



MATANUSKA-SUSITNA BOROUGH

PLANNING DEPARTMENT
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MEMORANDUM

To: Planning Commission
From: John Duffy, Director of Planning
Subject: MSB 002467 - Resort Development Proposal
Date: March 13, 1997

Introduction The Borough Assembly has requested the Planning Commission review the additional information submitted by Homestead Resort Properties. The additional information consists of a concept site plan. The concept site plan is attached for the Commission's consideration.

The Department has completed an initial review of Homestead Resort Properties' concept site plan (hereafter referred to as site plan). The United States Department of Agriculture, Natural Resources Conservation Service (NRCS) was asked to assist in the site plan review because of public testimony regarding potential groundwater contamination, availability of groundwater and the potential impact on wetlands. The NRCS's review of the site plan indicates that the wet soil conditions that exist on the parcel will complicate actual construction and could potentially cause environmental problems when dwellings, road, landscaping and septic fields are developed. The NRCS review also expresses concerns about the development's potential to negatively impact McRoberts Creek through sedimentation and erosion and possible impact on the area's drinking water supplies as golf courses tend to place a high demand on groundwater supplies. Lastly, the NRCS has identified an old river channel within the area proposed for development. The information provided by NRCS is attached.

Also attached is well log data for wells within ½ mile of the Borough parcel. The well log data was obtained from the State of Alaska, Department of Environmental Conservation.

A summary of the Department's review of the site plan as submitted by the Homestead Resort Properties follows.

Soils It appears that the Borough's parcel which is sought for the development is comprised of almost 50% wetlands and contains a water table located between 18 and 24 inches below the surface. A portion of the Borough parcel also contains bedrock conditions that are located

approximate 24 inches below the surface. The existing water table, wetlands and bedrock conditions of the soils suggest that the proposed design of the golf course and residential development may have to be altered in order to reduce development costs and/or limit any negative impact on water supplies and wetlands. The soil conditions also indicate that careful attention will have to be paid to how construction of the resort's facilities proceeds and in the routine application of pesticides and fertilizers in order to protect drinking water supplies and limit other potential environmental degradation. The existence of McRoberts Creek within the development area and the identification of an old river channel suggests that flood damage prevention should be a component of all development activities on the site. The attached NRCS information provides a more detailed review of the parcel's soils.

Trails Maud-Plumley and/or Butte trail(s) is located on the parcel and is identified by plat as being located on the property. The applicant has proposed to relocate the trail to the eastern boundary of the property. Bedrock and wetland conditions exist on the eastern boundary of the parcel. If the trail is relocated, it will require a platting action having a condition that equal or better access be provided.

Traffic Based upon the site plan's proposed development a preliminary estimate was made of the potential traffic generated by the proposed development. The estimate is based on the following assumptions:

- 165 single family¹ residences are developed each generating 6 trip ends² per day;
- Average weekday trip ends per acre generated by the golf course is 8.3³;
- Average weekend trip ends per acre generated by the golf course is 8 (A Saturday has an estimated 7.5 trip ends per acre and a Sunday has an estimated 8.1 trip ends per acre.);
- Since the estimated weekend and weekday trip end is about the same, an average of 8 trip ends per acre has been used;
- The proposed golf course is estimated to consist of 760 acres which is less than the entire site proposed for development;
- The National Golf Foundation (NGF) estimates that the national average for 18 hole,

¹ Personal communication with the Borough Platting Officer who was verbally informed by the applicant that a portion of the residential development will consist of multi-family dwelling units. Since the percentage of multi-family units is unknown, the residential trip generation is based solely on single family units which have a lower trip production rate.

² Residential trip ends are based upon the Mat-Su Borough Subdivision Construction Manual.

³ Note: The trip end rates are based upon an analysis of golf courses located mostly in suburban settings and ranging in size from 23 to 275 acres.

municipal golf courses in 1992 was 52,000 rounds. The NGF also notes that "there may be 10,000 to 12,000 fewer rounds than this average in northern regions with shorter seasons...." A round of golf may be either 9 or 18 holes⁴;

- No estimates of trip generation have been made for the equestrian or lodge facilities.
- A 160 day season has been used based upon the City of Palmer golf course season.⁵
- The City of Palmer golf course averages 18,000 rounds per season and the Moose Run golf course averages 38,000 rounds per season⁶.

Based upon the above assumptions, the average traffic generated by the proposed development could range from 1,240 to 7,070 trip ends per day. The low figure of 1,240 is based upon a season averaging 160 days with 40,000 rounds played per season, no multi-family development and no trips generated by the lodge or equestrian facilities. The high figure of 7,070 trip ends per day is based upon the per acre size of the proposed golf course and residential development. It should be noted the Institute of Transportation Engineers (Trip Generation, 4th edition) identified golf courses smaller than the one proposed by the applicant (on a per acre size) that have average weekday traffic levels of 6,600. It is not unlikely, therefore, that the Homestead Resort Properties' proposal, once fully developed could generate traffic of this magnitude.

The present Average Annual Daily Traffic (AADT) for Maud Road, which is a primary access into the development, is shown in Table 1. The proposed development would, using the most conservative estimate, almost doubles the existing traffic on Maud Road (at junction with Old Glenn Hwy). It is more likely, after adding in the trips generated by the equestrian facilities, the lodge and multi-family dwellings units, that traffic on Maud Road would increase three to four times from the 1994 AADT.

⁴ National Golf Foundation, Guidelines for Planning and Developing a Public Golf Course. 1995 edition.

⁵ Personal conversation with Jeff Barnett, City of Palmer, Golf Course Manager. The City of Palmer's golf course historically opens earlier (late April) and closes later (early October) than other area golf courses.

⁶ Personal conversation with Jeff Barnett, City of Palmer, Golf Course Manager.

Table 1
Annual Average Daily Traffic
Maud Road 1992 - 1994

Year	Junction with Old Glenn Hwy	Junction with Smith Road
1992	755	180
1993	750	165
1994	750	170

McRoberts Creek McRoberts Creek crosses the proposed development site, although the creek is not located on the Borough parcel. McRoberts Creek has been identified by the Alaska Department of Fish and Game as an important salmon spawning area. The creek also provides other wildlife habitat values and flood control qualities. The site plan indicates that a vegetative buffer will be located on both sides of the creek which should help protect against sedimentation and erosion.

Recommendation The review of the site plan submitted by Homestead Resort Properties, indicates that there is a potential for degradation of the nearby road system and the potential for negative impacts on the community's groundwater and drinking water supplies if not properly addressed. As indicated by the NRCS, the soils on the property make it problematic for development. In addition, an important salmon stream, McRoberts Creek will be impacted by the proposed development and this creek has important wildlife and flood control properties. A popular recreational trail is also located within the Borough parcel.

It should also be noted that the concept site plan contains positive attributes as well such as buffers along the property boundaries and along McRoberts Creek which will provide for screening and afford some sedimentation and erosion control. Lastly, the concept site plan is merely that, a concept of how the development might occur, and is based on preliminary information. As more detailed information and analyses are completed many of the issues and concerns noted herein may be resolved. The economic impact of the proposal is potentially large and is compatible with the Borough's long standing attempts to diversify its local economy and promote tourism/recreational developments. Although potential problems or concerns have been identified with the proposed development, many of these problems or concerns could be eliminated or reduced through more thorough analyses or studies. Therefore, the Department continues to respectfully recommend to the Planning Commission that the subject parcel be

classified as General Purpose Lands, that a non-competitive conveyance be considered because of the proposal's potential economic impact and that the conveyance follow the direction of the Borough Manager as outlined in his memorandum and letter of December 23, 1996, i.e., a lease with option to purchase. A lease with option to purchase is important in this case in order to ensure that the appropriate studies and analyses are undertaken and that actions are taken to eliminate or reduce to the extent possible degradation of the local environment, groundwater supplies and road network. In addition to the foregoing recommendations, the Department believes the following conditions should also apply to the proposed conveyance:

- that a master plan be developed and submitted to the Borough for approval that provides a detailed schematic and narrative description of the proposed development;
- that all relevant permits be obtained from Federal, State and Borough agencies prior to development, including the U.S. Army Corps of Engineers 404 permit;
- that a projected investment schedule, including phases, be submitted to the Borough;
- that a projected development schedule, including phases, be submitted to the Borough;
- that the exercise of any option to purchase be contingent upon satisfactory completion of the development or a specific, pre-agreed upon phase;
- that evidence of credit worthiness, letters of reference from financial institutions, proof of ability to finance the project, including phases, and ability to obtain performance bonds and insurance be provided to the Borough;
- that a traffic impact analysis be completed based upon the master plan;
- that a groundwater monitoring system be installed;
- that a storm water, drainage, erosion and flood control plan, to include McRoberts Creek, be developed based on the master plan and submitted to the Borough for approval;
- that a fertilizers and pesticides management plan be submitted to the Borough for approval;
- that a site rehabilitation plan describing how sites disturbed by construction or development activities will be rehabilitated be submitted to the Borough for approval.

Should a platting action be required as part of the proposed project, then the traffic impact analysis and storm water, drainage, erosion and flood control plan must be submitted as part of the platting action.