



# P l a n n i n g C o m m i s s i o n

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## S t a f f R e p o r t

FOR COMMISSION ACTION  
DECEMBER 5, 2011

### 1180 Alta Mesa Drive

**File Number UP 12-11 Application for a Use Permit for a new radio communications equipment building and 50-foot high antenna tower for first responders (Police and Fire District) located northeast of the EBMUD Carter Reservoir tank at the top of Alta Mesa Drive. OS-M (Open Space – MOSO), (RHC)**

#### **I. Application Basics**

##### **A. Zoning Permits Required:**

- Use Permit, under MMC Sections 8.08.020 and 8.144.080
- Design Review Approval of grading on average slope of 24%, under MMC Section 14.12.010
- Hillside Development Permit, under MMC Section 8.136.050

**B. CEQA Determination:** Categorically exempt pursuant to Section 15332 of the California Environmental Quality Act (CEQA) Guidelines (“In-Fill Development Projects”) and Section 15303, new construction of limited small new facilities, and installation of small, new equipment in small structures.

##### **C. Parties Involved:**

- i Applicant William J. McCammon, East Bay Regional Communications System Authority, 4985 Broder Road, Dublin, CA 94568
- i Property Owner East Bay Municipal Utility District, 375 11<sup>th</sup> Street, Oakland, CA 95607-4240

Figure 1: Vicinity Map

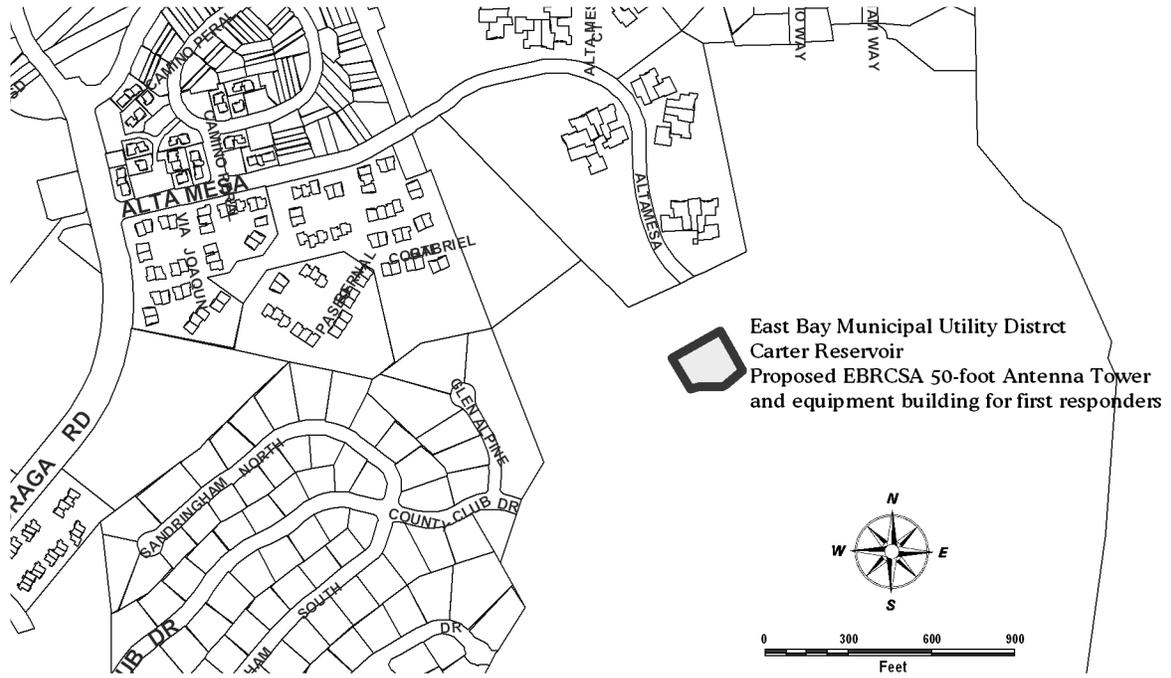
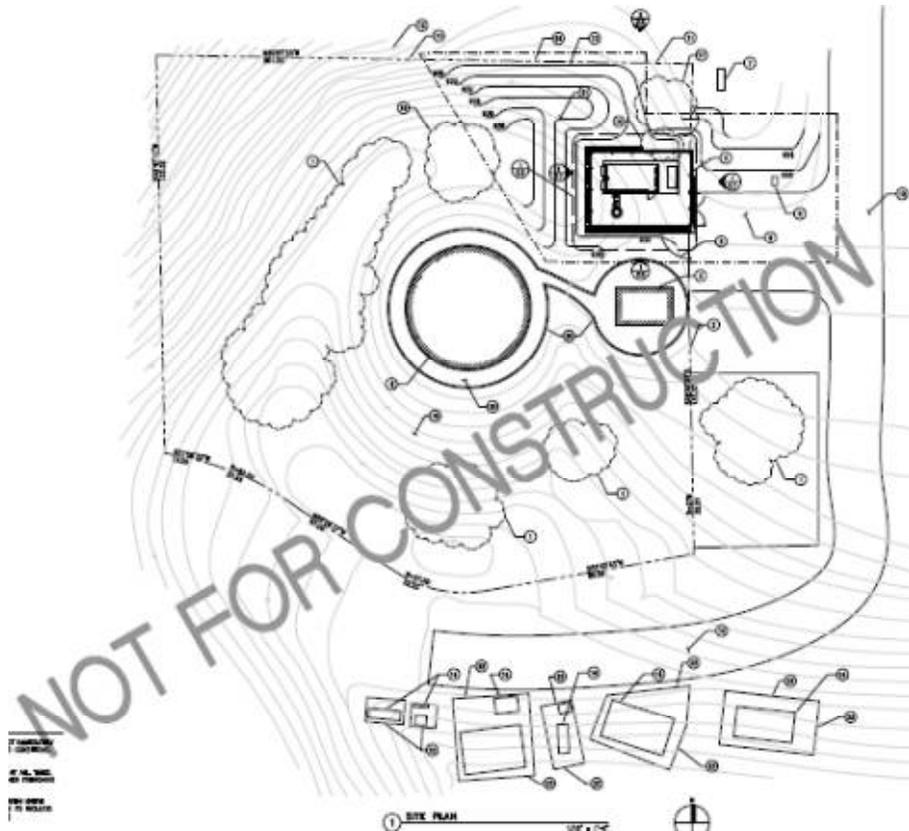


Figure 2: Site Plan



**Table 1: Land Use Information**

Location		Existing Use	Zoning District	General Plan Designation
Subject Property		EBMUD Water Tank and antennas and antenna equipment	OS-M	MOSO Open Space
Surrounding Properties	North	Vacant / Residential Townhouses further north	OS-M / 2-DUA further north	MOSO Open Space / Residential 2 du/ac beyond
	South	Six wireless transmitter facilities with vacant open space further south	OS-M / 3 DUA further south	MOSO Open Space / Residential 3 du/ac beyond
	East	Gravel access road / Saint Mary's College further east	OS-M / College (Institutional) further east	MOSO Open Space / Community Facilities beyond
	West	Vacant Open Space / Single Family Residential further west	OS-M / 3 DUA further west	MOSO Open Space / Residential 3 du/ac beyond

**Table 2: Special Characteristics**

Characteristic	Applies to Project?	Explanation
MOSO	Yes	All uses other than agriculture require use permit. Project is not a residential development but must comply with MOSO development standards
Slope / Geotechnical	Yes	Average slope of proposed area to be graded is 24%. Hillside Development Permit and geotechnical evaluation required
Creeks	No	There are no streams or riparian habitat on the property.
Oak Trees	Yes	There are oak trees on the property, but no oak trees or other native species will be removed for the project.
Trails / Open Space	No / Yes	The project site is within the fenced enclosure for the EBMUD Carter Reservoir. The facility would not obstruct any trails. Some of the open space at the northeast side of the water tank would be graded with a 200 square foot building installed and 50-foot high antenna tower.
Scenic Corridor	No	The project is not within 500-feet of any scenic corridor
Soil / Groundwater Contamination	Yes	The facility will have an auxiliary power generator, which would have a fuel tank. Any spillage of fuel could cause contamination of the soil.
Wireless Communications Ordinance Standards	Yes	Specific standards are listed in Tables 4 and 5 in this report.

**Table 3: Project Chronology**

Date	Action
Oct. 17, 2011	Application submitted
Nov. 21, 2011	Application deemed complete
Nov. 22, 2011	Public hearing notices mailed/posted
Dec. 5, 2011	PC hearing
Jan. 20, 2011	CEQA/PSA deadline <sup>1</sup>
After Use Permit	Design Review Board hearing to consider grading permit and hillside development permit

1. Project must be approved or denied within 60 days after being deemed complete if exempt from CEQA, or 60 days after adoption of a negative declaration, or 180 days after adoption of an EIR (Govt. Code Section 65950).

**Table 4: General Development Standards for Wireless Communications**

Development Standards from MMC Section 8.144.030	Standard	Proposed	Comment
Ground Mounted Equipment	Minimal functional height or not greater than 20 feet	Antenna tower will be 50 feet	An exception to this standard would be required
	Non-reflective finish or painted to minimize visual impacts	Galvanized metal tower	Applicant states that finish will become dull after a few weeks
	Sited to be screened by existing development, topography or vegetation.	Building is screened, tower is higher than water tank and vegetation	An exception would be required, since the tower is not screened
Roof and Building Mounted Equipment	Located far from outer edge of building	No equipment on roof of building	Complies
	Painted to match exterior of building or background	Color of Building is not specified	Can be made condition if project is approved
	Avoid mounting equipment on peaks of roofs	Building has a flat roof	Not applicable
	Equipment shall be screened or hidden from view	The building is partially hidden by proposed berm	Building complies
Radio Frequency Emissions	Facility shall comply with FCC standards	Radio Frequency Emissions not submitted	RF Electromagnetic Energy Compliance Report required if project is approved
Collocation with existing facilities	Encouraged to collocate with water tanks, light standards and other utility structures	Project is collocated with EBMUD water tank	Complies
Exterior Lighting	To be manually operated and	No permanent	This performance standard

	used only during night maintenance	exterior lighting is proposed	can be included as a condition if project is approved
Location of facility	Where feasible facility shall be on publicly owned property	Site is owned by EBMUD, a public utility company	Town owned property on top of Mulholland Ridge is restricted from all development.
Removal of Equipment	Must be removed 30 days after discontinuation of use	Issue not addressed in application	This requirement can be included as a condition if project is approved
Description of Site Selection Process	Coverage objectives and alternate site analysis shall be submitted	EBRCSA states that comprehensive review of site locations and computer modeling of those locations was undertaken	EBRCSA maintains that proposed site provides best coverage of the entire area. 50-foot tower height was determined by computer model to get signal into valley areas.
Proximity to Residential Buildings and property lines	300-feet minimum to a residential building and 100-foot minimum to a residential property line	Project is more than 400-feet from closest residential property line	Complies

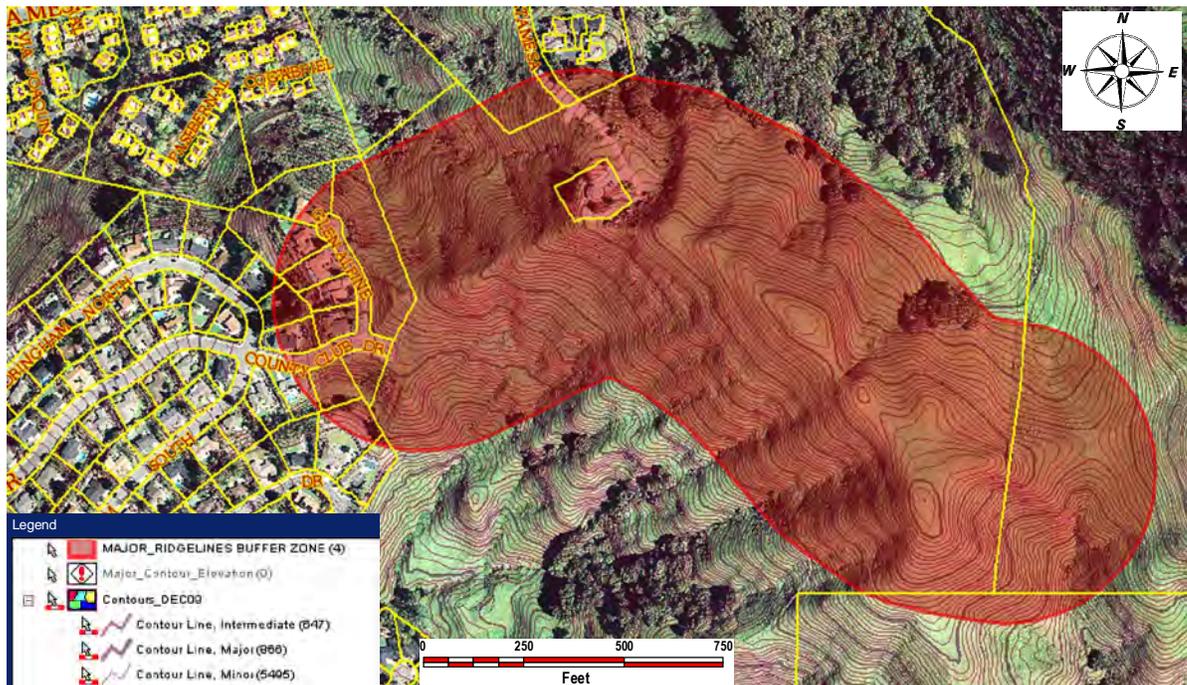
**Table 5: Open Space MOSO District Development Standards**

Development Standards from MMC Section 8.144.060	Standard	Proposed	Comment
Major Ridgelines	Shall not be located within 500-feet of a major ridgeline unless use permit approved prior to April 28, 1999	Project is within 500-feet of Moraga Ridge.	Other wireless providers were granted a variance. Police and Fire have existing repeater located above the site prior to April 28, 1999
Minor Ridgelines	Shall not be located on the crest of any ridgeline with an elevation of 800-feet or greater	Project site is not on the crest of the ridge.	Not Applicable
Slope of Property	Shall not be located where the slope has a grade of 20% or greater	Average Slope in the area of grading is 24%	After grading slope of equipment enclosure will be less than 20%
Special Design Considerations	Design facilities to appear as natural features, such as rocks or trees	Equipment building and antenna tower do not appear as natural features	Relocation of berm will partially screen building, but 50-foot antenna will be visible above ridgeline

## II. Project Setting

### A. Neighborhood / Area Description:

The EBMUD Carter Reservoir was built prior to the Town's incorporation. The area immediately above the EBMUD Carter Reservoir has six wireless transmitter facilities for cellular phones, in addition to a repeater for the County Sheriff's Police Dispatch System. The ridgeline above Alta Mesa Drive is known as "Moraga Ridge" and is defined as a major ridgeline in the General Plan. Development is prohibited by Moraga Municipal Code (MMC) Chapter 8.128 (Ridgeline Protection Ordinance) within 500 feet of Moraga Ridge, which is shown as the red shaded area on the aerial photo map below.



**Red shaded area is 500-feet on either side of Moraga Ridge above Alta Mesa**

The first wireless transmitter and antenna use permit was approved on October 15, 1990 for GTE Mobilnet. This included an unmanned telecommunications base station and two antenna arrays on either side of the fire road on top of Moraga Ridge. At that time the Ridgeline Protection Ordinance included a provision that allowed applications for variances to the prohibition of development within the 500-foot exclusion area on major ridges. The interim Town Attorney, Ken Schidig, ruled that the variance provision in the Ridgeline Protection Ordinance was not revoked by any provision in the 1986 Moraga Open Space Ordinance (MOSO) initiative. On the basis of that legal opinion, a variance application was approved for the GTE Mobilnet transmitter and antennas. When other wireless communication service providers requested transmitters and antennas at the top of Alta Mesa, the Town Attorney found that the variance provision in the ridgeline protection ordinance was in conflict with the MOSO requirements. The Town Council amended MMC Chapter 8.128 and removed the variance provision. However, the Town Council also found that cellular

phone service was in the public interest and that other wireless service providers should have an equal opportunity for access at the Alta Mesa site. Subsequently, five additional cellular service providers have been granted use permits for transmitters. The Nextel / Smart Communications use permit was approved on July 18, 1994 and Sprint PCS obtained a use permit including seven antenna panels on the ridge on September 18, 2000. None of the previously approved installations have antennas higher than 20-feet.

**B. Site Conditions:**

There is an existing earth berm at the north side of the Carter reservoir. The East Bay Regional Communications System Authority (EBRCSA) proposes to grade and reshape the berm to create a level pad for the equipment building and new antenna tower.

**III. Project Description**

The EBRCSA communications facility is intended to provide essential coverage to consolidate communications among first responders in Contra Costa and Alameda Counties. The repeater site will provide coverage for the Moraga Police Department and the Moraga-Orinda Fire District. The facility includes a 10-foot by 20-foot communications equipment shelter, a 50-foot high antenna tower with two 6-foot high monopole antennas at the top and one microwave dish antenna located about 8-feet below the top. There will be a 27-foot by 36-foot fenced enclosure around the communications equipment building and the antenna tower. A 4,000 square foot area will be graded for the building pad and berm around the fenced enclosure. The facility will also include a standby generator

**IV. Community Discussion**

**A. Neighbor/Community Concerns:**

A Public Hearing Notice was mailed on November 22, 2012 to property owners within 1,100 feet of the East Bay Municipal Utility District property. This notice area was expanded beyond the minimum 300-foot radius in order to include some of the residential properties in the general vicinity of the project. The notice area map, mailing list and public hearing are attached as **EXHIBIT D**. As of the date this report was written, the Town has not received any correspondence regarding the application.

**B. Committee Review:**

If the use permit is approved by the Planning Commission, the proposed grading for the project will require Design Review Board approval. Since the average slope within the area to be graded is 24%, the Town's Grading Ordinance requires the Board to consider the findings necessary for approval of the grading permit. A hillside development permit will also be necessary, since slopes steeper than 20% will be altered.

## V. Issues and Analysis

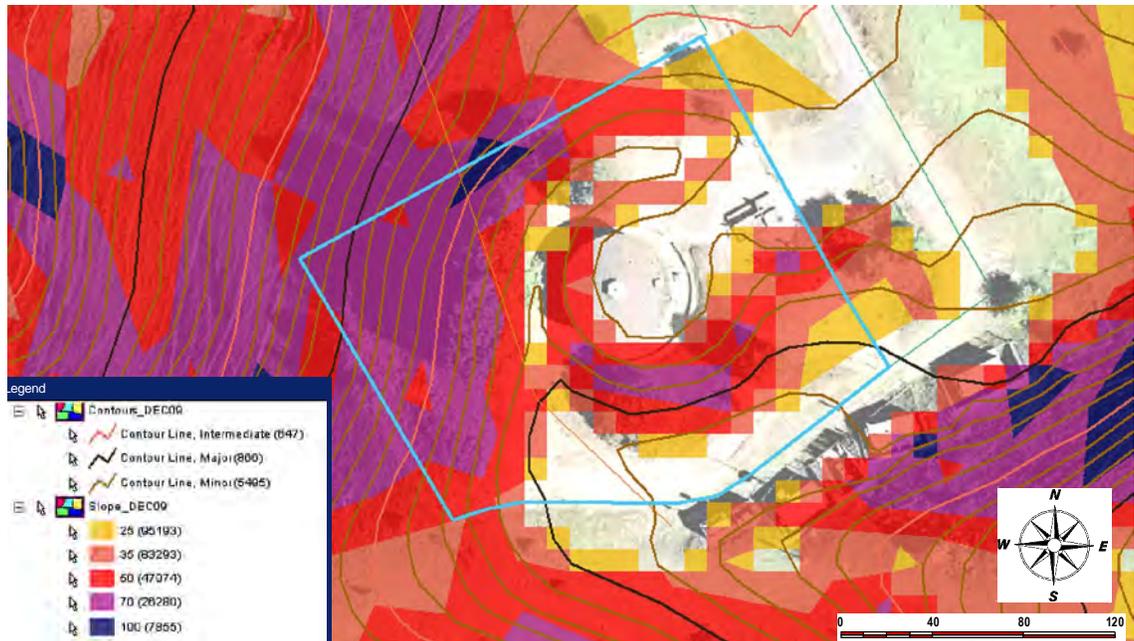
### A. Key Issues:

1. **The fifty foot height of the antenna tower** is the most significant issue. General development standard A-1 from MMC Section 8.144.030 states that antennas, poles and towers shall be of a minimal functional height or no greater than 20-feet, whichever is less. All existing ground mounted antennas conform to this height restriction. The only existing antennas that are higher than 20-feet are either mounted on top of buildings or on existing power transmission towers. Although this project provides improved communication for Alameda County and Contra Costa County emergency service providers, approving the 50-foot antenna tower could set a precedent for other wireless service providers. The applicant has provided two photomontage images to show the appearance of the proposed tower. One photo was taken from near the top of Alta Mesa Drive and the other was taken near the bottom of the hill at the Paseo de Moraga residential development. The photomontages are included as **EXHIBIT C**. The relatively close views of the site looking up the slope show most of the antenna tower above the horizon with open sky behind the tower. Views from more distant vantage points along Moraga Road or Saint Mary's Road may show more of the ridgeline behind the antenna tower. Section 8.144.150 of the Wireless Communications Ordinance may also apply to this application, since this section specifically applies to "towers". Sub-section "B" states that towers shall be of minimal functional height or not exceed the building height limit for the zoning district. The building height limits for the Open Space zone are not specified and are generally set by use permit. The building height limit is 35-feet maximum in most of the residential and commercial zoning districts in Town.
2. **The site location** at the EBMUD reservoir is at an elevation of 935-feet. The location of the antenna tower is approximately 35 to 40 feet below the elevation of Moraga Ridge and the center line of the ridge is about 150-feet south of the proposed tower. The 50-foot high tower would be about 10-feet above the ridgeline. The applicant stated in an email that a comprehensive review of site locations was undertaken and a computer model determined the height of the antenna tower. MMC Section 8.144.060-B states:

*The facilities shall comply with the development standards unless the applicant establishes and it is determined by the planning commission that there is no other optimal location for the carrier to provide adequate coverage, and it is determined that compliance with these standards would violate federal law. The burden shall be on the applicant to prove to the satisfaction of the planning commission that there are no optimal locations where adequate coverage could be provided.*

Alternative options to a 50-foot tower could be explored, such as two 20-foot antennas at the EBMUD reservoir property and two 20-foot antennas on the other side of the ridgeline with an underground cable connection to the remote antennas.

- The slope of the property** over a portion of the project site exceeds 20%. MMC Section 8.144.060-A-3 states that no wireless communications facilities which do not as of the effective date of said ordinance (April 28, 1999) have a conditional or temporary use permit shall be located on areas where the slope has a grade of twenty (20) percent or greater in MOSO open space. Unfortunately, this provision does not specify an “average slope” over the area. The slope map below shows the average slopes in the vicinity of the proposed EBRCSA transmitter and antenna tower project.



**Slope Map for EBMUD property and EBRCSA transmitter site**

Under part II (Interpretation) of the MOSO guidelines adopted by the Town Council on February 12, 1992, the applicant may submit a slope analysis exhibit showing a minimum 10,000 square foot “cell” with an average slope of less than 20%. The “cell” may be a polygonal shaped area and the “cell” could include the water tank and a portion of the access road in order to enclose the required 10,000 square foot area. In any case the applicant should show the “cell” with an average slope less than 20% to encompass the entire area of development. This would also include the 4,000 square feet area to be graded.

- Soil or groundwater contamination** could occur if there is any leakage from a fuel storage tank for the standby generator. Measures to contain any spills from an above ground or buried tank should be included on the plans.
- Non-reflective finish and painting to match the background** is required for the antennas and transmitter equipment building by the development standards. The applicant says that the finish on the galvanized metal tower will become dull after a few weeks. One problem with painting buildings to match the background is that during the spring season the grass on the hillsides is green and during the summer and fall it turns golden brown. No matter which color is selected, the

building will not always blend with the background. A dull gray-green color may be the best choice for the building, similar to the olive drab color of camouflage clothing.

6. **Tower warning light** may be required. On a recent trip along Highway 4 in Martinez, staff observed that the County Sheriff's radio tower near Glacier Drive has a beacon at the top that flashes to show aircraft the location of the tower. Staff does not know whether such a beacon would be required for the proposed 50-foot antenna tower. If a beacon is required then it would draw more attention to the tower.

## **B. General and Area Plan Consistency:**

General Plan Policy Analysis: The 2002 General Plan contains several policies applicable to the project, including the following:

1. Guiding Principal 7-: Encourage land uses, development patterns, and utilization of new communication and transportation technologies that may help reduce automobile trips and air pollution, ensuring that new wireless communication facilities are sited and designed to preserve the Town's unique visual character.

Staff Analysis: The proposed equipment building will be partially screened by the berm and should not significantly impact the visual character of the hillside. However, the antenna tower will be a very prominent man-made feature which will project above the ridgeline.

2. Policy LU1.8- Slope Restrictions: Under the terms of the Moraga Open Space Ordinance, development is prohibited on slopes greater than 20 percent in areas designated MOSO Open Space. The Zoning Ordinance, Chapter 8.52 (Open Space District) of the Moraga Municipal Code, defines the methodology for MOSO Open Space designation.

Staff Analysis: Compliance with this General Plan Policy was discussed under item 3 with the discussion of issues. In accordance with the Town's MOSO guidelines, the applicant will need to show a 10,000 square foot "cell" with an average slope less than 20% to encompass the entire area proposed for development.

3. Policy LU4.6 - Public Safety Facility Compatibility: Ensure that uses and buildings located in the vicinity of public safety facilities and training operations are compatible by design and siting.

Staff Analysis: The relatively small and low profile equipment building would be compatible in design and siting with the residential developments below the site. The 50-foot antenna tower is not compatible with the other wireless antennas located in the vicinity. The only antennas higher than 20-feet that have been approved are collocated on PG&E power line towers or located on the roofs of buildings.

4. Policy CD1.1– Location of New Development: To the extent possible, concentrate new development in areas that are least sensitive in terms of environmental and visual resources, including:
  - a) Areas of flat or gently sloping topography outside of flood plain or natural drainage areas.
  - b) The Moraga Center area and Rheem Park area.
  - c) Infill parcels in areas of existing development.

Staff Analysis: The project site is located in an area where many other wireless service providers have installed equipment shelters and antennas. After the proposed grading the project site would be flat. The site is not in a flood plain or natural drainage area such as a creek.

5. Policy CD1.2– Site Planning, Building Design and Landscaping: Retain natural topographic features and scenic qualities through sensitive site planning, architectural design and landscaping. Design buildings and other improvements to retain a low visual profile and provide dense landscaping to blend structures with the natural setting.

Staff Analysis: The existing topography was previously altered when the EBMUD water tank was built. The proposed grading would reshape the existing berm to screen the low profile equipment building. The proposed antenna tower is not low profile and could set a precedent for higher antennas at other wireless transmitter sites.

6. Policy CD1.3– View Protection: Protect important elements of the natural setting to maintain the Town's semi-rural character. Give particular attention to viewsheds along the Town's scenic corridors, protecting ridgelines, hillside areas, mature native tree groupings, and other significant natural features. Consideration should be given to views both from within the Town and from adjacent jurisdictions. Likewise, the Town should work with adjacent jurisdictions to protect views from Moraga to adjacent areas.

Staff Analysis: The antenna tower would project above the ridgeline and thereby intrude upon the natural setting more than the existing cellular phone antennas in the vicinity.

7. Policy CD1.5– Ridgelines and Hillside Areas: Protect ridgelines from development. In hillside areas, require new developments to conform to the site's natural setting, retaining the character of existing landforms preserving significant native vegetation and with respect to ridgelines, encourage location of building sites so that visual impacts are minimized. When grading land with an average slope of 20% or more, require 'natural contour' grading to minimize soil displacement and use of retainer walls. Design buildings and other improvements in accordance with the natural setting, maintaining a low profile

and providing dense native landscaping to blend hillside structures with the natural setting.

Staff Analysis: The proposed grading around the low profile equipment shelter would have natural contour grading but the 50-foot high antenna tower would be visually prominent above the ridgeline.

8. Policy CD1.7– Wireless Communications Facilities: Regulate the location and design of wireless communications facilities, satellite dishes and other miscellaneous antennas in accordance with the Town’s Ordinance No. 176 and the Federal Communications Act.

Staff Analysis: The proposed antenna tower does not conform to the 20-foot height limit in the Wireless Communications Ordinance.

9. Policy OS1.5– Development on Slopes and Ridgelines in Open Space Lands: In MOSO Open Space, development shall be prohibited on slopes with grades of twenty percent (20%) or greater and on the crests of minor ridgelines. The Town Council shall reduce the allowable densities on slopes of less than twenty percent (20%) through appropriate means such as requiring proportionally larger lot sizes or other appropriate siting limitations. For the purposes of this paragraph the term ‘minor ridgeline’ means any ridgeline, including lateral ridges, with an elevation greater than 800 feet above mean sea level, other than a major ridgeline.

Staff Analysis: Compliance with this General Plan Policy was discussed under item 3 with the discussion of issues. In accordance with the Town’s MOSO guidelines, the applicant will need to show a 10,000 square foot “cell” with an average slope less than 20% to encompass the entire area proposed for development. The project site is within the 500-foot development exclusion area for Moraga Ridge, which is a major ridgeline. The location of the project site is also above the 800-foot elevation.

10. Policy OS6.2– Noise Levels: Ensure that noise from all sources is maintained at levels that will not adversely affect adjacent properties or the community, especially during evening and early morning hours. Reasonable exceptions may be made in the interest of public safety.

Staff Analysis: The noise levels of the standby generator should be determined. If the generator is located within the equipment shelter, the walls of the building should be substantial enough to reduce the sound to 60 dba at the property line of the EBMUD Carter Reservoir as required by the development standards.

11. Policy PS1.6– Public Safety Improvements: Give high priority to those public improvements that are related to public safety.

Staff Analysis: The purpose of the communications facility is to improve radio transmission for first responders, including the Moraga Police Department and Moraga-Orinda Fire District.

12. Policy PS2.4– Disaster Preparedness: Participate, to the extent feasible, in programs relating to multi-jurisdictional disaster preparedness and cooperate with the County Office of Emergency Services and other appropriate agencies to revise and update the Town’s Disaster Preparedness Plan

Staff Analysis: The proposed facility would implement the land-mobile radio system established by the EBRCSA to consolidate communications among first responders in Contra Costa and Alameda Counties.

13. Policy PS4.10– Grading: Grading for any purpose whatsoever may be permitted only in accordance with an approved development plan that is found to be geologically safe and aesthetically consistent with the Town’s Design Guidelines. Land with a predevelopment average slope of 25% or greater within the development area shall not be graded except at the specific direction of the Town Council and only where it can be shown that a minimum amount of grading is proposed in the spirit of, and not incompatible with, the intention and purpose of all other policies of the General Plan. The Town shall develop an average slope limit beyond which grading shall be prohibited unless grading is required for landslide repair or slope stabilization.

Staff Analysis: The average slope within the area to be graded is 24%. Under the Town’s Grading Ordinance, Design Review Board approval will be required for the grading.

## **VI. General Conditions of Approval**

Under MMC Section 8.144.070, the Planning Commission may include conditions of approval deemed necessary to ensure visual and land use compatibility with the surroundings so as to avoid adverse effects on the health, safety, and welfare of the town’s residents, to protect existing vegetation, and to minimize the proliferation of such facilities, including but not limited to:

- A. Wireless communications facilities shall have a non-reflective finish and be painted to be compatible with the surrounding area and landscaped to minimize visual impacts;
- B. If not screened from view, equipment enclosures shall be compatible with the design scale, materials, colors and landscaping of other existing structures on the site;
- C. Stealth design of antennas shall be required as necessary to minimize visual impact.

- D. Wireless communication facilities shall be constructed and operated in such a manner as to minimize noise impacts on nearby residents and the public. Noise reduction shall be accomplished through the following measures:
1. A maximum allowable exterior noise level of sixty (60) dB at the property line of the facility must not be exceeded.
  2. Any maintenance or testing that will create noise that is audible from residences and other nearby sensitive receptors shall occur between the hours of eight a.m. to five p.m. Monday through Friday, excluding emergency repairs.
  3. Backup generators shall comply with the same noise standards referenced above and shall only be operated during power outages, emergency occurrences, or for testing and maintenance in accordance with subsection (D)(2) of this section.
- E. Additional landscaping or other screening shall be provided.

## VII. Required Findings for a Conditional Use Permit

MMC Section 8.12.120 lists the required findings that must be made to grant the Conditional Use Permit, as follows:

1. The proposed use is appropriate to the specific location **because it is collocated with a public utility (EBMUD water tank) which is a preferred location under the development guidelines; however, the height of the proposed antenna tower is not appropriate because the silhouette of the antenna would be visible above the ridgeline.**
2. The proposed use is not detrimental to the health, safety, and general welfare of the Town **because the new radio transmission repeater would be located more than 300-feet from any residence and the electromagnetic radiation from the antennas will be at too low a level to have any impact on the health, safety or general welfare of Town residents. However the applicant will need to submit RF emissions reports.**
3. The proposed use will not adversely affect the orderly development of property within the Town **because there are already six other wireless transmission sites in the vicinity. The proposed 50-foot high antenna tower would be a prominent visual object near the ridge.**
4. The proposed use will not adversely affect the preservation of property values and the protection of the tax base and other substantial revenue sources within the Town **because the new equipment will be collocated with existing wireless installations.**
5. The proposed use is consistent with the objectives, policies, general land uses and programs specified in the general plan and applicable specific plans **because it will improve coverage and allow wireless communication in an emergency consistent with General Plan policy PS1.6.**

6. The proposed use will not create a nuisance or enforcement problem within the neighborhood **because the new equipment building and antenna tower will be within a fenced enclosure that will be within an existing fenced enclosure around the EBMUD water tank. The Carter Reservoir is fenced with barbed wire and has a locked gate for entry.**
7. The proposed use will not encourage marginal development within the neighborhood **because this site is already used by wireless facilities.**
8. The proposed use will not create a demand for public services within the Town beyond that of the ability of the Town to meet in light of taxation and spending restraints imposed by law **because the wireless services for first responders will be maintained by the EBRCSA and do not require Town service.**
9. The proposed use is consistent with the Town's approved funding priorities **because no expenditure of Town funds is required.**

## VIII. Recommendation

Because the proposed EBRCSA communication facility is inconsistent with some of the provisions of the Wireless Communications Ordinance and several General Plan policies, staff finds difficulty supporting approval of the 50-foot high antenna tower at the EBMUD Carter reservoir location as proposed. Staff could recommend conditional approval of the project, including a condition that the antennas not exceed 20-feet in height above the ground and the requirement that the applicant provide an exhibit to show a 10,000 square foot cell with an average slope less than 20% that encompasses the entire area of development (see draft Resolution #-2011 enclosed as Attachment A). If the Planning Commission chooses to approve the facility, Findings 2, 4, and 5 state that the facility is essential for public safety purposes. Alternatively, the Planning Commission could adopt a resolution to deny without prejudice the 50-foot antenna tower.

### Attachments:

- A. Draft Resolution
- B. Project Plans, received October 17, 2011
- C. Photomontage showing new antenna tower
- D. Notice of Public Hearing
- E. Correspondence Received (none as of November 30, 2011)

**Staff Planner:** Richard Chamberlain, chamberlain@moraga.ca.us, (925) 888-7040

# ATTACHMENT A

## **DRAFT RESOLUTION**

**BEFORE THE TOWN OF MORAGA PLANNING COMMISSION**

**In the Matter of:**

Approval of a use permit for installation of a wireless communications facility for first responders at the EBMUD Carter Reservoir tank at 1180 Alta Mesa Drive. (APN 258-160-056)

**Resolution No. xx-2011 PC**

File No. UP 12-2011

Planning Commission Adoption

Date: December 5, 2011

Effective Date:

December 15, 2011 (If not appealed)

**WHEREAS**, an application for a use permit for installation of a wireless communication facility was submitted on October 17, 2011 by William J. McCammon on behalf of the East Bay Regional Communications System Authority; and

**WHEREAS**, the proposed facility included a new a 200-square foot equipment shelter and a 50-foot high antenna tower to be located northeast of the EBMUD Carter Reservoir tank at 1180 Alta Mesa Drive; and

**WHEREAS**, the project also included grading of approximately 4,000 square feet to provide a level pad for the equipment enclosure and tower, a 27-foot by 36-foot fenced enclosure and a standby generator; and

**WHEREAS**, the purpose of the wireless communications facility is to consolidate communications among first responders (Moraga Police and Moraga-Orinda Fire District, etc.) in Contra Costa and Alameda Counties; and

**WHEREAS**, the application was deemed complete on November 21, 2011 after receiving photomontages to show the visual impact of the 50-foot antenna tower and revised elevations that included the EBMUD water tank; and

**WHEREAS**, the project was found to be categorically exempt pursuant to Section 15332 of the California Environmental Quality Act (CEQA) Guidelines for in-fill development projects and Section 15303, new construction of limited small new facilities, and installation of small, new equipment in small structures; and

**WHEREAS**, on July 16, 2009 staff requested the Town Attorney to render an opinion on whether the 5-year initial period for a wireless conditional use permit stipulated under MMC Section 8.144.080-B was contrary to SB 1627 [Government Code Section 65964-(b)] and whether the requirement for annual testing to verify compliance with FCC radio frequency emissions standards was in conflict with FCC regulations under Section 332 in US Code Title 47, Chapter 5, subchapter III, Part I and would infringe on FCC authority; and

**WHEREAS**, on August 27, 2009 the Town Attorney ruled that Government Code section 65964(b) prohibits the Town from limiting the conditional use permit to less than 10 years; and

**WHEREAS**, the Town Attorney advised that as long as the Town does not impose more stringent emissions regulations than those imposed by the FCC, the Town would not be preempted by federal law from requiring tests to verify compliance with the FCC regulations for radio frequency emissions; and

**WHEREAS**, a Public Hearing Notice was mailed to the property owners within 1,100 feet of the project site on November 22, 2011 for the Planning Commission hearing on the project; and

**WHEREAS**, the Planning Commission held a public hearing on December 5, 2011 to consider the plans for EBRCSA communications facility and heard testimony from the applicant and interested parties.

**NOW, THEREFORE, BE IT RESOLVED** that the Planning Commission of the Town of Moraga hereby conditionally approves the use permit for the communications facility, with the following findings and subject to the conditions listed herein:

**PART 1: REQUIRED FINDINGS FOR CONDITIONAL USE PERMIT FROM MMC  
Chapter 8.12.120**

1. The proposed use is appropriate to the specific location because it is collocated with a public utility (EBMUD water tank) which is a preferred location under the development guidelines; however, the height of the proposed antenna tower is not appropriate because the silhouette of the antenna would be visible above the ridgeline.
2. The proposed use is not detrimental to the health, safety, and general welfare of the Town because the new radio transmission repeater would be located more than 300-feet from any residence and the electromagnetic radiation from the antennas will be at too low a level to have any impact on the health, safety or general welfare of Town residents. However the applicant will need to submit RF emissions reports. In addition, the proposed use is intended to improve the safety and general welfare of the Town by providing improved communication networks for public safety agencies.
3. The proposed use will not adversely affect the orderly development of property within the Town because there are already six other wireless transmission sites in the vicinity. Nevertheless, the proposed 50-foot high antenna tower would be a prominent visual object near the ridge.
4. The proposed use will not adversely affect the preservation of property values and the protection of the tax base and other substantial revenue sources within the Town because the new equipment will be collocated with existing wireless installations. In addition, the Town belongs to the Joint Powers Authority that proposes the antenna and equipment for public safety purposes.
5. The proposed use is consistent with the objectives, policies, general land uses and programs specified in the general plan and applicable specific plans because it will improve coverage and allow wireless communication in an emergency consistent with General Plan policy PS1.6.

6. The proposed use will not create a nuisance or enforcement problem within the neighborhood because the new equipment building and antenna tower will be within a fenced enclosure that will be within an existing fenced enclosure around the EBMUD water tank. The Carter Reservoir is fenced with barbed wire and has a locked gate for entry.
7. The proposed use will not encourage marginal development within the neighborhood because this site is already used by wireless facilities.
8. The proposed use will not create a demand for public services within the Town beyond that of the ability of the Town to meet in light of taxation and spending restraints imposed by law because the wireless services for first responders will be maintained by the EBRCSA and do not require Town service.
9. The proposed use is consistent with the Town's approved funding priorities because no expenditure of Town funds is required.

**PART 2: CONDITIONS OF APPROVAL:**

1. The proposed use and facility shall be substantially in conformance with the plans stamped "Planning Commission Official Exhibit" and dated December 5, 2011; however, the height of the antenna tower is not approved. The maximum height for the antennas shall be 20-feet in accordance with general development standard A-1 from MMC Section 8.144.030. Application can be made for additional 20-foot antennas at other locations as necessary to achieve coverage.
2. EBRCSA shall provide an exhibit to show a 10,000 square foot cell with an average slope less than 20% that encompasses the entire area of development. The "cell" can be a polygonal shaped area that includes portions of the access road as well as the EBMUD tank area in order to achieve the required 10,000 square foot area.
3. The proposed grading for the project shall be submitted to the Design Review Board for approval since the average slope within the 4,000 square foot area of disturbance is 24%.
4. The Design Review Board shall consider additional landscaping on the graded berm when they review the grading plans to help screen the equipment building.
5. Prior to the final inspection of the equipment enclosure, the additional landscaping shall be inspected by the planning staff.
6. The EBRCSA communications installation, including the equipment shelter and antenna poles and panels shall have a non-reflective finish and be painted to be compatible with the surrounding area.
7. All proposed fencing is approved at a height of no more than 6 feet.

8. There shall be no exterior lighting, except during an emergency repair at night. There shall be no flashing beacons at the tops of the antenna.
9. To avoid any possibility of soil or groundwater contamination from leakage of the fuel storage tank for the standby generator, the plans shall include a containment tray under the tank.
10. The EBRCSA facility shall be maintained and operated in such a manner as to minimize noise impacts on nearby residents and the public. Noise reduction shall be accomplished through the following measures:
  - a. The maximum allowable (peak level) exterior noise level shall be 60 dB measured at the property line of the facility.
  - b. Maintenance or testing of the facility that creates audible noise that could be heard from residences in the vicinity shall occur only between the hours of 8:00 a.m. to 5:00 p.m. Monday through Friday, excluding emergency repairs.
  - c. The standby or backup generator shall comply with the same noise standards referenced above and shall only be operated during power outages, emergency occurrences, or for testing and maintenance in accordance with condition 7.b. above.
  - d. Any other mechanical equipment at the facility, such as air conditioning units, pumps, etc., shall be designed so that average sound levels do not exceed 40 dB(a) outside the nearest existing residences between 10:00 p.m. and 7:00 a.m., or 45 dB(a) between 7:00 a.m. and 10:00 p.m. Noise associated with the communication equipment shall not be perceptible from off-site.
11. The applicant shall apply for and pay all appropriate fees for the grading permit, building permit, plan checks and inspections.
12. The Applicant shall submit final drainage plans for review and approval to the Town Engineer prior to the issuance of grading or building permits as appropriate.
13. If the vegetative cover on the site is disturbed during the months of October through April, then a storm water pollution prevention plan (SWPPP) shall be submitted to the Town's engineering department for control of drainage and erosion control measures on the construction site. The SWPPP shall include straw wattles at intervals not to exceed five (5) feet in horizontal distance on all disturbed or created slopes until vegetation is established to control erosion on the slopes.
14. Prior to the issuance of the grading permit, the applicant shall furnish the Town with security for completion of the erosion control work as follows:

- a. The performance of the work described and delineated on the approved Grading Plan and SWPPP in an amount approved by the Town Engineer but not less than 100% of the approved estimated cost of performing said work. The form of the security may be corporate security bond, letter of credit or cash.
  - b. The performance of the work described and delineated in the Erosion Control Plan, in an amount to be determined by the Town Engineer but not less than 100% of the approved estimated cost of performing said work. The form of the security may be a combination of corporate surety bond, letter of credit or cash except that cash deposits will be required for all amounts up to \$10,000.
  - c. The security whether corporate surety bond or an instrument or instruments of credit, at applicant's option, shall be in a form approved by the Town Attorney.
15. No dumping or stockpiling of soil or debris is permitted within the Open Space areas adjacent to the EBMUD Carter Reservoir. Contractors on the project shall be advised of this condition. Any dumping of soil or debris into the Open Space properties owned by the Bruzzone family may be cause for a stop work order until the area is fully restored and any damage done to native vegetation mitigated with replacement native vegetation.
16. Construction hours shall be limited to the hours from 8 a.m. to 5 p.m. in accordance with the Town's Noise Ordinance and to minimize potential disturbance of residents in the vicinity. Although work is not prohibited on weekends, your contractors should try to schedule noisy construction activities, such as jackhammers or other equipment using compressed air and grading equipment to weekdays only. This requirement shall be added to the specifications for the construction work so that contractors bidding on the project will be informed of the working hours.
17. In accordance with SB 1627 [Government Code Section 65964-(b)], this use permit shall be valid for an initial period of ten years. The conditional use permit may be extended by the Planning Commission for an additional ten year period following a public hearing and verification of continued compliance with the conditions of approval and a showing that the facility has been upgraded to minimize its impact, including community aesthetics, to the greatest extent permitted by the technology that exists at the time of renewal and is consistent with the provisions of federal law.
18. Within thirty (30) days after completion of the facility, and every five years thereafter, EBRCSA shall conduct tests to verify compliance with FCC radio frequency emissions standards and provide such test results to the town. Such testing shall be conducted during normal business hours and on a non-holiday weekday with the facility operating at maximum power and shall measure total emissions from the transmitter site.

19. In the event that the radio frequency emission test results exceed the FCC standards or scientific and/or medical data determine the wireless telecommunication operation to be detrimental to the health and safety of the citizens of Moraga, the Town shall reserve the right to revoke the use permit.
20. In accordance with MMC Section 8.144.080-C, EBRCSA shall submit a five-year wireless communications facilities master plan for Moraga that includes the following components:
  - a. A large-scale map of the town showing the five-year plan for wireless communication facility sites and planned coverage;
  - b. A written list of existing, proposed and anticipated wireless communication facilities that EBRCSA intends to install in Moraga in the next five years;
  - c. A description of the location of each site and the types of installations, including antennas and equipment.
21. All equipment associated with this wireless communication facility shall be removed within thirty days of the discontinuation of use and the site shall be restored to its original preconstruction condition in a manner consistent with continued use by any collocated facility. The town shall be given thirty (30) days notice of intent to discontinue use of the facility prior to discontinuation of use.
22. This approval and each condition contained herein shall be binding upon the applicant and any transferor, or successor in interest.
23. If there is no appeal, Planning Commission approval will be valid for one year from the effective date of this resolution of approval. You must obtain a building permit for construction of your project within one year or you may request an extension of the approval for one additional year. The request must be in writing to the Planning Director and should show good cause as to why the design approval should be extended.
24. These conditions of approval shall be included with and made part of any and all plans submitted for plan check and/or any permits, including building permits.

**PASSED AND ADOPTED** by the Planning Commission of the Town of Moraga on December 5, 2011, the following vote:

**AYES:**

**NOES:**

**ABSTAIN:**

**ABSENT:**

Stacia Levenfeld, Chair

Attest: \_\_\_\_\_  
Shawna Brekke-Read, Planning Director

DRAFT

# ATTACHMENT B

**PROJECT PLANS,  
RECEIVED OCTOBER 17, 2011**

# ATTACHMENT C

**PHOTOMONTAGE SHOWING  
NEW ANTENNA TOWER**

**Photomontage pictures showing proposed EBRCSA Radio Tower**



**Picture taken from the top of Alta Mesa**



**Picture taken from the bottom of Alta Mesa**



**Cropped view from top of Alta Mesa**



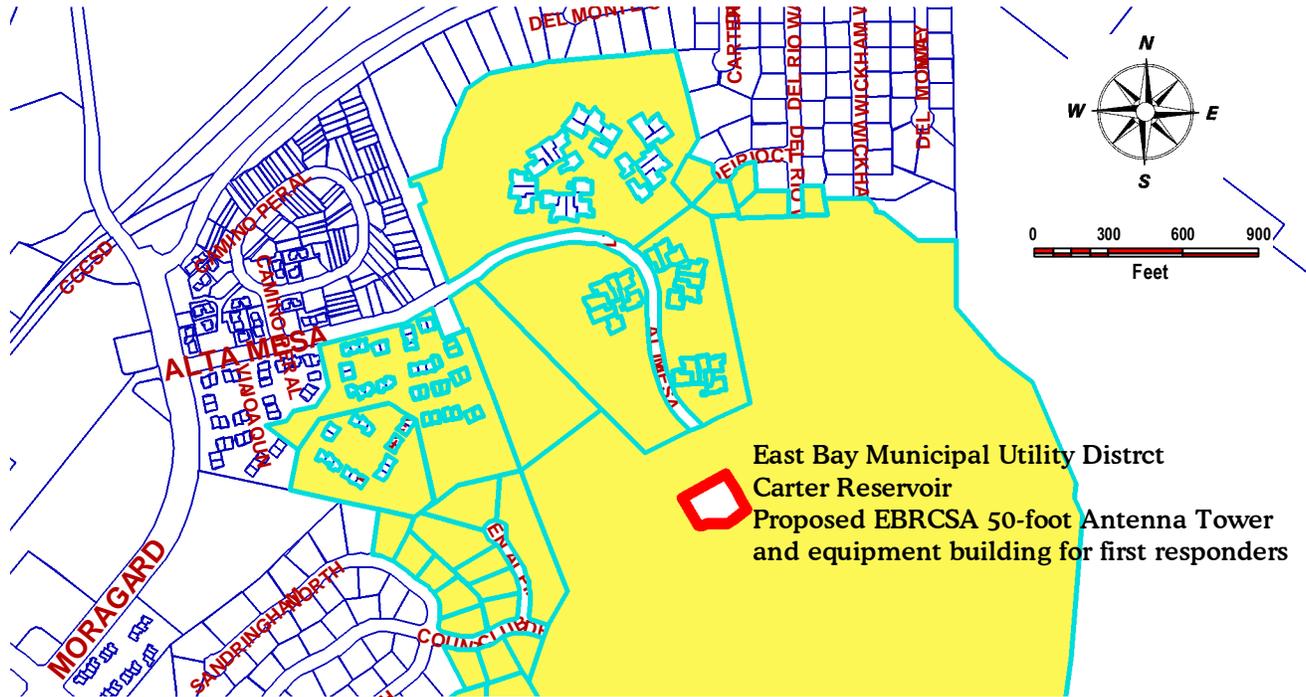
**Cropped view from the bottom of Alta Mesa**

# ATTACHMENT D

**AREA OF NOTICE MAP  
MAILING LIST AND  
PUBLIC HEARING NOTICE**

# VICINITY MAP AND AREA OF NOTICE

## East Bay Regional Communications Systems Authority (EBRCSA) Transmitter Tower at the EBMUD Carter Reservoir at the end of Alta Mesa – File Number: UP 12-11



**UP 12-11**  
**Mailed Public Notice**  
**November 22, 2011**

**1180 Alta Mesa**  
**EBRCSA Tower**  
**Mailing List**

**Planning**  
**Commission**  
**Public Hearing**

APN	Name	Address	City & Zip
258561079	Yimi Hu	300 CORTE GABRIEL	MORAGA, CA 94556 2025
258561080	John H Iii & Rachel A Marion	304 CORTE GABRIEL	MORAGA, CA 94556 2025
258561083	Robert G & Julianne Belote Trust	316 CORTE GABRIEL	MORAGA, CA 94556 2025
258561081	Yolanda Torres	65 GREENFIELD DR	MORAGA, CA 94556 1345
258561084	Steven Francis Horwitz Trust	1410 RIMER DR	MORAGA , CA 94556 2555
258561082	Barbara R White Trust	312 CORTE GABRIEL	MORAGA, CA 94556 2025
258541003	Richard H & Heidi K Raine	71 CARR DR	MORAGA, CA 94556 1901
258541005	Zuo-jun Shen	63 CARR DR	MORAGA, CA 94556 1901
258541004	William & Christine Booth Trust	67 CARR DR	MORAGA, CA 94556 1901
258541009	Linda Maleh Trust	1100 COUNTRY CLUB DR	MORAGA, CA 94556 1926
258530026	David R & Susan S Howard Trust	1103 COUNTRY CLUB DR	MORAGA, CA 94556 1925
258530027	Kent D & Kelly D Hodgkinson	1107 COUNTRY CLUB DR	MORAGA, CA 94556 1925
258530025	Alan R & Arlene J Young Trust	208 SANDRINGHAM N	MORAGA, CA 94556 1933
258530028	Richard Avanzino	310 GLEN ALPINE	MORAGA, CA 94556 1928
258530024	Thomas A Gilbertson Trust	216 SANDRINGHAM N	MORAGA, CA 94556 1933
258530029	Fred & Perry Serafin	320 GLEN ALPINE	MORAGA, CA 94556 1928

APN	Name	Address	City & Zip
258530023	Herbert Ballhorn Trust	224 SANDRINGHAM DR N	MORAGA, CA 94556 1933
258530030	James M & Robin W Siefkin	340 GLEN ALPINE	MORAGA, CA 94556 1928
258530022	Thomas & Elizabeth Chesterman	232 SANDRINGHAM DR N	MORAGA, CA 94556 1933
258530031	Giovanni B & Anna Cerruti Trust	350 GLEN ALPINE	MORAGA, CA 94556 1928
258160056	Real Estate Services	PO BOX 24055	OAKLAND , CA 94623 1055
258561077	Brion & Kristen Donlon	305 CORTE GABRIEL	MORAGA, CA 94556 2025
258561076	Sherwin T & Mildred Wong Tang	309 CORTE GABRIEL	MORAGA, CA 94556 2025
258561075	Gary M Sabatte Trust	6041 ACACIA AVE	OAKLAND , CA 94618 1816
258581012	William G & Elaine H Lind Trust	1189 ALTA MESA DR	MORAGA , CA 94556
258561086	Richard & Evelyn Perez	317 CORTE GABRIEL	MORAGA, CA 94556 2025
258581008	William G & Ljubica M Welden	1181 ALTA MESA	MORAGA, CA 94556 2015
258561085	Raymond C Iii Force	321 CORTE GABRIEL	MORAGA, CA 94556 2025
258581009	Alyce L Suss Trust	1183 ALTA MESA	MORAGA, CA 94556 2015
258561071	Patrick Leo Ross Trust	231 PASEO BERNAL	MORAGA, CA 94556 2034
258581011	Hans A & Agnes L Muller	1187 ALTA MESA	MORAGA, CA 94556 2015
258581010	Paul J Weiss	1185 ALTA MESA	MORAGA, CA 94556 2015
258561088	Eric K & Sharman A Noguchi	227 PASEO BERNAL	MORAGA, CA 94556 2034
258561087	John E & Barbara W Miller Trust	223 PASEO BERNAL	MORAGA, CA 94556 2034
258582007	James M & Kathleen Edwards Trust	1176 ALTA MESA	MORAGA, CA 94556 2042
258582006	Ann Evans Dzuna Trust	1174 ALTA MESA	MORAGA, CA 94556 2042
258582005	Steven & Henriette Hagman Trust	1172 ALTA MESA	MORAGA, CA 94556 2042
258582001	Patrick Jay Flaharty Trust	1164 ALTA MESA	MORAGA, CA 94556 2042
258581007	Ruth A Cohen Trust	1163 ALTA MESA	MORAGA, CA 94556 2015
258582004	Alexander B Jr Millar	1170 ALTA MESA	MORAGA, CA 94556 2042
258581006	John & Mary Ellen Viboch	1161 ALTA MESA	MORAGA, CA 94556 2015
258582003	Norma L Mygrant	1168 ALTA MESA	MORAGA, CA 94556 2042
258581005	Esref & Sibel Teker	3476 STATEVIEW BLVD	FORT MILL, SC 29715 7200
258582002	Roy C Fedotoff	1166 ALTA MESA	MORAGA, CA 94556 2042
258581004	Gertrude E Veiss	1157 ALTA MESA	MORAGA, CA 94556 2015
258581001	Paul D Kase Trust	1151 ALTA MESA	MORAGA, CA 94556 2015
258581003	Leann T Brown	1155 ALTA MESA	MORAGA, CA 94556 2015
258581002	Richard J Callahan Trust	1153 ALTA MESA	MORAGA, CA 94556 2015
258393001	Gregory R Schoofs	1064 DEL RIO WAY	MORAGA, CA 94556 2041
258392009	John E Smidebush Trust	1063 DEL RIO WAY	MORAGA, CA 94556 2032
258393004	Essex B Lodato	21 DEL RIO CT	MORAGA, CA 94556 2031
258393003	Robert J Berndt Trust	11 DEL RIO CT	MORAGA, CA 94556 2031
258393005	Gary C & Joanna B Hill	22 DEL RIO CT	MORAGA, CA 94556 2031
258561090	C/o Paseo De Moraga Hoa	315 DIABLO RD, Apt.#212	DANVILLE , CA 94526 3409
258570027	Matrix Property Management	4861 SUNRISE DR, Apt.#104	MARTINEZ, CA 94553 8602
258520003	Joan E Bruzzone	899 HOPE LN	LAFAYETTE , CA 94549
258160056	EBMUD	375 11th Street	Oakland, CA 95607-4240
	William J. McCammon, EBRCSA	4985 Broder Road	Dublin, CA 94568
<b>Duplicate Addresses</b>			
258541008	Russell J Bruzzone Inc	899 HOPE LN	LAFAYETTE, CA 94549 5131
258541007	Russell J Bruzzone Inc	899 HOPE LN	LAFAYETTE, CA 94549 5131
258160062	Joan E Bruzzone	899 HOPE LN	LAFAYETTE , CA 94549
258530032	Russell J Bruzzone Inc	899 HOPE LN	LAFAYETTE, CA 94549 5131
258582008	Matrix Property Management	4861 SUNRISE DR, Apt.#104	MARTINEZ, CA 94553 8602
258581013	Matrix Property Management	4861 SUNRISE DR, Apt.#104	MARTINEZ, CA 94553 8602
258561091	C/o Paseo De Moraga Hoa	315 DIABLO RD, Apt.#212	DANVILLE , CA 94526 3409



# PLANNING COMMISSION

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## NOTICE OF PUBLIC HEARING

### **1180 Alta Mesa Drive**

**Application for a Use Permit for a new radio communications equipment building and 50-foot high antenna tower for first responders (Police and Fire District) located northeast of the EBMUD Carter Reservoir tank at the top of Alta Mesa Drive. File Number UP 12-11.**

The Planning Commission of the Town of Moraga will hold a public hearing on the above matter, pursuant to Zoning Ordinance Sections 8.08.020 and 8.144.080, on **Monday, December 5, 2011** at the Moraga Library Community Meeting Room, 1500 St. Mary's Road (wheelchair accessible). The meeting starts at 7:00 p.m.

#### **PROJECT DATA:**

- 10-foot by 20-foot communications equipment shelter
- 50-foot high antenna tower with two 6-foot high monopole antennas at the top and one microwave dish antenna located about 8-feet below the top
- 27-foot by 36-foot fenced enclosure around the communications equipment
- Grading a 4,000 square foot area for building pad and berm around the enclosure
- The facility will also include a standby generator

#### **PERMITS REQUIRED:**

- Use Permit
- Design Review Approval of grading on average slope of 24%
- Hillside Development Permit

**APPLICANT:** East Bay Regional Communications System Authority

**OWNER:** East Bay Municipal Utility District

**ZONING DISTRICT:** OSM – DT (Moraga Open Space, MOSO, Density Transfer)

**ENVIRONMENTAL REVIEW STATUS:** Categorically exempt under Section 15332 of the California Environmental Quality Act (CEQA) Guidelines ("In-Fill Development Projects").

**ATTACHMENTS:** Vicinity map, project plans (some drawings not included to facilitate mailing; all drawings are available for public review; see "Further Information" below).

#### **PUBLIC COMMENT**

Comments may be made verbally at the public hearing and in writing before the hearing. Those wishing to speak at the hearing must submit a speaker card by 7:15 p.m. The Commission may limit the number of speakers and the time granted to each speaker. Written

comments to the Commission are encouraged and should be directed to:

Planning Department  
329 Rheem Boulevard  
Moraga, CA 94556

Fax: (925) 376-5203  
E-mail: [planning@moraga.ca.us](mailto:planning@moraga.ca.us)

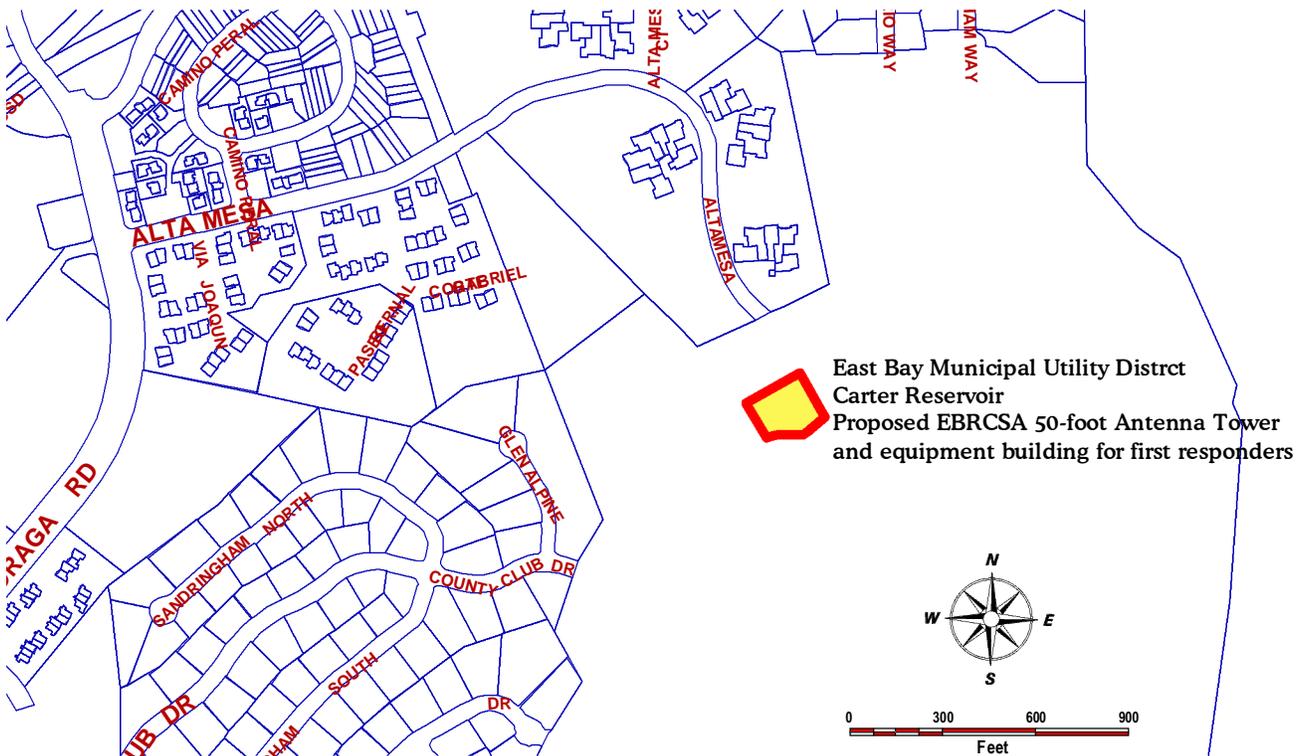
To assure distribution to Commission members prior to the meeting, **correspondence must be received by 12:00 noon, seven (7) days before the meeting.** 15 copies must be submitted of any correspondence with more than ten (10) pages or any item submitted less than seven days before the meeting.

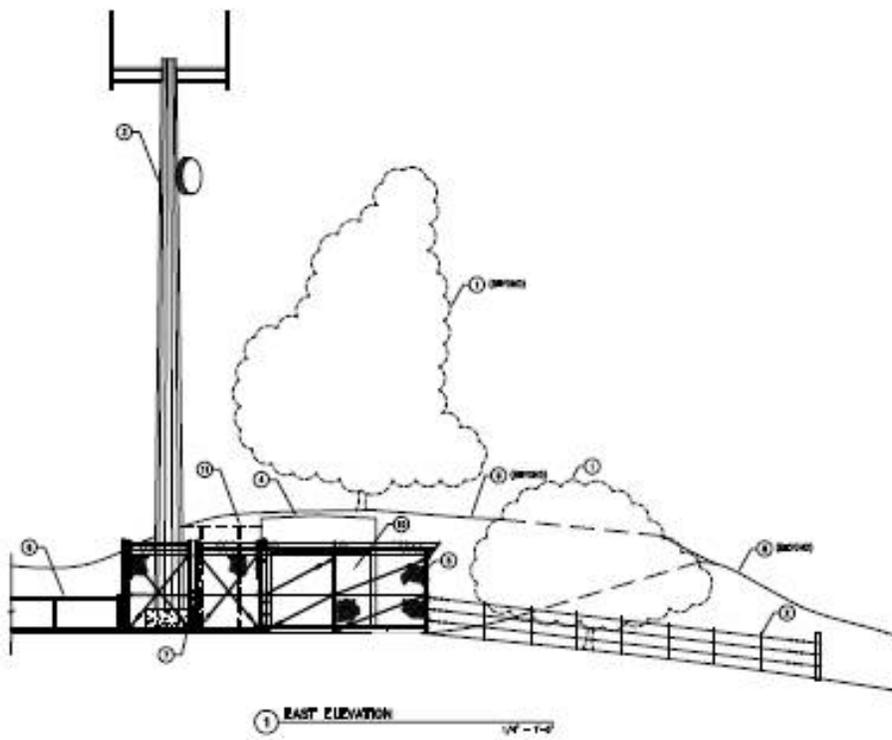
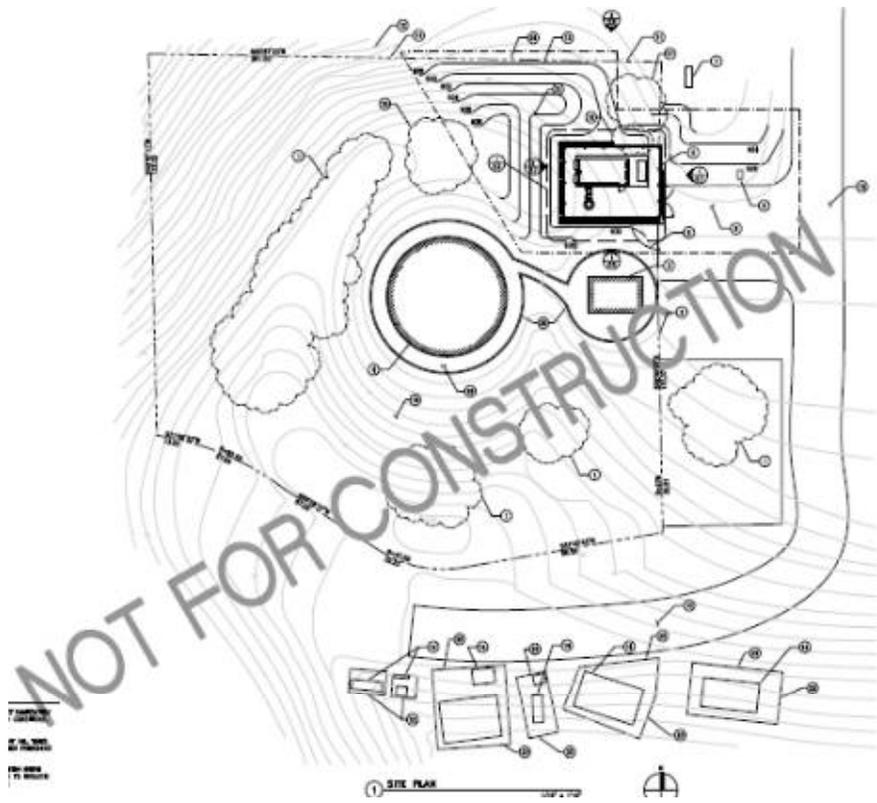
### COMMUNICATION ACCESS

To request a meeting agenda in large print, or on CD, call (925) 888-7040 (voice). Notice of at least five (5) business days will ensure availability. Agendas are also available on the Internet at: [www.moraga.ca.us](http://www.moraga.ca.us).

### FURTHER INFORMATION

Questions about the project should be directed to the project planner, (click and enter name), at (925) 888-7040 or [planning@moraga.ca.us](mailto:planning@moraga.ca.us). All project application materials, including full-size plans, may be viewed at the Planning Department, 329 Rheem Boulevard, during normal office hours.





ATTACHMENT E  
**CORRESPONDENCE RECEIVED**