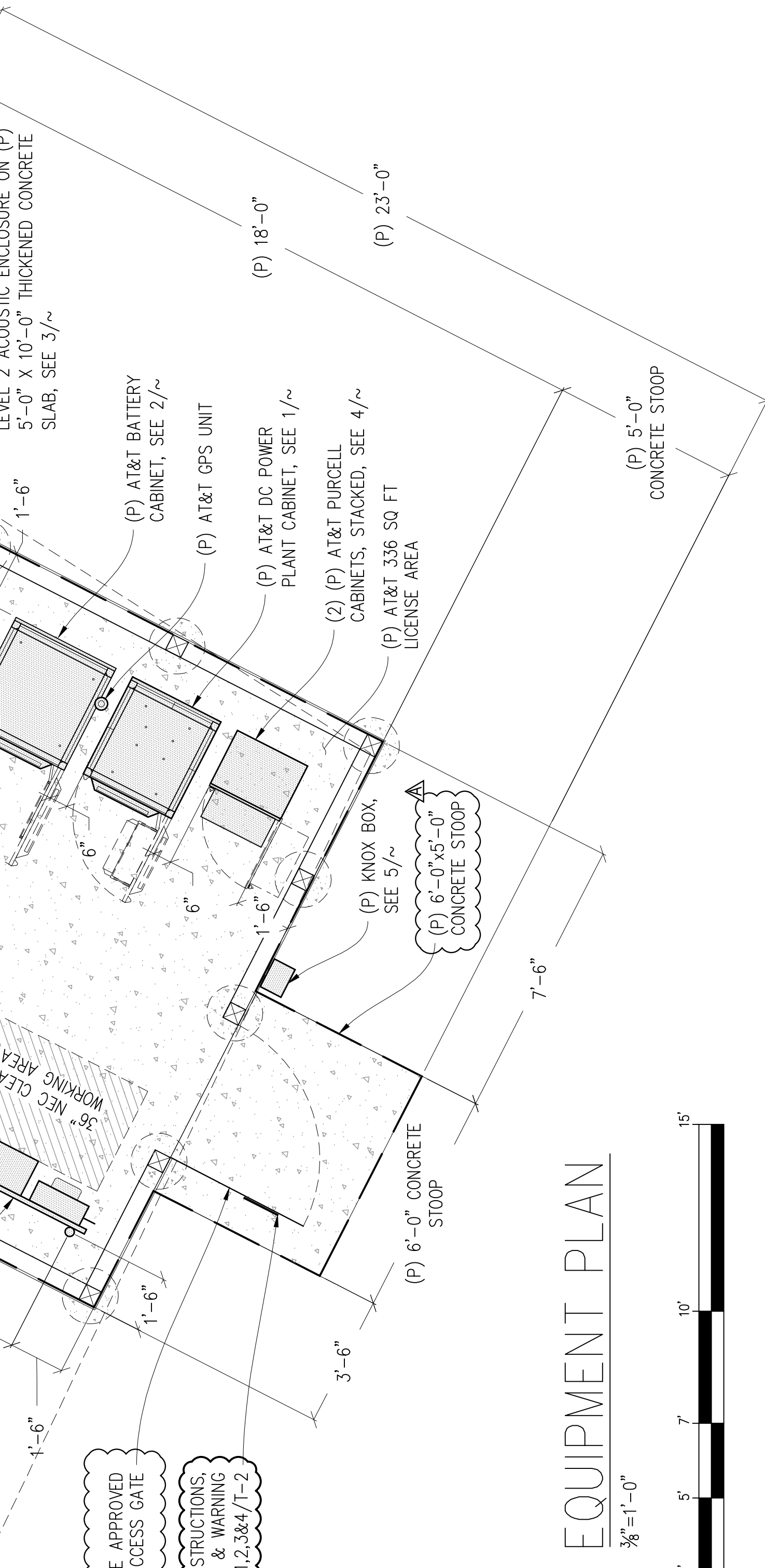
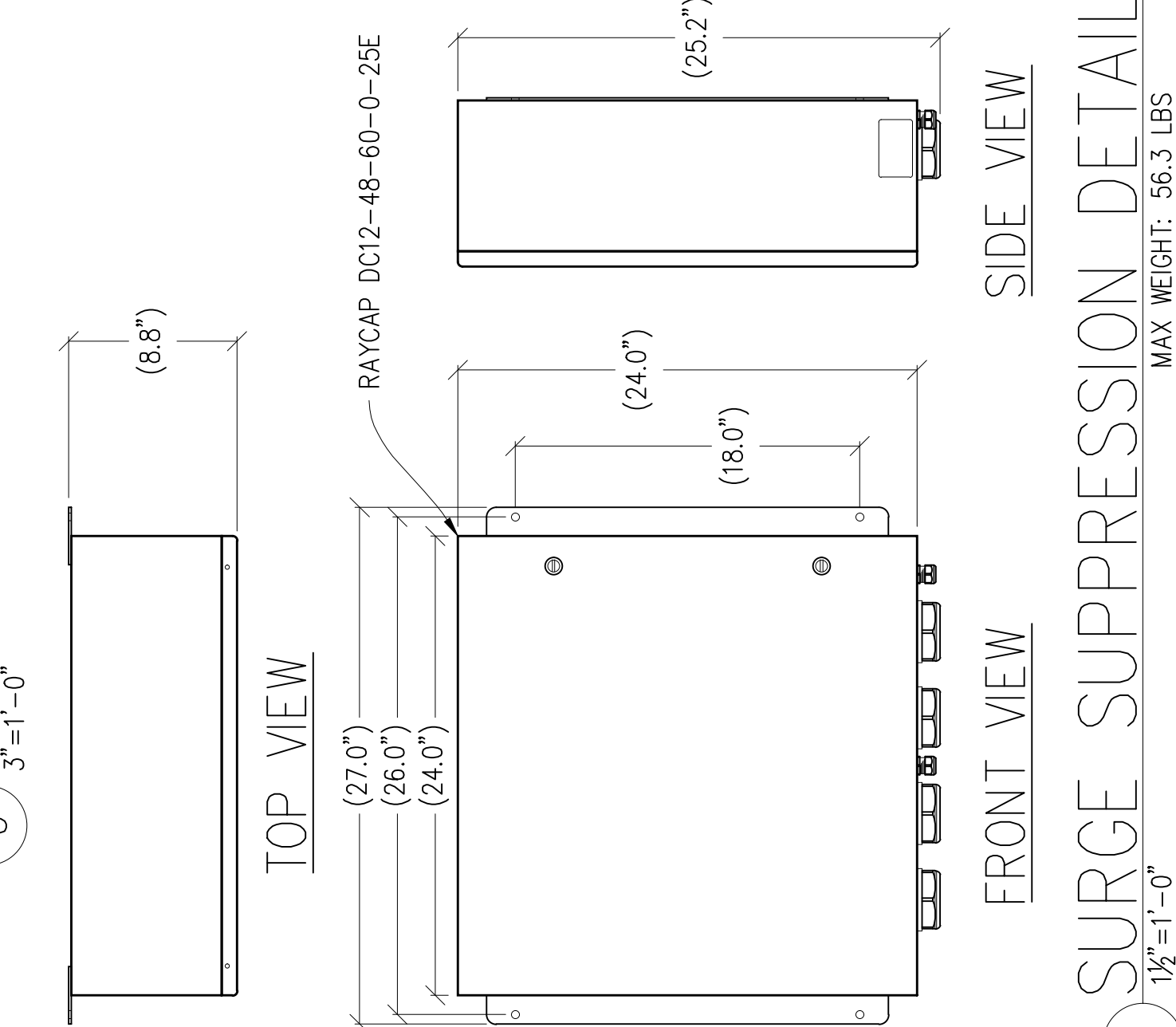
E-Mail: kevin@streamlineinc.com Fax: 916-660-1941

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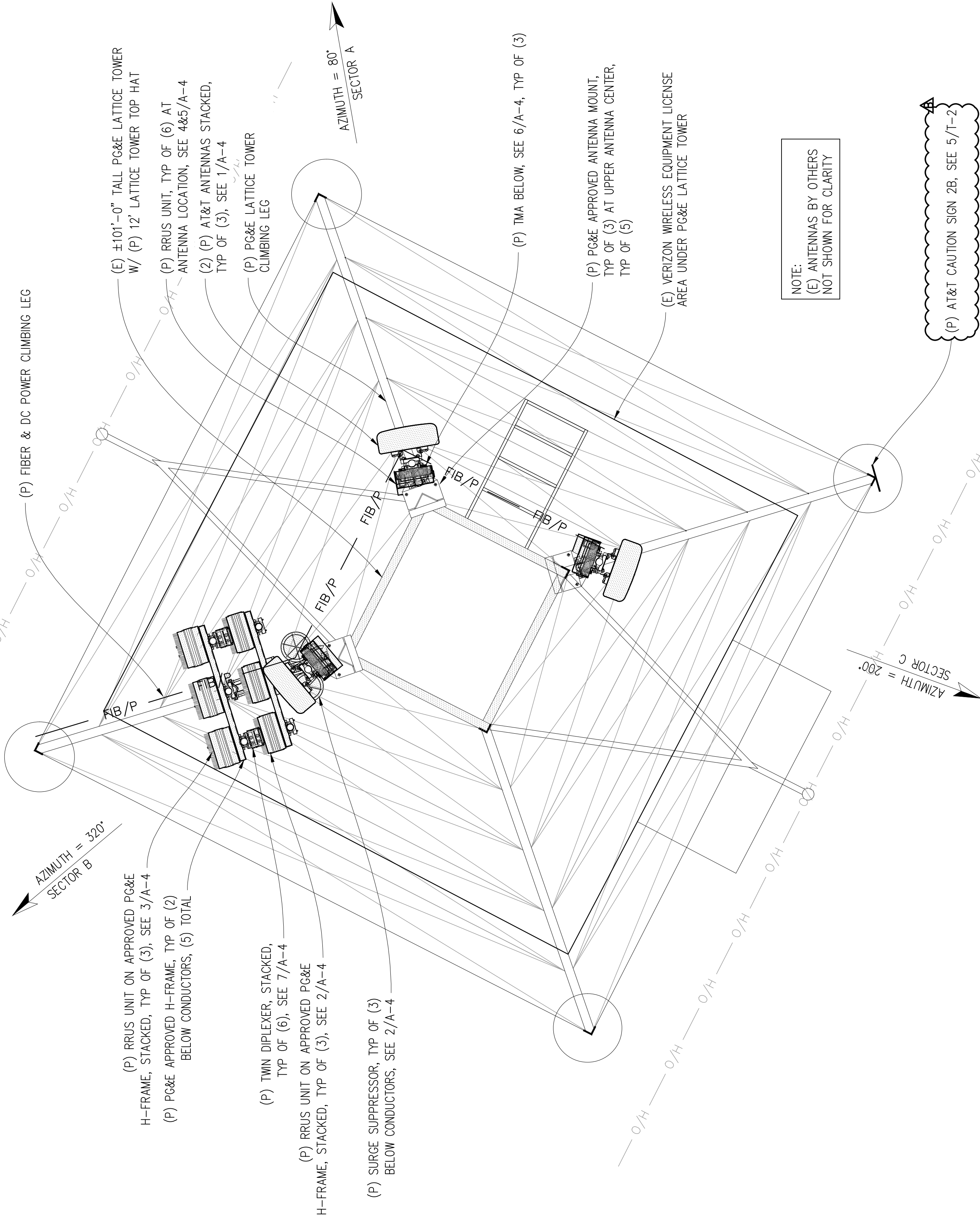
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5001 EXECUTIVE PARKWAY  
SAN RAMON, CA 94583

SHEET TITLE:
EQUIPMENT PLAN & DETAILS
SHEET NUMBER:
A-2

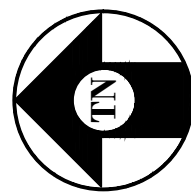
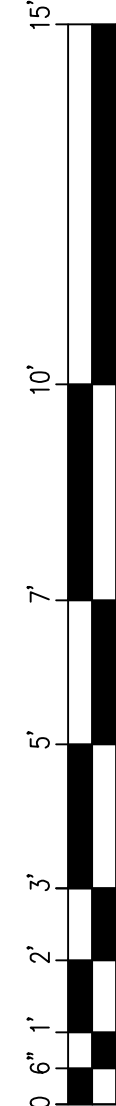


ANTENNA SCHEDULE						
ANTENNAS			RRU'S		CABLING	
SECTOR	TECHNOLOGY	ANTENNA MODEL	RAD. CENTER	AZIMUTH	RRU MODEL	NO. OF JUMPER'S
ALPHA SECTOR	A1	LTE 700/5G 850/LTE 1900/ LTE AWS 1-3PCS	108'-0"	80°	RRUS-4449 B5/B12 RRUS-88843 B2/B66A	2
	A2	LTE FNET/AWS2	102'-0"	80°	RRUS-4478 B14 RRUS-4426 B66	2
BETA SECTOR	B1	LTE 700/5G 850/LTE 1900/ LTE AWS 1-3PCS	108'-0"	320°	RRUS-4449 B5/B12 RRUS-88843 B2/B66A	2
	B2	LTE FNET/AWS2	102'-0"	320°	RRUS-4478 B14 RRUS-4426 B66	2
GAMMA SECTOR	C1	LTE 700/5G 850/LTE 1900/ LTE AWS 1-3PCS	108'-0"	200°	RRUS-4449 B5/B12 RRUS-88843 B2/B66A	2
	C2	LTE FNET/AWS2	102'-0"	200°	RRUS-4478 B14 RRUS-4426 B66	2



ANTENNA PLAN

1/2"=1'-0"



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2535 ELAKE AVE.  
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ISSUE STATUS

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	07/07/21	CLIENT REV	S.A.D.
	07/21/21	ZD 100%	D.G.
	02/17/21	CLIENT REV	D.G.
Δ	07/22/21	PLAN COMMENTS	C.T.C.
Δ	08/10/21	PLAN COMMENTS	C.T.C.

DRAWN BY: S. DANIELS

CHECKED BY: S. SAMG

APPROVED BY: -

DATE: 07/22/2021

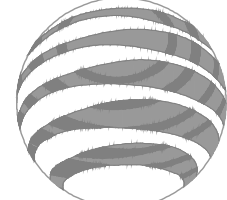
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Contact: Kevin Sorensen Phone: 916-660-1930  
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5001 EXECUTIVE PARKWAY  
SAN RAMON, CA 94583

SHEET TITLE:

ANTENNA PLAN  
& DETAILS

SHEET NUMBER:

A-3

TPA65R-BU4D

CCI

TOP VIEW

(20.7")

(7.7")

FRONT VIEW

(48.0")

ERICSSON RRUS-4426 B66

SIDE VIEW

(5.8")

TOP VIEW

(13.2")

FRONT VIEW

(13.9")

ANTENNA DETAIL

1/2"=1'-0"

MAX WEIGHT: 52.6 LBS

ERICSSON RRUS-4478 B14

SIDE VIEW

(8.26")

TOP VIEW

(13.4")

FRONT VIEW

(18.1")

ERICSSON RRUS-4478 B14

SIDE VIEW

(8.26")

TOP VIEW

(13.4")

FRONT VIEW

(18.1")

RRUS-4478 B14 DETAIL

1"=1'-0"

MAX WEIGHT: 59.4 LBS

ERICSSON RRUS-4449 B5/B12

SIDE VIEW

(9.44")

TOP VIEW

(13.19")

FRONT VIEW

(17.9")

ERICSSON RRUS-8843 B2/B66

SIDE VIEW

(10.9")

TOP VIEW

(13.2")

FRONT VIEW

(14.9")

RRUS-8843 B2/B66 DETAIL

1"=1'-0"

MAX WEIGHT: 75 LBS

Kaelus TMA2124F03V5-20

TOP VIEW

(10.5")

(8.3")

(5.1")

(11.2")

FRONT VIEW

(11.2")

(9.7")

(12.8")

TMA DETAIL

1 1/2"=1'-0"

WEIGHT = 35.7 LB

Kaelus DBC0006F3V51-2

TOP VIEW

(5.5")

(4.4")

FRONT VIEW

(11.7")

(8.0")

(11.1")

(5.2")

(6.2")

TWIN DIPLEXER DETAIL

1 1/2"=1'-0"

MAX WEIGHT: 12.4 LBS

ERICSSON RRUS-4478 B14

SIDE VIEW

(8.26")

TOP VIEW

(13.4")

FRONT VIEW

(18.1")

ERICSSON RRUS-4478 B14

SIDE VIEW

(8.26")

TOP VIEW

(13.4")

FRONT VIEW

(18.1")

RRUS-4478 B14 DETAIL

1"=1'-0"

MAX WEIGHT: 59.4 LBS

ERICSSON RRUS-4426 B66

SIDE VIEW

(5.8")

TOP VIEW

(13.2")

FRONT VIEW

(13.9")

RRUS-4426 B66 DETAIL

1"=1'-0"

MAX WEIGHT: 46 LBS

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SAN RAMON, CA 94583

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Contact: Kevin Sorensen Phone : 916-660-1930  
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	07/22/21	PLAN COMMENTS C.T.C	
Δ	08/10/21	PLAN COMMENTS C.T.C	

DRAWN BY: S. DANIELS  
CHECKED BY: S. SAMG  
APPROVED BY: -  
DATE: 07/22/2021

MARTINELLI

CCL04676  
2535 ELAKE AVE  
WATSONVILLE, CA 95076

27

EXHIBIT D

MARTINELLI

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2535 ELAKE AVE  
WATSONVILLE, CA 95076

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	07/27/21	ZD 100%	D.G.
	02/17/21	CLIENT REV	D.G.
▲	07/22/21	PLAN COMMENTS	C.T.C.
▲	08/10/21	PLAN COMMENTS	C.T.C.

DRAWN BY: S. DANIELS

CHECKED BY: S. SAMIG

APPROVED BY: –

DATE: 07/22/2021

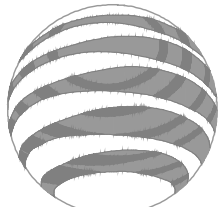
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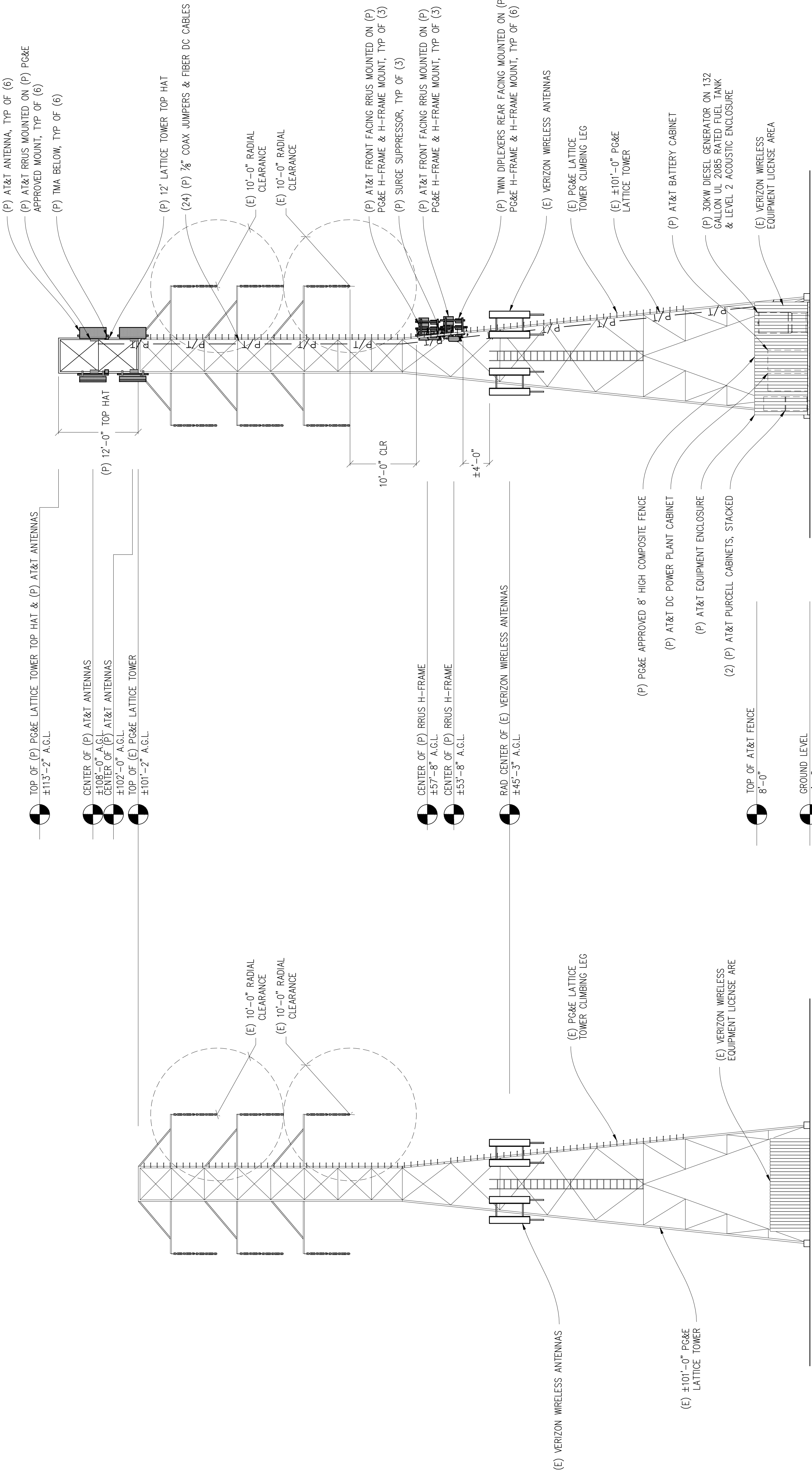
5001 EXECUTIVE PARKWAY  
SAN RAMON, CA 94583

SHEET TITLE:

ELEVATIONS

SHEET NUMBER:

A-5



(E) EAST ELEVATION

1/8"=1'-0"

(P) EAST ELEVATION

1/8"=1'-0"



ISSUE STATUS		
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	01/04/21	ZD 90% S.A.D.
	01/07/21	CLIENT REV S.A.D.
	01/27/21	ZD 100% D.G.
	02/17/21	CLIENT REV D.G.
Δ	07/22/21	PLAN COMMENTS C.T.C.
Δ	08/10/21	PLAN COMMENTS C.T.C.
DRAWN BY: S. DANIELS		
CHECKED BY: S. SARG		
APPROVED BY: -		
DATE:		07/22/2021

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E-Mail: [kevin@streamlineeng.com](mailto:kevin@streamlineeng.com) Fax: 916-660-1941

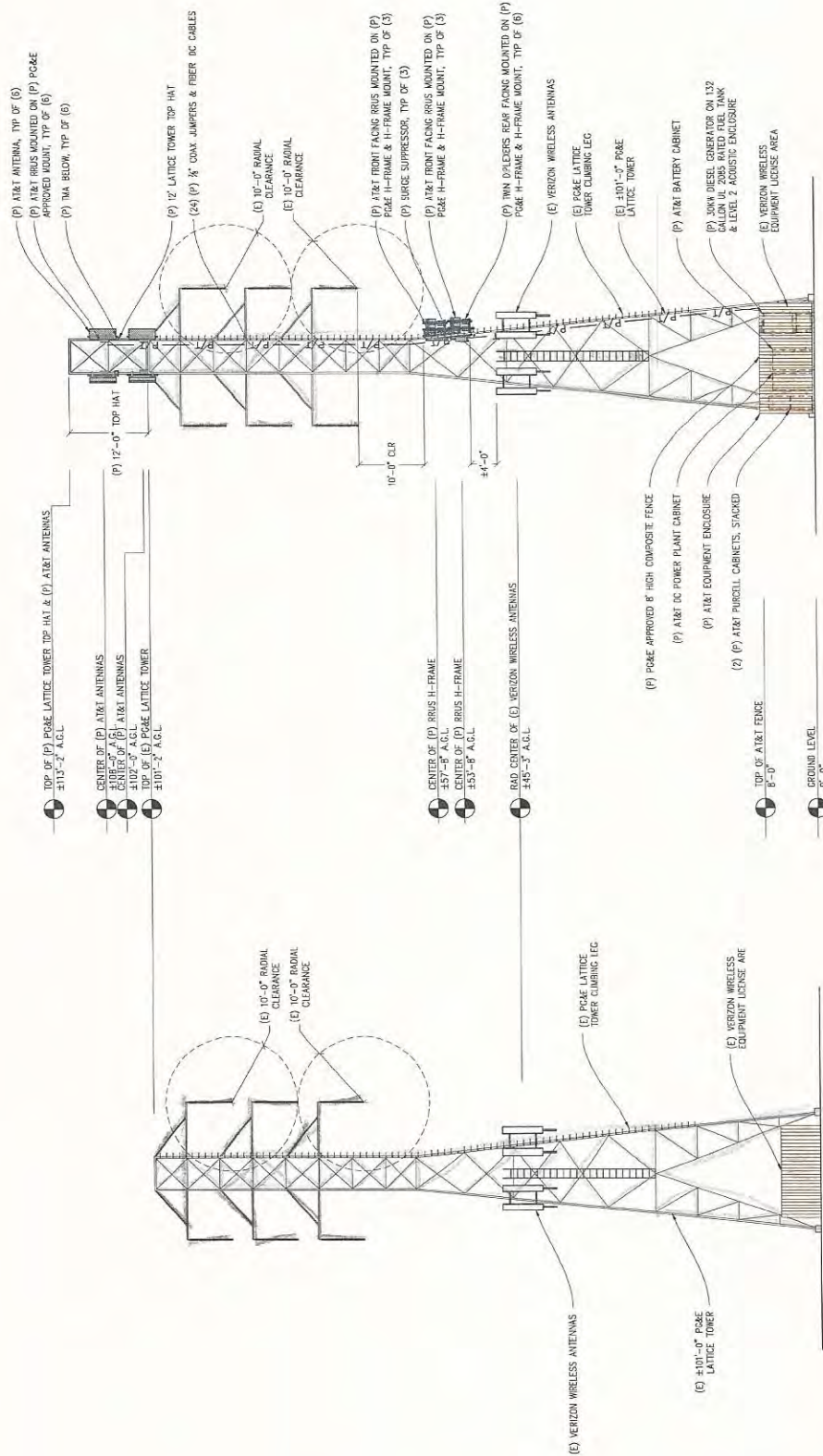
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S44EQ



5001 EXECUTIVE PARKWAY  
SAN RAMON, CA 94583

SHEET TITLE:	ELEVATIONS
SHEET NUMBER:	A-5



(P) EAST ELEVATION  
X<sub>8</sub>"=1'-0"

(E) EAST ELEVATION  
X=1'-0"

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▲	08/10/21	PLAN COMMENTS C.T.C	
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DATE: 07/22/2021			



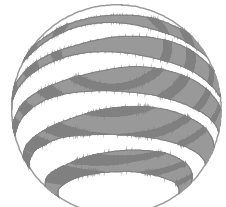
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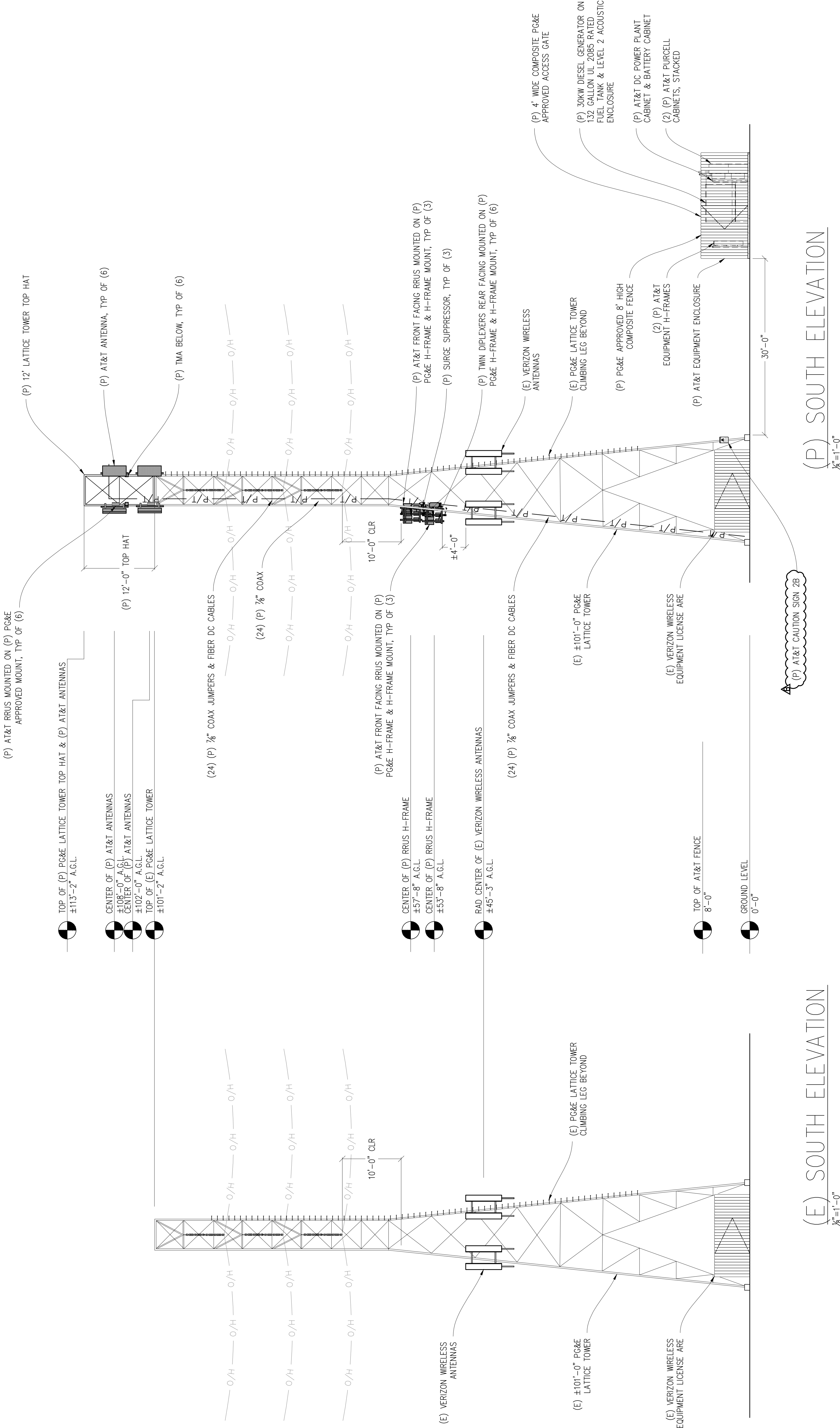
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SAN RAMON, CA 94583

SHEET TITLE:

ELEVATIONS

SHEET NUMBER:

A-6







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	02/17/21	CLIENT REV	D.G.
▲	07/22/21	PLAN COMMENTS C.T.C	
▲	08/10/21	PLAN COMMENTS C.T.C	
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CHECKED BY: S. SAMIG

APPROVED BY: -

DATE: 07/22/2021



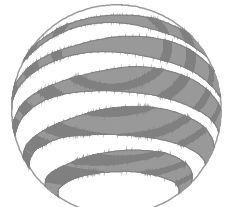
8445 Sierra College Blvd, Suite E Granite Bay, CA 95746  
Contact: Kevin Sorensen Phone : 916-660-1930  
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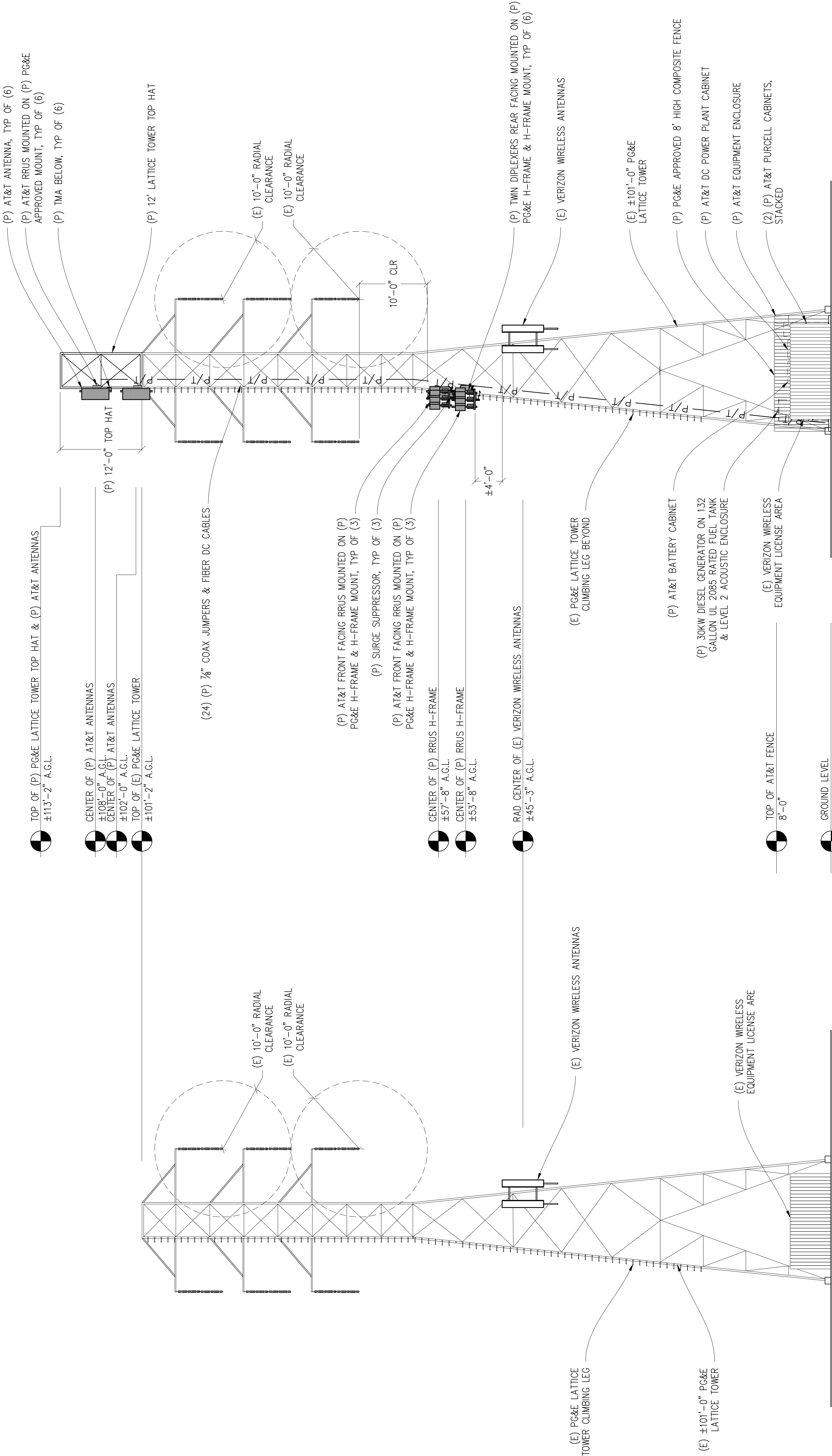
5001 EXECUTIVE PARKWAY  
SAN RAMON, CA 94583

SHEET TITLE:

ELEVATIONS

SHEET NUMBER:

A-7



(E) WEST ELEVATION  
1/8" = 1'-0"

(P) WEST ELEVATION  
1/8" = 1'-0"



ISSUE STATUS			
Δ	DATE	DESCRIPTION	BY
	01/04/21	ZD 80%	S.A.D.
	01/07/21	CLIENT REV	S.A.D.
	01/27/21	ZD 100%	D.G.
	02/17/21	CLIENT REV	D.G.
▲	07/22/21	PLAN COMMENTS C.T.O	
▲	08/10/21	PLAN COMMENTS C.T.O	

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CHECKED BY:	S. SAMG
APPROVED BY:	-
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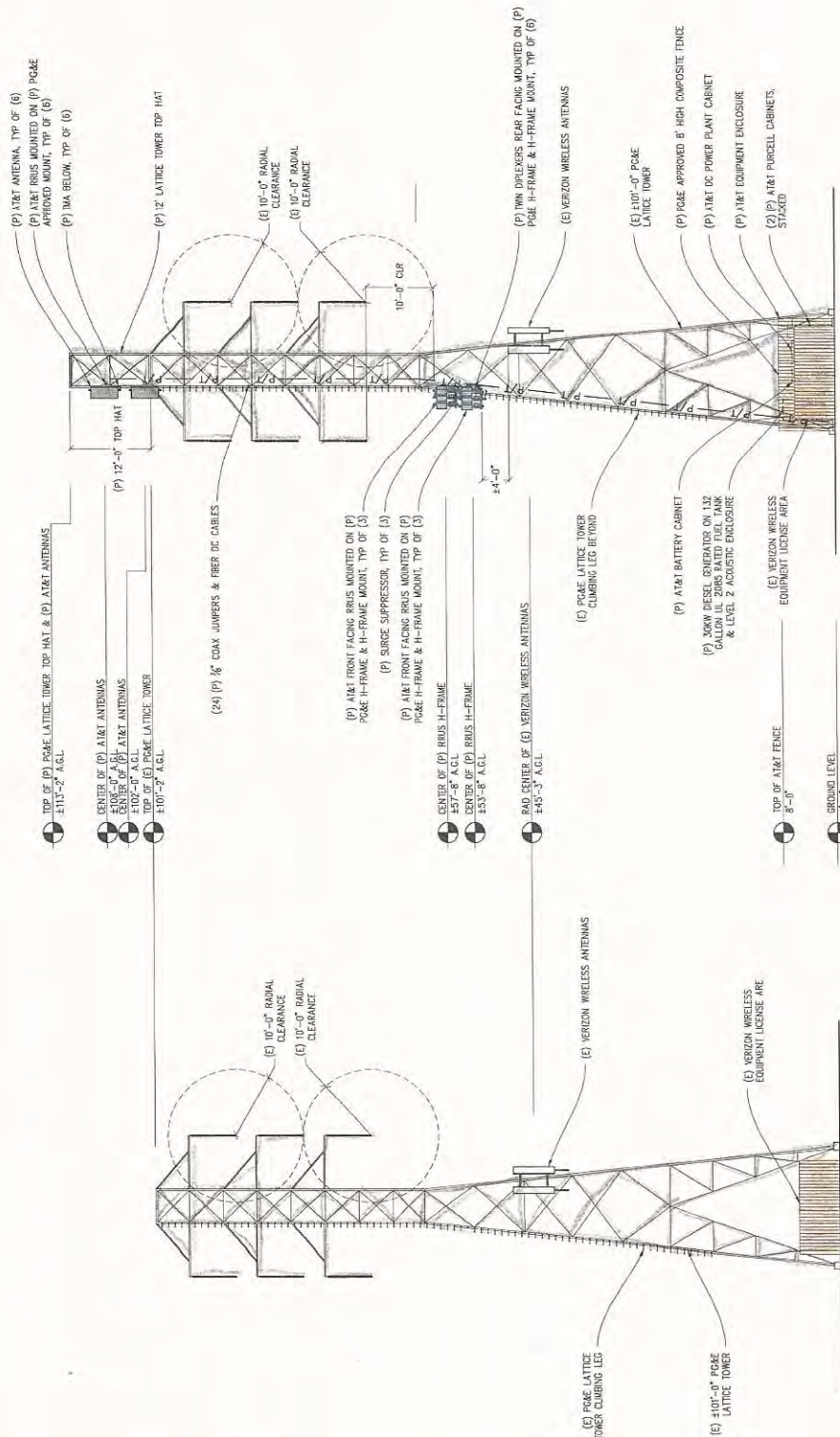
5001 EXECUTIVE PARKWAY  
SAN RAMON, CA 94583

SHEET TITLE:

## ELEVATIONS

SHEET NUMBER:

A-7



(E) WEST ELEVATION  
X=1'-0"

(P) WEST ELEVATION  
1/2" = 1'-0"





MARTINELLI

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2335 ELLIOTT AVE  
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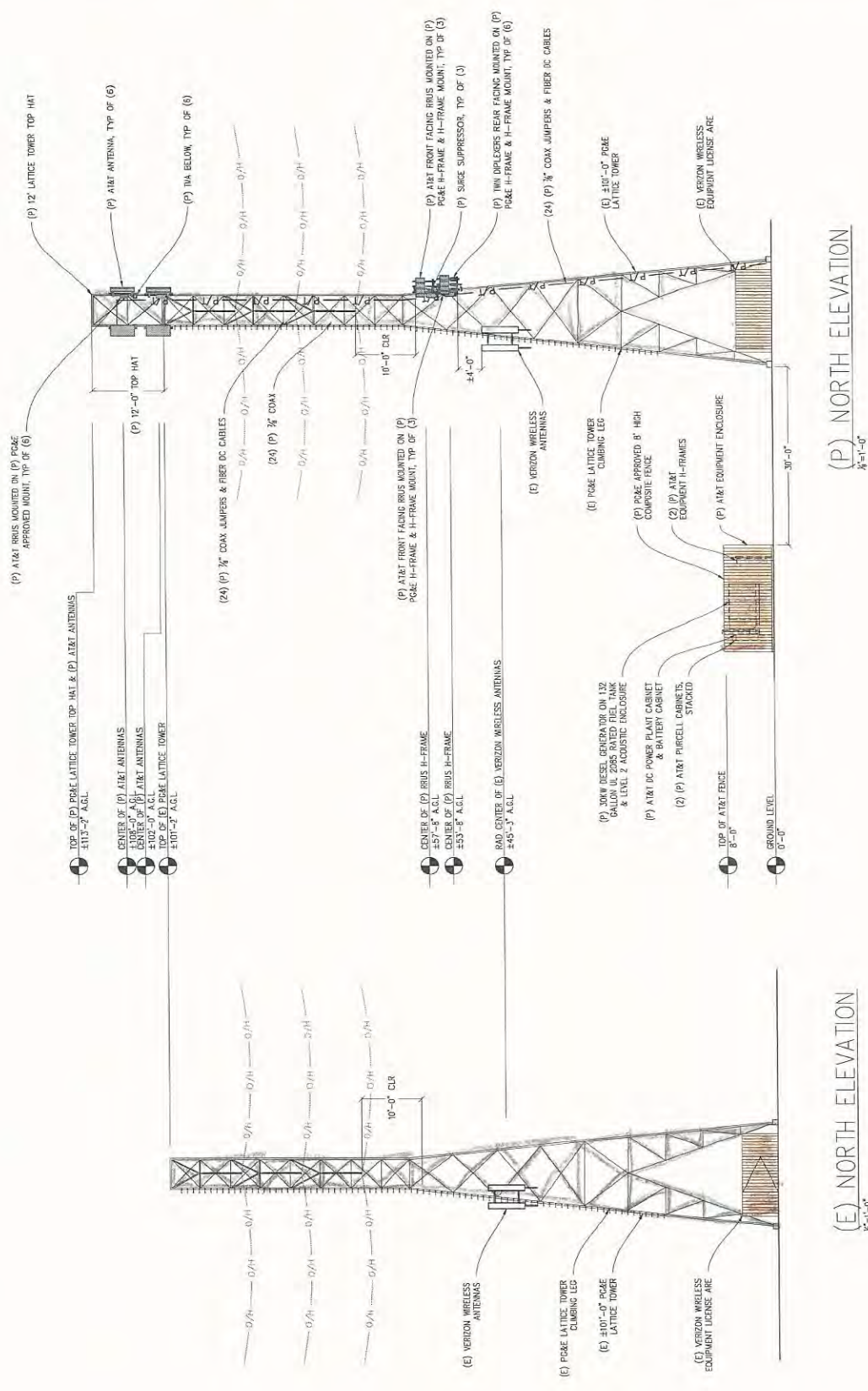
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Δ	DESCRIPTION
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4	DATE: 07/22/2021 BY: S. DANIELS
5	DATE: 07/22/2021 BY: S. DANIELS
6	DATE: 07/22/2021 BY: S. DANIELS
7	DATE: 07/22/2021 BY: S. DANIELS
8	DATE: 07/22/2021 BY: S. DANIELS
9	DATE: 07/22/2021 BY: S. DANIELS
10	DATE: 07/22/2021 BY: S. DANIELS
11	DATE: 07/22/2021 BY: S. DANIELS
12	DATE: 07/22/2021 BY: S. DANIELS
13	DATE: 07/22/2021 BY: S. DANIELS
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15	DATE: 07/22/2021 BY: S. DANIELS
16	DATE: 07/22/2021 BY: S. DANIELS
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62	DATE: 07/22/2021 BY: S. DANIELS
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98	DATE: 07/22/2021 BY: S. DANIELS
99	DATE: 07/22/2021 BY: S. DANIELS
100	DATE: 07/22/2021 BY: S. DANIELS

**Streamline Engineering**  
and Design, Inc.  
845 Santa Clara Blvd, Suite E, Santa Clara, CA 95050  
Contact: Kevin Koenig Phone: 916-650-1830  
E-Mail: kkoenig@streamlineeng.com Fax: 916-650-1841

**PRELIMINARY:**  
**NOT FOR**  
**CONSTRUCTION**  
KEVIN R. SORENSEN  
5/4/2021

**at&t**  
5001 EXECUTIVE PARKWAY  
SAN RAMON, CA 94583

SHEET TITLE:
ELEVATIONS
SHEET NUMBER
A-8



ELECTRICAL LABELING REQUIREMENTS

1. CONTRACTOR SHALL LABEL ALL ELECTRICAL DEVICES INSTALLED OR ALTERED PURSUANT TO THIS CONTRACT PER THE FOLLOWING. LABELS SHALL BE PERMANENT BLACK ON WHITE PEEL & STICK LABEL MAKER TYPE FOR ALL SWITCH & OUTLET PLATES, CONDUITS AND CEILING FIXTURES, AND SHALL BE PHENOLIC TAG TYPE FOR PANELS, XFMR's, PULL BOXES, ETC.; PHENOLIC TAGS SHALL BE RED IN COLOR WHERE BACKED UP BY GENERATOR
2. ALL PANELS, XFMR's AND PULL BOXES SHALL BE LABELED WITH DEVICE "NAME", VOLTAGE(S), RATING FOR XFMR's, AND "FED FROM" DATA.
3. ALL SWITCH & OUTLET PLATES SHALL BE LABELED WITH "FED FROM" CIRCUIT DATA (PANEL NAME & CIRCUIT#); ALL GANG SWITCHES SHALL BEAR SWITCH NUMBERS BEGINNING W/#1 ON LEFT OF THE MAIN LIGHTING SWITCH FOR EACH ROOM FOR COORDINATION W/FIXTURE LABELS.
4. ALL (N) OR RETROFITTED LIGHTING FIXTURES SHALL BE LABELED WITH THE "FED FROM" DATA (SWITCH#)
5. ALL CONDUITS EXITING A PANEL BOARD SHALL BE LABELED "CIRCUIT(S) X..." WHERE X IS/ARE THE BREAKER#(S). CONDUITS EXITING XFMR'S SHALL BE LABELED "FEEDER TO <PANEL, DEVICE>". E.G. "FEEDER TO PANEL <panel name>". CONDUITS ENTERING/EXITING A ROOM OR FLOOR SHALL BE LABELED AT THE ENTRY & EXIT (OR IN A SINGLE LOCATION IF OBVIOUS) W/"FED FROM..." & "TO PANEL/XFMR/..." DATA.
6. "FED FROM: DATA = <panel name> <br> Eg: "PANEL X/1,3,5")

ELECTRICAL NOTES

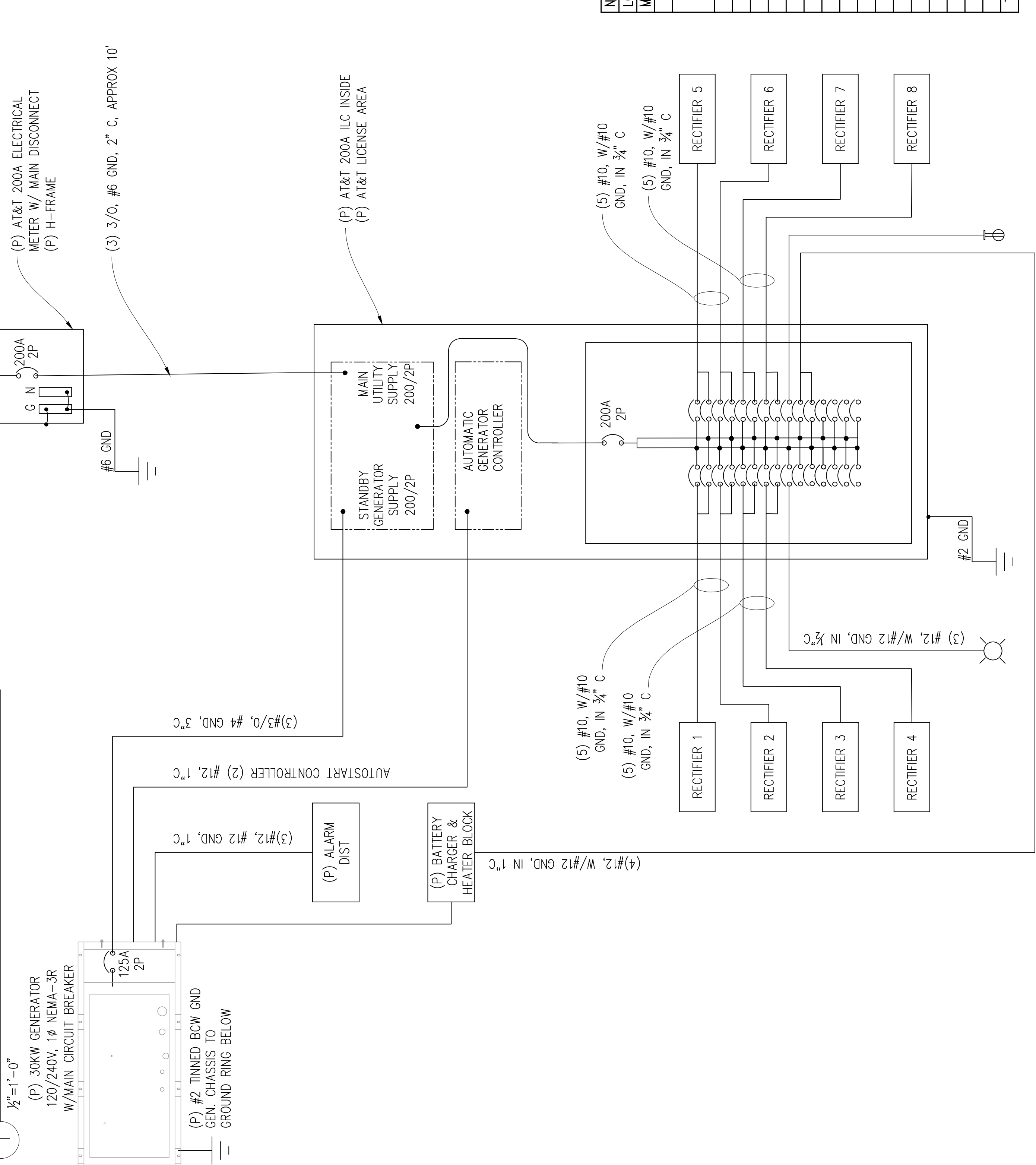
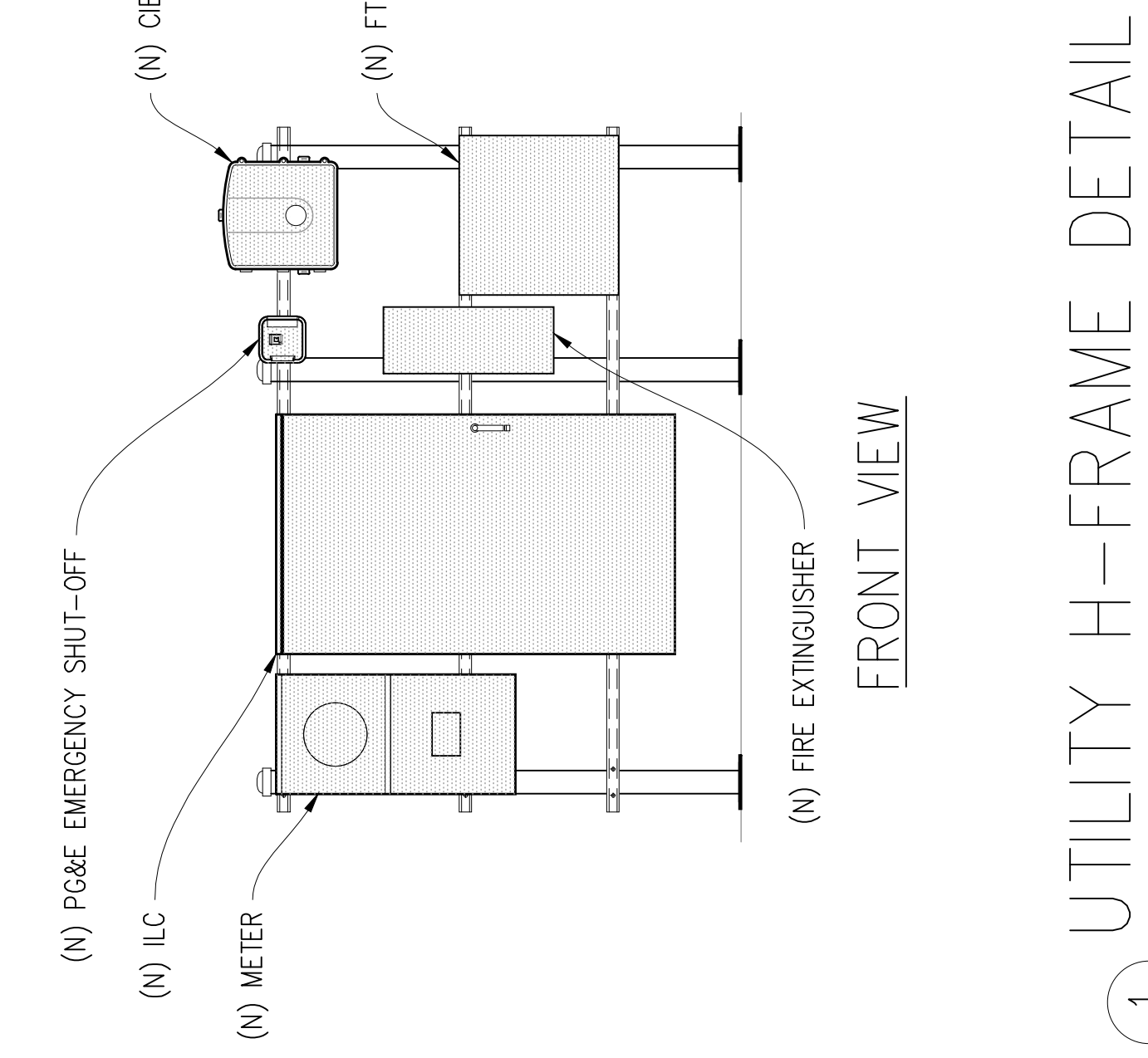
1. ALL ELECTRICAL WORK SHALL CONFORM TO THE 2019 CEC AS WELL AS ALL ADOPTED STANDARDS, APPLICABLE STATE AND LOCAL CODES.
2. CONTRACTOR SHALL FURNISH AND INSTALL ALL CONDUIT, CONDUCTORS, PULL BOXES, TRANSFORMER PADS, POLE RISERS, AND PERFORM ALL TRENCHING AND BACKFILLING REQUIRED IN THE PLANS.
3. ALL ELECTRICAL ITEMS SHALL BE U.L. APPROVED OR LISTED AND PROCURED PER PLAN SPECIFICATIONS.
4. ALL CIRCUIT BREAKERS, FUSES, AND ELECTRICAL EQUIPMENT SHALL HAVE AN INTERRUPTION RATING NOT LESS THAN THE MAXIMUM SHORT CIRCUIT CURRENT TO WHICH THEY MAY BE SUBJECTED WITH A MINIMUM OF 10,000 A.I.C. OR AS REQUIRED.
5. THE ENTIRE ELECTRICAL INSTALLATION SHALL BE GROUNDED AS REQUIRED BY ALL APPLICABLE CODES.
6. ELECTRICAL WIRING SHALL BE COPPER #12 AWG MIN WITH TYPE THHN, THWN-2 OR THW-2, INSULATION RATED FOR 90°C DRY OR 70°C WET.
7. ALL OUTDOOR EQUIPMENT SHALL HAVE NEMA 3R ENCLOSURE.
8. ALL BURIED WIRE SHALL RUN THROUGH SCHEDULE 40 PVC CONDUIT UNLESS OTHERWISE NOTED.
9. A GROUND WIRE IS TO BE PULLED IN ALL CONDUITS.
10. WHERE ELECTRICAL WIRING OCCURS OUTSIDE A STRUCTURE AND HAS THE POTENTIAL FOR EXPOSURE TO WEATHER, WIRING SHALL BE IN WATERTIGHT GALVANIZED RIGID STEEL OR FLEXIBLE CONDUIT.
11. WHERE PLANS CALL FOR A NEW ELECTRICAL SERVICE, PRIOR TO SUBMITTING BID, CONTRACTOR SHALL VERIFY PLAN DETAILS WITH THE UTILITY'S SERVICE PLAN & REQMTS INCLUDING SERVICE VOLTAGE, METER LOCATION, MAIN DISCONNECTING MEANS, AND AIC REQMT, AND SHALL OBTAIN CLARIFICATION FROM THE PROJECT ENGINEER ON ANY DEVIATIONS FOUND IN THESE PLANS.
12. WHERE THESE PLANS SHOW A DC POWER PLANT, THE INSTALLATION OPERATING AT LESS THAN 50 VDC UNGROUNDED, 2-WIRE, SHALL COMPLY WITH ARTICLE 720, AS FOLLOWS:
  - A. POWER PLANT SHALL BE SUPPLIED BY THE WIRELESS CARRIER AS A PULL-TAG ITEM AND INSTALLED BY THE CONTRACTOR.
  - B. CONDUCTORS SHALL NOT BE SMALLER THAN #12 AWG COPPER MIN. CONDUCTORS FOR BRANCH CIRCUITS SUPPLYING MORE THAN ONE APPLIANCE SHALL BE 10 AWG CU MIN; CONTRACTOR SHALL SIZE CONDUCTORS BASED ON MFG'S DATA FOR THE APPLIANCES SERVED.
  - C. THERE ARE NO DC RECEPTACLES OR LUMINAIRES ALLOWED ON THIS PROJECT. ALL CIRCUITS SHALL ORIGINATE AT AN INTEGRATED DOUBLE LUG TAP OR SOCKET TERMINATION ON AN INTEGRATED DC CIRCUIT BREAKER AT AN INDIVIDUAL RECTIFIER MODULE AND TERMINATE AT THE SPECIALIZED LUG ON THE RESPECTIVE APPLIANCE AS A SINGLE RUN OF WIRE WITHOUT SPLICES. ALL DC WIRING SHALL BE LABELED AT THE DC PLANT WITH THE APPLIANCE SERVED AND THE DC VOLTAGE.
  - D. ALL CABLING SHALL BE INSTALLED IN A NEAT AND WORKMAN LIKE MANNER AND SUPPORTED BY BUILDING STRUCTURE. EG. (N) CABLE TRAY OVERHEAD, IN SUCH A MANNER THAT THE CABLE WILL NOT BE DAMAGED BY NORMAL USE.

WIRING NOTES

1. ALL BREAKERS 10,000 AIC MIN. CONTRACTOR TO VERIFY W/ UTILITY
2. ALL ≤ 20A CIRCUITS #12 THHN OR THWN-2.
3. ALL 30A CIRCUITS #10 THHN OR THWN-2 STRANDED.
4. ALL 40A CIRCUITS #8 THHN OR THWN-2 STRANDED.
5. ALL 50A CIRCUITS #6 THHN OR THWN-2 STRANDED.
6. ALL 60A CIRCUITS #6 THHN OR THWN-2 STRANDED.
7. ALL ELECTRICAL WIRING IS SURFACE MOUNTED IN EMT OR AS REQUIRED FOR EXPOSURE.

(P) PANEL SCHEDULE

NAMEPLATE : PANEL A			SC LEVEL : 22,000			VOLTS: 120V/240V, 1Ø		
LOCATION : OUTSIDE						BUS AMPS: 200A		
MOUNTING : WALL						MAIN CB: 200A		
ØA	ØB						ØA	ØB
LOAD VA	LOAD VA	LOAD DESCRIPTION	BKR AMP/ POLE	CIRCUIT NO	BKR AMP/ POLE	LOAD DESCRIPTION	LOAD VA	LOAD VA
1320		RECTIFIER 1	30/2	1	2	RECTIFIER 5	1320	
	1320	" "	—	3	4	" "		1320
1320		RECTIFIER 2	30/2	5	6	RECTIFIER 6	1320	
	1320	" "	—	7	8	" "		1320
1320		RECTIFIER 3	30/2	9	10	RECTIFIER 7	1320	
	1320	" "	—	11	12	" "		1320
1320		RECTIFIER 4	30/2	13	14	RECTIFIER 8	1320	
	1320	" "	—	15	16	" "		1320
300		TECH LIGHTS	20/2	17	18	GFCI	300	
	300	" "	—	19	20	GENERATOR BATTERY CHARGE		120
0		SPARE	—	21	22	GENERATOR HEATER	1000	
	0	" "	—	23	24	SPARE		0
0		" "	—	25	26	" "	0	
	0	" "	—	27	28	" "		0
		" "	—	29	30	" "	0	
5580		PHASE TOTALS				PHASE TOTALS	6580	5400
TOTAL VA =	23140	TOTAL AMPS =	96					



MARTINELLI

CCL04676  
2535 ELAKE AVE  
WATSONVILLE, CA 95076

ISSUE STATUS

Δ	DATE	DESCRIPTION	BY
	07/04/21	ZD 90%	S.A.D.
	07/07/21	CLIENT REV	S.A.D.
	07/27/21	ZD 100%	D.G.
	02/17/21	CLIENT REV	D.G.
Δ	07/22/21	PLAN COMMENTS/C.I.C	
Δ	08/10/21	PLAN COMMENTS/C.I.C	
DRAWN BY: S. DANIELS			
CHECKED BY: S. SAMG			
APPROVED BY: -			
DATE: 07/22/2021			

8445 Sierra College College Blvd, Suite E Granite Bay, CA 95746  
Contact: Kevin Sorensen Phone: 916-660-1930  
E-Mail: kevin@streamlinedesign.com Fax: 916-660-1941

THREE PLANS AND SPECIFICATIONS ARE SUBMITTED FOR REVIEW AND APPROVAL BY THE ENGINEER. THE ENGINEER'S REVIEW SHALL NOT BE USED BY ANY PERSON OR ENTITY ON OTHER PROJECTS WITHOUT THE WRITTEN CONSENT OF THE ENGINEER. Copyright 2008, STREAMLINE ENGINEERING AND DESIGN, INC. ALL RIGHTS RESERVED.

PRELIMINARY:  
NOT FOR  
CONSTRUCTION

KEVIN R. SORENSEN  
S4469

at&t



5001 EXECUTIVE PARKWAY  
SAN RAMON, CA 94583

SHEET TITLE:

ELECTRICAL PLAN

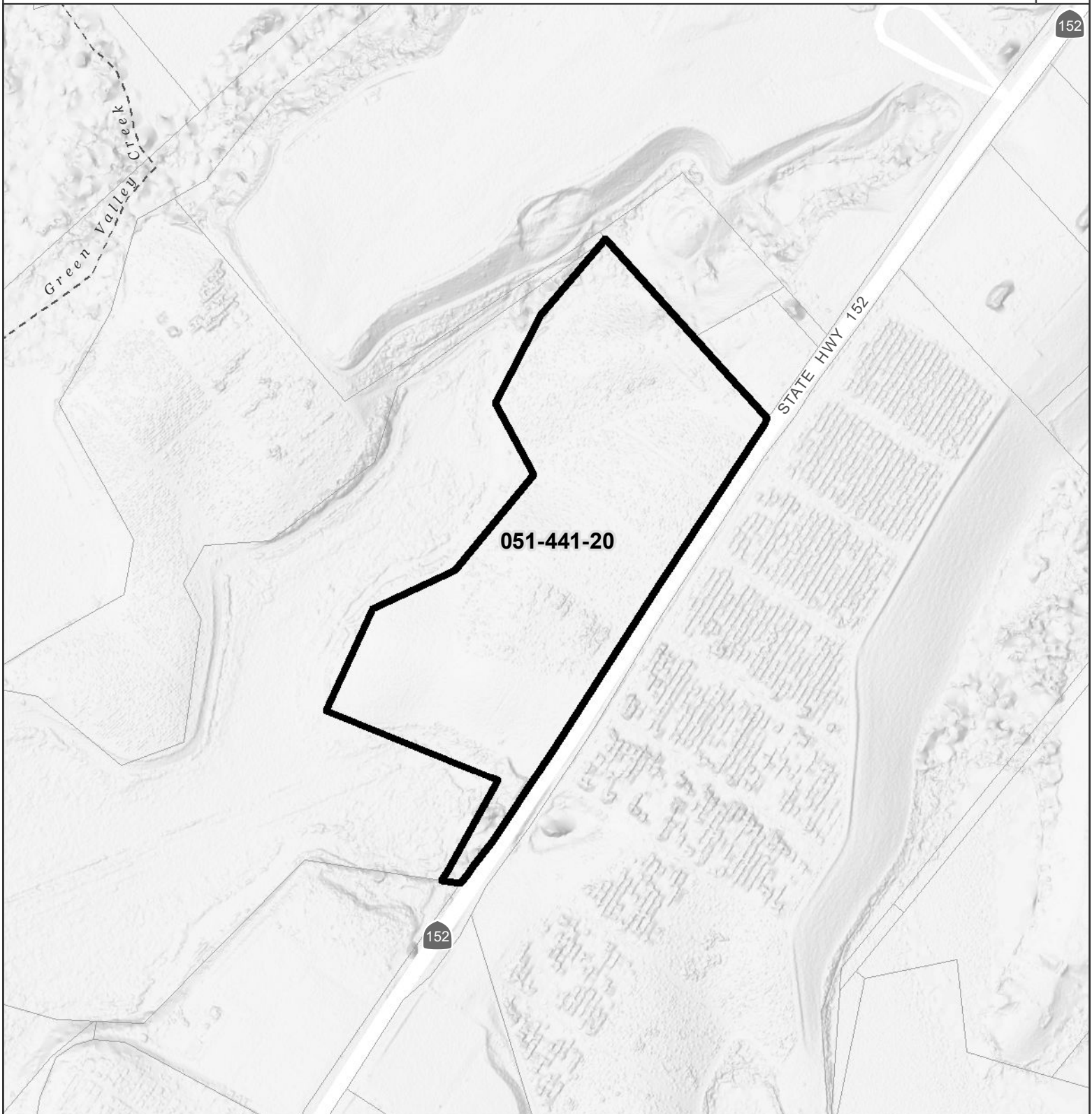
SHEET NUMBER:

E-1







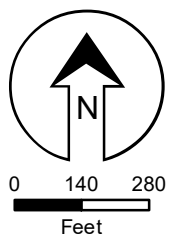
# Parcel Location Map



**Parcel: 05144120**

-  Study Parcel
-  Assessor Parcel Boundary

Map printed: 22 Oct. 2021

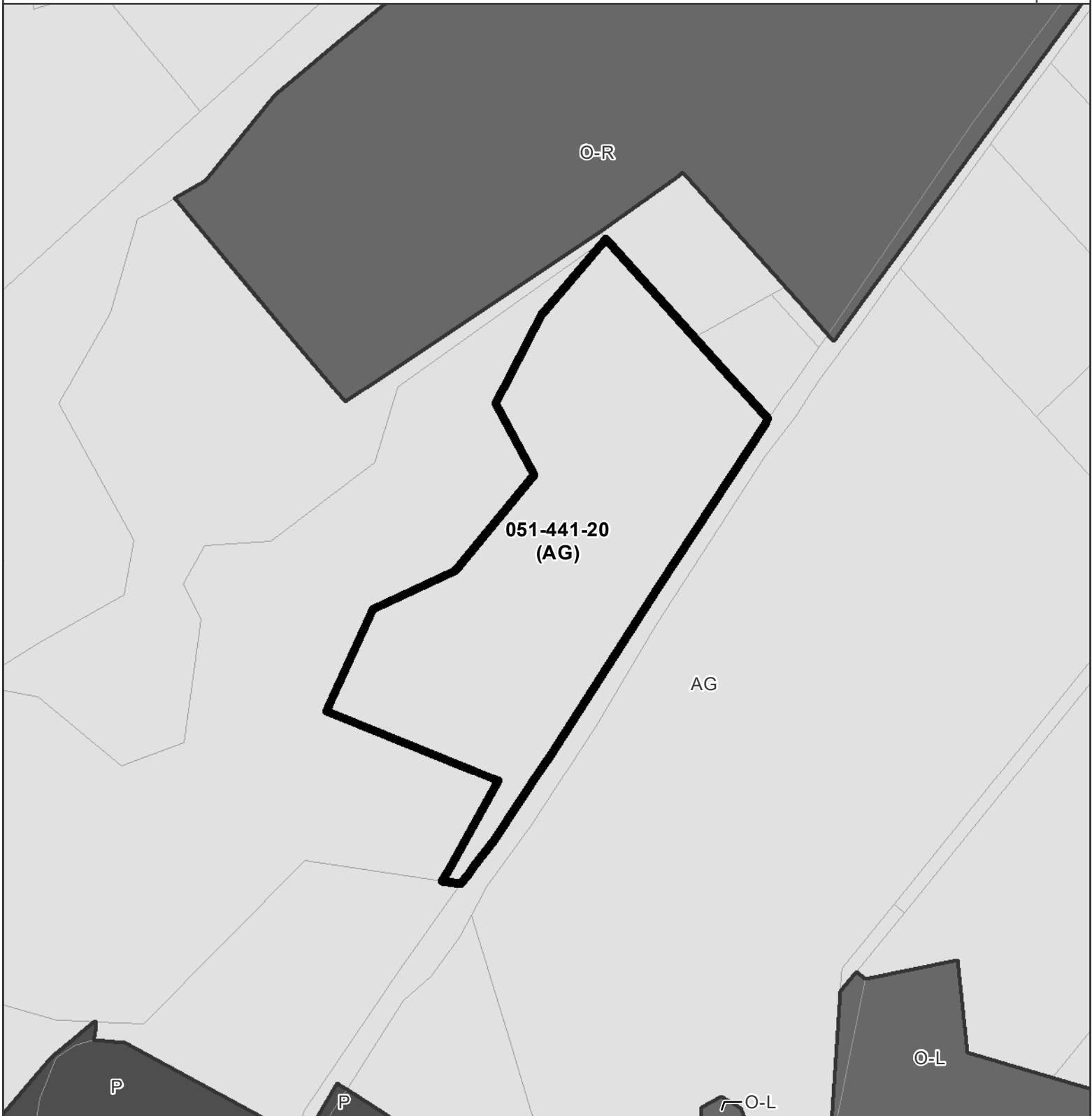








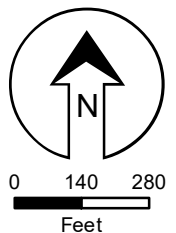
# Parcel General Plan Map



Mapped  
Area



-  AG *Agricultural*
-  O-L *Lake/Reservoir/Lagoon*
-  O-R *Parks, Recreation & Open Space*
-  P *Public Facilities*





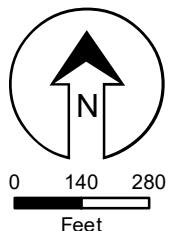
# Parcel Zoning Map



Mapped  
Area



- A Agriculture
- CA Commercial Agriculture
- RA Residential Agricultural
- PF Public/Community Facilities
- PR Parks, Recreation, & Open Space



POR. CORRALITOS & SALISIPUEDES RANCHOS  
SECS. 27, 28, 33, & 34, T. 11S., R. 2E., M.D.B. & M.

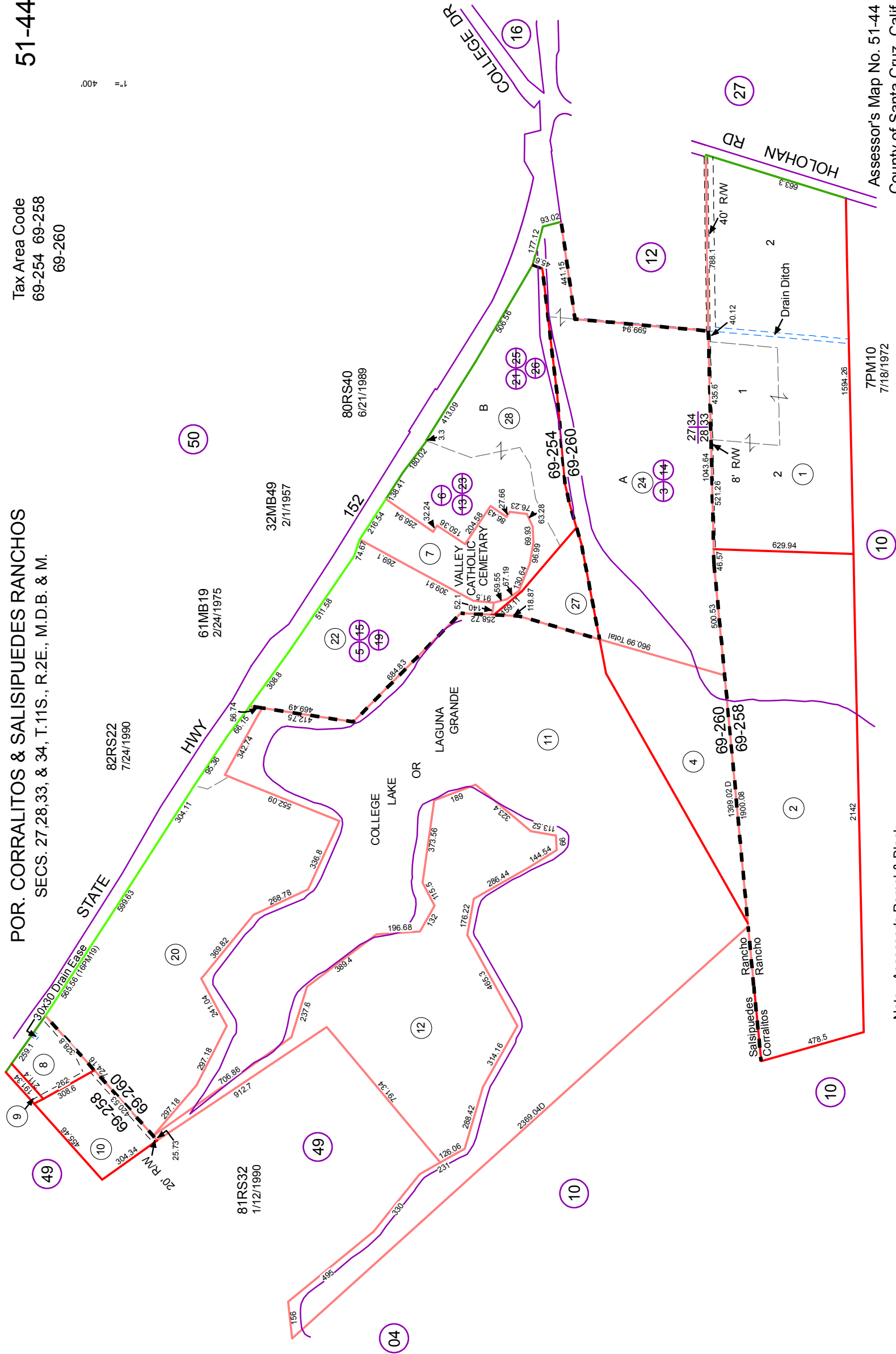
51-44

Assessor's Map No. 51-44  
County of Santa Cruz, Calif.  
July 2000

Note - Assessor's Parcel & Block Numbers are Shown in Circles.

Electronically redrawn 7/24/00 KSA  
Rev. 6/7/01 mvm (changed page refs.)  
Rev 12/8/08 CB (Spatial Adjustment)

LIABILITY FOR OTHER USES. NOT TO BE REPRODUCED. ALL RIGHTS RESERVED. © COPYRIGHT SANTA CRUZ COUNTY ASSESSOR 2000



## Parcel Information

### Services Information

Urban/Rural Services Line: ☐ Inside ☒ Outside  
Water Supply: Well  
Sewage Disposal: Septic  
Fire District: Pajaro Valley Fire Protection District  
Drainage District: Flood Zone 7A

### Parcel Information

Parcel Size: Approximately 22 acres  
Existing Land Use - Parcel: Commercial Agriculture  
Existing Land Use - Surrounding: Commercial Agriculture (CA), Public and Community Facilities (PF-L, Residential Agriculture (RA)  
Project Access: Off East Lake Avenue  
Planning Area: South County  
Land Use Designation: AG (Agriculture)  
Zone District: CA (Commercial Agriculture)  
Coastal Zone: ☐ Inside ☒ Outside  
Appealable to Calif. Coastal Comm.: ☐ Yes ☒ No

Technical Reviews: N/A

### Environmental Information

Geologic Hazards: Not mapped/no physical evidence on site  
Fire Hazard: Not a mapped constraint  
Slopes: N/A  
Env. Sen. Habitat: Mapped but no physical evidence on site  
Grading: Minimal grading proposed  
Tree Removal: No trees proposed to be removed  
Scenic: Not a mapped resource  
Archeology: Not mapped/no physical evidence on site

**AT&T Mobility • Proposed Base Station (Site No. CCL04676)  
2535 East Lake Avenue • Watsonville, California**

**Statement of Hammett & Edison, Inc., Consulting Engineers**

The firm of Hammett & Edison, Inc., Consulting Engineers, has been retained on behalf of AT&T Mobility, a personal wireless telecommunications carrier, to evaluate the base station (Site No. CCL04676) proposed to be located at 2535 East Lake Avenue in Watsonville, California, for compliance with appropriate guidelines limiting human exposure to radio frequency (“RF”) electromagnetic fields.

**Executive Summary**

AT&T proposes to install directional panel antennas on top of the tall PG&E lattice tower sited at 2535 East Lake Avenue in Watsonville. The proposed operation will, together with the existing base station at the site, comply with the FCC guidelines limiting public exposure to RF energy.

**Prevailing Exposure Standard**

The U.S. Congress requires that the Federal Communications Commission (“FCC”) evaluate its actions for possible significant impact on the environment. A summary of the FCC’s exposure limits is shown in Figure 1. These limits apply for continuous exposures and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. The most restrictive limit for exposures of unlimited duration at several wireless service bands are as follows:

Wireless Service Band	Transmit Frequency	“Uncontrolled” Public Limit	Occupational Limit (5 times Public)
Microwave (point-to-point)	1–80 GHz	1.0 mW/cm <sup>2</sup>	5.0 mW/cm <sup>2</sup>
Millimeter-wave	24–47	1.0	5.0
Part 15 (WiFi & other unlicensed)	2–6	1.0	5.0
CBRS (Citizens Broadband Radio)	3,550 MHz	1.0	5.0
BRS (Broadband Radio)	2,490	1.0	5.0
WCS (Wireless Communication)	2,305	1.0	5.0
AWS (Advanced Wireless)	2,110	1.0	5.0
PCS (Personal Communication)	1,930	1.0	5.0
Cellular	869	0.58	2.9
SMR (Specialized Mobile Radio)	854	0.57	2.85
700 MHz	716	0.48	2.4
600 MHz	617	0.41	2.05
[most restrictive frequency range]	30–300	0.20	1.0

Power line frequencies (60 Hz) are well below the applicable range of these standards, and there is considered to be no compounding effect from simultaneous exposure to power line and radio frequency fields.



**AT&T Mobility • Proposed Base Station (Site No. CCL04676)  
2535 East Lake Avenue • Watsonville, California**

**General Facility Requirements**

Base stations typically consist of two distinct parts: the electronic transceivers (also called “radios” or “channels”) that are connected to the traditional wired telephone lines, and the passive antennas that send the wireless signals created by the radios out to be received by individual subscriber units. The transceivers are often located at ground level and are connected to the antennas by coaxial cables. Because of the short wavelength of the frequencies assigned by the FCC for wireless services, the antennas require line-of-sight paths for their signals to propagate well and so are installed at some height above ground. The antennas are designed to concentrate their energy toward the horizon, with very little energy wasted toward the sky or the ground. This means that it is generally not possible for exposure conditions to approach the maximum permissible exposure limits without being physically very near the antennas.

**Computer Modeling Method**

The FCC provides direction for determining compliance in its Office of Engineering and Technology Bulletin No. 65, “Evaluating Compliance with FCC-Specified Guidelines for Human Exposure to Radio Frequency Radiation,” dated August 1997. Figure 2 describes the calculation methodologies, reflecting the facts that a directional antenna’s radiation pattern is not fully formed at locations very close by (the “near-field” effect) and that at greater distances the power level from an energy source decreases with the square of the distance from it (the “inverse square law”). This methodology is an industry standard for evaluating RF exposure conditions and has been demonstrated through numerous field tests to be a conservative prediction of exposure levels.

**Site and Facility Description**

Based upon information provided by AT&T, including zoning drawings by Streamline Engineering and Design, Inc., dated February 17, 2021, it is proposed to install six CCI Model TPA65R-BU4D directional panel antennas on a 12-foot extension on top of the existing 101-foot PG&E lattice tower sited among greenhouses at the commercial farm located at 2535 East Lake Avenue\* in unincorporated Santa Cruz County, about a mile north of Watsonville. The antennas would employ up to 16° downtilt, would be mounted at an effective heights of about 108 and 102 feet above ground, and would be oriented in stacked pairs toward 80°T, 200°T, and 320°T, to provide service in all directions. The maximum effective radiated power in any direction would be 17,110 watts, representing simultaneous operation at 9,330 watts for AWS, 2,590 watts for PCS, 1,740 watts for cellular, and 3,450† watts for 700 MHz service.

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\* State Route 152.

† This figure includes operation for “FirstNet” services in the 700 MHz band.





**AT&T Mobility • Proposed Base Station (Site No. CCL04676)  
2535 East Lake Avenue • Watsonville, California**

Presently located lower on the tower are similar antennas for use by Verizon Wireless. For the limited purpose of this study, the transmitting facilities of that carrier are assumed to be as follows:

Service	Maximum ERP	Antenna Model	Downtilt	Height
AWS	11,800 watts	CommScope NHH-65B	2°	45 ft
PCS	5,300	CommScope NHH-65B	2	45
Cellular	2,800	CommScope NHH-65B	2	45
700 MHz	2,800	CommScope NHH-65B	2	45

### **Study Results**

For a person anywhere at ground, the maximum RF exposure level due to the proposed AT&T operation by itself is calculated to be 0.033 mW/cm<sup>2</sup>, which is 5.2% of the applicable public exposure limit. The maximum calculated cumulative level at ground, for the simultaneous operation of both carriers, is 14% of the public exposure limit. The maximum calculated cumulative level at any nearby residence<sup>‡</sup> is 2.3% of the public exposure limit. The maximum calculated cumulative level at any building on the campus of St. Francis Catholic School, located at 2400 East Lake Avenue, about 1,950 feet to the southwest, is 0.47% of the public limit. The maximum calculated cumulative level at any building on the campus of Lakeview Middle School, located at 2350 East Lake Avenue, about 2,400 feet to the southwest, is 0.30% of the limit. It should be noted that these results include several “worst-case” assumptions and therefore are expected to overstate actual power density levels.

### **No Recommended Mitigation Measures**

Due to their mounting locations and height, the AT&T antennas would not be accessible to unauthorized persons, and so no measures are necessary to comply with the FCC public exposure guidelines. It is presumed that PG&E already takes adequate precautions to ensure that there is no unauthorized access to its tower and that all personnel receive appropriate training to prevent exposures in excess of the occupational limit.

### **Conclusion**

Based on the information and analysis above, it is the undersigned’s professional opinion that operation of the base station proposed by AT&T Mobility at 2535 East Lake Avenue in Watsonville, California, will comply with the prevailing standards for limiting public exposure to radio frequency energy and, therefore, will not for this reason cause a significant impact on the environment. The highest calculated level in publicly accessible areas is much less than the prevailing standards allow for exposures of unlimited duration. This finding is consistent with measurements of actual exposure conditions taken at other operating base stations.

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<sup>‡</sup> Located at least 870 feet away, based on photographs from Google Maps.

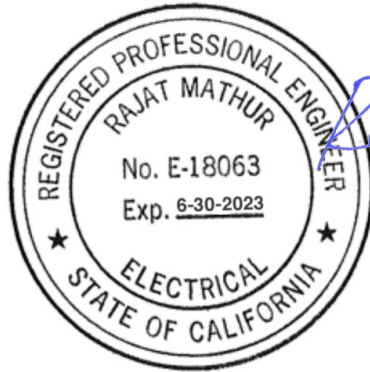




**AT&T Mobility • Proposed Base Station (Site No. CCL04676)  
2535 East Lake Avenue • Watsonville, California**

**Authorship**

The undersigned author of this statement is a qualified Professional Engineer, holding California Registration No. E-18063, which expires on June 30, 2023. This work has been carried out under his direction, and all statements are true and correct of his own knowledge except, where noted, when data has been supplied by others, which data he believes to be correct.



*Rajat Mathur*

Rajat Mathur, P.E.  
707/996-5200

June 21, 2021



**HAMMETT & EDISON, INC.**  
CONSULTING ENGINEERS  
SAN FRANCISCO

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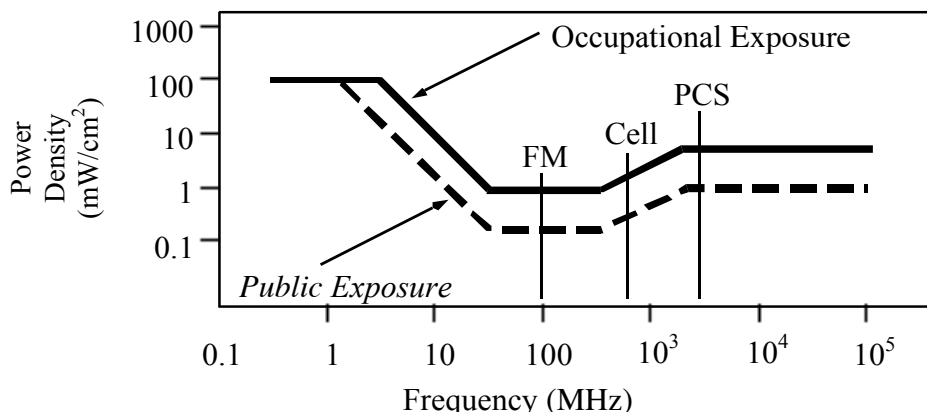
P7VF.1  
Page 4 of 4

## FCC Radio Frequency Protection Guide

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The FCC adopted the limits from Report No. 86, “Biological Effects and Exposure Criteria for Radiofrequency Electromagnetic Fields,” published in 1986 by the Congressionally chartered National Council on Radiation Protection and Measurements (“NCRP”). Separate limits apply for occupational and public exposure conditions, with the latter limits generally five times more restrictive. The more recent standard, developed by the Institute of Electrical and Electronics Engineers and approved as American National Standard ANSI/IEEE C95.1-2006, “Safety Levels with Respect to Human Exposure to Radio Frequency Electromagnetic Fields, 3 kHz to 300 GHz,” includes similar limits. These limits apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health.

As shown in the table and chart below, separate limits apply for occupational and public exposure conditions, with the latter limits (in *italics* and/or dashed) up to five times more restrictive:

Frequency Applicable Range (MHz)	Electromagnetic Fields (f is frequency of emission in MHz)					
	Electric Field Strength (V/m)		Magnetic Field Strength (A/m)		Equivalent Far-Field Power Density (mW/cm <sup>2</sup> )	
0.3 – 1.34	614	<i>614</i>	1.63	<i>1.63</i>	100	<i>100</i>
1.34 – 3.0	614	<i>823.8/f</i>	1.63	<i>2.19/f</i>	100	<i>180/f<sup>2</sup></i>
3.0 – 30	1842/f	<i>823.8/f</i>	4.89/f	<i>2.19/f</i>	900/f <sup>2</sup>	<i>180/f<sup>2</sup></i>
30 – 300	61.4	<i>27.5</i>	0.163	<i>0.0729</i>	1.0	<i>0.2</i>
300 – 1,500	3.54√f	<i>1.59√f</i>	√f/106	<i>√f/238</i>	f/300	<i>f/1500</i>
1,500 – 100,000	137	<i>61.4</i>	0.364	<i>0.163</i>	5.0	<i>1.0</i>



Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits, and higher levels also are allowed for exposures to small areas, such that the spatially averaged levels do not exceed the limits. However, neither of these allowances is incorporated in the conservative calculation formulas in the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) for projecting field levels. Hammett & Edison has incorporated those formulas in a computer program capable of calculating, at thousands of locations on an arbitrary grid, the total expected power density from any number of individual radio frequency sources. The program allows for the inclusion of uneven terrain in the vicinity, as well as any number of nearby buildings of varying heights, to obtain more accurate projections.



## RFR.CALC™ Calculation Methodology

### Assessment by Calculation of Compliance with FCC Exposure Guidelines

The U.S. Congress required (1996 Telecom Act) the Federal Communications Commission (“FCC”) to adopt a nationwide human exposure standard to ensure that its licensees do not, cumulatively, have a significant impact on the environment. The maximum permissible exposure limits adopted by the FCC (see Figure 1) apply for continuous exposures from all sources and are intended to provide a prudent margin of safety for all persons, regardless of age, gender, size, or health. Higher levels are allowed for short periods of time, such that total exposure levels averaged over six or thirty minutes, for occupational or public settings, respectively, do not exceed the limits.

#### Near Field.

Prediction methods have been developed for the near field zone of panel (directional) and whip (omnidirectional) antennas, typical at wireless telecommunications base stations, as well as dish (aperture) antennas, typically used for microwave links. The antenna patterns are not fully formed in the near field at these antennas, and the FCC Office of Engineering and Technology Bulletin No. 65 (August 1997) gives suitable formulas for calculating power density within such zones.

For a panel or whip antenna, power density  $S = \frac{180}{\theta_{BW}} \times \frac{0.1 \times P_{net}}{\pi \times D \times h}$ , in mW/cm<sup>2</sup>,

and for an aperture antenna, maximum power density  $S_{max} = \frac{0.1 \times 16 \times \eta \times P_{net}}{\pi \times h^2}$ , in mW/cm<sup>2</sup>,

where  $\theta_{BW}$  = half-power beamwidth of antenna, in degrees,

$P_{net}$  = net power input to antenna, in watts,

$D$  = distance from antenna, in meters,

$h$  = aperture height of antenna, in meters, and

$\eta$  = aperture efficiency (unitless, typically 0.5-0.8).

The factor of 0.1 in the numerators converts to the desired units of power density.

#### Far Field.

OET-65 gives this formula for calculating power density in the far field of an individual RF source:

power density  $S = \frac{2.56 \times 1.64 \times 100 \times RFF^2 \times ERP}{4 \times \pi \times D^2}$ , in mW/cm<sup>2</sup>,

where  $ERP$  = total ERP (all polarizations), in kilowatts,

$RFF$  = three-dimensional relative field factor toward point of calculation, and

$D$  = distance from antenna effective height to point of calculation, in meters.

The factor of 2.56 accounts for the increase in power density due to ground reflection, assuming a reflection coefficient of 1.6 (1.6 x 1.6 = 2.56). The factor of 1.64 is the gain of a half-wave dipole relative to an isotropic radiator. The factor of 100 in the numerator converts to the desired units of power density. This formula is used in a computer program capable of calculating, at thousands of locations on an arbitrary grid, the total expected power density from any number of individual radio frequency sources. The program also allows for the inclusion of uneven terrain in the vicinity, as well as any number of nearby buildings of varying heights, to obtain more accurate projections.

