

SECTION 4.22 SOLAR ENERGY SYSTEM (SES).

The components and subsystems required to convert solar energy into electric energy suitable for use. The area of the system includes all the land inside the perimeter of the system, which extends to any fencing. For the purposes of these zoning regulations, solar energy systems are divided into three (3) classes.

- a. **Level 1 Solar Energy System.** A roof mounted system on any code compliant structure.
 1. Level 1 Solar Energy System are prohibited in Riverfront 1 and Riverfront 3 zones.
 2. Level 1 Solar Energy Systems, other than solar shingles, are allowed in Riverfront 2, Riverfront 4, Central Business District, Gateway Zone, and Henderson Innovative Planning District only if the SES is enclosed or screened to ensure that such features are not visible from street level and are compatible to the architectural style of the building.
 3. Level 1 Solar Energy Systems which are solar shingles if visible from the street are a conditional use in Riverfront 2, Riverfront 4, Central Business District, Gateway Zone, and Henderson Innovative Planning District and must match the existing façade and architecture of the building.
 4. Level 1 Solar Energy Systems are allowable in all other zones other than those listed in subsections (1) and (2) above.
- b. **Level 2 Solar Energy System.** Any ground mounted system not included in a Level 1 SES and meets the following area restrictions and requirements:
 1. Level 2 Solar Energy Systems are only allowed in Agricultural Zone and Light Industrial (M-1) and Heavy Industrial (M-2) zones.
 2. In an agricultural zone the area of the SES shall not exceed one half (1/2) acre in size and shall require a building permit issued by the Henderson City Codes Department.
 3. In an industrial zone the SES shall not exceed ten (10) acres in size.

4. The height of any ground mounted SES shall not exceed twenty-five (25) feet as measured from the highest natural grade below each solar panel (excludes utility poles and antennas constructed for the project).
5. Setback requirements for Level 1 and Level 2 SES shall be in compliance with the zoning classification for the parcel.
6. There shall be no signs permitted on Level 2 SES except those displaying emergency information, owner contact information, warning or safety instructions or signs that are required by a federal, state or local agency. Such signs shall not exceed 5 square feet in area.
7. In an Industrial Zone, a Level 2 SES shall require a site plan approved by the Henderson City-County Planning Commission and a building permit by the Henderson City Codes Department.
8. Lighting on Level 2 SES shall be prohibited except that required by federal or state regulations.

c. **Level 3 Solar Energy System.** Any ground mounted system that is greater than the one half (1/2) acre in size for agricultural zone or exceeds the ten acres in size for an industrial zone satisfy the parameters for a Level 2 SES and must meet the following restrictions and requirements.

1. Level 3 SES are only allowed in Agricultural Zone and Light Industrial (M-1) and Heavy Industrial (M-2) zones.
2. The height of any ground mounted Level 3 SES shall not exceed twenty-five (25) feet as measured from the highest natural grade below each solar panel (excludes utility poles and antennas constructed for the project).
3. Setback requirements for Level 3 SES shall be as follows: (1) All equipment shall be at least fifty (50) feet from the perimeter property lines of the project area; (2) No interior property line setbacks shall be required if the project spans multiple contiguous properties,; (3) All equipment shall be located at least one hundred (100) feet from any residential

structure and; the maximum height of any individual component will be 25 feet measured from the local ground level of the component.

4. All Level 3 SES shall be screened with an 8' tall fence and a double row of staggered pines (minimum 8' height at planting) planted 15' on center from any public right-of-way or adjacent residential use. The pine trees shall be located outside of the fence. The use of barbed wire or sharp pointed fences shall be prohibited in or along any boundary adjoining residential properties.
5. There shall be no signs permitted on Level 3 SES except those displaying emergency information, owner contact information, warning or safety instructions or signs that are required by a federal, state or local agency. Such signs shall not exceed 5 square feet in area.
6. Level 3 SES shall require a site plan approved by the Henderson City-County Planning Commission and a building permit by the Henderson City Codes Department.
7. Lighting on Level 3 SES shall be prohibited except that required by federal or state regulations.

Decommissioning of Level 3 SES shall be as follows:

1. The developer shall post a Surety Bond with the Henderson City-County Planning Commission for the abandonment of the site and in the event the Commission must remove the facility. Abandonment shall be when the SES ceases to transfer energy on a continuous basis for twelve (12) months. The surety bond shall be one (1) percent of the total cost of the installed SES.
2. A decommissioning plan shall be submitted at the time of application by the party responsible for decommissioning and the land owner and must include the following: (1) Defined conditions upon which the decommissioning will be initiated. i.e. there has been no power production for 12 months, the land lease has ended, or succession of use of abandoned facility, etc.; (2) Removal of all non-utility owned equipment, conduit,

structures, fencing, roads, and foundations; (3) Restoration of the property to its original condition prior to development of the SES; (4) The time frame for completion of decommissioning activities; (5) the party currently responsible for decommissioning, and; (6) Plans for updating the decommissioning plan.