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Taormina's volunteer efforts, finds his involvement and amateur radio facility non-essential to the LEPC function.

In accordance with the above, access to the amateur radio communication system by key staff may prove to be beneficial and desirable for the public convenience and welfare during times of Emergency Operations Command and extended power or emergency communication outages.

#### IV. KEY ISSUES

**4.1 Setbacks.** In accordance with Section 17.40.050 of the Storey County Code, minimum setbacks for structures in the E-10-HR Zone shall be as follows: (a) front 30 feet; (b) rear 40 feet; and (c) sides 15 feet. The existing four towers and the proposed location for the additional two proposed structures appear to comply with these setback requirements (see Table 1 excerpt from submitted application correspondence). In addition, the distance of each tower to the nearest adjacent residential dwelling (except the applicant's residence) are outside the area in which a failed tower may fall.

While the existing and proposed structures have been designed by a Nevada licensed engineer, it is important to note that the height of each structure far exceeds the distance to each parcel boundaries in which they are located. In order to assure that people and structures on abutting parcels will remain safe from the neighboring towers, an engineering certificate must be submitted to Storey County stating that each structure complies with the International Building Code and can withstand lateral wind load common to the area as determined by the Storey County Building Department. In addition, it is recommended that an insurance policy adequate in scope is in place to insure any damage that may occur in association with tower failure.

Structure #	Tower Identifier	Height of Structure	Erected	Nearest Property Line	Setback
1	40 Meter Rohn 45G	140'	1997	76'	Side
2	20 Meter Rohn 25G	85'	1998	145'	Side
3	160 Meter Rohn 25G	110'	2007	34'	Side
4	20 Meter Rohn 45G	140'	2007	170'	Side
5	15 Meter Monopole (proposed)	120'	Base installed 7/08	38'	Side
6	80 Meter Monopole (proposed)	195'	Base installed 7/08	72'	Side

**Table 1:** Distance schedule of setbacks submitted by the applicant as part of the special use permit application. Data contained herein is considered approximate.

**4.2 Visual Impacts (towers):** The subject property and abutting parcels are designated low density residential (one residence per ten acres) and are zoned E-10-HR. The estimated distance between nearest residences and the amateur radio antenna towers are demonstrated in Table 2 and Figure 4. The existing and proposed tower designs, as submitted by the applicant, are summarized in Section III of this report and detailed in Exhibit E. As demonstrated by the applicant, existing and proposed towers applicable to this special use permit request range from 85' to 195' in height, and include various linear type antenna arrays which will not exceed the maximum height of 195'.

The existing towers are constructed of uncoated galvanized triangular steel lattice type

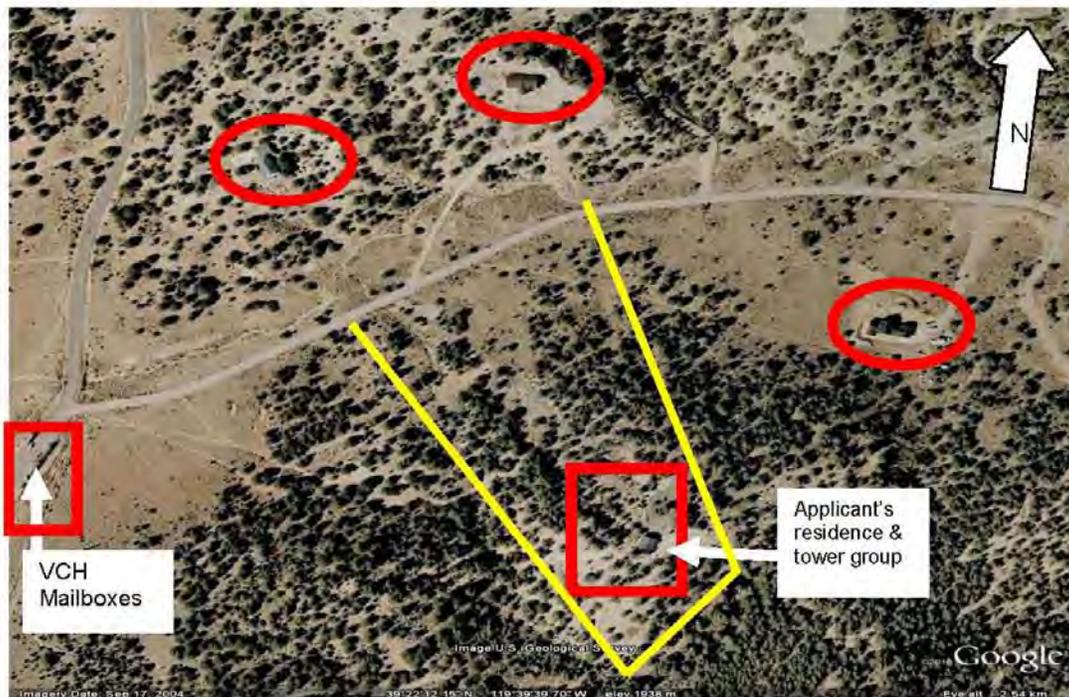
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framework which has oxidized to a dull-gray finish. The lattice framework with its exposed and dulled finish blends relatively well with the sky and surrounding mountain backdrop (see Figure 3 and 4). Information submitted by the applicant pertaining to the proposed monopole towers, however, describes a beige “Nevada Sand” (see photo in Figure 6) color that will be used. This color, or any variation thereof, will exhibit a stark contrast to the forested backdrop and blue or gray sky. Staff recommends, as demonstrated in the list of conditions for this special use permit, that a durable coating which visually resembles the non-reflective (dull) gray finish that is seen of the existing structures be applied to the additional structures, if approved.

Structure #	Tower Identifier	Distance to Nearest Adjacent Residential Structure
1	40 Meter Rohn 45 G (140')	960'
2	20 Meter Rohn 25G (85')	802'
3	160 Meter Rohn 25 G (110')	873'
4	20 Meter Rohn 45G (140')	670'
5	15 Meter Monopole (proposed) (120')	610'
6	80 Meter Monopole (proposed) (195')	721'

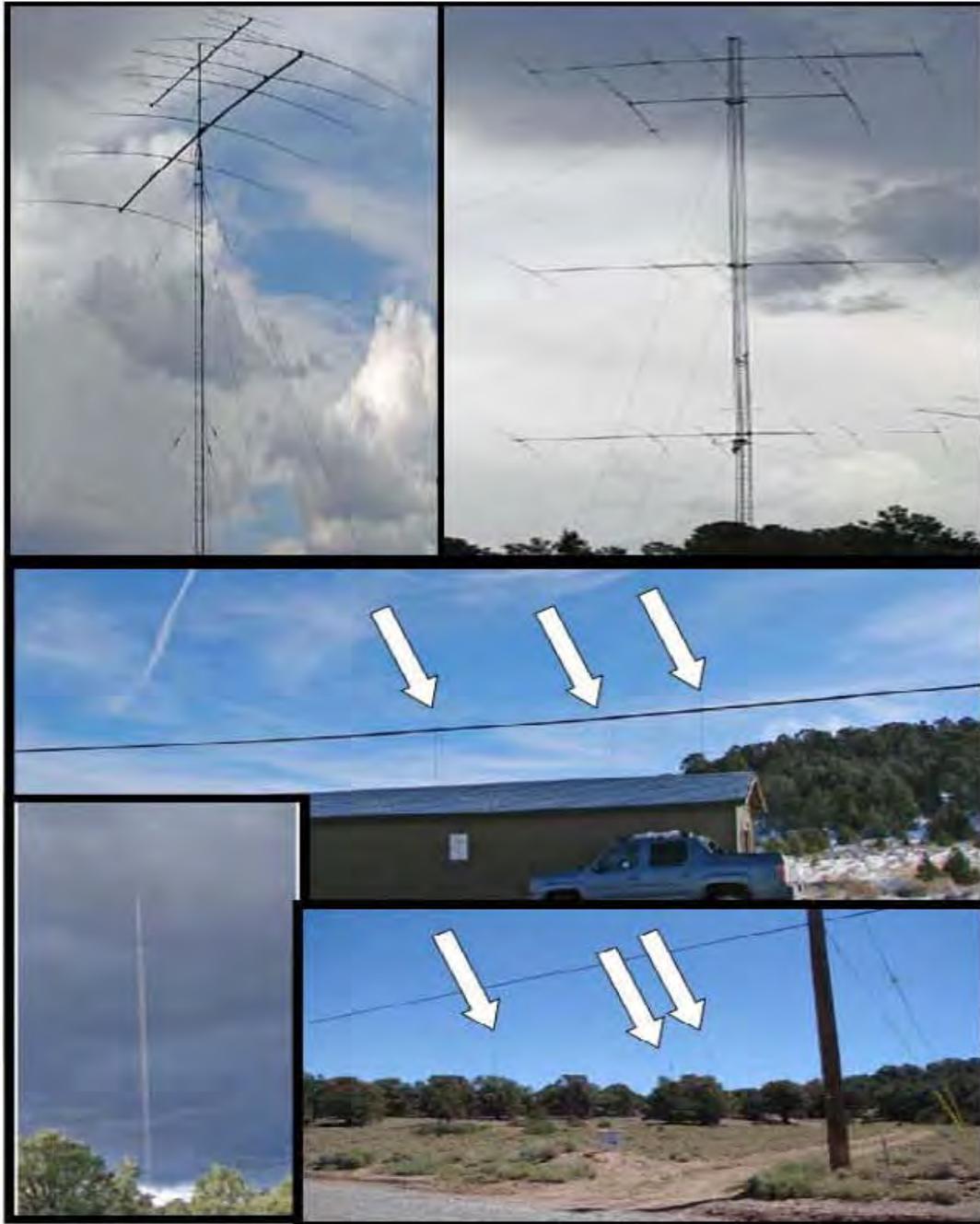
**Table 2:** The distances indicated above were provided by the applicant (see Exhibit D). An on-site visual determination was conducted to verify general accuracy thereof. The approximate distances above appear to be correct.



**Figure 4:** Red circles show approximate location of the nearest adjacent residences.

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**Figure 5:** Photos illustrate visibility of existing amateur radio antenna towers. The two proposed monopole structures (see Figure 6 below) are not included in this visual representation. Visibility of the existing structures is also portrayed in Figure 3 above.

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**Figure 6:** The proposed monopole structures have a tapered design with a base diameter of twenty (20) inches and a tip diameter of ten (10) inches. Final design, as recommended by staff, will be pursuant the approval of the building department.

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4.3 Visual Impacts (FAA lights/coloration): The Federal Aviation Administration (FAA) requires towers (“obstructions”) to be lighted (beacons) with devices which either flash, strobe, remain steady burning, or perform a combination thereof. The FAA states specifically that, “Any temporary or permanent structure, including all appurtenances, that exceeds and overall height of 200 feet (61m) above ground level (AGL) or exceeds any obstruction standard contained in 14 CFR [Code of Federal Regulations] part 77, should normally be marked and/or lighted” (US Department of Transportation Federal Aviation Administration, p. 3, 2007).

The existing and proposed amateur radio antenna towers are between 85’ and 195’ and should require no FAA signal lighting or applied coloration. In order to maintain the rural residential character of the surrounding area, including the area’s dark skylines (see regulations for outdoor lighting in Chapter 8.02, “Dark Skies”, of the Storey County Code) the height of all structures (including antennas and other devices placed thereupon) should be limited to no more than 195’ and the entire premises should be limited in design and placement so that no FAA lighting or applied coloration becomes necessary.

4.4 Activity and Traffic: The amateur radio and computer controls are located in a segregated portion of a detached two-car garage. The radio system will be in operation 24 hours per-day, 12 months a year. There are no customers or employees associated with the operation, with exception of maintenance workers who may enter the premises occasionally to make repairs and adjustments to the system. Temporary traffic related to construction of the two additional towers, if approved, will take place for a limited period of time and is expected to impose minimal to no impacts on the surrounding area.

4.5 Noise: The applicant proposes to maintain a portable 50 kilowatt (5,000 watt) back-up generator in order to maintain communications and provide for soft shut-down of radio/computer equipment during power outages. Staff recommends that the SUP stipulates that the generator is only used during such times of necessity. Any other use of the machine should necessitate sound muffling and encasement in a sound-insulated structure sufficient in design to abate all noise that may take place at parcel boundary lines. There are no other anticipated noise sources associated with the operation.

4.6 Electromagnetic Interference. There has been no reported interference with emergency and non-emergency communications related to existing amateur radio operation. Potential interference from additional systems put in place may result. It must be noted, however, that the regulation and enforcement of any form of interference resulting from amateur radio systems is entirely within the jurisdiction of the Federal Communications Commission (FCC). No local jurisdiction may impose or enforce regulations related thereto. All complaints related to alleged interference from the amateur radio system must be submitted directly to the FCC.

4.7 Emergency Access. Access and circulation for vehicles and emergency equipment is well facilitated throughout the premises. As there are safety risks associated with work being done on or in connection with the towers and electrical systems, the permit holder must maintain clear emergency vehicle access ways. In addition, all persons working within the premises need to be informed by the applicant to dial Emergency Services Direct-Connect 775.847.0950 (in lieu of 9-11) from cellular telephones during times of emergencies.

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Figure 7: The paved driveway facilitates continuous circular traffic flow. Provided that the travel way is maintained free of vehicles and other obstructions, there appears to be adequate travel and staging space for emergency vehicles and other equipment.

4.8 Emergency Management Plan. The applicant should develop a comprehensive Emergency Management Plan which is submitted to Storey County Emergency Fire and Management for review and approval prior to the special use permit being issued. The plan shall include, but not be limited to, the following in case of failure of one or more amateur radio antenna towers and related appurtenances: (1) Permit Holder's emergency contact phone number(s); (2) emergency contact procedure, including for Dispatch 9-1-1, Storey County Emergency Direct-Connect 775.847.0950, and Fire and Emergency Management Departments; (3) documenting and reporting; (4) post structure failure management, clean-up, reclamation, and material disposal; (5) electrical system shut-down procedure; (6) disclosure and management of hazardous materials (e.g., asbestos) or other conditions (e.g., radiation), if applicable; and (7) post structure failure damage reporting and treatment of affected neighboring properties.

#### **V. LAND USE COMPATIBILITY & PROJECT ALTERNATIVES**

The purpose and findings set forth in Section 17.40.015 (Estate Zoning) of the County Code state that, "The E estate zone is established for areas particularly suited for low density residential use, to further enhance the quality of life and to prohibit the development of uses which are incompatible and detrimental to a residential environment".

While the existing amateur radio antenna towers are in fact visible to the neighboring areas, they do not appear to cause detriment or otherwise impact the "quality of life" that presently exists in the residential area. The two proposed monopole towers, exclusively, in accordance with the recommended conditions of approval, also do not appear to cause substantial aesthetic impacts to the area. Erecting the two proposed monopole towers in addition to the existing structures, creating the appearance of an "antenna farm", however, appears to cross that threshold and is hereby found to substantially impact the visual aesthetics and character of the surrounding area.

In accordance with *Taormina* and PRB-1, the county may "attempt to negotiate a compromise with the applicant" in order to provide for a "reasonable accommodation" for amateur radio

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