CITY OF CLAYTON

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AGENDA
PLANNING COMMISSION
Regular Meeting
7:00 P.M. on Tuesday, September 8, 2015

Hoyer Hall, Clayton Community Library, 6125 Clayton Road, Clayton, California

1. CALL TO ORDER, ROLL CALL, PLEDGE TO THE FLAG

2. ADMINISTRATIVE

2.a. Review of agenda items.

2.b. Declaration of Conflict of Interest.

2.c. Commissioner Dan Richardson to report at the City Council meeting of September 15, 2015 (alternate Gregg Manning).

3. PUBLIC COMMENT

4. MINUTES

4.a. Approval of the minutes for the July 14, 2015 Planning Commission meeting.

5. PUBLIC HEARINGS

5.a. **SPR-03-15, Site Plan Review Permit, Edward Criado,** 973 Oak Street, APN: 119-022-006. A request for approval of a Site Plan Review Permit to allow the construction of a two-story addition measuring approximately 1,500 square feet in area and 22 feet in height on an existing two-story single-family residence. Pursuant to California Environmental Quality Act (CEQA) Guideline 15303 – New Construction or Conversion of Small Structures, the project is categorically exempt from CEQA.

Staff Recommendation: Staff recommends that the Planning Commission receive and consider the staff report and all information provided and submitted to date, receive and consider any public testimony and, if determined to be appropriate, conditionally approve the Edward Criado Site Plan Review Permit SPR-03-15.

5.b. **UP-01-15, Use Permit, T-Mobile,** north side of Marsh Creek Road, APN: 119-070-007. A request for approval of a Use Permit to allow the installation and operation of a wireless communications facility. The proposal would involve the construction of an approximate 40-foot antenna designed as a "monopine" (appearing as a tree), a 35-foot utility pole, and a fenced-in equipment enclosure for the equipment located at the base of the antenna and utility pole. Pursuant to California Environmental Quality Act (CEQA) Guideline 15303 – New Construction or Conversion of Small Structures, the project is categorically exempt from CEQA.

Staff Recommendation: Staff recommends the Planning Commission receive and consider the staff report and all information provided and submitted to date, receive and consider all public testimony and, if determined to be appropriate, conditionally approve the T-Mobile Use Permit UP-01-15.

6. OLD BUSINESS

None.

7. NEW BUSINESS

None.

8. COMMUNICATIONS

8.a. Staff.
8.b. Commission.

9. ADJOURNMENT

9.a. The next regularly-scheduled meeting of the Planning Commission will be held on **Tuesday, September 22, 2015**.

Most Planning Commission decisions are appealable to the City Council within ten (10) calendar days of the decision. Please contact Community Development Department staff for further information immediately following the decision. If the decision is appealed, the City Council will hold a public hearing and make a final decision. If you challenge a final decision of the City in court, you may be limited to raising only those issues you or someone else raised at the public hearing(s), either in oral testimony at the hearing(s) or in written correspondence delivered to the Community Development Department at or prior to the public hearing(s). Further, any court challenge must be made within 90 days of the final decision on the noticed matter. If you have a physical impairment that requires special accommodations to participate, please contact the Community Development Department at least 72 hours in advance of the meeting at 925-673-7340. An affirmative vote of the Planning Commission is required for approval. A tie vote (e.g., 2-2) is considered a denial. Therefore, applicants may wish to request a continuance to a later Commission meeting if only four Planning Commissioners are present.

Any writing or documents provided to the majority of the Planning Commission after distribution of the agenda packet regarding any item on this agenda will be made available for public inspection in the Community Development Department located at 6000 Heritage Trail during normal business hours.

Minutes
Clayton Planning Commission Meeting
Tuesday, July 14, 2015

1. CALL TO ORDER, ROLL CALL, PLEDGE TO THE FLAG

Chair Dan Richardson called the meeting to order at 7:00 p.m. at Hoyer Hall, 6125 Clayton Road, Clayton, California.

Present: Chair Dan Richardson
Vice Chair David Bruzzone
Commissioner Tuija Catalano
Commissioner Sandra Johnson
Commissioner Gregg Manning

Absent: None

Staff: Community Development Director Mindy Gentry
Assistant Planner Milan Sikela, Jr.

2. ADMINISTRATIVE

2.a. Selection of Chair and Vice Chair.

Commissioner Manning moved and Commissioner Johnson seconded a motion to elect Vice Chair David Bruzzone as Chair of the Planning Commission. The motion passed 5-0.

Commissioner Richardson moved and Commissioner Manning seconded a motion to elect Commissioner Johnson as Vice Chair of the Planning Commission. The motion passed 5-0.

2.b. Selection of TRANSPAC representative.

Chair Bruzzone volunteered to be the TRANSPAC representative with Vice Chair Johnson as backup.

Commissioner Richardson moved and Commissioner Manning seconded the appointment. The motion passed 5-0.

2.c. Review of agenda items.

2.d. Declaration of Conflict of Interest.

2.e. Vice Chair Dave Bruzzone to report at the City Council meeting of July 21, 2015.

3. PUBLIC COMMENT

None.

4. MINUTES

4.a. Approval of the minutes for the June 9, 2015 Planning Commission meeting.

Commissioner Manning moved and Vice Chair Johnson seconded a motion to approve the minutes, as submitted. The motion passed 3-0-2 (Commissioner Richardson and Commissioner Catalano abstained).

5. PUBLIC HEARINGS

5.a. **SPR-02-15, Site Plan Review Permit, Erik and Alexis Alden,** 14 Nottingham Circle (APN 120-032-003). A request for approval of a Site Plan Review Permit to allow the construction of a second-story closet addition measuring approximately 140 square feet in area and 20 feet in height on an existing two-story single-family residence. Pursuant to California Environmental Quality Act (CEQA) Guideline 15301 – Existing Facilities, the project is categorically exempt from CEQA.

The public hearing was opened.

Assistant Planner Sikela presented the staff report.

One of the applicants, Alexis Alden, indicated the following:

- Master bedroom has no master closet.
- We have done our best to integrate the addition with the existing design of our residence.

Commissioner Manning asked why the project was started without permits.

The project contractor, Tim Smith, provided the following responses and explanations:

- We were not aware that you needed a permit for such a minor modification to a residence.
- We looked at different rooflines in order provide the highest level of integration.
- The previous owner was using a previously-existing 22-inch-by-30-inch crawlspace opening to get into an enclosed area adjacent to the master bedroom.
- The crawlspace access to the enclosed area was very unorthodox and so the applicant was interested in having an actual closet with standard access rather than an enclosed area with crawlspace access.

Commissioner Richardson indicated that he could see the framework of the project from Clayton Road.

Vice Chair Johnson indicated that she was glad to see the applicant doing the right thing by applying for a Site Plan Review Permit.

Commissioner Catalano indicated the design of the project will cause minimal impact and she supports approval of the Site Plan Review Permit.

Chair Bruzzone indicated that he concurred with Commissioner Catalano's comment regarding visual impacts and also supported approval of the Site Plan Review Permit.

Vice Chair Johnson moved and Commissioner Manning seconded a motion to approve Site Plan Review Permit SPR-02-15, with the conditions of approval recommended by staff. The motion passed 5-0.

6. OLD BUSINESS

None.

7. NEW BUSINESS

The Planning Commissioners all welcomed the new Community Development Director Mindy Gentry.

Director Gentry indicated that she is looking forward to working for the City.

8. COMMUNICATIONS

8.a. Staff.

Director Gentry provided status updates on the e-permit processing being finalized at the Contra Costa County Building Department, first and second readings of the Rooftop Solar Permit Streamlining Act Ordinance being done by the Clayton City Council, continued Silver Oak Estates project environmental review, reinstatement of the entitlements for the Oak Creek Canyon project, and the City Council's review of upcoming proposed amendments to the Town Center Specific Plan.

8.b. Commission.

None.

9. ADJOURNMENT

9.a. The meeting was adjourned at 7:30 p.m. to the regularly-scheduled meeting of the Planning Commission on July 28, 2015.

Submitted by
Mindy Gentry
Community Development Director

Approved by
David Bruzzone
Chair

Community Development\Planning Commission\Minutes\2015\0714

PLANNING COMMISSION
STAFF REPORT

Meeting Date:	**September 8, 2015**
Item Number:	**5.a.**
From:	**Milan J. Sikela, Jr.** **Assistant Planner**
Subject:	**Public Hearing to consider a Site Plan Review Permit request to construct a two-story addition on an existing two-story residence (SPR-03-15)**
Applicants:	**Edward Criado**

REQUEST

Edward Criado, is requesting a public hearing for the consideration of a Site Plan Review Permit to allow the construction of an addition measuring approximately 1,500 square feet in area and 20 feet in height on an existing two-story single-family residence.

PROJECT INFORMATION

Location:	973 Oak Street APN: 119-022-006
General Plan Designation:	Low Density – Single Family Residential (1.1 to 3.0 units per acre).
Zoning:	Single Family Residential R-15 District (15,000 square-foot minimum lot area).
Environmental Review:	Pursuant to California Environmental Quality Act (CEQA) Guideline 15303 – New Construction or Conversion of Small Structures, the project is categorically exempt from CEQA.
Public Notice:	On August 28, 2015, a public hearing notice was posted at the notice boards and mailed to property owners within 300 feet of the project site.
Authority:	Section 17.44.020 of the Clayton Municipal Code (CMC) authorizes the Planning Commission to approve a Site Plan Review Permit in accordance with the standards of review in CMC Section 17.44.040.

DISCUSSION

The applicant is requesting Planning Commission consideration of a Site Plan Review Permit to allow the construction of a two-story addition measuring approximately 1,500 square feet in area and 20 feet in height on an existing two-story single-family residence. The addition will incorporate matching horizontal siding, brick wainscoting, composition roof material, and a 4:12 roof pitch. The vicinity map is provided as **Attachment A** and the site plan, roof plan, floor plan, cross-section, and architectural elevations are provided as **Attachment B**.

The proposed design of the new addition will foster a dynamic structural presence for the subject property. The applicant has brought cohesion to the dwelling through use of a unified main roof component which balances the appearance of the residence. The various projections and recesses of the exterior walls lend articulation and visual interest to the proposal, with rhythm and scale being provided by the dormers on the front elevation. The project shows enhancement of the integration and connectivity of the home through use of complementary exterior colors and materials and a shift of structural massing from the existing second-story component on the right, rear corner of the residence (to be removed) to the proposed prominent roof mass that is more centralized in nature.

Setback Analysis

The project meets the R-15 District standards as shown below.

Required Setbacks	Existing Setbacks		Proposed Setbacks		Project Compliance
Front Setback 20'	East	30'	East	No Change	Yes
Side Setback					
10' interior	North	14'	North	No Change	Yes
	South	15'	South	No Change	Yes
25' aggregate	Aggregate	29'	Aggregate	No Change	Yes
Rear Setback 15'	West	115'	North	85'	Yes

Residential Floor Area Analysis

Building Footprint

The proposal meets the building footprint requirements as shown below.

Lot Size	Building Footprint Allowed	Existing Building Footprint	Proposed Building Footprint	Project Compliance
20,909 sq ft	5,227 sq ft	2,855 sq ft	4,331 sq ft	Yes

Floor Area

The proposal meets the floor area requirements as shown below.

Lot Area	Floor Area Allowed	Existing Floor Area	Proposed Floor Area	Project Compliance
20,909 sq ft	7,318 sq ft	3,242 sq ft	4,331 sq ft	Yes

CONCLUSION

Staff has reviewed the design aspects of the proposed plans relative to the standards for Site Plan Review Permits and development standards for the zoning district and has determined that the project, as conditioned, is in conformance with the Clayton Municipal Code. The proposed findings of approval listed below specifically address the standards.

RECOMMENDATION

Staff recommends that the Planning Commission receive and consider the staff report and all information provided and submitted to date, receive and consider any public testimony and, if determined to be appropriate, conditionally approve Site Plan Review Permit SPR-03-15 to allow the construction of an addition measuring approximately 1,500 square feet in area and 20 feet in height on an existing two-story single-family residence at 973 Oak Street (APN: 119-022-006).

PROPOSED FINDINGS OF APPROVAL

Based upon the evidence set forth in the staff report, which includes relevant information from the project application, as well as testimony at the public hearing, the Planning Commission makes the following findings that Site Plan Review Permit SPR-03-15, as conditioned:

1. Is consistent with the General Plan designation and policies.

   The project is consistent with the General Plan designation and policies since the project consists of an enlargement of a single family home, an allowed use, within the Single Family Low Density designation site.

2. Meets the standards and requirements of the Zoning Ordinance.

   The project meets the standards and requirements of the Zoning Ordinance since the project will be constructed in compliance with Site Plan Review Permit requirements, findings, and conditions of approval.

3. Preserves the general safety of the community regarding seismic, landslide, flooding, fire, and traffic hazards.

   Preserves the general safety of the community regarding seismic, landslide, flooding, fire, and traffic hazards since the project will be constructed in compliance with the Clayton Municipal Code, Uniform Building Code, and other agency regulations where applicable

4. Maintains solar rights of adjacent properties.

   The project will not block adjacent properties from direct sunlight from any angle of the ecliptic.

5. Reasonably maintains the privacy of adjacent property owners and/or occupants.

The project reasonably maintains the privacy of adjacent property owners and/or occupants since the project involves removal of the second-story component, thereby reducing the height of the residence and mitigating impacts to privacy, and complies with the setback requirements of the Clayton Municipal Code.

6. Reasonably maintains the existing views of adjacent property owners and/or occupants.

   The project reasonably maintains the existing views of adjacent property owners and/or occupants since the project involves removal of the second-story component, thereby reducing the height of the residence and maintaining existing views.

7. Is complementary, although not identical, with adjacent existing structures in terms of materials, colors, size, and bulk.

   The project is complementary, although not identical, with adjacent existing structures in terms of materials, colors, size, and bulk since the addition has been designed with exterior colors and materials that architecturally complement the surrounding residences and the massing of the project complies with all applicable zoning regulations and development standards for setback, building footprint, and residential floor area requirements.

8. Is compatible with the neighborhood and surrounding land uses.

   The project consists of the expansion of an existing single family home and is not considered a manufactured home; therefore this finding is not applicable.

The above-stated findings assume acceptance and approval of the proposed condition of approval listed below.

PROPOSED CONDITIONS OF APPROVAL

These conditions of approval apply to the Criado Residence Aerial Photo, Site Plan, Roof Plan, Site Photos, Floor Plan, Cross-Section, and Architectural Elevations, prepared by LP Designs, date stamped August 28, 2015.

1. The applicant shall indemnify, protect, defend, and hold harmless the City and its elected and appointed officials, officers, employees, and agents from and against any and all liabilities, claims, actions, causes, proceedings, suits, damages, judgments, liens, levies, costs, and expenses of whatever nature, including, but not limited to, attorney's fees, costs, and disbursements arising out of or in any way relating to the issuance of this entitlement, any actions taken by the City relating to this entitlement, and any environmental review conducted under the California Environmental Quality Act for this entitlement and related actions.
2. The project shall be constructed in accordance with the approved plans, prepared by LP Designs, date stamped August 28, 2015, and as conditionally approved by the Clayton Planning Commission on September 8, 2015.
3. Any major changes to the project shall require Planning Commission review and approval. Any minor changes to the project shall be subject to City staff review and approval.

4. No permits or approvals, whether discretionary or mandatory, shall be considered if the applicant is not current on fees, reimbursement payments, and any other payments that are due.
5. An encroachment permit shall be required for all work in the public right-of-way.

ADVISORY NOTES

Advisory notes are provided to inform the applicant of: (a) Clayton Municipal Code requirements; and (b) requirements imposed by other agencies. The advisory notes state requirements that may be in addition to the conditions of approval.

1. The applicant shall comply with all applicable State, County, and City codes, regulations and adopted standards as well as pay all associated fees and charges.
2. This Site Plan Review Permit shall be used, exercised, or established within twelve months after the granting of the Permit, or a time extension must be obtained from the Planning Commission, otherwise the Permit shall be null and void (Clayton Municipal Code Sections 17.64.010-17.64.030).
3. All construction and other work shall occur only between 7:00 a.m. and 5:00 p.m. Monday through Friday. Any such work beyond these hours and days is strictly prohibited unless specifically authorized in writing by the City Engineer (Clayton Municipal Code Section 15.01.101) located at 5375 Clayton Road, Concord, 925-363-7433.
4. The applicant shall obtain the necessary building permits from the Contra Costa County Building Inspection Department. All construction shall conform to the California Building Code.
5. Additional requirements may be imposed by the Contra Costa County Fire Protection District. Before proceeding with the project, it is advisable to check with the Fire District located at 2010 Geary Road, Pleasant Hill, 925-930-5500.
6. If the project site is located within an area subject to covenants, conditions, and restrictions (CC&Rs) administered by a homeowners' association (HOA), additional requirements and/or approvals may be required by the HOA. Before proceeding with the project, it is advisable to check with the HOA to ensure any applicable requirements are met.

ATTACHMENTS

A. Vicinity Map
B. Criado Residence Aerial Photo, Site Plan, Roof Plan, Site Photos, Floor Plan, Cross-Section, and Architectural Elevations, prepared by LP Designs, date stamped August 28, 2015

Com Dev\SPR\2015\SPR-03-15.criado.addition\SPR-03-15.criado.sr.for.pc.mtg.9.8.15
Community Development\Planning Commission\Final Staff Reports and Notices of Decision\2015\9-8-15

VICINITY MAP

CITY OF CLAYTON	**Criado Residence** **Site Plan Review Permit SPR-03-15** **973 Oak Street** **APN: 119-022-006**	N (Not to Scale)

ATTACHMENT A

UNDERGROUND SERVICE ALERT
CALL 800.642.2444
CALL TWO DAYS BEFORE DIGGING

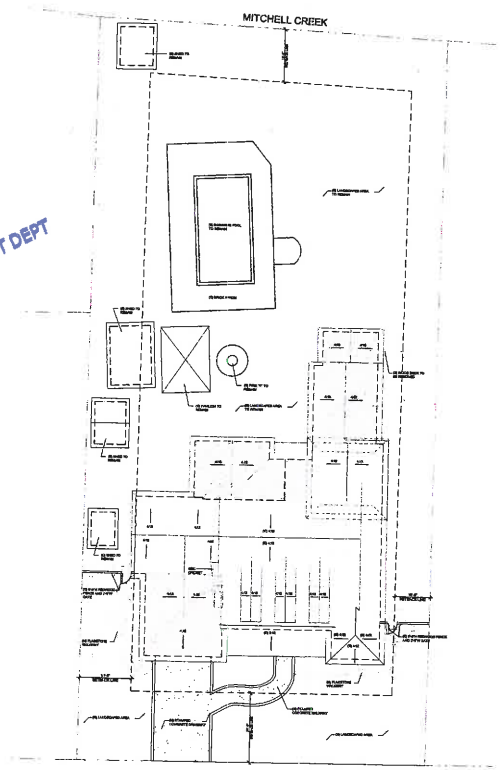
LP DESIGNS
5580 JASPER COURT
CONCORD, CA 94521
CELL: 925.759.9763

DESIGN REVIEW

ATTACHMENT B

Additions and Alterations to the
Criado Residence
973 Oak Street
Clayton, CA 94517
925.672.1976
A.P.N. 119-022-006

2 AERIAL PHOTO
SCALE: N.T.S.



1 SITE / ROOF PLAN
SURVEY INFORMATION SHOWN HEREIN IS BASED ON AERIAL PHOTO AND PLOT PLAN PROVIDED BY CONTRA COSTA COUNTY ACCESSOR'S MAP.
SCALE: 1/16" = 1'-0"

ISSUE

NO:	DESCRIPTION:	DATE:

DATE: 05.11.15
SCALE: AS SHOWN
DRAWN BY:
CAD FILE NAME:
JOB NO.: 21301

SHEET TITLE:
SITE/ROOF PLAN, AERIAL PHOTO

SHEET NO.:
A2

B-1

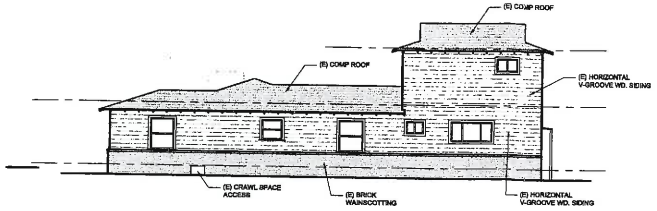
EAST ELEVATION

EAST ELEVATION

WEST ELEVATION

7 PHOTOS OF EXISTING HOUSE

SCALE: N.T.S.



6 EXISTING NORTH ELEVATION

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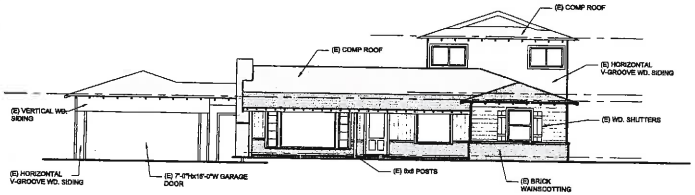
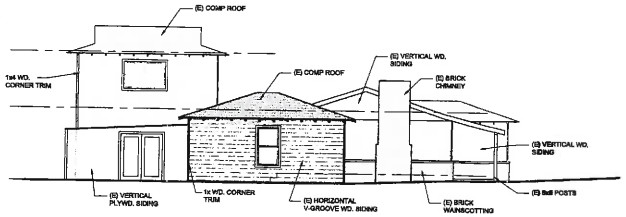


5 EXISTING EAST ELEVATION

SCALE: 1/8"=1'-0"



4 EXISTING SOUTH ELEVATION

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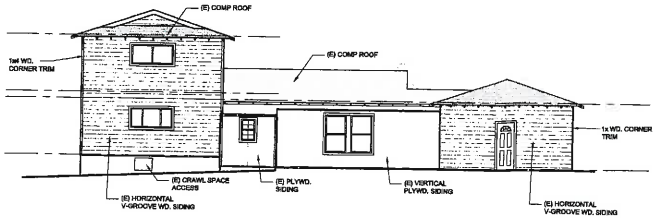

3 EXISTING WEST ELEVATION

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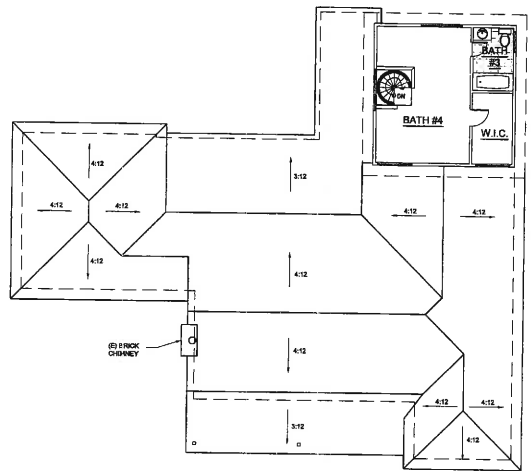
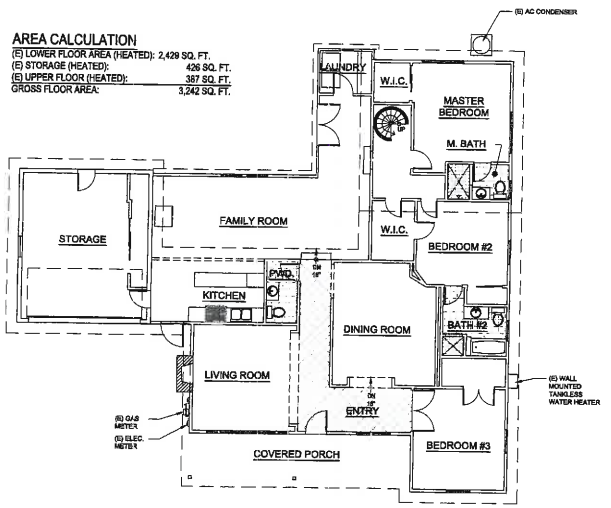


2 EXISTING UPPER FLOOR PLAN

SCALE: 1/8"=1'-0"

AREA CALCULATION

(E) LOWER FLOOR AREA (HEATED):	2,429 SQ. FT.
(E) STORAGE (HEATED):	426 SQ. FT.
(E) UPPER FLOOR (HEATED):	387 SQ. FT.
GROSS FLOOR AREA:	3,242 SQ. FT.



1 EXISTING LOWER FLOOR

SCALE: 1/8"=1'-0"

TRUE NORTH

B-2

DESIGNS

LP DESIGNS
5560 JASPER COURT
CONCORD, CA 94521
CELL: 925.766.9788

DESIGN REVIEW

Additions and Alterations to the
Criado Residence
973 Oak Street
Clayton, CA 94517
925.672.1976
A.P.N. 119-022-006

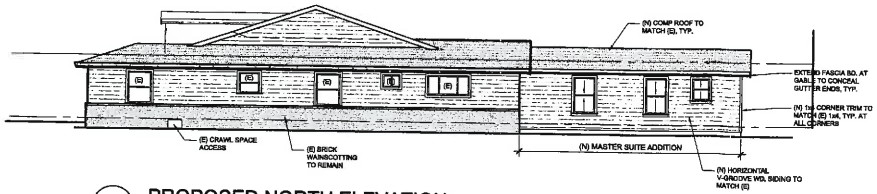
ISSUE

NO.	DESCRIPTION	DATE

DATE: 08.11.16
SCALE: AS SHOWN
DRAWN BY:
CAD FILE NAME:
JOB NO.: 21301

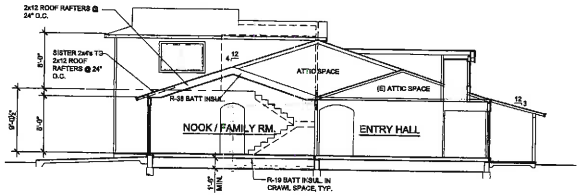
SHEET TITLE:
EXISTING FLOOR PLANS, EXISTING EXTERIOR ELEVATIONS AND PHOTOS OF EXISTING HOUSE

SHEET NO.:
A3
3 OF – SHEETS



6 PROPOSED NORTH ELEVATION

SCALE: 1/8"=1'-0"



2 PROPOSED SECTION

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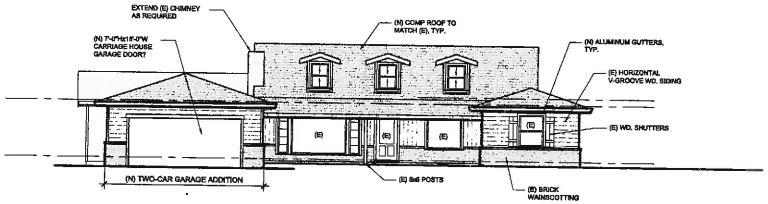
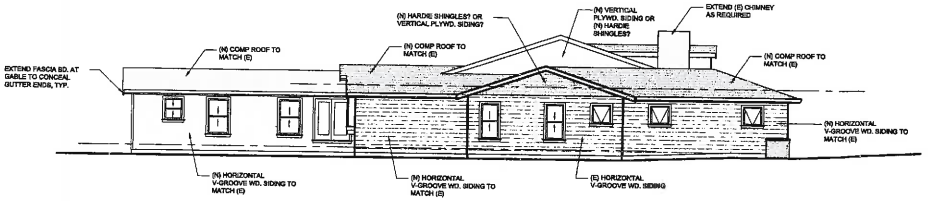


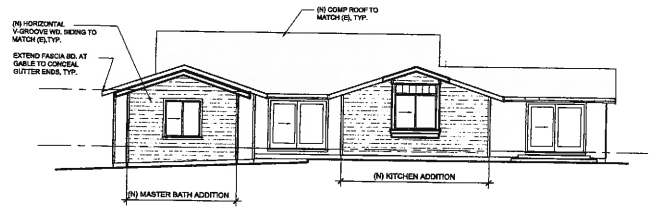
5 PROPOSED EAST ELEVATION

SCALE: 1/8"=1'-0"



4 PROPOSED SOUTH ELEVATION

SCALE: 1/8"=1'-0"



3 PROPOSED WEST ELEVATION

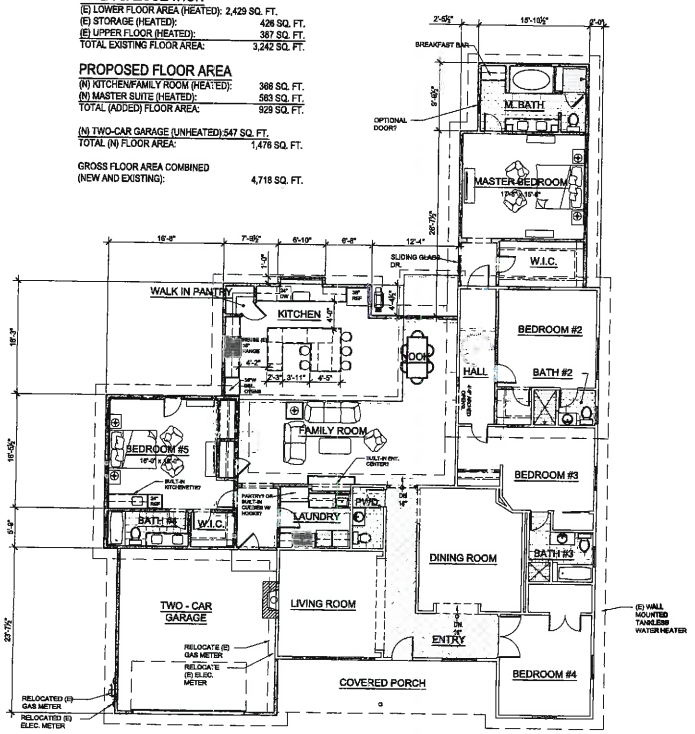
SCALE: 1/8"=1'-0"

AREA CALCULATION

(E) LOWER FLOOR AREA (HEATED):	2,429 SQ. FT.
(E) STORAGE (HEATED):	426 SQ. FT.
(E) UPPER FLOOR (HEATED):	387 SQ. FT.
TOTAL EXISTING FLOOR AREA:	3,242 SQ. FT.

PROPOSED FLOOR AREA

(N) KITCHEN/FAMILY ROOM (HEATED):	368 SQ. FT.
(N) MASTER SUITE (HEATED):	583 SQ. FT.
TOTAL (ADDED) FLOOR AREA:	928 SQ. FT.
(N) TWO-CAR GARAGE (UNHEATED):	547 SQ. FT.
TOTAL (N) FLOOR AREA:	1,476 SQ. FT.
GROSS FLOOR AREA COMBINED (NEW AND EXISTING):	4,718 SQ. FT.



1 PROPOSED SINGLE LEVEL PLAN (ADDS = 1,485 SQ.FT.)

SCALE: 1/8"=1'-0"

LP DESIGNS
5560 JASPER COURT
CONCORD, CA 94521
CELL: 925.759.9788

DESIGN REVIEW

Additions and Alterations to the
Criado Residence
973 Oak Street
Clayton, CA 94517
925.672.1976
A.P.N. 119-022-006

ISSUE

NO:	DESCRIPTION:	DATE:

DATE: 08.11.15
SCALE: AS SHOWN
DRAWN BY:
CAD FILE NAME:
JOB NO.: 21301

SHEET TITLE: PROPOSED SINGLE LEVEL PLAN

SHEET NO.: A4

4 OF -- SHEETS

B-3

PLANNING COMMISSION
STAFF REPORT

Meeting Date:	**September 8, 2015**
Item Number:	**5.b.**
From:	**Milan J. Sikela, Jr.** **Assistant Planner**
Subject:	**Public Hearing to consider a Use Permit request to allow the installation and operation of a wireless communications facility (UP-01-15)**
Applicant:	**T-Mobile**

REQUEST

T-Mobile, the applicant, is requesting a Use Permit for the installation and operation of a wireless communications facility.

PROJECT INFORMATION

Location:	North of Marsh Creek Road, approximately 580 feet from the intersection of Marsh Creek Road and Diablo Parkway on property owned by Contra Costa Water District (APN: 119-070-007)
General Plan Designation:	PQ – Public/Quasi-Public
Specific Plan:	Marsh Creek Road Specific Plan – Open Space
Zoning:	PF – Public Facility
Environmental Review:	Pursuant to California Environmental Quality Act (CEQA) Guideline 15303 – New Construction or Conversion of Small Structures, the project is categorically exempt from CEQA.
Public Notice:	On August 28, 2015, a public hearing notice was posted at the notice boards and mailed to property owners within 300 feet of the project site. On August 29, 2015, a public hearing notice was published in the Contra Costa Times.
Agency Referrals:	Comments received from the City Engineer have been incorporated into the Conditions of Approval. The Contra Costa County Building Inspection Department and Contra Costa County Fire Protection District did not respond.

Authority: Section 17.42.050.A.1 of the Clayton Municipal Code (CMC) authorizes the Planning Commission to approve a Use Permit in accordance with the Findings in CMC Section 17.42.050.B and Standards of Review in CMC Section 17.60.040.

BACKGROUND AND DISCUSSION

T-Mobile is requesting the consideration of a Use Permit to allow the installation and operation of a wireless communications facility located on property owned by Contra Costa Water District (CCWD), north of Marsh Creek Road, approximately 580 feet from the intersection of Marsh Creek Road and Diablo Parkway (**Attachment A**). The proposal includes the installation of an approximate 40-foot "monopine" (which is a structure that appears as a tree) and a 35-foot wood utility pole located inside of a 240 square-foot fenced-in enclosure (**Attachment B**). The T-Mobile enclosure will be located directly adjacent to a larger existing enclosure that houses the CCWD water tank, associated CCWD equipment, and another monopine that was installed previously by the wireless communication provider, Verizon Wireless, in 2001 when the property was still located in unincorporated Contra Costa County. The T-Mobile enclosure is proposed to utilize chain link fencing to match the existing fencing surrounding the CCWD enclosure and is proposed to house the T-Mobile monopine, utility pole, two BTS cabinets, three fiber boxes, a GPS antenna, and other minor associated equipment (**Attachment B, Page B-5**).

On the cell tower, the proposal involves the inclusion of the following antenna types:

- Three small, heavy antennas measuring 54 inches in height, 8.60 width in width, 14.80 inches in thickness, and weighing 100 pounds each;
- Six tall, lighter antennas measuring 96.4 inches in height, 7.1 inches in width, 11.9 inches in thickness, and weighing 50 pounds each;
- Three remote radio units (RRUs) 17.8 inches in height, 7.2 inches in width, 17.3 inches in thickness, and weighing 50 pounds each; and
- One microwave dish.

There are a total of nine proposed antennas, three RRUs, and one microwave dish. Staff has provided a condition that additional equipment or antennas proposed for the site be subject to City staff review and approval.

The applicant has provided an Alternative Site Analysis that supports the installation of telecommunications equipment at this site (**Attachment C**). The analysis found that the project site was preferable to alternative sites in the immediate area since the subject site would best meet T-Mobile's coverage objectives and would be less visually obtrusive with the monopine design. The monopine is designed and located in a manner that blends into the surrounding environment and is screened by the other existing on-site trees. The applicant has also submitted a letter from CCWD authorizing T-Mobile's use of the site (**Attachment D**).

In addition, the applicant has submitted a Radio Frequency Emissions Analysis Report (**Attachment E**) which summarizes that the project meets Federal Communications Commission general public limit for exposure to radio frequency emissions. Regarding anticipated project-related noise impacts, the applicant has submitted an Environmental Noise Assessment Report which summarizes that the noise generated from the project site will be in compliance with the applicable Objectives and Policies of the Clayton General Plan Noise Element (**Attachment F**).

Regarding use of the utility pole, staff discussed with the applicant the possibility of undergrounding the utilities rather than using a utility pole. The applicant responded with the following email:

> "Unfortunately undergrounding the utilities for this project is not an option. Due to the property being home to a water tank along with a large amount of underground water lines, the property owner (Contra Costa Water District) would not allow us to underground in fear of disturbing all existing. Apparently it is the District's policy."

Staff notes the T-Mobile site is located approximately 190 feet north of Marsh Creek Road (approximately 10 to 15 feet further away from Marsh Creek Road than the existing Verizon Wireless monopine) and the photo simulations show the site is surrounded by numerous existing on-site trees. However, in order to provide greater screening and blending, staff has provided conditions of approval regarding the design of the monopine such as incorporation of a thicker branch distribution (i.e., more branches per square foot) and the appropriate painting of the equipment. Furthermore, in order to address construction and maintenance of the wireless communication facility and site improvements (including fencing upkeep), staff has provided a condition of approval addressing maintenance and upkeep of the site.

ANALYSIS AND CONCLUSION

Since the proposal will not involve parking impacts or traffic; will not generate noise levels in violation of the General Plan Noise Element; will not create significant levels of dust, airborne particulate, fumes, smells, or litter; and is not a place used by people (other than repair technicians) resulting in crime, congregations, and negative influences on minors; staff concludes that, as conditioned, the project complies with the Use Permit Standards of Review listed in Section 17.60.040 of the Clayton Municipal Code.

RECOMMENDATION

Staff recommends the Planning Commission receive and consider the staff report and all information provided and submitted to date, receive and consider all public testimony and, if determined to be appropriate, conditionally approve the T-Mobile Use Permit UP-01-15 to allow the installation and operation of a wireless communications facility located on property owned by Contra Costa Water District north of Marsh Creek Road (APN: 119-070-007).

PROPOSED FINDINGS OF APPROVAL

Based upon the evidence set forth in the staff report, which includes relevant information from the project application, as well as both oral and written testimony provided at the public hearing, the Planning Commission makes the following required use permit and antenna findings for Use Permit UP-01-15, as conditioned:

Use Permit Findings

1. That the use shall be in conformity with the General Plan and any applicable specific plan.

   The proposed project is a telecommunications facility and is in conformance with the General Plan since the project site is located in a Public/Quasi-Public land use

designation which allows for public/quasi-public uses including, but not limited to, wireless communication facilities. The proposed project is also in conformance with the Marsh Creek Road Specific Plan since it is clustered with another utility provider and wireless communications facility which locates the project away from the natural open space areas that the Marsh Creek Road Specific Plan seeks to protect.

2. That the use shall be in conformity with City-adopted standards.

   The project is complying with all Use Permit and Clayton Municipal Code requirements, findings, and conditions of approval.

3. That the use shall not negatively affect the general safety (e.g., seismic, landslide, flooding, fire, traffic) of the City or the surrounding area.

   The project will not negatively affect the general safety of the City or surrounding area since the project will be located approximately 190 feet from the nearest public areas (streets, sidewalks, and properties) and will be constructed in conformance with the State of California Uniform Building Code and other agency regulations where applicable.

4. That the use shall not have significant negative impacts on the health or general welfare of residents, businesses, property owners, or employees in the City.

   The project will not have significant negative impacts on the health or general welfare of residents, businesses, property owners, or employees in the City since the antenna will be screened through the use of a monopine design among existing on-site trees, located away from public and residential areas, and will provide improved wireless services to the Clayton region.

5. That the permit will be in accord with the purpose of the Use Permits as stated herein.

   The project will be in accord with the purpose of Use Permits as stated in Chapter 17.60 of the Clayton Municipal Code since the project complies with the City's Use Permit standards of review, is compatible with the land use designation of the site and will not be a detrimental use within the City.

<u>Antenna Findings</u>

1. That the applicant has demonstrated that he has made every effort by selection of design and equipment and by location of the antenna to limit the impact on the neighborhood.

   The applicant has done the following to limit the impacts upon the neighborhood:
   a. Being located approximately 300 feet from the nearest residential property.
   b. Being screened by a high number of existing on-site trees and the monopine design of the cell tower which, since the monopine is designed to appear like a tree, will allow the antenna to blend into the existing trees.

c. Being located inside of a fenced enclosure which is integrated with the existing fencing in and around the Contra Costa Water District property where the tower is proposed to be located.

2. The antenna will not be constructed to the rear of the residence or main structure unless it can be demonstrated that it is less like obtrusive elsewhere.

   The telecommunications site will be constructed approximately 300 feet from the nearest private residential property, which is less visually obtrusive than constructing the antenna in close proximity to residential properties.

3. That the antenna must be linked physically or electronically to a receiver located on the same parcel of land on which the antenna is located.

   The project proposal has provided the necessary link with a receiver located on the same parcel of land on which the antenna is located.

4. That all the structural supports for the antenna meet or exceed manufacturer's specifications.

   The telecommunications site will require a building permit prior to constructing the monopine and associated equipment, which will require the submittal of structural calculations to show the design meets the requirements of the type of facility for the environment it will be located within.

5. That no more than one antenna tower be placed per lot unless additional towers are screed from public right-of-way and adjacent parcels.

   The proposed facility is located on a property with another antenna (Verizon Wireless) which is screened from public streets and sidewalks through use of a monopine design which blends into the existing trees.

6. That the tower meets setback requirements within the designated zone and a minimum of ten (10) feet from property lines.

   The project incorporates a tower that is located approximately 300 feet from the nearest private residential property and is over 10 feet from the property lines of the subject site.

The above-stated findings assume acceptance and approval of the proposed Conditions of Approval listed below.

PROPOSED CONDITIONS OF APPROVAL

These Conditions of Approval apply to the T-Mobile topographic survey, site plan, equipment plan, antenna plan, and elevations, submitted by the applicant, date stamped April 28, 2015; Radio Frequency Emissions Analysis Report, prepared by EBI Consulting, date stamped April 28, 2015; and Environmental Noise Assessment Report, prepared by EBI Consulting, date stamped April 28, 2015.

1. The project site shall be kept in good working order which includes, but is not limited to, adequate trash collection; avoidance of localized flooding, erosion, and soil degradation; reduction of fire risks; and ensuring the continued health, safety, and welfare of the project environs.
2. The applicant shall install, and at all times maintain in good condition, three-dimensional bark cladding on the entire vertical support structure.
3. The applicant shall paint, and at all times maintain in good condition, all mounts, arms, brackets, and other support equipment with flat natural colors that resemble pine tree branches and/or needles.
4. The applicant shall install, and at all times maintain in good condition, at least 3.5 faux pine branches per vertical foot. The faux pine branches must commence at 12 feet above ground level and naturally taper towards the top. The faux pine branches must extend at least 24 inches from the edge of the tower-mounted equipment, including the antennas.
5. The applicant shall paint, and at all times maintain in good condition, all tower-mounted equipment including all antennas, remote radio units/heads, power equipment, tower-mounted amplifiers, cables, wires, and other connections with flat natural colors that resemble pine tree branches and/or needles.
6. The applicant shall install, and at all times maintain in good condition, faux pine needle socks over all antennas, remote radio units/heads, and other similar tower-mounted equipment.
7. The applicant shall install, and at all times maintain in good condition, green vertical slates throughout the entire chain link fence.
8. All existing on-site trees shall be protected during construction. Prior to building permit issuance, the applicant shall submit an arborist report for trees where construction will take place within the dripline which shall be reviewed and approved by the Community Development Director.
9. All structures and equipment associated with the wireless communications facility site shall be removed within thirty (30) days of the discontinuance of the use and the site shall be restored to its pre-development condition. In addition, the applicant shall provide the City with a notice of intent to vacate the site a minimum of thirty (30) days prior to vacation. This condition shall be recorded against the subject property.
10. No external cables shall be permitted on the outside face of the monopine trunk. All cables shall be within the trunk of the monopine from the point where they enter at the level of the antennas to the point where they exit to transit to the equipment area.
11. Additional equipment or antennas shall be subject to City staff review and approval.
12. T-Mobile shall install and at all times maintain in good condition an RF Notice sign on the entry gate of the fenced equipment enclosure at least five (5) feet above the ground. The signage shall comply with FCC OET Bulletin 65 or ANSI C95.2 for color, symbol, and content conventions. The signage shall at all times provide a working local or toll-free telephone number to its network operations center, and such telephone number shall be able to reach a live person who can exert transmitter power-down control over this site as required by the FCC.
13. The applicant agrees to indemnify, protect, defend, and hold harmless the City and its elected and appointed officials, officers, employees, and agents from and against any and all liabilities, claims, actions, causes, proceedings, suits, damages, judgments, liens, levies, costs, and expenses of whatever nature, including, but not limited to, attorney's fees, costs, and disbursements arising out of or in any way relating to the issuance of

this entitlement, any actions taken by the City relating to this entitlement, and any environmental review conducted under the California Environmental Quality Act for this entitlement and related actions.

ADVISORY NOTES

These Advisory Notes are provided to inform the applicant of: (a) Clayton Municipal Code requirements; or (b) requirements imposed by other agencies. These Advisory Notes state requirements that may be in addition to the Conditions of Approval.

1. The applicant shall comply with all applicable City, County, State, and wireless communications codes, regulations, and adopted standards.
2. Prior to obtaining a building permit, the applicant shall prepare an erosion and stormwater control plan for review and approval by the City Engineer (Clayton Municipal Code Chapter 13.12).
3. This Use Permit shall be used, exercised, or established within twelve months after granting of the Permit or a time extension must be obtained from the Planning Commission otherwise the Permit shall be null and void (Clayton Municipal Code Section 17.64.010-030).
4. The applicant shall obtain the necessary building permits from the Contra Costa County Building Inspection Department. All construction shall conform to the California Building Code.
5. All construction and other work shall occur only between 7:00 a.m. and 5:00 p.m. Monday through Friday. Any such work beyond these hours and days is strictly prohibited unless specifically authorized in writing by the City Engineer (Clayton Municipal Code Section 15.01.101) located at 5375 Clayton Road, Concord, 925-363-7433.
6. Additional requirements may be imposed by the Contra Costa County Fire Protection District. Before proceeding with the project, it is advisable to check with the Fire District located at 2010 Geary Road, Pleasant Hill, 925-930-5500.

ATTACHMENTS

A Vicinity Map
B T-Mobile topographic survey, site plan, equipment plan, antenna plan, and elevations, submitted by the applicant, date stamped April 28, 2015
C Alternative Site Analysis, submitted by the applicant, date stamped August 26, 2015
D Letter from the Contra Costa Water District, submitted by the applicant, date stamped August 26, 2015
E Radio Frequency Emissions Analysis Report, prepared by EBI Consulting, date stamped April 28, 2015
F Environmental Noise Assessment Report, prepared by EBI Consulting, date stamped April 28, 2015
G Photosimulations, submitted by the applicant, August 26, 2015

UP\2015\UP-01-15.tmobile.cell.site\UP-01-15.tmobile.cell.site.staff.report.for.PC.mtg.9.8.15
Community Development\Planning Commission\Final Staff Reports and Notices of Decision\2015\9-8-15

VICINITY MAP

CITY OF CLAYTON	**T-Mobile** **Contra Costa Water District Property** **Use Permit UP-01-15** **North of Marsh Creek Road** **APN: 119-070-007**	N (Not to Scale)

ATTACHMENT A

T-MOBILE WEST LLC

T··Mobile®

RECEIVED
APR 28 2015
CITY OF CLAYTON
COMMUNITY DEVELOPMENT DEPT

SEMINARY RESERVOIR & PUMP STATION
MARSH CREEK RD
CLAYTON, CA 94517

BA21633B

RFDS VER#: 1 11/22/2014

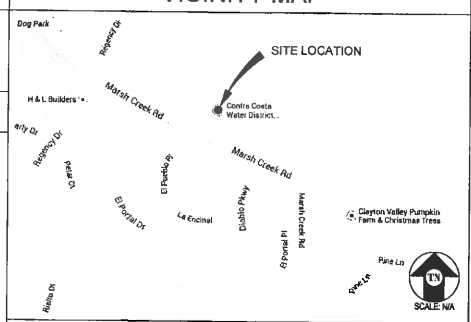
PROJECT DESCRIPTION

A (P) T-MOBILE UNMANNED TELECOMMUNICATION FACILITY CONSISTING OF A (P) 20'-0"X12'-0" (240 SQ FT) EQUIPMENT LEASE AREA W/ (2) (P) BTS CABINETS, A (P) 40' HIGH MONOPINE, (3) (P) RRUS-11 UNITS, (9) (P) ANTENNAS, (1) (P) GPS ANTENNA, & (1) (P) ø2' T-MOBILE MICROWAVE DISH.

PROJECT INFORMATION

SITE NAME:	SEMINARY RESERVOIR & PUMP STATION	SITE #:	BA21633B
COUNTY:	CONTRA COSTA	JURISDICTION:	CITY OF CLAYTON
APN#:	119-070-007	POWER:	PG&E
SITE ADDRESS:	MARSH CREEK RD CLAYTON, CA 94517	TELEPHONE:	AT&T
CURRENT ZONING:	-		
CONSTRUCTION TYPE:	V-B		
OCCUPANCY TYPE:	U, (UNMANNED COMMUNICATIONS FACILITY)		
PROPERTY OWNER:	CONTRA COSTA WATER DISTRICT 2411 BISSO LANE CONCORD, CA 94524 ATTN: DINO ANGELOSANTE (925) 688-8162 DANGELOS@CCWATER.COM		
APPLICANT:	T-MOBILE WEST LLC 1855 GATEWAY BLVD 9TH FLOOR CONCORD, CA 94520-3200		
LEASING CONTACT:	ATTN: TINA SCHILLING (916) 719-2417		
ZONING CONTACT:	ATTN: KEVIN BOWYER (408) 219-5442		
CONSTRUCTION CONTACT:	ATTN: HOLLY KIRKPATRICK (415) 716-8361		
LATITUDE: LONGITUDE:	N 37° 55' 35.07" NAD 83 W 121° 55' 1.66" NAD 83		
AMSL:	±656'		

VICINITY MAP



DRIVING DIRECTIONS

FROM: 1855 GATEWAY BLVD, CONCORD, CA 94520-3200
TO: MARSH CREEK RD, CLAYTON, CA 94517

1. HEAD SOUTHEAST ON GATEWAY BLVD	161 FT
2. TAKE THE 1ST LEFT ONTO CLAYTON RD	7.6 MI
3. CONTINUE ONTO MARSH CREEK RD	0.7 MI

END AT: MARSH CREEK RD, CLAYTON, CA 94517

ESTIMATED TIME: 15 MINUTES ESTIMATED DISTANCE: 8.3 MILES

CODE COMPLIANCE

ALL WORK & MATERIALS SHALL BE PERFORMED & 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:

2013 CALIFORNIA ADMINISTRATIVE CODE, PART 1, TITLE 24 C.C.R.
2013 CALIFORNIA BUILDING CODE (CBC), PART 2, TITLE 24 C.C.R.
(2012 INTERNATIONAL BUILDING CODE VOLUMES 1-2 AND 2013 CALIFORNIA AMENDMENTS)
2013 CALIFORNIA ELECTRICAL CODE (CEC), PART 3, TITLE 24 C.C.R.
(2011 NATIONAL ELECTRICAL CODE AND 2013 CALIFORNIA AMENDMENTS)
2013 CALIFORNIA MECHANICAL CODE (CMC) PART 4, TITLE 24 C.C.R.
(2012 UNIFORM MECHANICAL CODE AND 2013 CALIFORNIA AMENDMENTS)
2013 CALIFORNIA PLUMBING CODE (CPC), PART 5, TITLE 24 C.C.R.
(2012 UNIFORM PLUMBING CODE AND 2013 CALIFORNIA AMENDMENTS)
2013 CALIFORNIA ENERGY CODE (CEC), PART 6, TITLE 24 C.C.R.
2013 CALIFORNIA FIRE CODE, PART 9, TITLE 24 C.C.R.
(2012 INTERNATIONAL FIRE CODE AND 2013 CALIFORNIA AMENDMENTS)
2013 CALIFORNIA GREEN BUILDING STANDARDS CODE, PART 11, TITLE 24 C.C.R.
2013 CALIFORNIA REFERENCED STANDARDS, PART 12, TITLE 24 C.C.R.
ANSI/EIA-TIA-222-G

ALONG WITH ANY OTHER APPLICABLE LOCAL & STATE LAWS AND REGULATIONS

DISABLED ACCESS REQUIREMENTS

THIS FACILITY IS UNMANNED & NOT FOR HUMAN HABITATION. DISABLED ACCESS & REQUIREMENTS ARE NOT REQUIRED IN ACCORDANCE WITH CALIFORNIA STATE BUILDING CODE, TITLE 24 PART 2, SECTION 11B-203.4

SHEET INDEX

SHEET	DESCRIPTION	REV
T-1	TITLE SHEET	-
LS-1	TOPOGRAPHIC SURVEY	-
A-1	SITE PLAN	-
A-2	ENLARGED SITE PLAN	-
A-3	EQUIPMENT PLAN & DETAILS	-
A-4	ANTENNA PLAN & DETAILS	-
A-5	ELEVATIONS	-

APPROVAL

RF
LEASING
ZONING
CONSTRUCTION
T-MOBILE

SEMINARY RESERVOIR & PUMP STATION
BA21633B
MARSH CREEK RD
CLAYTON, CA 94517

ISSUE STATUS

△	DATE	DESCRIPTION	
	10/23/14	ZD 90%	C.C.
	12/03/14	CLIENT REV	J.S.
	12/12/14	ZD 100%	M.D.
	02/09/15	PLAN CHECK	J.S.
	03/24/15	PLAN CHECK	J.S.
	04/20/15	PLAN CHECK	J.S.

DRAWN BY: C. CODY
CHECKED BY: J. GRAY
APPROVED BY: -
DATE: 04/20/15

Streamline Engineering and Design Inc.
8445 Sierra College Blvd, Suite E Granite Bay, CA 95746
Contact: Larry Houghtaby Phone: 916-275-4180
E-Mail: larry@streamlineeng.com Fax: 916-880-1941

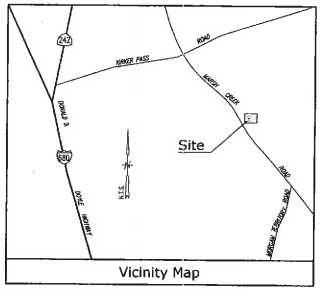
T-MOBILE WEST LLC
T··Mobile·
1855 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

SHEET TITLE:
TITLE

SHEET NUMBER:
T-1

ATTACHMENT B

B-1



Title Report

THIS SURVEY WAS COMPLETED WITHOUT THE BENEFIT OF A TITLE REPORT.
PREPARED BY:
ORDER NO.:
DATED:

Legal Description

PARCEL 1 OF RECORD OF SURVEY, IN THE CITY OF CLAYTON, COUNTY OF CONTRA COSTA, STATE OF CALIFORNIA, FILED IN BOOK 45, PAGES 2, IN THE OFFICE OF THE COUNTY RECORDER OF SAID COUNTY.

Assessor's Parcel No.

119-070-007

Easements

NOT AVAILABLE

Access Easement/Lease Area

TO BE DETERMINED

Geographic Coordinates at Proposed Monopine

1983 DATUM: LATITUDE 37° 55' 35.00"N LONGITUDE 121° 55' 01.46"W
ELEVATION = 855.0 FEET ABOVE MEAN SEA LEVEL

CERTIFICATION:
THE LATITUDE AND LONGITUDE SHOWN ABOVE ARE ACCURATE TO WITHIN +/- 15 FEET HORIZONTALLY AND THAT THE ELEVATIONS SHOWN ABOVE ARE ACCURATE TO WITHIN +/- 3 FEET VERTICALLY. THE HORIZONTAL DATUM (GEOGRAPHIC COORDINATES) IS IN TERMS OF THE NORTH AMERICAN DATUM OF 1983 (NAD 83) AND IS EXPRESSED IN DEGREES (°), MINUTES (') AND SECONDS ("). TO THE NEAREST HUNDREDTH OF A SECOND. THE VERTICAL DATUM (ELEVATIONS) IS IN TERMS OF THE NORTH AMERICAN VERTICAL DATUM OF 1988 (NAVD 88) AND IS DETERMINED TO THE NEAREST TENTH OF A FOOT.

Basis of Bearings

THE STATE PLANE COORDINATE SYSTEM OF 1983 (NAD 83), CALIFORNIA ZONE 3.

Bench Mark

THE CALIFORNIA SPATIAL REFERENCE CORS IS "CAAS", ELEVATION = 3354.998 FEET (NAVD 88).

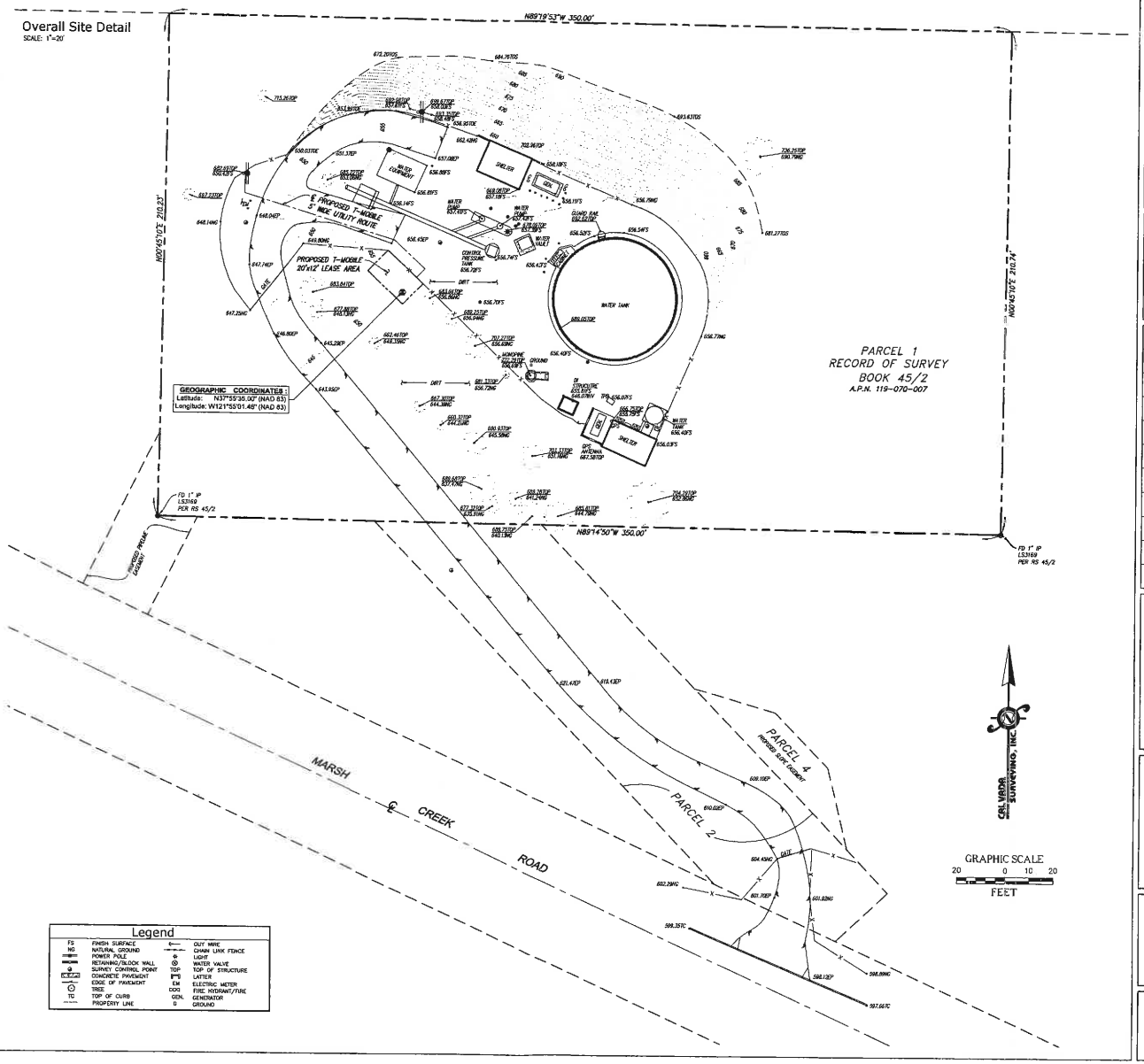
Date of Survey

OCTOBER 17, 2014.

B-2

Overall Site Detail

SCALE: 1"=20'



GRAPHIC SCALE
20 0 10 20
FEET

Legend

FS	FINISH SURFACE	OHW	OLIY WIRE
NG	NATURAL GROUND	CLF	CHAIN LINK FENCE
	POWER POLE		LIGHT
	RETAINING/BLOCK WALL		WATER VALVE
	SURVEY CONTROL POINT	TOP	TOP OF STRUCTURE
	CONCRETE PAVEMENT		LATTICE
	EDGE OF PAVEMENT	EM	ELECTRIC METER
	TREE	FDC	FIRE HYDRANT/FIRE
TC	TOP OF CURB	GEN.	GENERATOR
	PROPERTY LINE	G	GROUND

T··Mobile··
Stick Together •

1755 CREEKSIDE OAKS, SUITE 190
SACRAMENTO, CA 95833

PLANS PREPARED BY:

Streamline Engineering and Design Inc.

8445 Sierra College, Blvd. Suite E. Granite Bay, Ca 957496
Contact: Larry Houghtby Phone: 916-660-1930
E-Mail: larry@streamlineeng.com Fax: 916-660-1941

CONSULTANT:

CAL VADA SURVEYING, INC.

411 Jenks Cir., Suite 205, Corona, CA 92880
Phone: 951-280-9960 Fax: 951-280-9746
Toll Free: 800-CALVADA www.calvada.com

JOB NO. 141031

NO.	DATE:	DESCRIPTION:	BY:
	10/20/14	SUBMITTAL	HP
1	11/21/14	CLIENT'S COMMENTS	MN
2	01/07/15	GEOGRAPHIC COORDINATES	MN

SITE INFORMATION:

BA21633B

SEMINARY RESERVOIR & PUMP STATION

MARSH CREEK ROAD
CLAYTON, CA 94517
CONTRA COSTA COUNTY

SEAL:

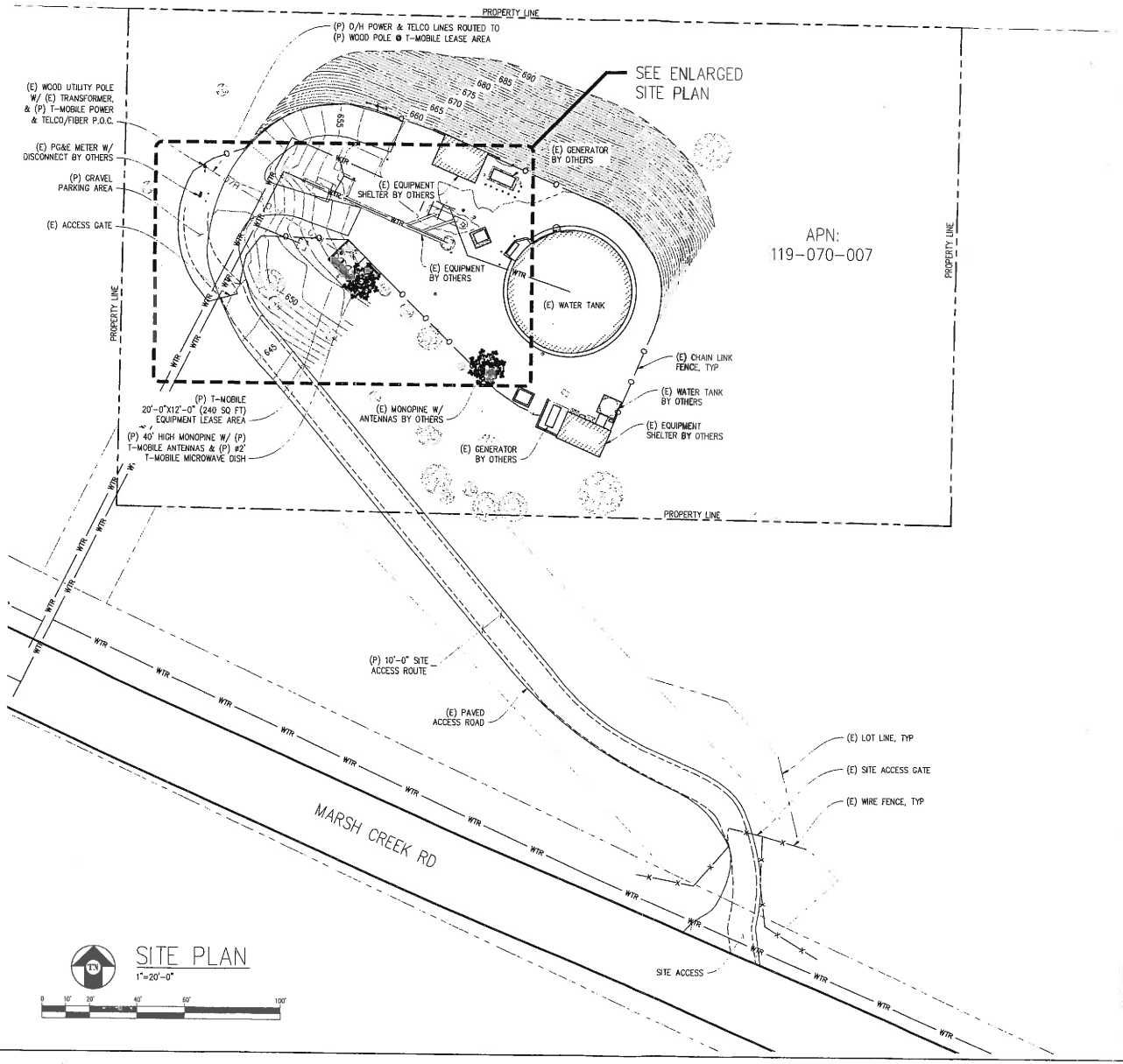
SHEET TITLE:

TOPOGRAPHIC SURVEY

SHEET NUMBER:

LS-1

SHEET 1 OF 1



NOTE:
ALL (P) CONDUITS MUST BE ROUTED ABOVE GROUND

SEMINARY RESERVOIR & PUMP STATION

BA21633B
MARSH CREEK RD
CLAYTON, CA 94517

ISSUE STATUS

△	DATE	DESCRIPTION	
	10/23/14	ZD 90%	C.C.
	12/03/14	CUENT REV	J.S.
	12/12/14	ZD 100%	M.D.
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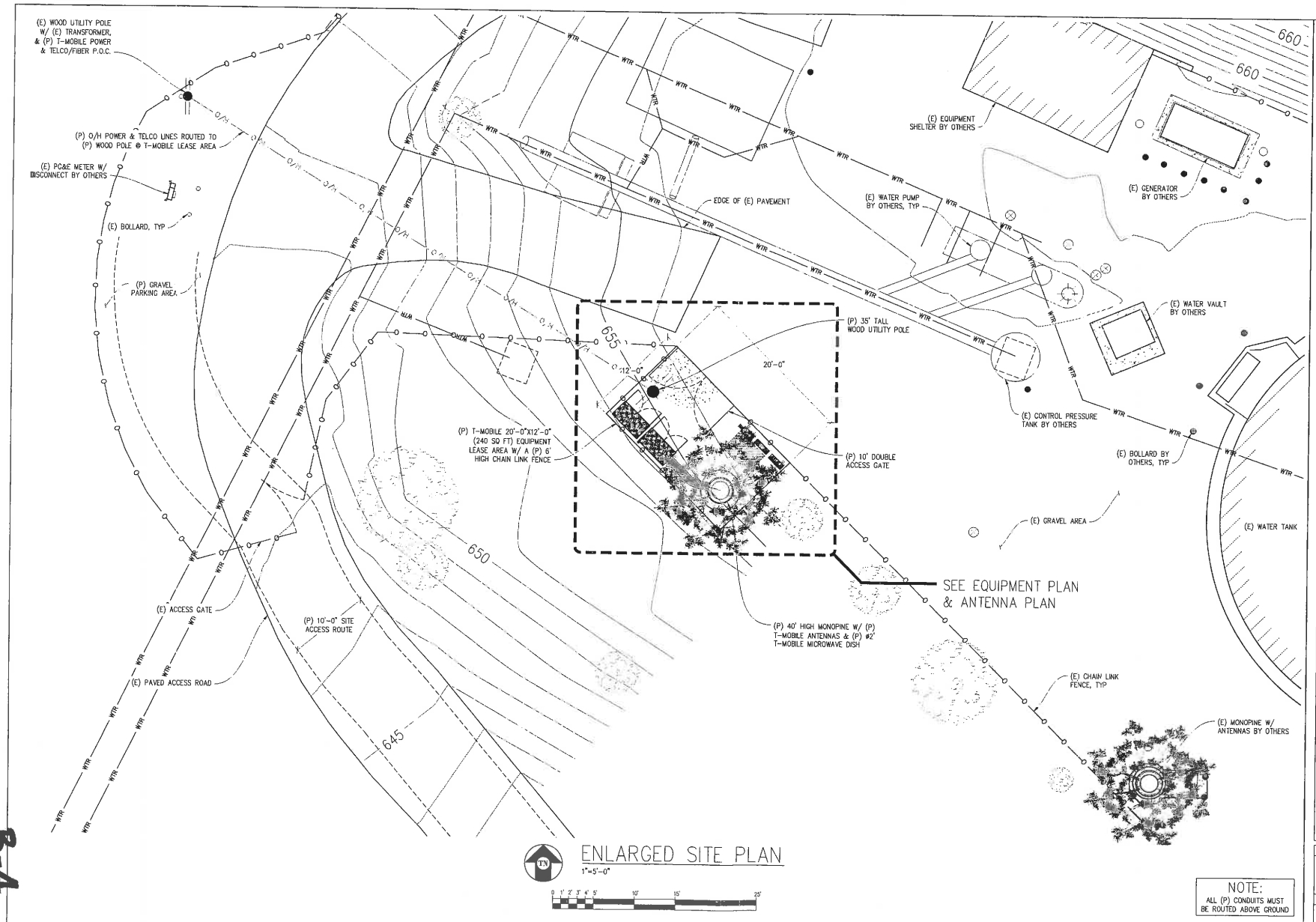
T-MOBILE WEST LLC
T-Mobile
1855 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

SHEET TITLE:
SITE PLAN

SHEET NUMBER:
A-1



ENLARGED SITE PLAN

1"=5'-0"

0 1' 2' 3' 4' 5' 10' 15' 25'

NOTE:
ALL (P) CONDUITS MUST BE ROUTED ABOVE GROUND

SEMINARY RESERVOIR & PUMP STATION

BA21633B
MARSH CREEK RD
CLAYTON, CA 94517

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Streamline Engineering and Design Inc.
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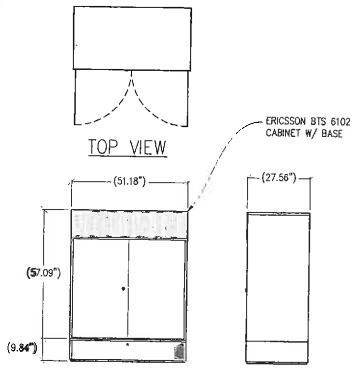
Contact: Larry Houghtby Phone: 916-275-1160
E-Mail: larry@streamlineeng.com Fax: 916-660-1941

T-MOBILE WEST LLC
T-Mobile
1855 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

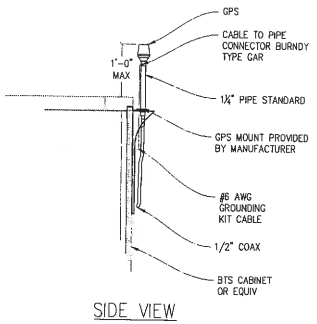
SHEET TITLE:
ENLARGED SITE PLAN

SHEET NUMBER:
A-2

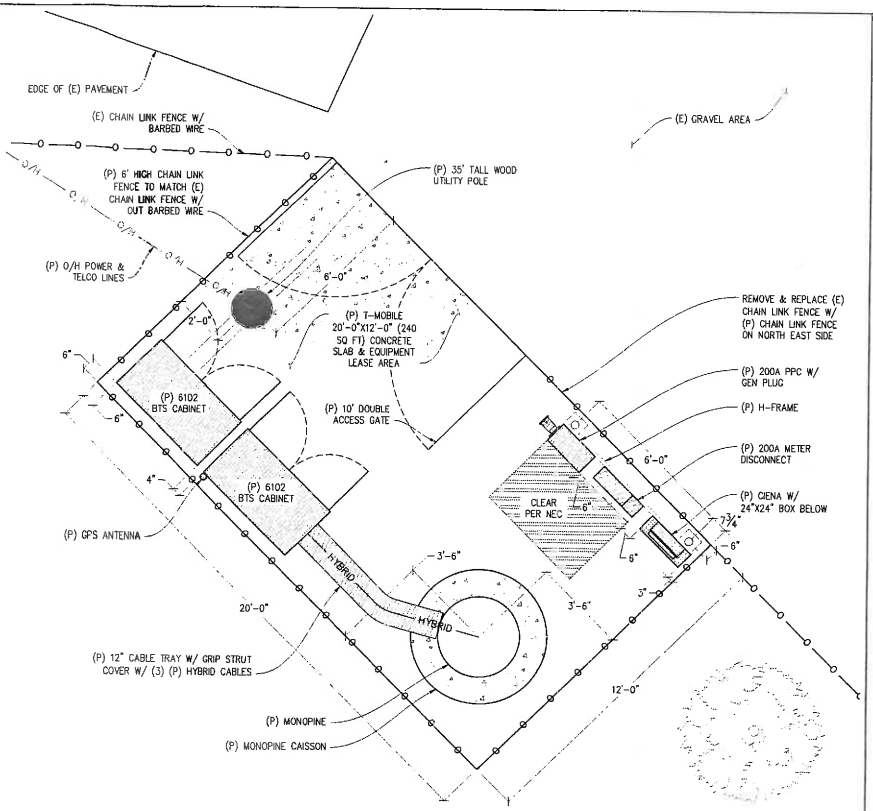
B-4



1 BTS DETAIL
½"=1'-0" WEIGHT = 1135 LBS



2 GPS ANTENNA MOUNT DETAIL
1"=1'-0"



EQUIPMENT PLAN
½"=1'-0"

0 6" 1' 2' 3' 5' 7' 10'

SEMINARY RESERVOIR & PUMP STATION

BA21633B
MARSH CREEK RD
CLAYTON, CA 94517

ISSUE STATUS

△	DATE	DESCRIPTION	
	10/23/14	ZD 90%	C.C.
	12/03/14	CLIENT REV	J.S.
	12/12/14	ZD 100%	M.D.
	02/09/15	PLAN CHECK	J.S.
	03/24/15	PLAN CHECK	J.S.
	04/20/15	PLAN CHECK	J.S.

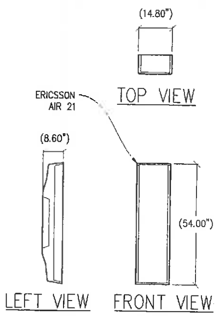
DRAWN BY: C. CODY
CHECKED BY: J. GRAY
APPROVED BY: -
DATE: 04/20/15

Streamline Engineering and Design, Inc.
8445 Sierra College Blvd, Suite E Granite Bay, CA 95746
Contact: Larry Houghtaby Phone: 916-275-4190
E-Mail: larry@streamlineeng.com Fax: 916-660-1841

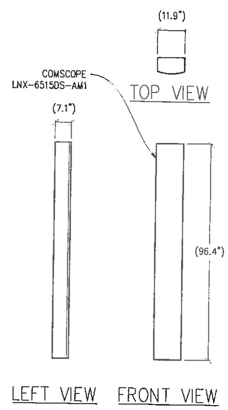
T-MOBILE WEST LLC
T-Mobile
1855 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

SHEET TITLE:
EQUIPMENT PLAN & DETAILS

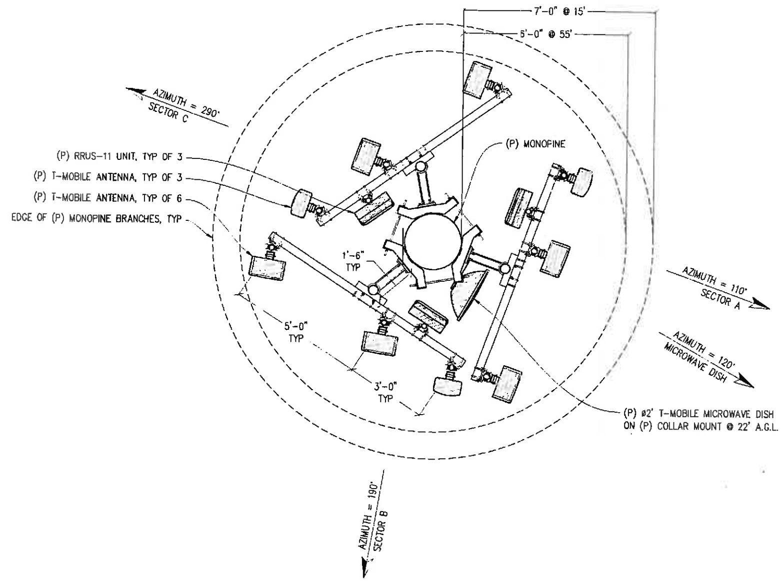
SHEET NUMBER:
A-3



1 ANTENNA DETAIL
½"=1'-0"   MAX WEIGHT: 100.0 LBS

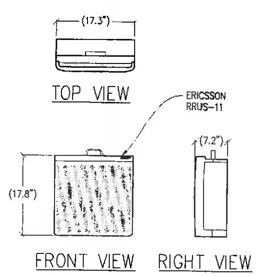


2 ANTENNA DETAIL
½"=1'-0"   MAX WEIGHT: 49.8 LBS



ANTENNA PLAN
½"=1'-0"

NOTE:
1. MONOPINE BRANCHES HAVE BEEN OMITTED FOR CLARITY.
2. PAINT (P) ANTENNAS & ANTENNA EQUIPMENT GREEN TO MATCH (E) MONOPINE.
3. (P) ANTENNAS TO BE COVERED IN MONOPINE SOCKS.



3 RRUS-11 DETAIL
1"=1'-0"   MAX WEIGHT: 50 LBS

SEMINARY RESERVOIR & PUMP STATION

BA21633B
MARSH CREEK RD
CLAYTON, CA 94517

ISSUE STATUS

△	DATE	DESCRIPTION	
	10/23/14	ZD 90%	C.C.
	12/03/14	CLIENT REV	J.S.
	12/12/14	ZD 100%	M.D.
	02/09/15	PLAN CHECK	J.S.
	03/24/15	PLAN CHECK	J.S.
	04/20/15	PLAN CHECK	J.S.

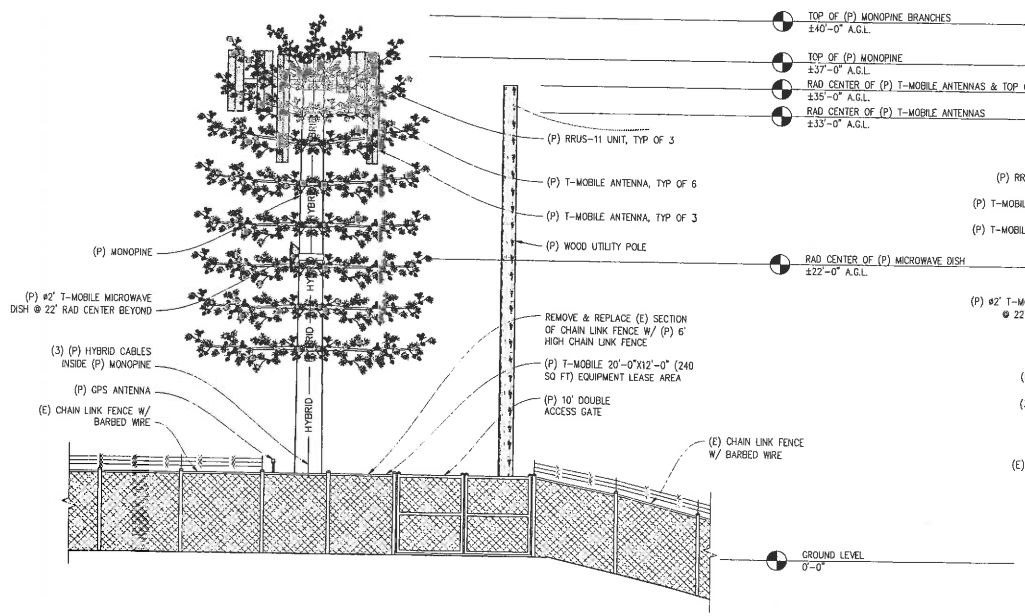
DRAWN BY: C. CODY
CHECKED BY: J. GRAY
APPROVED BY: -
DATE: 04/20/15

Streamline Engineering and Design Inc.
8445 Sierra College Blvd, Suite E Granite Bay, CA 95746
Contact: Larry Houghtby Phone: 916-275-4160
E-Mail: larry@streamlineeng.com Fax: 916-660-1941

T-MOBILE WEST LLC
T · · Mobile ·
1855 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

SHEET TITLE:
ANTENNA PLAN & DETAILS

SHEET NUMBER:
A-4



NORTH ELEVATION

1/4"=1'-0"

NOTE:
1. PAINT (P) ANTENNAS & ANTENNA EQUIPMENT GREEN TO MATCH (E) MONOPINE.
2. (P) ANTENNAS TO BE COVERED IN MONOPINE SOCKS.

WEST ELEVATION

1/4"=1'-0"

NOTE:
1. PAINT (P) ANTENNAS & ANTENNA EQUIPMENT GREEN TO MATCH (E) MONOPINE.
2. (P) ANTENNAS TO BE COVERED IN MONOPINE SOCKS.

8-7

SEMINARY RESERVOIR & PUMP STATION

BA21633B
MARSH CREEK RD
CLAYTON, CA 94517

ISSUE STATUS

△	DATE	DESCRIPTION	
	10/23/14	ZD 90%	C.C.
	12/03/14	CLIENT REV	J.S.
	12/12/14	ZD 100%	M.D.
	02/09/15	PLAN CHECK	J.S.
	03/24/15	PLAN CHECK	J.S.
	04/20/15	PLAN CHECK	J.S.

DRAWN BY: C. CODY
CHECKED BY: J. GRAY
APPROVED BY: –
DATE: 04/20/15

Streamline Engineering and Design, Inc.
8445 Sierra College Blvd, Suite E Granite Bay, CA 95746
Contact: Larry Houghtaby Phone: 916-275-4180
E-Mail: larry@streamlineeng.com Fax: 916-660-1941

T-MOBILE WEST LLC
T-Mobile
1655 GATEWAY BLVD 9TH FLOOR
CONCORD, CA 94520

SHEET TITLE:
ELEVATIONS

SHEET NUMBER:
A-5

ATTACHMENT C

Alternative Analysis: T-Mobile looked at several different properties in the area to determine the site location that would best meet their coverage objectives, while meeting all city guidelines. Three different locations were examined during the initial drive testing (see below and attached):

A) Contra Costa Water Tank (Subject Site): This property best met T-Mobile's coverage objectives. T-Mobile also believed that this would be the least visually obtrusive, as the proposed faux tree would be within a large amount of existing trees and would have a similar height to the existing trees. City staff informed T-Mobile's representative that this would likely be the most feasible option in terms of approval through the city after T-Mobile's representative emailed the potential options over.

B) Monopine in Clayton Community Park: The T-Mobile team walked this property to determine the feasibility of a new cell site in the park. It was determined that the most viable option on this property would be a monopine (fake tree) located near the trail in between the bottom baseball field and the upper baseball fields. This candidate was eventually not chosen because getting power and fiber to the proposed location would be very difficult. Additionally, T-Mobile felt that having a cell site located in a public park may face some public opposition.

C) Monopine/Monopole in Rear Parking Lot of Diablo View Middle School: The most feasible solution for a cell site on this property would be a monopole or faux tree located in the rear parking lot of the middle school. Out of the three candidates, this candidate was the worst in terms of meeting T-Mobile's coverage objectives. This candidate was also not chosen because T-Mobile felt that having a cell site located on a middle school property may face some public opposition.

Let me know if you need anything else from me on this.

C-1

Kevin Bowyer, Land Use Manager | Modus, Inc.
m: 408-219-5442 | www.modus-corp.com

C-2

ATTACHMENT
D

CONTRA COSTA
WATER DISTRICT

June 27, 2015

City of Clayton
600 Heritage Trail
Clayton, CA 94517

Subject: **LETTER OF AUTHORIZATION FOR ENTITLEMENT APPLICATION PURPOSES**

Dear Sir or Madam:

Contra Costa Water District ("CCWD"), as owner of the Contra Costa County Assessor Parcel Number 119-070-007, hereby authorizes T-Mobile West LCC, d/b/a T-Mobile ("Applicant"), its employees, agents, and contractors, to prepare, submit, and complete, on CCWD's behalf, the planning conditions of approval compliance review application ("Application") necessary for the consideration of addition of certain telecommunications equipment described in the Application.

The authorizations provided here are for application-related purposes only and do not permit any activity by the Applicant on the subject property, which shall require additional authorization and consent of CCWD, nor indicate agreement between Applicant and CCWD for the addition of any telecommunications equipment, which shall require the approval of the CCWD Board of Directors subsequent to the planning department's approval of the Application.

CCWD hereby authorizes planning department employees ("Planning Staff") to enter upon the subject property during normal business hours as necessary to inspect the subject property for the purpose of processing the Application. All access shall be accompanied by CCWD staff. Planning Staff shall give CCWD 48 hours notice prior to entering the subject property. Notice shall be given by telephone to Dino Angelosante at 925-688-8162 so that an escort can be arranged.

Contra Costa Water District may, in its sole discretion, terminate this authorization at any time upon prior written notice to Planning Staff.

If you have any questions, please call me at 925-688-8162.

Sincerely,

Dino Angelosante
Real Property Agent

ATTACHMENT E

RECEIVED
APR 28 2015
CITY OF CLAYTON
COMMUNITY DEVELOPMENT DI

EBI Consulting
environmental | engineering | due diligence

RADIO FREQUENCY EMISSIONS ANALYSIS REPORT

T-Mobile Proposed Facility

Site ID: BA21633B
VZW Seminary Reservoir
Park Lane & Marsh Creek Rd, Clayton, California, 94517

December 29, 2014

EBI Project Number:
62147253

Status:	**Compliant**
Recommended Signage	
Sign Count	Sign Type
1	
1	
1	

Remarks: See attached signage plan. No additional mitigation required.

21 B Street · Burlington, MA 01803 · Tel: (781) 273.2500 · Fax: (781) 273.3311

EBI Consulting
environmental | engineering | due diligence

December 29, 2014

Attn: Aris Antons
1855 Gateway Blvd., Suite 900
Concord, CA 94520

Emissions Values for Site: BA21633B

Maximum Composite Emissions Value: **6.3%** of the FCC general public limit
Proposed site is in compliance with Federal regulations regarding
(radio frequency) RF Emissions.

EBI Consulting was directed to analyze the Proposed T-Mobile monotree facility located at Park Lane & Marsh Creek Rd in Clayton, California for the purpose of determining whether the emissions from the Proposed T-Mobile Antenna Installation located on this property are within specified federal limits.

All information used in this report was analyzed as a percentage of current Maximum Permissible Exposure (% MPE) as listed in the FCC OET Bulletin 65 Edition 97-01and ANSI/IEEE Std C95.1. The FCC regulates Maximum Permissible Exposure in units of microwatts per square centimeter (μW/cm2). The number of μW/cm2 calculated at each sample point is called the power density. The exposure limit for power density varies depending upon the frequencies being utilized. Wireless Carriers and Paging Services use different frequency bands each with different exposure limits, therefore it is necessary to report results and limits in terms of percent MPE rather than power density.

All results were compared to the FCC (Federal Communications Commission) radio frequency exposure rules, 47 CFR 1.1307(b)(1) – (b)(3), to determine compliance with the Maximum Permissible Exposure (MPE) limits for General Population/Uncontrolled environments as defined below.

General population/uncontrolled exposure limits apply to situations in which the general public may be exposed or in which persons who are exposed as a consequence of their employment may not be made fully aware of the potential for exposure or cannot exercise control over their exposure. Therefore, members of the general public would always be considered under this category when exposure is not employment related, for example, in the case of a telecommunications tower that exposes persons in a nearby residential area.

Public exposure to radio frequencies is regulated and enforced in units of microwatts per square centimeter (μW/cm2). The general population exposure limit for the 700 and 800 MHz Bands is 467 μW/cm2 and 567 μW/cm2 respectively, and the general population exposure limit for the PCS and AWS bands is 1000 μW/cm2. Because each carrier will be using different frequency bands, and each frequency band has different exposure limits, it is necessary to report percent of MPE rather than power density.

Occupational/controlled exposure limits apply to situations in which persons are exposed as a consequence of their employment and in which those persons who are exposed have been made fully aware of the potential for exposure and can exercise control over their exposure. Occupational/controlled exposure limits also apply where exposure is of a transient nature as a result of incidental passage through a location where exposure levels may be above general population/uncontrolled limits (see below), as long as the exposed person has been made fully aware of the potential for exposure and can exercise control over his or her exposure by leaving the area or by some other appropriate means.

Additional details can be found in FCC OET 65.

CALCULATIONS

Calculations were done for the Proposed T-Mobile Wireless antenna monotree facility located at Park Lane & Marsh Creek Rd in Clayton, California using the equipment information listed below. All calculations were performed per the specifications under FCC OET 65. Because of the short wavelength of PCS services, the antennas require line-of-site paths for good propagation, and are typically installed a distance above ground level. Antennas are constructed to concentrate energy towards the horizon, with as little energy as possible scattered towards the ground or the sky. This design, combined with the low power of PCS facilities, generally results in no possibility for exposure to approach Maximum Permissible Exposure (MPE) levels, with the exception of in areas in the immediate vicinity of the antennas.

For all calculations, equipment was calculated using the following assumptions:

1) 2 GSM / UMTS channels (PCS Band – 1950 MHz) were considered for each sector of the Proposed installation. The transmit power for these channels is 30 watts per channel.

2) 2 LTE channels (AWS Band – 2100 MHz) were considered for each sector of the Proposed installation. The transmit power for these channels is 60 watts per channel.

3) 1 LTE channel (700 MHz Band) was considered for each sector of the Proposed installation. The transmit power for this channel is 30 watts.

4) All radios at the Proposed installation were considered to be running at full power and were uncombined in their RF transmissions paths per carrier prescribed configuration. Per FCC OET Bulletin No. 65 - Edition 97-01 recommendations to achieve the maximum anticipated value at each sample point, all power levels emitting from the Proposed antenna installation are increased by a factor of 2.56 to account for possible in-phase reflections from the surrounding environment. This is rarely the case, and if so, is never continuous.

5) EBI has performed theoretical worst case modeling using Roofview® to estimate the maximum potential power density from each antenna based on worst-case assumptions for the number of antennas and power.

6) The Data for all T-Mobile antennas used in this analysis is shown below in Table 1. Actual antenna gains for each antenna were used per manufacturer's specifications.

7) There are no additional carriers located on this facility.

All calculations were done with respect to uncontrolled / general public threshold limits.

T-Mobile Site Inventory and Power Values

Antenna Number	Sector	Antenna Make	Model	Height (ft) Above Nearest Walking Surface	Frequency Band	Technology	Power Per Channel	Azimuth	Number of Channels
1	A	Ericsson	AIR 21 B2A/B4P	34.7	PCS - 1950 MHz	GSM/UMTS	30	110	2
2	A	Ericsson	AIR 21 B4A/B2P	34.7	AWS - 2100 MHz	LTE	60	110	2
3	A	Commscope	LNX-6515DS-A1M	32.0	700 MHz	LTE	30	110	1
1	B	Ericsson	AIR 21 B2A/B4P	34.7	PCS - 1950 MHz	GSM/UMTS	30	190	2
2	B	Ericsson	AIR 21 B4A/B2P	34.7	AWS - 2100 MHz	LTE	60	190	2
3	B	Commscope	LNX-6515DS-A1M	32.0	700 MHz	LTE	30	190	1
1	C	Ericsson	AIR 21 B2A/B4P	34.7	PCS - 1950 MHz	GSM/UMTS	30	290	2
2	C	Ericsson	AIR 21 B4A/B2P	34.7	AWS - 2100 MHz	LTE	60	290	2
3	C	Commscope	LNX-6515DS-A1M	32.0	700 MHz	LTE	30	290	1

Table 1: T-Mobile Site Inventory and Power Value

Additional Carriers Located on Site	
Carrier	MPE %
	No additional carriers are located onsite.

Table 2: Additional Carrier Inventory and Emissions Levels

Summary

All calculations performed for this analysis yielded results that were within the allowable limits for general public exposure to RF Emissions. T-Mobile can bring this site into compliance by posting the recommended signage per this report.

The anticipated maximum contribution from each sector of the T-Mobile facility is **6.3%** of the allowable FCC established general public limit (1.26% of the FCC occupational limit). This was determined through calculations along a radial from each sector taking full power values into account as well as actual vertical plane antenna gain values per the manufacturers supplied specifications for gain.

The anticipated maximum composite MPE value for this site is **6.3%** of the allowable FCC established general public limit (1.26% of the FCC occupational limit). This is based upon worst case modeling performed on the ground taking emissions contributions from all carriers present into account. This value will determine whether the site itself is in compliance with regards to electromagnetic emissions or whether mitigation solutions may be required to bring the site into compliance.

FCC guidelines state that if a site is found to be out of compliance (over allowable thresholds), that carriers over a 5% contribution to the composite value will require measures to bring the site into compliance. For this facility, the composite values calculated were well within the allowable 100% threshold standard per the federal government.

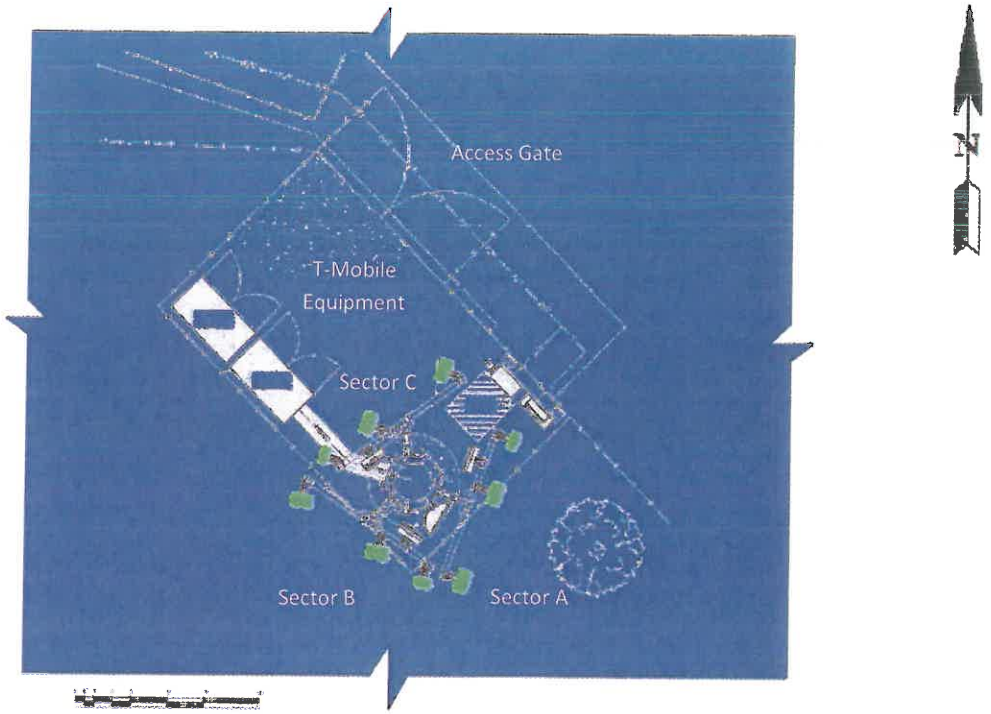
EBI's modeling indicates that there are no areas on the walking/working surfaces at ground level in front of the T-Mobile antennas that may exceed the FCC standards for general population exposure.

In order to alert any such elevated workers, an NOC sign and a blue Notice sign are recommended for installation at the access to the monotree. Additionally, a yellow Notice to Workers sign is recommended for installation at the base of the monotree as depicted on the Signage Plan – Appendix B.

Jonathan Ilgenfritz
RF-EME Technician

EBI Consulting
21 B Street
Burlington, MA 01803

Figure 1: Walking/Working Surface Emissions Thresholds



PLAN VIEW

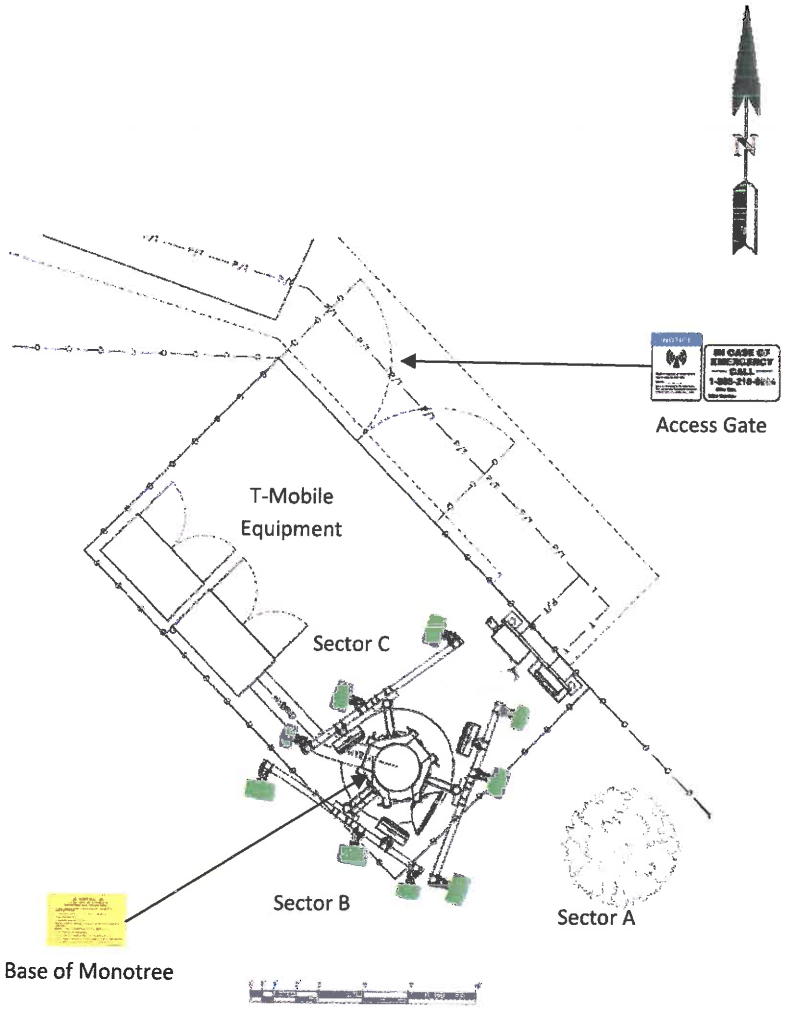
Sector 1	**There are no areas that exceed either the FCC's general public or occupational thresholds exposure limits in front of the sector 1 antennas on the walking/working surface.**
Sector 2	**There are no areas that exceed either the FCC's general public or occupational thresholds exposure limits in front of the sector 2 antennas on the walking/working surface.**
Sector 3	**There are no areas that exceed either the FCC's general public or occupational thresholds exposure limits in front of the sector 3 antennas on the walking/working surface.**
Other Carriers	There are no other carrier antennas included in the modeling.

Attachment 1: Plan View – Signage Locations

f

Status:	Compliant
Recommended Signage for compliance	
Sign Count	Sign Type
1	
1	
1	

Notes:
The Proposed site will be in compliance upon installation of recommended signage.



T-Mobile Antennas

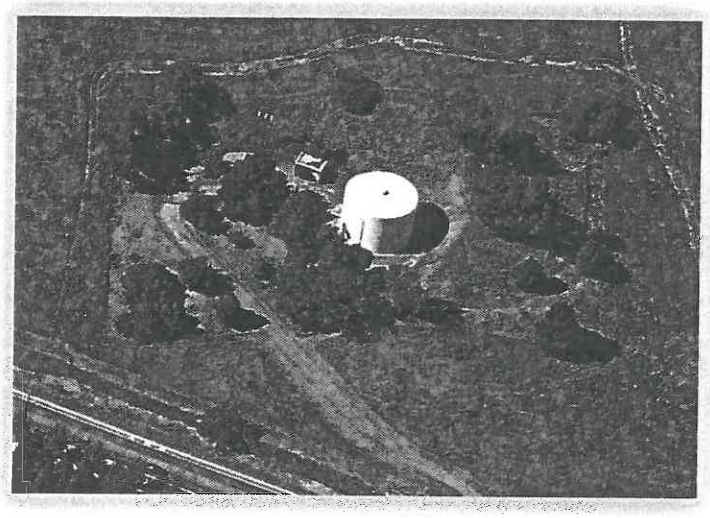
Sign	Description	Posting Instructions
	**NOC** Informational sign, used to provide T-Mobile emergency contact information for the site.	Securely post at the access to the site in a manner conspicuous to all individuals entering thereon. **Denote Site ID Number on Sign in Permanent Marker.**
	**Notice To Workers** Informational sign, used to notify workers that there are active antennas installed and provide guidelines for working in RF environments.	Securely mount approximately 48 inches above grade at the base of the monotree as indicated in the signage plan.
	**Blue Notice sign** Used to notify individuals they are entering an area where the power density emitted from transmitting antennas is within the FCC's MPE limit for the general public.	Securely post at the access to the site in a manner conspicuous to all individuals entering thereon. **Denote Site ID Number on Sign in Permanent Marker.**

ATTACHMENT F

Environmental Noise Assessment Report

Site No. BA21633B
Seminary Reservoir & Pump Station
Marsh Creek Rd.
Clayton, CA

EBI Project No. 6215003736
June 25, 2015



Prepared for:

T-Mobile, LLC.
12920 SE 38th Street
Bellevue, WA 98006

Prepared by:

EBI Consulting
environmental | engineering | due diligence

TABLE OF CONTENTS

APPENDICES

1.0 EXECUTIVE SUMMARY

T-Mobile proposes to locate an unstaffed wireless telecommunications facility at site number BA21633B (site name Seminary Reservoir & Pump Station). This site is located in a rural/industrial area on the property of the Contra Costa Water District on Marsh Creek Rd., Clayton, CA, and is herein referred to as Seminary Reservoir & Pump Station.

This study evaluates potential noise impacts from the proposed climate controlled equipment on the site vicinity. Acoustic modeling was performed to predict sound level impacts from the proposed equipment installation at the nearest property line. This report evaluates compliance of the Seminary Reservoir & Pump Station in relation to the City of Clayton General Plan; Section VIII Noise Element, concerning the sound level limits at all project property lines.

Based on the results of this study, EBI concludes that the BA21633B project will be in compliance with the City of Clayton General Plan; Section VIII Noise Element, concerning the sound level limits at all project property lines. ,

2.0 BACKGROUND

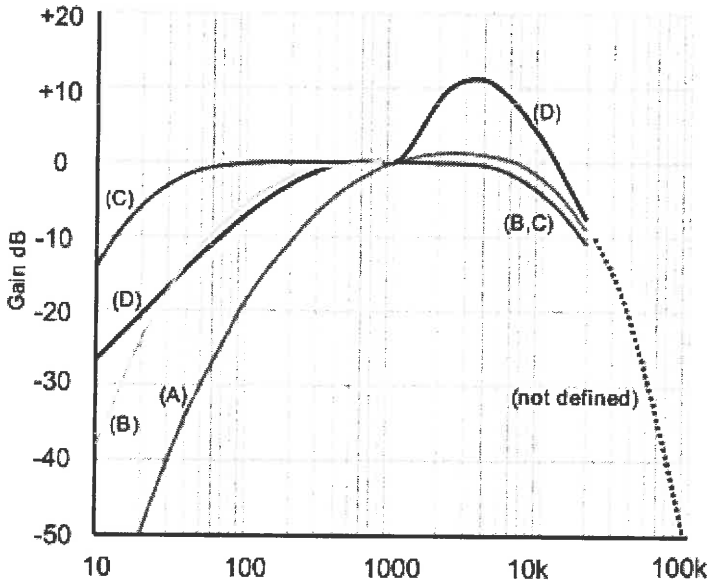
All sounds originate from a source. The sound energy, produced by a source, creates variations in air pressure which travel in all directions much like a wave ripples across the water. The "loudness" or intensity of a sound is a function of the sound pressure level, defined as the ratio of two pressures: the measured sound pressure from the source divided by a reference pressure (i.e. threshold of human hearing). Sould level measurements are most commonly expressed using the decibel (dB) scale. The decibel scale is logarithmic to accommodate the wide range of sound intensities the human ear is capable of responding to. On this scale, the threshold of human hearing is equal to 0 dB, while levels above 140 dB can cause immediate hearing damage.

One property of the decibel scale is that the combined sound pressure level of separate sound sources is not simply the sum of the contributing sources. For example, if the sound of one source of 70 dB is added to another source of 70 dB, the total is only 73 dB, not a doubling to 140 dB. In terms of human perception of sound, a 3 dB difference is the minimum perceptible change for broadband sounds (i.e. sounds that include all frequencies). A difference of 10 dB represents a perceived halving or doubling of loudness.

Environmental sound is commonly expressed in terms of the A-weighted sound level (dBA). The A-weighting is a standard filter to make measured sound levels more nearly approximate the frequency response of the human ear. Table 1 shows the adjustments made at each octave band frequency to contour un-weighted sound levels (dB) to A-weighted sound levels (dBA).

TABLE 1 - A-WEIGHTED OCTAVE BAND ADJUSTMENT (±dB)

Octave Band Center Frequency (Hz)	32	64	125	250	500	1000	2000	4000	8000	16000
A-weighting Adjustment (±dB)	-39.4	-26.2	-16.1	-8.6	-3.6	0.0	+1.2	+1.0	-1.1	-6.6



A-weighting (blue), B (yellow), C (red), and D-weighting (blk)

Environmental sound varies depending on environmental conditions. Some sounds are sharp impulses lasting for short periods of time, while others rise and fall over longer periods of time. There are various measures (metrics) of sound pressure designed for different purposes. The Leq, or equivalent sound level, is the steady-state sound level over a period of time that has the same acoustic energy as the fluctuating sound that was measured over the same period. The Leq is commonly referred to as the average sound level and is calculated automatically by the sound level meter using methods defined in ANSI S1.4-1983[1].

[1] American National Standards Institute, ANSI S1-4-1983, American National Standard Specification for Sound Level Meters, 1983

3.0 REGULATORY REQUIREMENTS

City of Clayton: General Plan; Section VIII Noise Element

The City of Clayton describes Environmental Noise standards and noise level limits. These limits are applicable at the boundaries of the property where sound is produced. The table of sound level limits for each land use category has been extracted from the plan and is shown in Table 2 below. Chapter VIII, Noise Element, of the City's General Plan regulates the different land use categories and the applicable noise limits respectively. Note that the limit corresponding to the zoning district of the receiver (not the noise source) is applied.

TABLE 2 – LAND USE COMPATABILITY FOR ENVIRONMENTAL NOISE STANDARDS
TABLE OF APPLICABLE EXTERNAL NOISE LIMITS

Land Use	Acceptable/Unacceptable	Requirements and Limitations
General	Acceptable	<60 dBA Ldn
	Unacceptable	>70 dBA Ldn
Residential	Acceptable	<55 dBA Ldn at property line
Indoor	Acceptable	<45 dBA Ldn

4.0 SITE DESCRIPTION

The site BA21633B is located located in a rural/industrial area on the property of the Contra Costa Water District on Marsh Creek Rd., Clayton, CA. The site is zoned as PF (Public Facility), but borders residentially zoned properties, zoned as R-10, according to the City of Clayton zoning map[2], and therefore noise generated by the installed equipment is subject to the limitations in the Residential category of Table 2.
Two (2) 6131 Ericsson (RBS 3106) cabinets are proposed for installation within the equipment compound. Figure 1 presents the proposed equipment cabinet location and site property lines.

[2] City of Clayton Official Zoning Map February 2013. Accessed Online on 6/26/2015: http://www.ci.clayton.ca.us/assets/zoning.pdf

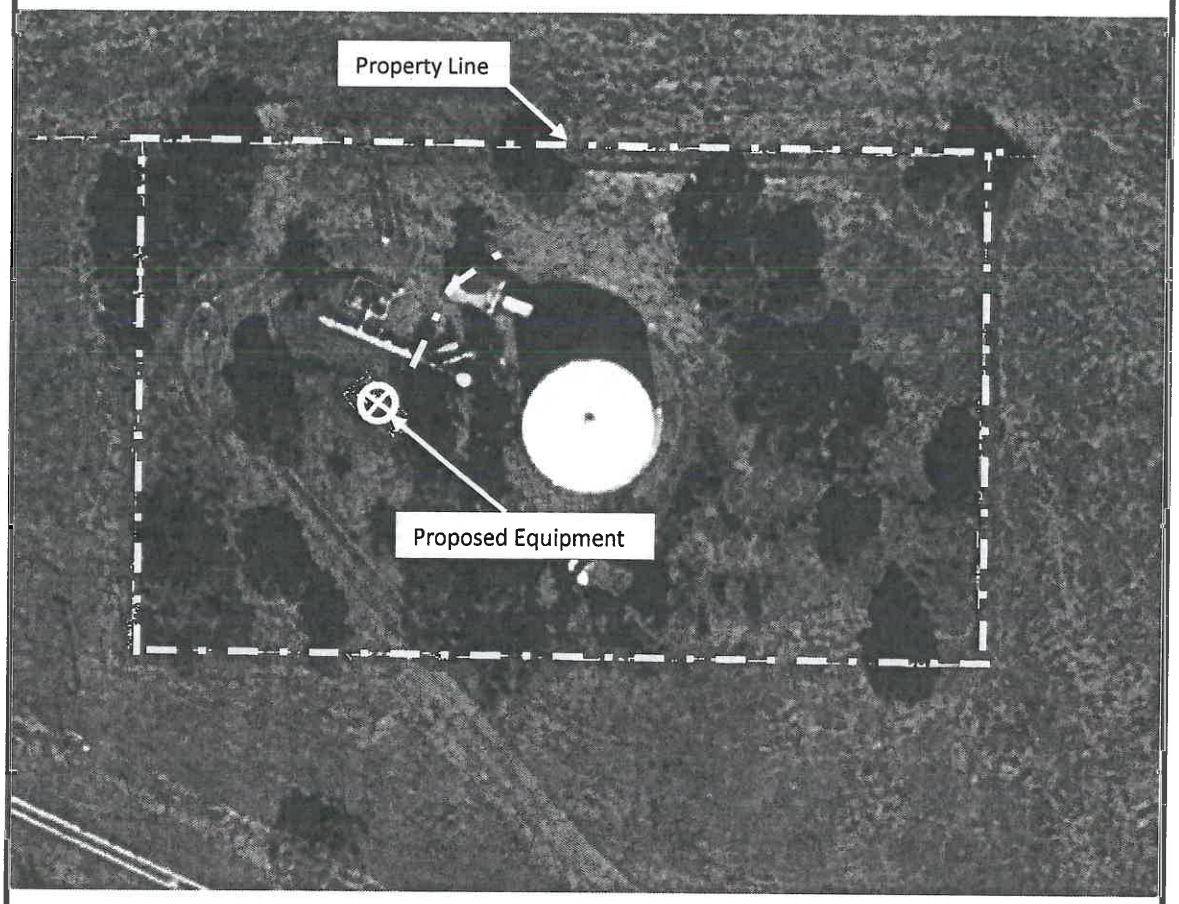


FIGURE 1 – SITE SCHEMATIC

Seminary Reservoir & Pump Station
BA21633B
Marsh Creek Rd., Clayton, CA

5.0 AMBIENT SOUND LEVELS

Ambient sound levels are estimated to be 30 dBA at nighttime for the purposes of this project. Note that noise sources in rural areas are typically estimated to be between 35 and 45 dBA (Ldn) (FERC 2002, EPA 1978). Therefore an estimate of 20 dBA (30 dBA Ldn) is considered highly conservative.

6.0 MODELED POST CONSTRUCTION NOISE LEVELS

The Cadna/A® computer noise model was used for computing sound levels from the proposed equipment throughout the surrounding community. An industry standard, employing ISO 9613-2 methodology, Cadna/A was developed to provide estimates of sound levels at distances from specific noise sources taking into account the effects of terrain features, including relative elevations of noise sources, receivers, and intervening objects (buildings, hills, trees), and ground effects due to areas of hard ground (pavement, water) and soft ground (grass, field, forest). In addition to computing sound levels at specific receiver positions, Cadna/A can compute noise contours showing areas of equal and similar sound level.

As input, Cadna/A incorporated a *geometric model* of the study area, reference *noise source* levels. Cadna/A uses a *sound propagation model* to project noise levels from equipment operations into the surrounding community. The three-dimensional geometric model of the study area was developed from aerial photography and digital terrain information obtained from Google Earth.

Complete modeling output sheets from the Cadn/A are contained in Appendix B. Table 4 summarizes the results of the acoustic modeling.

Predictive post-construction noise levels were calculated for site BA21633B using estimated existing noise levels and acoustical specifications for two (2) RBS 3306 cabinets. The 3306 cabinet is similar to the 3106 and was used to approximate sound output as equipment specifications and decibel ratings for the two (2) proposed 6131 Ericsson (RBS 3106) cabinets were not available at the time of this study. Noise specifications for proposed equipment are summarized in Table 3.

TABLE 3 – ACOUSTIC SOURCES

Source Name	Description	Equipment Noise
		dBA (Sound Power Level)
RBS 3106	6131 Ericsson Cabinet	73
RBS 3106	6131 Ericsson Cabinet	73

TABLE 4 – POST CONSTRUCTION SOUND LEVEL RESULTS

Location	Existing Condition (dBA)		Equipment Noise Impact (dBA)	Future Condition (dBA) and Increase (±dB) w/ Proposed Equipment	
	Daytime	Nightime	24/7	Daytime	Nighttime
Nearest Property Line	30	20	32.5	34.4 (+4.4)	32.7 (+12.7)

7.0 RESULTS AND CONCLUSIONS

The equipment cabinet installation at Marsh Creek Rd. will comply with the City of Clayton City of Clayton General Plan; Section VIII Noise Element. The Element limits noise in residential zones to 55 Ldn at the property line.

As shown in Table 4, worst-case predictive modeling indicates post-construction noise levels would be 34.4 dBA during daytime hours and 32.7 dBA at night at the nearest property line. This results in an Ldn of 39.4 dBA.

Worst-case modeling methodologies are based on the manufacturer-provided equipment specifications. Manufacturer specifications include a decibel rating, which reflects the maximum decibel output the equipment will produce when running at full capacity. The 6131 Ericsson (RBS 3106) cabinets equipment is assumed to be running at full capacity, twenty-four hours per day.

8.0 LIMITATIONS

This report was prepared for the use of T-Mobile, LLC. The conclusions provided by EBI are based solely on the information provided by the client. The observations in this report are valid on the date and time of the investigation. Reported noise levels contained herein are a factor of meteorological and environmental conditions present at the time of the site survey, and represent "typical" site noise levels. Measurement and calculations contained in this report should be considered accurate to within one decibel. Any additional information that becomes available concerning the site should be provided to EBI so that our conclusions may be revised and modified, if necessary. This report has been prepared in accordance with Standard Conditions for Engagement and authorized proposal, both of which are integral parts of this report and has been designed to address the City of Clayton General Plan; Section VIII Noise Element.

9.0 REVIEWER CERTIFICATION

I, Cynara Canantella, state that:

- I am an employee of Envirobusiness Inc. (d/b/a EBI Consulting), which provides acoustic survey and compliance services to the wireless communications industry. I have reviewed the data collected during the site survey which is incorporated into this Site Compliance Report such that the information contained in this report is true and accurate to the best of my knowledge.

Sincerely,
By EBI Consulting

Cynara Cannatella
Senior Engineer

APPENDIX A

EQUIPMENT SPECIFICATIONS

7.2.5 Acoustic Noise

The acoustic noise levels refer to a fully equipped RBS 3308 and are measured for typical traffic in accordance with ISO 9614-2. The table below shows the values.

RBS Variant	Temperature	Total Sound Power Level
Indoor version	+20°C	4.05 Bel(A)
	+40°C	5.35 Bel(A)
Outdoor version	+20°C	5.10 Bel(A)
	+45°C	7.30 Bel(A)

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APPENDIX B

CadnA® Environmental Noise Model Results

CandA® Modeling Results

SOURCE

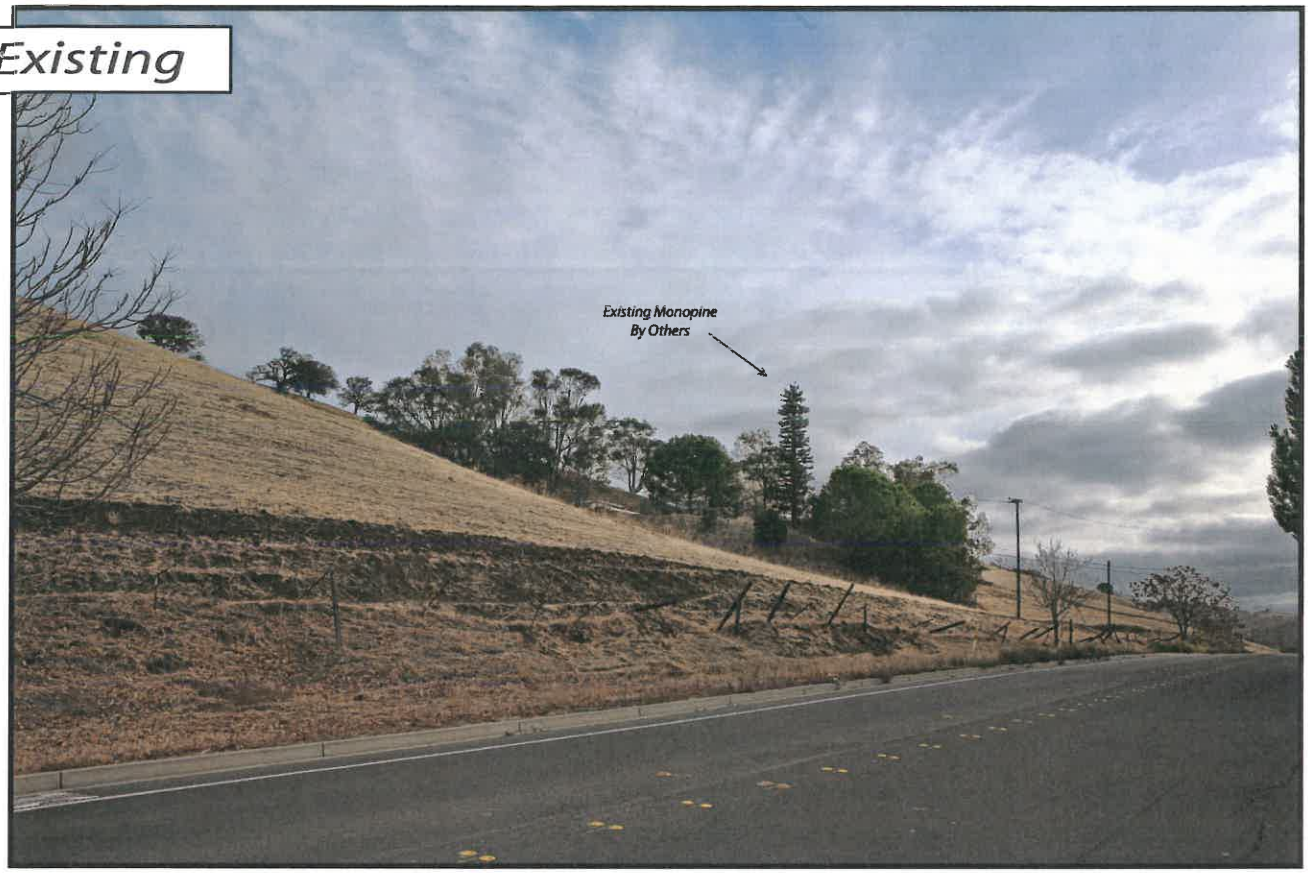
Name	M.	ID	Result. PWL			Lw / Li			Correction			Freq.	Direct.	Height		Coordinates		
			Day	Evening	Night	Type	Value	norm.	Day	Evening	Night					X	Y	Z
			(dBA)	(dBA)	(dBA)			dB(A)	dB(A)	dB(A)	dB(A)	(Hz)		(m)		(m)	(m)	(m)
RBS 3106 / 6131 Cabinet A		S1	73.0	73.0	73.0	Lw	73.0		0.0	0.0	0.0	500	(none)	1.50	r	471532.36	3658310.75	201.29
RBS 3106 / 6131 Cabinet A		S2	73.0	73.0	73.0	Lw	73.0		0.0	0.0	0.0	500	(none)	1.50	r	471532.25	3658310.89	201.34

RECEIVER

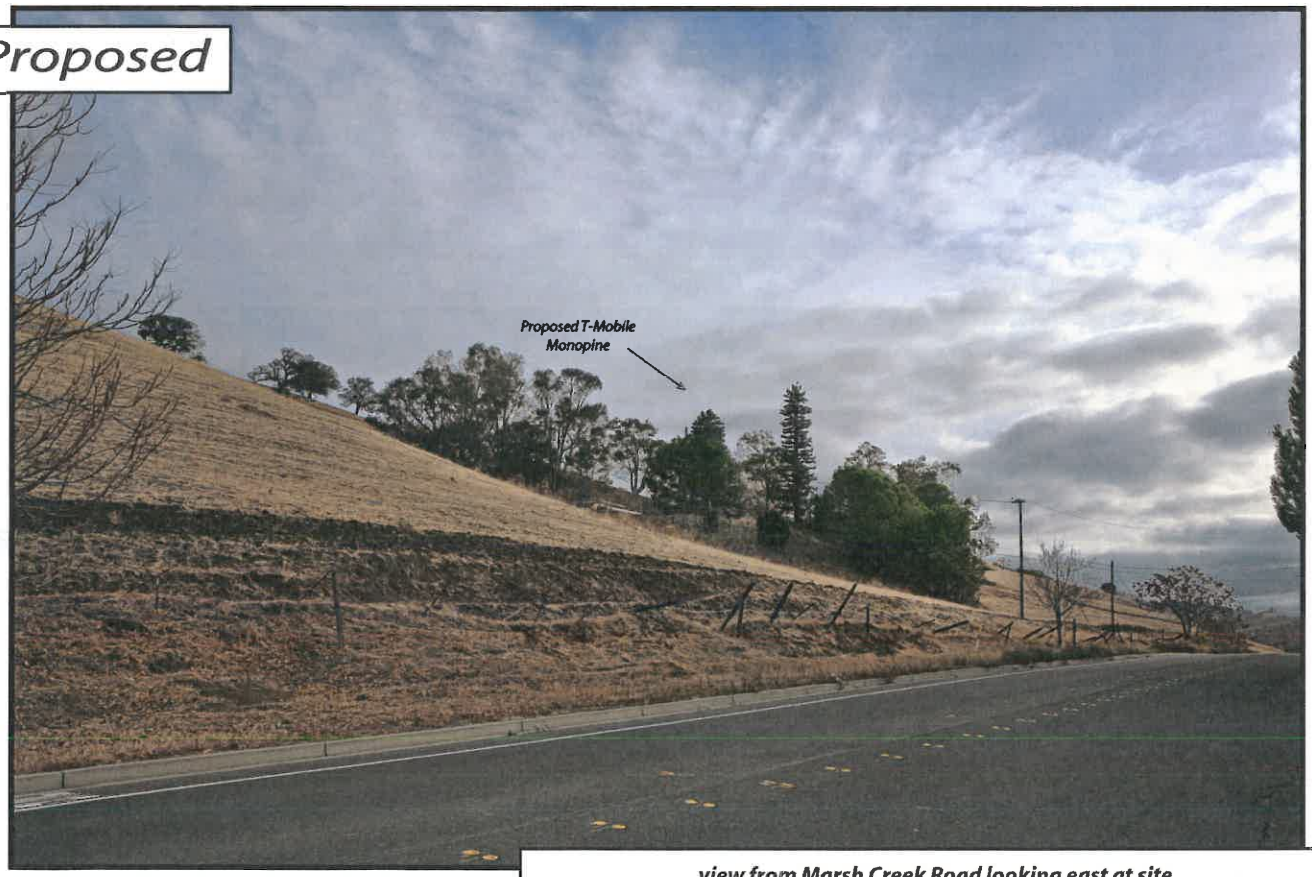
Name	M.	ID	Level Lr		Limit. Value		Land Use			Height		Coordinates		
			Day	Night	Day	Night	Type	Auto	Noise Type			X	Y	Z
			(dBA)	(dBA)	(dBA)	(dBA)				(m)		(m)	(m)	(m)
Nearest Property Line		R1	32.5	32.5	0.0	0.0		x	Total	1.50	r	471506.07	3658310.60	198.24

Attachment G

Existing



Proposed



AdvanceSim
Photo Simulation Solutions
Contact (925) 202-8507

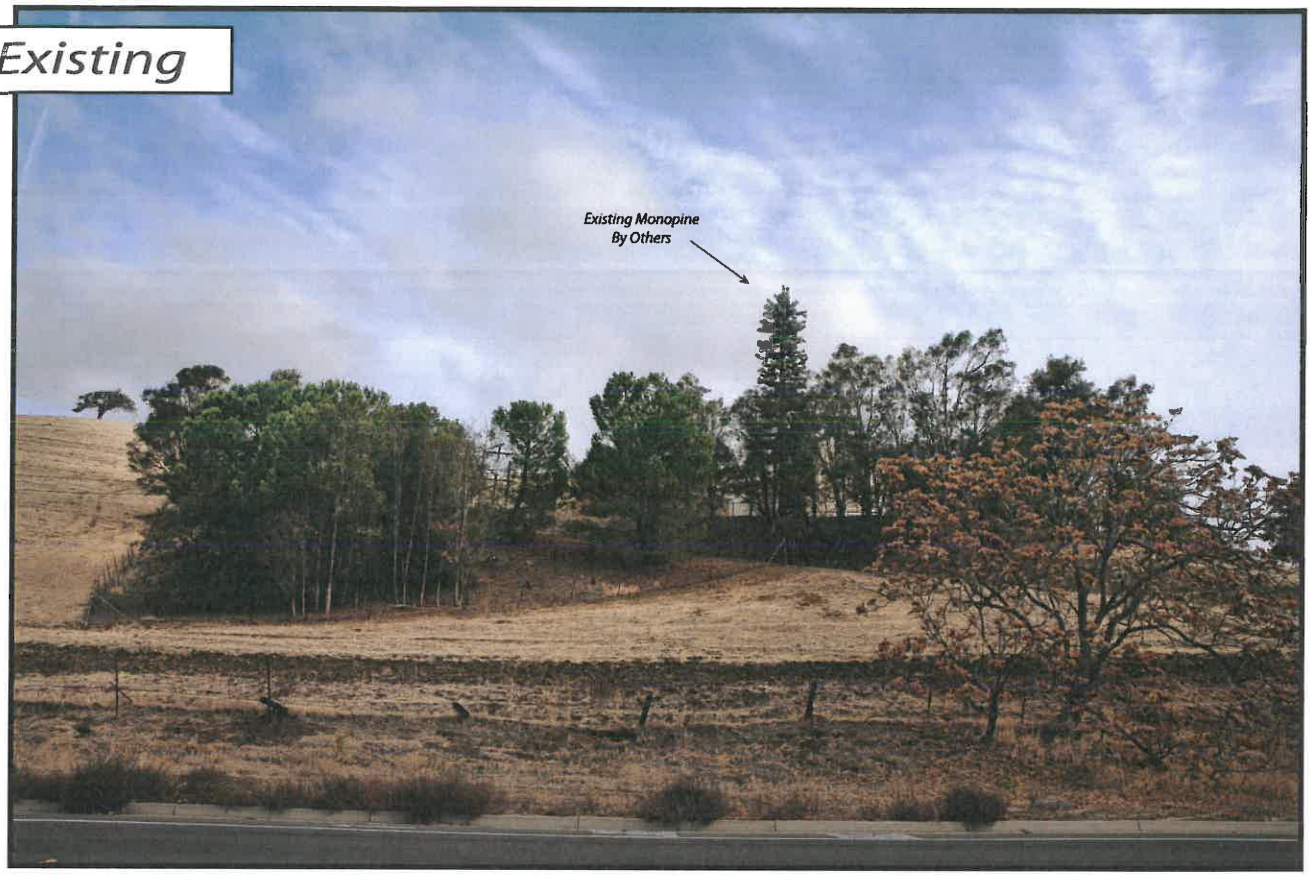
view from Marsh Creek Road looking east at site

T-Mobile

BA21633D Seminary Reservoir & Pump Station
Marsh Creek Road, Clayton, CA
Photosims Produced on 8-26-2015

G-1

Existing



Proposed

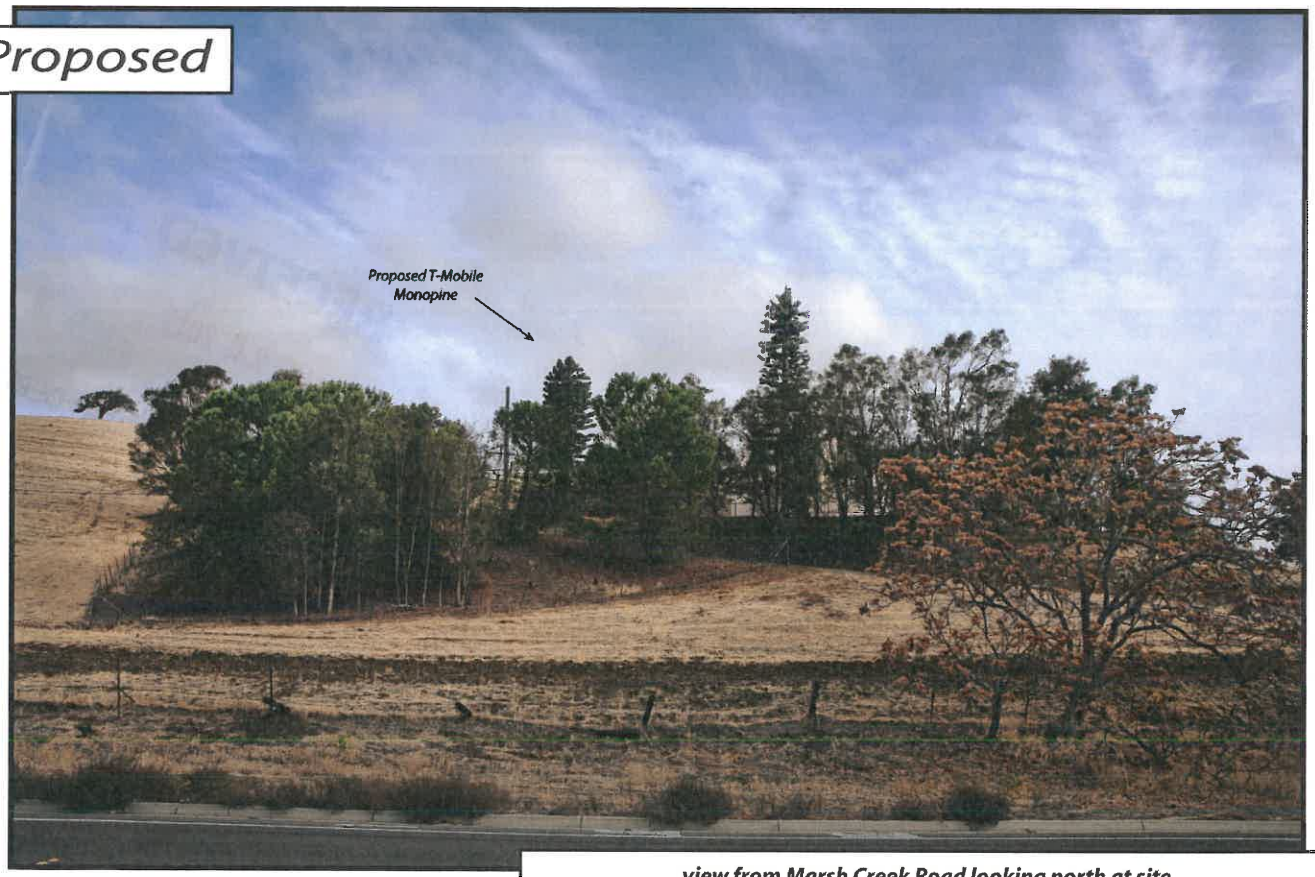


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Photo Simulation Solutions
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view from Marsh Creek Road looking north at site

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Marsh Creek Road, Clayton, CA
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G-2

Existing

Proposed

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view from Marsh Creek Road looking northwest at site

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G-3

Existing

Proposed

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view from El Pueblo Court looking northeast at site

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Marsh Creek Road, Clayton, CA
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