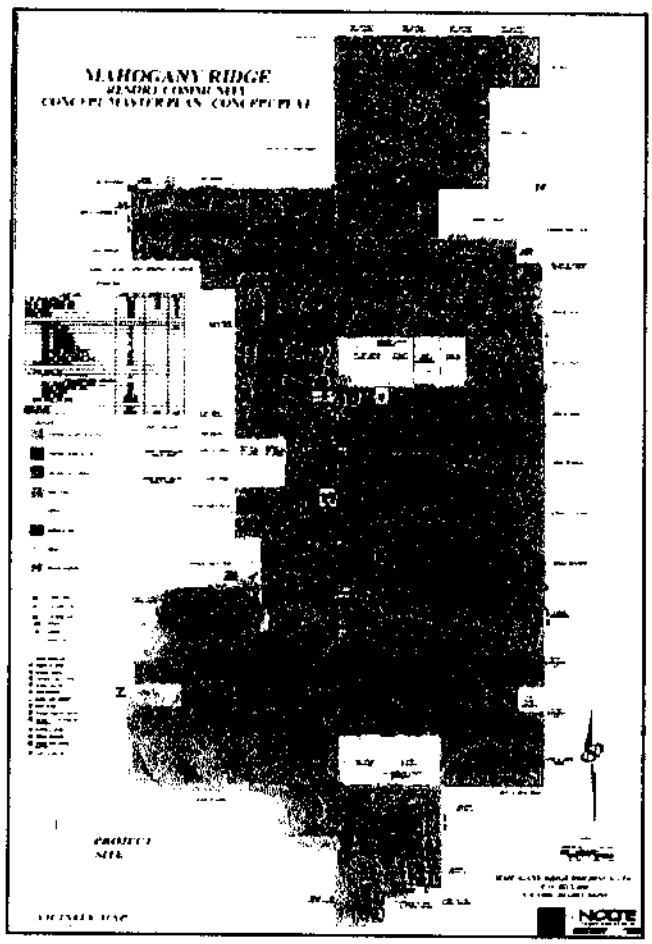
HALES ENGINEERING
Innovative Transportation Solutions

Mahogany Ridge
Traffic Impact Study



Teton County, Idaho
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UT08-116

179 North 1200 East, Ste. 103 Lehi, Utah 84043 p. 801/ 766.4343
www.halesengineering.com

EXECUTIVE SUMMARY

This study addresses the traffic impacts associated with the proposed development of land located southwest of Driggs, Idaho in Teton County, Idaho. The proposed development, Mahogany Ridge, is a resort community consisting of a resort hotel and residential units (90% secondary and 10% primary).

To determine the traffic impacts of the proposed development, background traffic conditions are compared to "plus project" traffic conditions for three different years: 2008, 2015, and 2030. Background traffic conditions include existing and projected (2015 and 2030) traffic without project generated by the development. Plus project traffic conditions are a combination of the background traffic and traffic generated by the proposed development for the various development analysis time periods.

This study also recommends needed mitigations for background and plus project traffic conditions for each of the analysis years. The mitigations for the plus project conditions are recommended assuming that background mitigations for the year under consideration and any previous years have been made.

TRAFFIC ANALYSIS

The following is an outline of the traffic analysis performed by Hales Engineering for the respective traffic conditions of this project.

Existing (2008) Background Conditions Analysis

Hales Engineering performed weekday p.m. (4:00 to 6:00) peak period traffic counts at the following intersection(s):

- Buxton Road / SH-33
- Buxton Road / 500 West
- 400 West / 200 South
- Cedron Road (575 South) / 450 West
- SH-33 / SH-31
- 800 South / 200 West
- 450 West / 450 South (Almas Lodge Rd)

These counts were performed on Tuesday, February 26, 2008 and Wednesday, February 27, 2008. The p.m. peak hour was determined to be between 5:00 and 6:00 p.m. Based on the combination of current (2008) intersection volumes and

traffic generated by the site, the weekday p.m. peak hour was the critical time period identified for analysis. Detailed count data is included in Appendix A.

As shown in Table ES-1, based on overall intersection averages, all of the study intersections experience acceptable levels of delay.

Project Conditions Analysis

The proposed land use for the project will be as follows:

- Resort Hotel — 150 units
- Residential (90% secondary, 10% primary) — 1294 units
- Office Space — 4,000 sq ft GFA
- Restaurant — 5,000 sq ft GFA
- 2 Golf Courses
  - Golf Course 1: — 27 Holes
  - Golf Course 2: — 18 Holes

Trip generation for the project was computed using rates published in the Institute of Transportation Engineers (ITE), Trip *Generation, 7th Edition, 2003.* The proposed development, Mahogany Ridge, will be completed in 8 phases. Trip Generation for Phase 1 is included in the Existing (2008) Plus Project Conditions analysis, Trip Generation for Phases 1 to 4 are included in the Future (2015) Plus Project Conditions analysis, and Trip Generation for Phases 1 to 8 are included in the Future (2030) Plus Project Conditions analysis. The projected net trip generation for Phases 1 to 8 of the development is as follows:

- Daily Trips — 7,428 vehicles per day
- Morning Peak Hour Trips: — 453 vehicles per hour
- Evening Peak Hour Trips: — 696 vehicles per hour
- Saturday Trips: — 7,520 vehicles per day
- Saturday Peak Hour Trips: — 737 vehicles per hour

Weekday p.m. peak hour project generated trips were assigned to study intersections to assess impacts of the project as this combination created the "worst case" scenario.

Existing (2008) Plus Project Conditions Analysis

As shown in Table ES-1, based on overall intersection averages, all of the study intersections experience acceptable levels of delay.

Future (2015) Background Conditions Analysis

As shown in Table ES-1, based on overall intersection averages, all of the study intersections experience acceptable levels of delay.

Future (2015) Plus Project Conditions Analysis

As shown in Table ES-1, based on overall intersection averages, all of the study intersections experience acceptable levels of delay.

Future (2030) Background Conditions Analysis

As shown in Table ES-1, based on overall intersection averages, two study intersections experience unacceptable levels of delay.

Future (2030) Plus Project Conditions Analysis

As shown in Table ES-1, based on overall intersection averages, one study intersection experiences unacceptable levels of delay.

RECOMMENDATIONS

The following mitigations are recommended:

General Recommendations

The signalized intersection of Buxton Road & SH-33 appears to be configured to allow for protected/permissive left turn operations in the north- and southbound directions. However, when data was collected for this study, it was observed that the signal was running under two phase operations. For purposes of this study, it has been assumed that the additional protected/permissive phases will be utilized in the future.

Existing (2008) Background

No mitigations are recommended.

Existing (2008) Plus Project

No mitigations are recommended.

Future (2015) Background

No mitigations are recommended.

Future (2015) Plus Project

No mitigations are recommended.

Future (2030) Background

The following mitigations are recommended:

- Buxton Road & SH-33
  - Widen SH-33 to a five lane cross section in the downtown Driggs area
- SH-31 & SH-33
  - Signalize the intersection
  - Add left turn lanes to each of the approaches

Future (2030) Plus Project

The following mitigation measures are recommended:

- Buxton Road & SH-33
  - Lengthen the westbound left turn lane to 200 feet.