



Santa Barbara County Fire Department

Fire Prevention Division

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Development Standard - #9

GROUND MOUNTED SOLAR ARRAYS

The information contained in this standard is provided solely for the convenience of the reader in complying with the Santa Barbara County Fire Department (SBCFD) requirements. It should be used as a schematic reference only. The SBCFD reserves the right to make changes and improvements to this standard as and when required by law, or otherwise, at any time. The Department's current standards will be posted and made available for downloading by the public at the following web site: www.sbcfire.com

Please note that the SBCFD assumes no liability for any damages incurred directly or indirectly as a result of any errors, omissions, or discrepancies between this standard and any applicable law. It is the sole responsibility of the person or persons conducting any work pursuant to this standard to ensure their work complies with any and all applicable codes, ordinances, and regulations.

CHAPTER 1 ADMINISTRATION

1.1 PURPOSE. The purpose of this standard is to provide clarification of requirements and establish and assign an acceptable level of quality and minimum level of mandatory controls for ground mounted solar arrays within the Santa Barbara County Fire District.

1.2 SCOPE. This standard establishes a minimum level of fire access and fire protection features for ground mounted solar arrays.

1.3 APPLICABILITY. This standard shall apply to all new and existing ground mounted solar arrays within the jurisdiction of the Santa Barbara County Fire District

1.4 FEES. A plan check fee is required for the installation of or modification to telecommunications facilities and associated equipment as required by the current SBCFD fee schedule.

CHAPTER 2 DEFINITIONS

ALL WEATHER ACCESS ROAD. A road capable of supporting a 20-ton axle vehicle in a 10-year storm as certified by a State of California registered civil engineer.

CHAPTER 3 GENERAL

3.1 PLAN SUBMITTAL. Telecommunications facility plans shall be submitted digitally to the SBCFD Planning and Engineering Division by emailing digital copies of all documents to pe.submittals@countyofsb.org and shall be approved prior to the start of site construction. Site/Plot plans shall be drawn with care by a trained person. Plans shall be drawn to an indicated scale of not less than 1 inch = 10 feet. Plans shall include the following:

- 1) Name of owner and/or occupant

- 2) Location of project, including street number, street name city, and assessor parcel number.
- 3) Plot plan showing access from the public right away including roads and driveways, parking lots, gates and all structures existing and proposed
- 4) Vegetation clearance zone

3.2 ACCESS TO GROUND MOUNTED SOLAR ARRAYS. Fire Department access ways shall be provided in accordance with the California Fire Code and SBCFD Standard 1 as specified herein.

3.2.1 Access ways shall also adhere to all applicable Santa Barabara County Public Works and Flood Control grading and drainage requirements.

3.3 WEIGHT REQUIREMENTS. The minimum standard structural section for driveway access beds and shoulders shall be designed and constructed to support a 20-ton vehicle.

3.4 ROADWAY REQUIREMENTS. Driveways and private roadways shall be constructed of an approved all-weather surface.

3.4.1 Roadways leading to the array site shall be a minimum of twelve feet (12') wide with sixteen foot (16') unobstructed horizontal clearance and thirteen feet six inches (13.5') unobstructed vertical clearance (see figure 1).

3.4.2 All internal roadways shall be a minimum of twenty feet (20') wide.

3.4.2 Roadways shall not exceed fifteen percent (15%) slope.

3.4.3 An internal roadway shall be installed around the perimeter of the entire project for emergency vehicles.

3.5 TURNAROUNDS. When through access cannot be provided, an approved fire department turnaround complying with SBCFD standard 1 shall be installed.

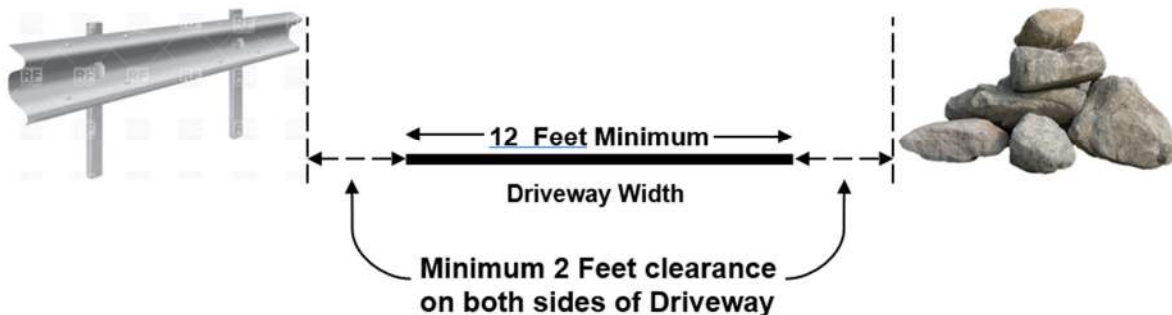
3.6 GATES. When gates are installed they shall comply with SBCFD standard #1.

3.6.1 Gates shall be provided with an approved fire department locking system.

3.6.2 The minimum clear width of gate openings shall be a minimum of two feet wider than the required road width served by the gate.

3.7 FIRE LANE IDENTIFICATION. At the discretion of the fire code official, fire lane markings may be required if competing uses are expected to obstruct the roadway.

FIGURE 1 – Required Driveway Width



CHAPTER 4 ADDRESSING

4.1 ADDRESSING. Addressing for telecommunications facilities shall be installed for the life of the project and comply with this section.

4.2 LEGIBILITY. Address numbers shall be a minimum of six (6) inches tall and shall contrast with their background.

4.3 VISIBILITY. Address numbers shall be placed in a position that is plainly visible from the street or road fronting the property.

4.4 ADDITIONAL SIGNAGE. Additional address markings may be required depending upon setback from the main road. Long driveways and road forks shall be provided with sufficient signage to guide responding personnel.

4.4.1 Additional signage shall be a minimum of four (4) inches tall and shall contrast with their background.

CHAPTER 5 SOLAR PV MARKING

5.1 MARKING. Solar Photovoltaic systems must be clearly marked. Marking is needed to provide emergency responders with appropriate warning and guidance with respect to working around and isolating the solar electric system.

5.2 SIGNAGE REQUIREMENTS. All marking signs shall be installed per the current California Electrical Code.

5.2.1 Materials used for marking signs must be weather resistant.

CHAPTER 6 VEGETATION CLEARANCE

6.1 DEFENSIBLE SPACE. Defensible space and vegetation clearance shall be maintained from start of project construction through the life of the project.

6.1.1 No vegetation shall be allowed to accumulate under or around the arrays.

6.1.2 Ten feet (10') on either side of the access road shall be maintained free of vegetation.

6.1.3 Additional vegetation clearance may be required in high fire hazard areas.

6.1.4 On large solar array facilities, a vegetation management plan may be required.

CHAPTER 7 WATER SUPPLY

7.1 WATER SUPPLY. A water supply may be required at photovoltaic sites to provide water to firefighting resources. The requirement will be determined based on size of facility, location of the facility, location to other reasonable water sources, and presence of structures or other equipment.

CHAPTER 8 ADDITIONAL CONSIDERATIONS

8.1 EQUIPMENT. Additional equipment such as propane tanks, above ground fuel tanks, battery systems and generators shall be included on the plan set detailing capacity and location and shall comply with the current adopted edition of the California Fire Code.

8.2 FIRE EXTINGUISHERS. Fire Extinguishers shall be installed in accordance with the current adopted fire code.