Paraiso Springs Resort: Preliminary Fire Protection Plan

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This Memorandum provides a description of the fire protection systems that will support the planned development of the Paraiso Springs Resort, as shown on the conceptual Site Plan and Grading Plan prepared by EDSA (Project).

SUMMARY

The fire protection system for the Project will be a wet hydrant network, supplied by a dedicated fire water pipeline system that will be separate from the Project's potable water system. Each hydrant will have one four-inch and two, two and one-half-inch connections. A total of sixteen (16) hydrants will be provided and located throughout the site as indicated on the attached map. The flow capacity for each hydrant will be 1,000 gallons per minute (gpm).

In addition to the wet hydrant system, all buildings on site will be sprinklered. A commercial sprinkler system will be provided for the Hotel/Spa Resort Complex, the Hamlet and the condominiums, and it will be supplied by the fire water pipeline system. Requirements for fire flow are based on sprinkler demand for the Project's largest building (Hotel Conference Center Wing @ 25,000 sf), along with one adjacent hydrant. Based on this building size, up to 500,000 gallons of fire water storage will be provided for the on-site fire suppression system. The precise storage volume for the Project will be established through detailed engineering studies preformed during the Design Development phase of the Project.

A water reservoir of up to 500,000 gallons will be provided on-site to support the hydrant and commercial building sprinkler systems. The potential reservoir options are:

• A steel tank, located at the west end of the development, above the western-most condominium units. Assuming a pressure of 40 psi will be required at the highest hydrant (elevation approximately 1305 ft), this tank will need to be located above elevation 1410 ft.

• An on-site artificial lake or storage pond. In conjunction with this artificial lake, a fire pump would be utilized, because most likely, the lake would be located at an elevation below most of the development and therefore gravity flow would not work. The fire pump would be approximately 2,000 gpm capacity.

The water for the fire protection system will be from an on-site source.

The condominiums and single-family homes will also be sprinklered. Most likely, these sprinklers will be connected to the potable water system, on the homeowner's side of their water meter.

A series of Fire Department Connections (four total) will also be installed around the Hotel building and entrance, as shown on the attached map. The commercial and residential fire sprinkler systems, along with the hydrant system, will be designed by a licensed Fire Protection Engineer.

Other fire protection Project elements include:

- Twelve (12) foot wide (minimum) access roads by the Spa, Fitness Center and condominiums,
- · Adequate vehicle turn-arounds at end of roadways,
- Access Road Bridge across creek must be designed for highway loading standards (HS-44).

METHODOLOGY

The technical data contained in this Memorandum is based on information received from Mr. Frank Royos/CA Dept. of Forestry and Mr. Art Black/Carmel Fire Protection Association, who have fire protection jurisdiction for the Paraiso Springs area of Monterey County.

ASSUMPTIONS

The following assumptions pertain to the preliminary fire protection system described above:

- 1) A water reservoir, either a steel tank or an artificial lake, can be located on the project site and constructed in conformance with recommendations from the Geotechnical Engineer. The reservoir will have a storage volume of up to 500,000 gallons, which will be maintained at all times.
- 2) The on-site source is capable of supplying enough water to fill the fire water reservoir on a regular basis, for an indefinite period of time, within an acceptable timeframe after reservoir drawdown.
- 3) The Project fire suppression system layout and capacity will be verified during subsequent Project design phases.

SUPPORTING DATA

Refer to the attached map for a general layout of fire hydrants and fire department connections. This data was provided by Frank Royos in March 2005, and Art Black in May 2005.

