

CITY OF RAPID CITY

RAPID CITY, SOUTH DAKOTA 57701

Department of Fire and Emergency Services
Fire Prevention Division
1930 Promise Rd
(605) 394-5233
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August 11, 2008

Karen Bulman Planner Growth Management Department City of Rapid City 300 6th Street Rapid City, SD 57701

Re: 07PD102 Canyon Lake Resort

Karen,

The following comments summarize the Fire Departments findings and conversations held with Mr. Derby and Bob Westlake over the last two to three weeks.

- Fire Flow required has been determined by considering a building construction type III-A, and 73,713 sq. ft. in area. As per the International Fire Code 2003 edition a base fire flow demand would be 4000 gallons per minute. However the existing facility is fire sprinkler protected throughout with an approved NFPA-13 system, which will be extended to the new addition, this allows the fire flow demand to be reduced to 2000 gallons per minute at 20 psi residual pressure.
- July 9, 2008 1200hrs a hydrant flow test was conducted at 2720 Chapel Lane, utilizing the existing on-site hydrant. At the time of the test the available fire flow was calculated to be approx 1800 gallons per minute at 20psi residual pressure. Although the 2000 gallon per minute requirement for this project does not appear to be available, the Rapid City Fire Department has identified that the fire flow is acceptable based upon the use of an NFPA-13 fire sprinkler system throughout.
- Two of the existing fire hydrants may be utilized in the current locations and an additional fire hydrant will be requested within one of the parking islands near the West end of the building addition.
- It appears that the parking lot configuration as proposed will accommodate the fire department emergency apparatus.



EQUAL OPPORTUNITY EMPLOYER

• Many questions have arisen regarding the evacuation of the facility and the implications of Rapid City's 40 unit rule, due to the single point of access or egress via the chapel valley bridge. Based upon the definition of dwelling units within the city's regulatory documents, the provisions of resolution 00OA006 do not appear to apply. It is the Rapid City Fire Departments opinion that the facility does not negatively impact evacuation of the existing neighborhood due to fire flood or other natural disasters. Nor does the facility create any unacceptable exposure risk due to wild fire. The proposed facility will be fully fire sprinkler protected and have all of the appropriate fire detection and alarm features as required by the fire code. In the event of a natural disaster requiring evacuation from the area, the resort occupants could easily be organized and directed to evacuate at the most appropriate time. The location and configuration of the resort may actually lend itself to protecting the occupants in place, utilization as a temporary shelter or emergency operations center.

Overall it appears that this proposed resort will meet the minimum criteria as set forth by the International Fire Code as locally amended, and the operational needs of the Rapid Department of Fire and Emergency Services.

If you have any further questions please feel free to give me a call at 394-5233 ext. 21, or my cell at 390-4511.

Sincerely

Timothy D. behlings

Captain

Fire Prevention Division Rapid City Fire Department