



CITY/BOROUGH OF JUNEAU
ALASKA'S CAPITAL CITY

Mailed 7/19/05

Readers board

REVISED
PLANNING COMMISSION
NOTICE OF DECISION

Date: July 6, 2005
File No.: MAP2005-00003

CBJ Community Development Department
155 South Seward Street
Juneau, AK 99801

Application For: D-10 zoning after the dedication of an eight-foot pedestrian easement along the banks of Lemon Creek, and dedication of an easement for a community playground and funds for the construction of such.

Legal Description: Parcel 1 Mendota Park

Parcel Code No.: 5-B12-0-107-004-1; 5-B12-0-131-004-1

Hearing Date: April 12, 2005

The Planning Commission, at its regular public meeting, adopted the analysis and findings listed in the attached memorandum dated April 7, 2005, and approved staff's recommendation for the requested zone change. This would change the current RR (T) D-10 to D-10 zoning following the completion of the required conditions and adoption of necessary legislation by Assembly.

The Commission recommends that the Assembly adopt this zone change request with the following condition:

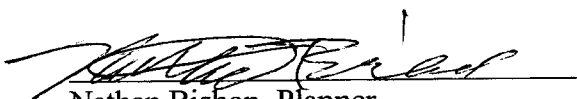
1. Zone change shall take place only after the below listed dedications and contributions have been executed:
 - Dedication of an eight-foot wide pedestrian easement the length of parcel 1 within Mendota Park Subdivision, in a location to be selected by the City within an area between the southwest boundary of said parcel and a line 50-feet parallel to that boundary;
 - Dedication of an easement for the construction and maintenance of a public park and playground as shown in attached document (See Attachment "C" within attached staff report);
 - Dedication of a public access easement over that portion of the access driveway on private property;

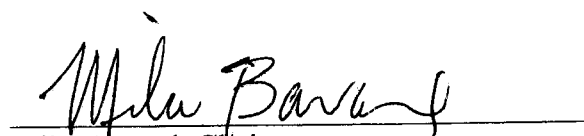
- Contribution of \$25,000 to be used and applied in the following manner:
 - a. Playground equipment, park improvements, and or pedestrian path improvements \$20,000.00
 - b. Playground rough grading (may be paid in kind) \$ 5,000.00

Attachments: April 7, 2005 memorandum from Nathan Bishop, Community Development to the CBJ Planning Commission regarding MAP2005-00003.

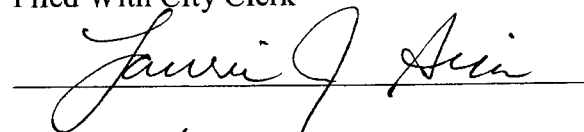
This Notice of Decision constitutes a recommendation to the CBJ Assembly. Decisions to recommend an action are not appealable, even if the recommendation is procedurally required as a prerequisite to some other decision (CBJ 01.50.020 (b)).

Project Planner:


Nathan Bishop, Planner
CBJ Community Development


Mike Bavard, Chairman
Planning Commission

Filed With City Clerk


7/19/2005

cc: Plan Review

NOTE: The Americans with Disabilities Act (ADA) is a federal civil rights law that may affect this development project. ADA regulations have access requirements above and beyond CBJ - adopted regulations. Owners and designers are responsible for compliance with ADA. Contact an ADA - trained architect or other ADA trained personnel with questions about the ADA: Department of Justice (202) 272-5434, or fax (202) 272-5447, NW Disability Business Technical Center 1 (800) 949-4232, or fax (360) 438-3208.

MEMORANDUM

CITY/BOROUGH OF JUNEAU
155 South Seward Street, Juneau, Alaska 99801

DATE: April 7, 2005

TO: Planning Commission

FROM: Nathan Bishop, Planner *Nathan Bishop*
Community Development Department

FILE NO.: MAP2005-00003

PROPOSAL: An amendment to allow for D-10 zoning after the dedication of an eight-foot pedestrian easement along the banks of Lemon Creek, and dedication of an easement for a community playground and funds for the construction of such.

GENERAL INFORMATION

Applicant: CBJ Community Development Department

Property Owner: Ralph Horecny

Property Address: Anka Street, Juneau

Legal Description: RSH III, Lot 26

Parcel Code No.: 5-B12-0-131-004-0

Site Size: 5.04 acres

Zoning: RR (T) D10

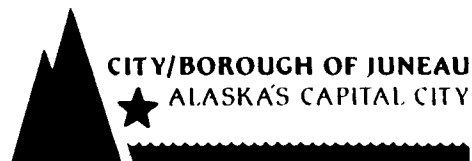
Utilities: City water and Sewer are available

Access: Davis Avenue

Existing Land Use: Vacant

Surrounding Land Use:

- North - D-15 Multi family residential
- South - Lemon Creek-Industrial
- East - D-5 Correctional facility
- West - D-5 Single family residential



PROJECT DESCRIPTION AND BACKGROUND

The Community Development Department (CDD) has been working with the developers of the subject parcel and representatives of the neighborhood association to facilitate an amendment to the conditions of zoning transition, stipulated in the previous rezoning of this parcel. We believe it would be to the advantage of both the developer and the neighborhood if the transition to D-10 zoning were modified.

In the previous re-zoning of this parcel (See Attachment "A") the transition from the RR zoning designation to the D-10 designation was subject to the following requirements:

Section 3. Conditions. The transition of said property shall be allowed only:

- (A) after the applicant provides a traffic impact analysis in conformance with CBJ 49.40.300 and acceptable to the Manager, which demonstrates that the Davis Avenue, Glacier Highway intersection would operate at a level of service of "C" or better after full build-out of the subject parcel and pedestrian improvements are made on Davis Avenue;
- (B) after pedestrian improvements acceptable to the Manager and the State of Alaska, Department of Transportation and Public Facilities, have been completed on Davis Avenue;
- (C) in conformance with the standards and procedures set forth in CBJ 49.70.700 - 49.70.720; and
- (D) after the subject parcel has had its boundary adjusted to include only those areas above the ordinary high water mark of Lemon Creek as determined by the Manager.

Since the adoption of the legislation enacting this zone change, the developers have met all but condition "B" (See Attachment "B"). While they are willing to make pedestrian improvements to the Davis Avenue ROW, they believe the neighborhood would be better served by the dedication of a public playground and streamside-walking corridor.

In lieu of the Davis Avenue Pedestrian improvements, the Developers propose the following:

1. Dedication of an eight-foot wide pedestrian easement the length of parcel 1 within Mendota Park Subdivision, in a location to be selected by the City within an area between the southwest boundary of said parcel and a line 50-feet parallel to that boundary
2. Dedication of an easement for the construction and maintenance of a public park and playground as shown in attached document (See Attachment "C")
3. Contribution of \$25,000 to be used and applied in the following manner:
 - a. Playground equipment or park improvements \$10,000
 - b. Pedestrian path improvements \$10,000
 - c. Playground rough grading \$ 5,000 (may be paid in kind)

Discussions between staff, the developers and representatives from the neighborhood association have resulted in a general concurrence that this amendment would better serve the Lemon Creek Neighborhood and the needs of the Developer. While the Neighborhood association still recognizes the need for pedestrian

improvements on Davis Avenue, they are also cognizant that the offer to dedicated these easements and associated improvements are a one-time opportunity that will allow the community the continued use and benefits of the scenic streamside corridor. Furthermore, the 2006-2011 Capital Improvement Plan, nominated Davis Avenue improvements for a FY 2006 appropriation. Given this scenario the Neighborhood Association has, during the previous Planning Commission meeting on this case, given their verbal support for this amendment

ANALYSIS

ZONE CHANGE INITIATION

CBJ §49.75.110. INITIATION. A rezoning may be initiated by the director, the commission or the assembly at any time during the year. A developer or property owner may initiate a request for rezoning in January or July only. Adequate public notice shall be provided by the director to inform the public that a rezoning has been initiated.

1. The application was initiated by the director on March 8, 2005
2. Owners of adjacent properties were mailed information packets on March 11, 2005. Potentially affected public and private agencies were provided with information packets via email as well. The director has provided adequate public notice through newspaper advertising, property owner mailings and a public notice sign was posted on-site.

RESTRICTIONS AND PROCEDURE

CBJ §49.75.120. RESTRICTIONS ON REZONINGS. Rezoning requests covering less than two acres shall not be considered unless the rezoning constitutes an expansion of an existing zone. Requests which are substantially the same as a rezoning request rejected within the previous twelve months shall not be considered. A rezoning shall not allow uses which violate the land use maps of the comprehensive plan.

The CBJ Land Use Code provides minimum restrictions for zone change requests. This proposal conforms to these restrictions as follows:

1. The request constitutes a modification to the existing RR (T) D10 multifamily zone and is more than 2 acres.
2. No similar request has been made in the past year.
3. This rezone constitutes a modification to the conditions of the previous zone change; it does not allow uses that violate the land use maps of the comprehensive plan.

CBJ §49.75.130. PROCEDURE. A rezoning shall follow the procedure for a major development permit except for the following:

- 1) *The commission decision for approval shall constitute only a recommendation to the assembly.*

The action by the Planning Commission on a zone change request is different from action on a permit request. Action on a zone change request is discretionary. There is no assumption the zone change will be approved. Specifically, the Planning Commission action is to make a recommendation to the Assembly to change the zoning maps or deny the request.

LAND USE

The southern edge of the subject parcel abuts the ordinary high water mark of Lemon Creek; while the northern edge abuts an un-constructed extension of Davis Avenue. Lands to the west of the subject parcel are occupied by single family development, and Lemon Creek Correctional facility occupies the eastern boundary. Lots to the north of the subject parcel are largely developed with multifamily structures.

DENSITY

The proposed change would not affect the density of the subject property; rather it would facilitate a means of accommodating a more timely transition to the previously approved, D-10 transitional zoning designation.

COMPREHENSIVE PLAN

The Comprehensive Plan offers general guidance for residential development:

POLICIES

5.1. It is the policy of the CBJ to facilitate availability of sufficient land with adequate public facilities and services for a range of housing types and densities to enable the public and private sectors to provide housing opportunities for all CBJ residents. It is further the policy of the CBJ to allow greater flexibility and a wider range of creative solutions in land development by encouraging such techniques as planned unit development and cluster housing.

Given the proximity to public facilities, the demand for economical housing, and the creative solution for addressing the need for a public park and open space in this area, this proposed modification would meet the intent of this policy.

5.1.1. Monitor land use designations to insure sufficient land available to meet projected needs for residential development in areas with existing or projected arterial access, public transit service, and other adequate public facilities and services.

See comments on previous policy.

5.2. It is the policy of the CBJ to facilitate residential developments of various densities which are appropriately located in relation to site conditions, surrounding land uses, and capability of public facilities and transportation systems.

Any development that might occur on the subject parcel would be appropriate in relation to surrounding land uses. Public facilities and transportation systems are capable of accommodating any development that could potentially occur on the subject parcel.

5.4. It is the policy of the CBJ to require provision or availability of transportation access, sewer, water, and drainage facilities as a condition for approval of proposals for residential development and to support anticipated development through a program of extensions and improvements to municipal services.

Provision of transportation access, sewer, water, and drainage facilities will be required as a condition for

approval of any proposal for residential (or other) development of the subject portion of the subject parcel under §49.35.

5.4.5. Amend the Land Use Code to allow appropriate urban densities in areas served by community sewer and water systems.

The zoning map amendment herein proposed is an amendment to the Land Use Code intended to allow appropriate urban densities in an area that could be easily served, at developer expense, by community sewer and water systems.

2.3. It is the policy of the CBJ to promote compact urban development within and adjacent to existing urban areas to insure efficient utilization of land resources and facilitate economic provision of urban facilities and services.

The subject portion of the subject parcel is adjacent to existing urban areas, and compact urban development of the subject portion of the subject parcel would be an efficient utilization of land resources. The requested change in zoning of the subject portion of the subject parcel would facilitate economic provision of urban facilities and services to a large portion of the subject parcel.

2.8. It is the policy of the CBJ to encourage and facilitate provision of a variety of housing opportunities in sufficient quantities and at affordable prices, to meet the housing needs of its residents. Provision of an adequate supply of housing for low and moderate income families is a top priority.

The requested zoning map amendment would facilitate the development of the subject parcel with multi-family housing, which is generally more market-affordable than is single-family housing, for which the subject portion of the subject parcel is currently zoned.

The Comprehensive Plan also speaks to the need to protect the sensitive areas within our community.

POLICY 2.5. It is the policy of the CBJ to protect the region's scenic, environmental, and economically valuable natural resources from the adverse impacts of urban development. Development shall be controlled carefully and, if necessary, prohibited in naturally hazardous areas.

The subject portion of the subject parcel is undeniably a part of the region's scenic and environmental asset base and has historically been used as a sand and gravel extraction site, which provided for an economic return on the valuable natural resources on the site. Furthermore, the parcel is adjacent to a scenic and environmentally sensitive anadromous fish stream. The proposed amendment would provide a means for protecting and utilizing this resource by building and developing an asset that can be appreciated by the whole community.

3.10.2. Require additional review of any permanent structures or other development proposed within gravel resource areas which would preclude the eventual development of gravel resources: allow development if evaluation by a licensed civil engineer demonstrates that significant gravel resources do not exist on a particular site and if development does not interfere with extraction of gravel resources in nearby areas.

Any further extraction on this site could preclude this site being used for any other future uses. While

the proposed development area is currently above the limits of the 100-year flood plain, further extraction would quickly reduce the ground level below the limits of the flood plain.

ACCESS

The subject portion of the subject parcel is accessed by Davis Avenue; as previously mentioned Davis Avenue is scheduled to have significant traffic and pedestrian improvements following an appropriation by the assembly in FY 2006. After leaving the constructed portion of the Davis Avenue ROW, the subject lot will be accessed via a driveway in the un-constructed portion of Davis Ave; this will have further review at the time the applicant submits an application for such.

TRAFFIC

Per CBJ Code:

49.40.310 Traffic; minimum standards. A major development which results in a reduction of two levels of service or a service level of "D" or less, as defined by the American Association of State Highway Transportation Officials, is prohibited.

In the previous zone change for the subject parcel the traffic conditions at the Davis Avenue, and Glacier highway were believed to be operating at a level of service of "E" or "F", this was one of the primary reasons for adopting transitional zoning, rather than allowing the zoning to transition at the time of approval. As previously mentioned the applicant has, since that time, provided a traffic report that shows the level of service (LOS) of this intersection is currently operating at LOS "C" and will continue to do so after full build out of the subject parcel. This analysis was reviewed for CDD by Sam Kito, Consulting traffic engineer; Mike Scott, CBJ Streets Superintendent; and by Rick Purves, DOT&PF, all of these individuals concur with the results of the report, indicating the report provided adequate support to justify the findings. As per the previous zone change conditions, Rod Swope, CBJ City Manager has also reviewed the analysis and approved the report for meeting the zone change condition (See Attachment " B").

The report provided clearly indicates the additional traffic will not result in any reduction of service, and that the LOS will remain at "C" for a minimum of 25 years. Therefore, Staff believes that the proposed zone change will not impact neighborhood traffic to any degree that requires mitigation.

ZONE CHANGE OPTIONS AND ALTERNATIVES

There are two options or alternatives for the proposed zoning map amendment. The first is approval of the proposed amendment. The second is denial of the proposed amendment; these two options are discussed at greater length below.

Option 1: Zoning Map Amendment Approval

This option addresses the need for park improvements in the Lemon Creek neighborhood, as well as the immediate need for affordable housing. Moving this amendment forward will allow the developer to proceed with their residential development at a time when interest rates make this project feasible. This option recognizes that the necessary pedestrian improvements on Davis Avenue will be made in the next couple of

years with or without any efforts on the developers' part. In addition it recognizes that the impacts of the proposed development will be phased over a period of three to five years, therefore at the time the improvements are most needed they will presumably be in place. There is some risk in this option in that the implementation of the Capital Improvement Plan is dependant upon appropriations by the Assembly, and therefore somewhat uncertain. However, Davis Avenue has been identified on the CIP for several years running now, and continues to move forward, it is Staffs belief, that this project has enough momentum behind it to push it through in the very near term.

Option 2: Denial of this Amendment has two possible outcomes. Following Davis Avenue improvements, the zoning will transition to D-10 without any changes to this ordinance. At this time the developers would be able to proceed with their development (following the receipt of the necessary additional permits for the driveway in the ROW, and residential development), without any public dedications or contributions.

The second possible outcome with this option, is the developer determining that the project is no longer feasible due to changes in interest rates, and abandoning the project. Given the shortage of moderately priced housing in Juneau, and the rising interest rates this option profligates this environment of scarcity.

SUMMARY

The zoning map amendment herein considered is relatively minor, and will help to address a community need. Adequate provisions are in place to ensure that appropriate improvements to infrastructure are required in conjunction with development of the subject parcel. The proposed zoning map amendment is in conformance with the Comprehensive Plan, and will likely facilitate the development of market-affordable housing in Juneau.

FINDINGS

After review of the application materials, the CBJ Land Use Code and the CBJ Comprehensive Plan the Director makes the following findings:

1. The request meets the submittal requirements and the rezoning initiation, zone change restrictions and procedural requirements of the CBJ Land Use Code.
2. This proposal does not violate the Land Use maps of the Comprehensive Plan.
3. Infrastructure improvements required by CBJ Ordinance No. 88-33, plat #90-13, plat #94-69, and the requirements at §49.15.460 will ensure that access to the subject site is addressed, including safety concerns associated with additional traffic using the intersection of Crow Hill Drive with Douglas Highway. This proposal conforms to Policies 5.2 and 5.4 of the Comprehensive Plan concerning transportation access.

STAFF RECOMMENDATION

Staff recommends that the Planning Commission adopt the Director's analysis and findings and recommend to the Assembly, approval of D-10 zoning for the subject lot with the following condition:

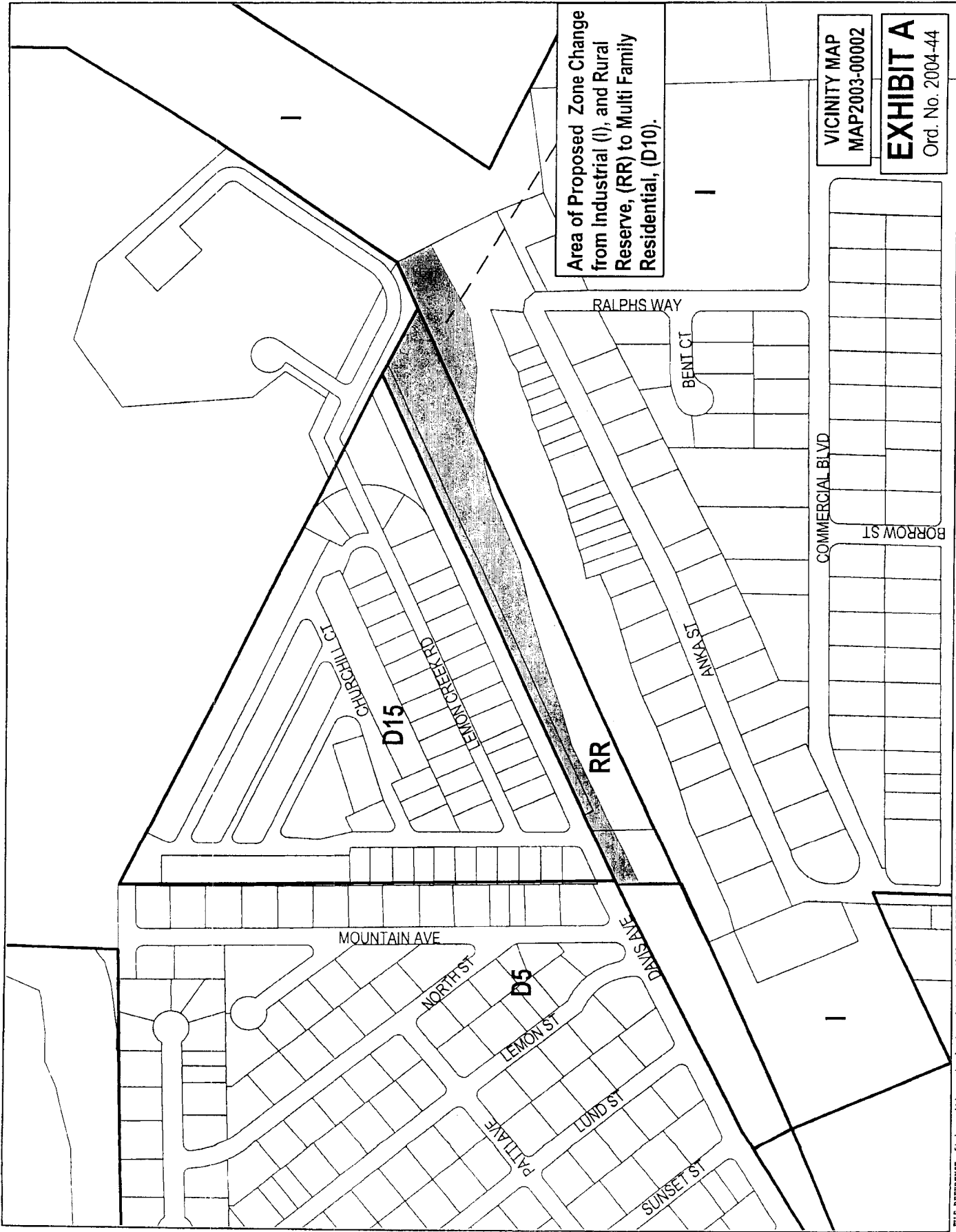
Zone change shall take place only after the below listed dedications and contributions have been executed:

1. Dedication of an eight-foot wide pedestrian easement the length of parcel 1 within Mendota Park Subdivision, in a location to be selected by the City within an area between the southwest boundary of said parcel and a line 50-feet parallel to that boundary
2. Dedication of an easement for the construction and maintenance of a public park and playground as shown in attached document (See Attachment "C")
3. Contribution of \$25,000 to be used and applied in the following manner
 - a. Playground equipment or park improvements \$10,000
 - b. Pedestrian path improvements \$10,000
 - c. Playground rough grading \$ 5,000 (may be paid in kind)

Area of Proposed Zone Change
from Industrial (I), and Rural
Reserve, (RR) to Multi Family
Residential, (D10).

VICINITY MAP
MAP2003-00002

EXHIBIT A
Ord. No. 2004-44



ATTACHMENT A

Presented by: The Manager
Introduced: 12/20/2004
Drafted by: J.W. Hartle

ORDINANCE OF THE CITY AND BOROUGH OF JUNEAU, ALASKA

Serial No. 2004-44

An Ordinance Amending the Official Zoning Map of the City and Borough to Change the Zoning of a Fraction of Lot 26 RSH III, Currently Zoned Industrial, and USS 2557, Currently Zoned Rural Reserve, to RR (T) D-10, Multi-Family Residential.

BE IT ENACTED BY THE ASSEMBLY OF THE CITY AND BOROUGH OF JUNEAU, ALASKA:

Section 1. Classification. This ordinance is of a general and permanent nature and shall become a part of the City and Borough code.

Section 2. Amendment of Official Zoning Map. The Official Zoning Map of the City and Borough adopted pursuant to CBJ 49.25.110 is amended to change the zoning of a fraction of Lot 26 RSH III, currently zoned Industrial and USS 2557, currently zoned Rural Reserve, to RR (T) D-10 Multi-Family Residential. This is more particularly described as:

A tract of land in USMS 609 and U.S. Survey 2557, Juneau Recording District, First Judicial District, State of Alaska described as follows:

BEGIN at Corner No. 2, U.S. Survey 2557; thence N66°23'06"E along the southern boundary of Lot 3, U.S. Survey 5504 - 167.24 feet to a common corner with Lot 2B, RSH Subdivision II; thence S22°47'21"E along the western boundary of said Lot 2B - 100.13 feet to the ordinary high waterline of Lemon Creek; thence along said ordinary high water line the following courses: S64°29'57"W - 139.33 feet; S58°45'41"W - 46.07 feet; S65°27'15"W - 66.61 feet; S81°55'54"W - 146.18 feet; N86°13'44"W - 138.66 feet; S76°28'54"W - 225.96 feet; S69°14'25"W - 217.22 feet; S77°01'02"W - 157.94 feet; S73°34'44"W - 149.74 feet; S71°58'40"W - 136.50 feet; S73°11'00"W - 108.30 feet; S72°54'23"W - 102.81 feet; S63°32'52"W - 352.69 feet; thence N00°11'00"E - 62.81 feet to a point on the southern boundary of the Davis Street right-of-way; thence easterly along said southern boundary - 1,630.58 feet to a point where said southern boundary intersects with the western boundary of Lot 3, U.S. Survey 5504; thence S63°02'14"E along said boundary - 212.20 feet to the point of beginning; containing 5.04 acres more or less.

///

The described is shown on the attached Exhibit "A", illustrating the area of proposed zone change.

Section 3. Conditions. The transition of said property shall be allowed only:

(A) after the applicant provides a traffic impact analysis in conformance with CBJ 49.40.300 and acceptable to the Manager, which demonstrates that the Davis Avenue, Glacier Highway intersection would operate at a level of service of "C" or better after full build-out of the subject parcel and pedestrian improvements are made on Davis Avenue;

(B) after pedestrian improvements acceptable to the Manager and the State of Alaska, Department of Transportation and Public Facilities, have been completed on Davis Avenue;

(C) in conformance with the standards and procedures set forth in CBJ 49.70.700 - 49.70.720; and

(D) after the subject parcel has had its boundary adjusted to include only those areas above the ordinary high water mark of Lemon Creek as determined by the Manager.

Section 4. Administration. The requirements set forth in section 3 shall be noted on the zoning maps and in the CBJ permit tracking system.

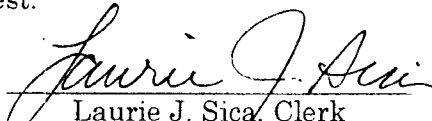
Section 5. Expiration. This ordinance shall be automatically repealed if the conditions set forth in Section 3 have not been met within six years of the effective date in Section 6.

Section 6. Effective Date. This ordinance shall be effective 30 days after its adoption.

Adopted this 10th day of January, 2005.


Bruce Botelho, Mayor

Attest:

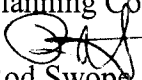

Laurie J. Sica, Clerk

MEMORANDUM

CITY/BOROUGH OF JUNEAU
City & Borough Manager's Office
155 S. Seward St., Juneau, Alaska 99801
Rod_Swope@ci.juneau.ak.us



Voice (907) 586-5240
Fax (907) 586-5385

DATE: April 1, 2005
TO: Planning Commission
FROM: 
Rod Swope
City & Borough Manager
SUBJECT: Required Traffic Impact Analysis

In accordance with Section 3(A) of Ordinance 2004-44 I have reviewed the Traffic Impact Analysis, dated March 18, 2005, prepared by Timothy Miller, PE for the proposed JRM Subdivision and Davis Condo projects.

I find the analysis to be acceptable and in conformance with CBJ 49.40.300. The traffic analysis report concludes that neither project will generate sufficient additional traffic to warrant installation of a new traffic signal on Glacier Highway.

ATTACHMENT B

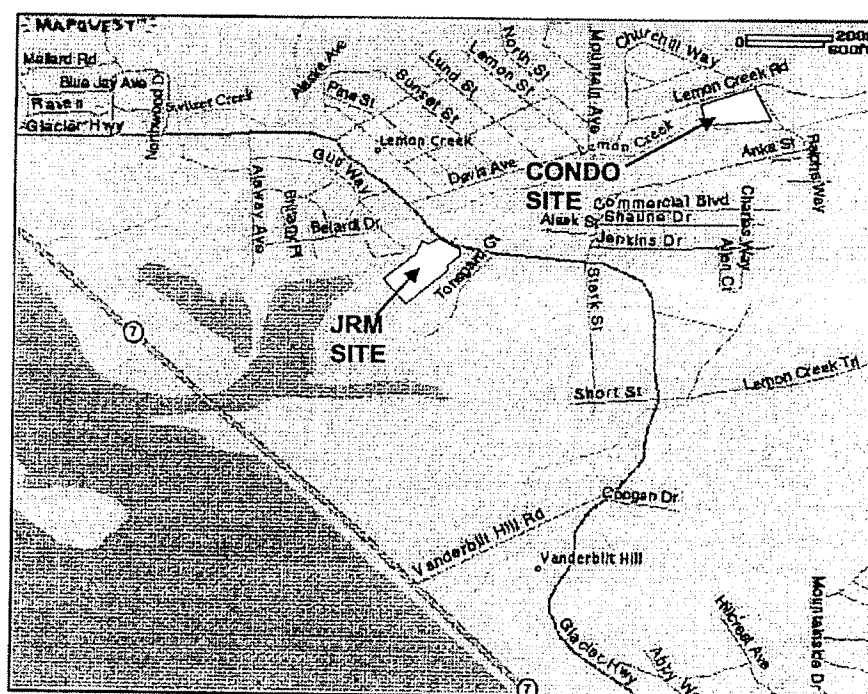


**TRANSPORTATION
CONSULTING
NORTHWEST**

a division of TCN, Inc.

1607 E. Main St
Auburn, WA 98002

Combined Traffic Impact Analysis JRM Subdivision & Davis Condos



Juneau, Alaska

Prepared For:
R&M Engineering

At the Request of:
CBJ

Prepared by:

Timothy Miller, PE
Alaska #CE 8649
Member, ITE #11026
March 16, 2005

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Introduction

This report analyzes the traffic access and impact of the proposed JRM Subdivision & Davis Condo developments in Juneau, AK. The JRM Subdivision is located on the south side of Glacier Highway near Lemon Creek. The Davis Condo development is located on the SW quadrant of the Lemon Creek Road and Churchill Way.

According to the JRM Subdivision site plan, the project consists of the construction of a 14 lot industrial zone Subdivision of the current JRM Subdivision. The Davis Condo project does not have a site plan prepared at this time but is reported to include 50 condo units. Access to the JRM Subdivision will be via one road approach onto Glacier Highway. Access to the condos will be via driveways onto Lemon Creek Road.

Study Area

A level of service (LOS) analysis is required of the following two intersections:

- Glacier Highway & Davis Avenue
- Glacier Highway & JRM access

The Synchro 6 computer software program was used to perform the LOS analyses.

Existing Conditions Without Project

An inventory of the street and intersection characteristics in the project vicinity was conducted and is summarized in the report.

PM peak hour traffic volumes at the study intersections were gathered.

Future Conditions Without Project

For traffic volumes taken in 2004, a 1.0% background traffic growth factor was used to project traffic volumes that will exist in 2005 for the without project condition. Traffic volumes for a 20 year horizon of 2025 was also computed using the same growth factor.

PM peak hour Level of Service (LOS) analyses at the study area intersections were completed for the 2005 without project condition and the 2025 without project condition.

Future Conditions With Project

The following items were evaluated:

- Trip generation, distribution and assignment were developed.
- LOS analyses at the study area intersections were calculated for 2005 & 2025.
- Site access requirements and improvement needs were analyzed.
- Signal warrant analysis was conducted for the JRM access onto Glacier Highway and for the intersection of Glacier Highway & Davis Avenue.
- Measures to mitigate the development's impact on the transportation facilities in the study area were developed.

I. Project Identification, Street Inventory

Project Identification

The project consists of the construction of a 14 lot industrial zone Subdivision of the current JRM Subdivision and a 50 unit condo project located nearby on Lemon Creek Road. Access to the Subdivision will be via a road approach onto Glacier Highway. Access to the condos will be via driveways onto Lemon Creek Road.

The developments are located in Juneau, Alaska as shown in Figure 1, Site Vicinity. The proposed site plan of the JRM Subdivision is shown in Figure 2. The site plan for the Davis Condos is under development and was not yet available.

Street Inventory

Glacier Highway is a collector roadway fronting the northeasterly edge of the JRM Subdivision. It is 3 lanes wide (one lane in each direction plus a two way left turn lane). It has a posted speed limit of 40 mph.

Davis Avenue is a two-lane local residential street intersecting Glacier Highway immediately northwest of Lemon Creek. It is controlled by a STOP sign at the Glacier Highway intersection.

II. Trip Generation

Trip generation for the both sites is estimated using data from the seventh edition of Trip Generation as well as existing data from the Juneau Read-Mix site. The Trip Generation report is published by the Institute of Transportation Engineers (ITE) compiling measured trip generation data from different land use types from locations across the US. A copy of the relevant pages from Trip Generation is included in the Appendix.

ITE Land Use Code 230 (Residential Condominium/Townhouse) using dwelling units as the independent variable was selected as the appropriate method of determining the trip generation for the Davis Condos.

Trip generation for the JRM Subdivision was divided into two parts. The first part is the existing Juneau Read-Mix site (Lots 6-9). This is a seasonal business with peak trip generation occurring during the summer construction months. Since this report is being produced in off-peak period it was necessary to use trip generation estimates based on information from Juneau Read-Mix. The owners estimated that throughout the day there could be as many as 328 trips (278 of which are trucks). Using a 12% PM peak hour factor it is estimated that the amount of trips during the PM peak hour is 39 (33 of which are trucks).

Trip generation for the second part (Lots 1-5 and 10-14) of the JRM Subdivision was estimated using two methods. The first method was to assume the highest possible amount of trips the site could produce by selecting ITE Land Use Code 770 (Business Park) with KSF as the independent variable. Table 1 shows the trip generation using this first method.

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As seen in Table 1 the existing Juneau Read-Mix uses generates 39 PM peak hour trips, and the rest of the JRM Subdivision (assuming a land use of Business Park) will generated 144 PM peak hour trips, giving a total of 183 PM peak hour trips, 53 entering and 131 exiting for the entire JRM Subdivision. The Davis Condos will generate 26 PM peak hour trips, 17 entering and 9 exiting.

Table 1 JRM Subdivision & Davis Condos PM Peak Hour Trip Generation									
Lot	Land Use	Size	Units	Rate	PM Peak Hour Trips	PM Peak Hour Trips			
						Entering		Exiting	
						%	Trips	%	Trips
6-9	Existing Juneau Ready Mix				39	50%	20	50%	20
1-5, 10-14	Business Park (LUC 770)	111.764	KSF	1.29	144	23%	33	77%	111
	Totals				183		53		131
						29%		71%	
	Land Use	Size	Units	Rate	PM Peak Hour Trips	PM Peak Hour Trips			
						Entering		Exiting	
						%	Trips	%	Trips
	Davis Condos (LUC 230)	50	D.U.	0.52	26	67%	17	33%	9
	Totals				26		17		9

The second method for Lots 1-5 & 10-14 was to estimate the likely trip generation for each lot use individually. ITE Land Use Code 814 (Specialty Retail) using KSF as the independent variable was selected as the appropriate method of determining the trip generation for Lot 1 (Sporting goods retail store) as well as for Lot 2 (Unknown investment development). ITE Land Use Code 151 (Mini Warehouse) using storage units as the independent variable was selected as the appropriate method of determining the trip generation for Lots 3 and 4 (Boat storage condos). ITE Land Use Code 140 (Manufacturing) using KSF as the independent variable was selected as the appropriate method of determining the trip generation for Lots 5, 11, and 12 (Wholesale seafood processor and distributor). ITE Land Use Code 110 (General Light Industrial) using KSF as the independent variable was selected as the appropriate method of determining the trip generation for Lots 10, 13, and 14 (Contractor storage yard).

Using this method, as shown in Table 1a, the JRM Subdivision (using individual land uses) will generate 152 PM peak hour trips, 56 entering and 96 exiting. This is 31 less trips than a Business Park land use generates.

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Table 1a JRM Subdivision & Davis Condos PM Peak Hour Trip Generation									
Lot	Land Use	Size	Units	Rate	PM Peak	PM Peak Hour Trips			
					Hour	Entering	Exiting		
					Trips	%	Trips	%	Trips
6-9	Existing Juneau Ready Mix				39	50%	20	50%	20
1	Specialty Retail (LUC 814)	8.385	KSF	2.71	23	44%	10	56%	13
2	Specialty Retail (LUC 814)	9.011	KSF	2.71	24	44%	11	56%	14
3,4	Mini-Warehouse (LUC 151)	20	Units	0.03	1	50%	0	50%	0
5	Manufacturing (LUC 140)	5.770	KSF	0.74	4	36%	2	64%	3
10	General Light Industrial (LUC 110)	10.726	KSF	0.98	11	12%	1	88%	9
11	Manufacturing (LUC 140)	22.657	KSF	0.74	17	36%	6	64%	11
12	Manufacturing (LUC 140)	13.230	KSF	0.74	10	36%	4	64%	6
13	General Light Industrial (LUC 110)	11.933	KSF	0.98	12	12%	1	88%	10
14	General Light Industrial (LUC 110)	11.980	KSF	0.98	12	12%	1	88%	10
	Totals				152		56		96
							37%		63%
	Land Use	Size	Units	Rate	PM Peak	PM Peak Hour Trips			
					Hour	Entering	Exiting		
					Trips	%	Trips	%	Trips
	Davis Condos (LUC 230)	50	D.U.	0.52	26	67%	17	33%	9
	Totals				26		17		9
							67%		33%

For the purpose of LOS calculations the trip generation using Business Park for the JRM Subdivision was selected, because the results would be more conservative and give a "worse case" scenario.

A spreadsheet computing the new site generated entering, exiting and total trips for percentages of trip generation from 1% to 100% was prepared and is included in the Appendix.

III. Traffic Assignment

Traffic Volume Data

2004 traffic counts were gathered and were adjusted by a 1.0% annual traffic growth factor to account for general background growth.

The horizon year for this analysis will be 2005 (1 year) and 2025 (20 years after buildout). Figure 3 shows the existing 2004 PM Peak Hour turning movements w/o project at the study intersections. Figure 3a shows the adjusted 2005 PM Peak Hour turning movements w/o project. Figure 3b shows the adjusted 2025 PM Peak Hour turning movements w/o project.

New trips generated by the JRM Subdivision were distributed in accordance with existing dwelling unit demographics as furnished by the City and Borough of Juneau (CBJ). Analysis of

the CBJ dwelling unit data shows 58% are located to the NW, and 42% are located to the SE of the site. A copy of the CBJ data is included in the Appendix. The new site generated trip % assignments are shown in Figure 4 along with PM peak hour site generated trip assignments.

New trips generated by the Davis Condos site were distributed in accordance with existing traffic patterns and street system configuration. The new site generated trip % assignments are shown in Figure 4a along with PM peak hour site generated trip assignments.

The new trips from both sites were added together to form the total site generated trips for the developments shown in Figure 4b.

The new site generated trips were added to the 2005 w/o project volumes to establish the 2005 PM Peak Hour w/ project data shown in Figure 5a. The new site generated trips were added to the 2025 w/o project volumes to establish the 2025 PM Peak Hour w/ project data shown in Figure 5b.

IV. Level of Service

Capacity computations of the study intersections were performed using the Synchro 6.0 software package. This computer program was developed by TrafficWare as an accurate representation of the Special Report 209 "Highway Capacity Manual" methodology. Outputs from the program are included in the Appendix. Level of Service (LOS) was calculated for the study area intersections noted above.

Unsignalized Intersections

For the case of unsignalized intersections, the LOS of the driveway exiting movements and entering left turn movements are calculated. The delay value established for each LOS criteria from the 2000 Highway Capacity Manual is listed in Table 2.

Table 2 Unsignalized Intersection Level of Service Criteria	
Level of Service	Delay per Vehicle (sec.)
A	≤ 10
B	>10 and ≤ 15
C	>15 and ≤ 25
D	>25 and ≤ 35
E	>35 and ≤ 50
F	>50

The results of the unsignalized intersection analyses are summarized in Table 3.

Table 3 Unsignalized Intersection PM Peak Hour Level of Service Summary						
Glacier Highway & Davis Avenue	2005 w/o Project		2005 w/ Project		2025 w/ Project	
	LOS (A-F)	Delay (Sec.)	LOS (A-F)	Delay (Sec.)	LOS (A-F)	Delay (Sec.)
Glacier LT	A	9.2	A	9.7	B	10.5
Davis All	C	15.4	C	17.7	C	24.6
Glacier Highway & Site Access	LOS (A-F)	Delay (Sec.)	LOS (A-F)	Delay (Sec.)	LOS (A-F)	Delay (Sec.)
Glacier LT (Enter)	-	-	A	8.9	A	9.2
Site LT (Exit)	-	-	C	15.2	C	17.4
Site RT (Exit)	-	-	B	12.6	B	14.0

Note that all movements operate at LOS C or better in the buildout year as well as in 2025.

V. Signal Warrant Analysis

Glacier Highway & JRM Subdivision Access

A signal warrant analysis was conducted for the JRM site access & Glacier Highway. The warrant tested was Warrant 3 – Peak Hour from the 2000 MUTCD. The peak hours tested were the 2005 PM peak hour w/ project condition and the 2025 PM peak hour w/ project condition.

The peak hour tested first was the 2005 PM peak hour with project condition. The analysis was based on 1,062 vehicles from both approaches of the major street (Glacier Highway) and 76 left turning vehicles exiting the site. Right turning exiting traffic was excluded from the analysis since they are in a separate turn lane, and had low delay under the LOS analysis. In effect, if signalized, these right turns would likely be able to be accommodated by turning right on red. Hence, they do not contribute to the “need” for a traffic signal. Figure 6 shows the plotted values for this intersection on a graph taken from MUTCD Fig. 4C-3. It clearly shows the plotted point lies well below the threshold for warranting a signal. The left turn exiting volume would need to increase by another 104 vehicles, or 137% for this warrant to be satisfied.

The peak hour tested next was the 2025 PM peak hour with project condition. The analysis was based on 1,281 vehicles from both approaches of the major street (Glacier Highway) and 76 left turning vehicles exiting the site. Figure 7 shows the plotted values for this intersection on a graph taken from MUTCD Fig. 4C-3. It shows the plotted point lies well below the threshold for warranting a signal. The left turn exiting volume would need to increase by an additional 55 vehicles, or 72% for this warrant to be satisfied.

Thus, no traffic signal is warranted at the JRM site access onto Glacier Highway.

Glacier Highway & Davis Avenue

Because DOT&PF indicated a desire to eventually signalize the Glacier Highway & Davis Avenue intersection, a signal warrant analysis was conducted for this intersection as well. This was done for the without project condition and the with project condition. The warrant tested was Warrant 3 – Peak Hour from the 2000 MUTCD.

The peak hour tested first was the 2005 PM peak hour without project condition. The analysis was based on 1,005 vehicles from both approaches of the major street (Glacier Highway) and 124 vehicles from the high volume approach from the minor street (Davis Avenue). Figure 8 shows the plotted values for this intersection on a graph taken from MUTCD Fig. 4C-3. It clearly shows the plotted point lies well below the threshold for warranting a signal. The Davis Avenue volume would need to increase by an additional 78 vehicles, or 63% for this warrant to be satisfied.

The peak hour tested next was the 2005 PM peak hour with project condition. The analysis was based on 1,126 vehicles from both approaches of the major street (Glacier Highway) and 137 vehicles from the high volume approach from the minor street (Davis Avenue). Figure 9 shows the plotted values for this intersection on a graph taken from MUTCD Fig. 4C-3. It shows the plotted point lies below the threshold for warranting a signal. The Davis Avenue volume would need to increase by an additional 25 vehicles, or 18% for this warrant to be satisfied.

Finally the 2025 PM peak hour with project condition was tested. With 1,346 vehicles from both approaches of the major street (Glacier Highway) and 164 vehicles from the high volume approach from the minor street (Davis Avenue). Figure 10 shows the plotted values for this intersection on a graph taken from MUTCD Fig. 4C-3. It shows the plotted point lies above the threshold for warranting a signal.

However, this analysis was done assuming a 1% traffic growth and existing traffic patterns. There is question as to whether traffic would grow by 1% as the Juneau area population is not growing by this amount and there is also a new interchange planned that should divert traffic from this intersection that has not been accounted for.

Even assuming a 1% traffic growth and existing traffic patterns a signal would not be warranted if Davis Avenue adds a right turn lane at the Glacier Highway intersection. Right turning traffic from Davis would be excluded from the analysis since they are in a separate turn lane. In effect, if signalized, these right turns would likely be able to be accommodated by turning right on red. Hence, they do not contribute to the "need" for a traffic signal.

In conclusion, whether the project is added or not, a signal is not currently warranted at Glacier Highway & Davis Avenue due to traffic volumes.

DOT&PF furnished crash data for the intersection of Davis Avenue & Glacier Highway for the period of 1/1/99 through 12/31/03. This data is included in the appendix. There were 3 reported accidents in that 5 year period, or less than one crash per year. Warrant 7, Crash Experience has a threshold of 5 or more reported crashes per year susceptible to correction by signalization. Hence it can be seen Warrant 7 is also not met, so safety is not an issue warranting signalization at this location.

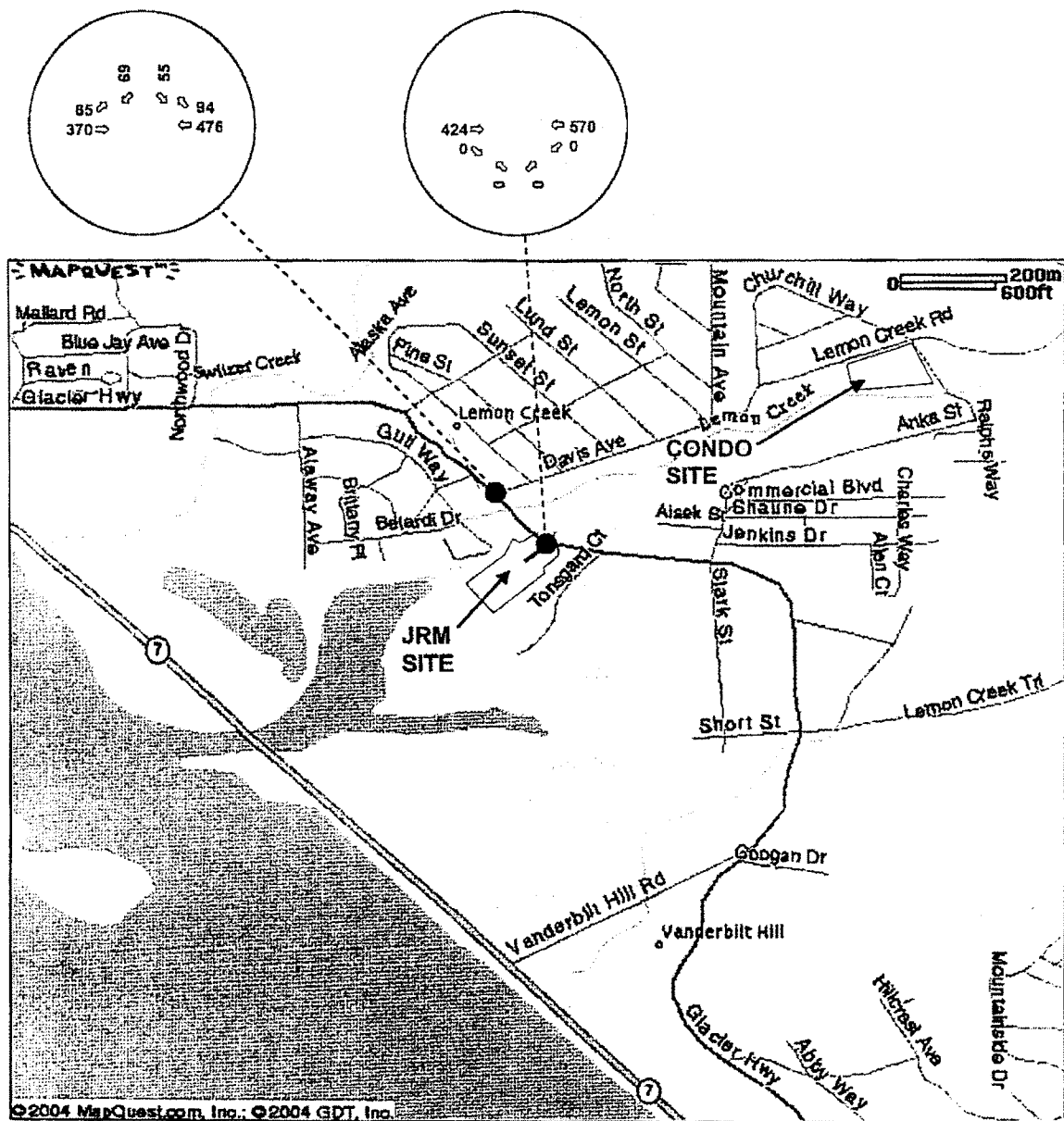
VI. Mitigation

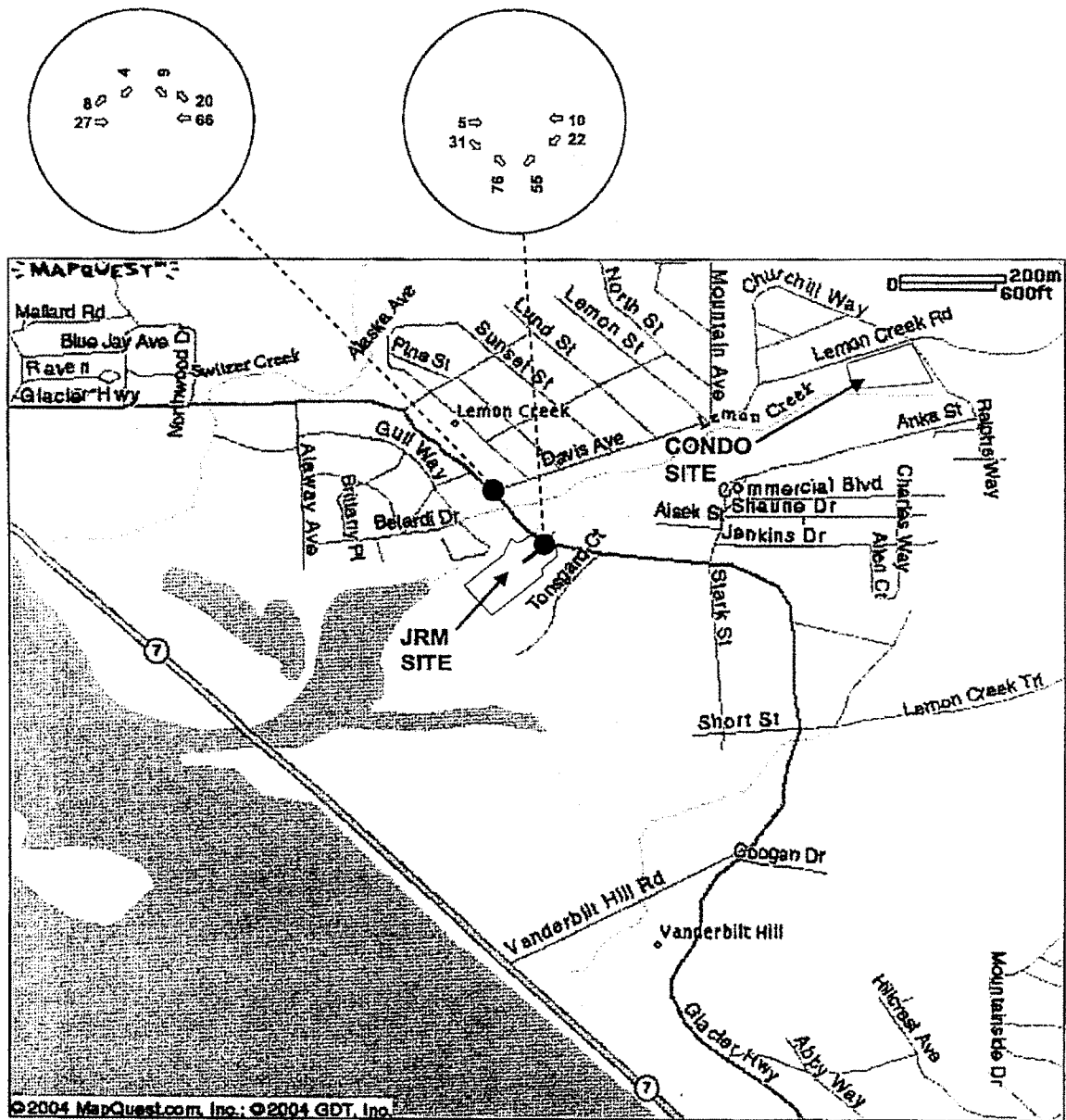
The construction of the JRM Subdivision and Davis Condo site results in no LOS grade level change. All intersections or key movements operate at LOS C or better with or without the project, even in 2025.

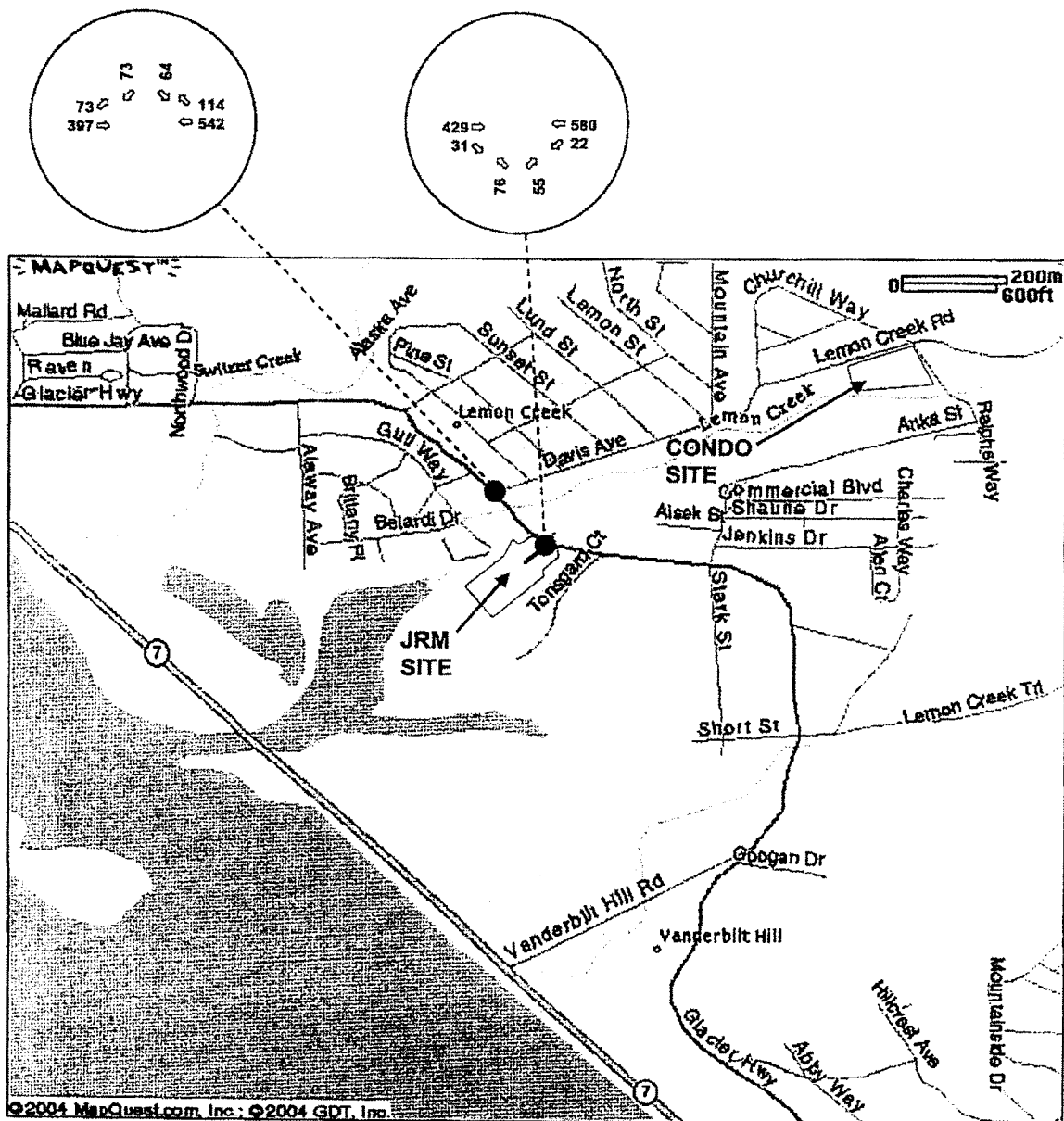
Signal warrant analysis conducted at the intersections of Glacier Highway & Davis Avenue and Glacier Highway & the JRM access shows that neither intersection meets signal warrants. Therefore, no signals need to be constructed as a result of impacts from this project.

The JRM Subdivision should construct it's highway approach onto Glacier Highway to include sufficient width and channelization to accommodate two approach lanes, one for left turns and one for right turns. This will support good traffic operations at this intersection.

The Davis Condos project will add 27 PM peak hour trips to Davis Avenue. There are currently 283 PM trips on Davis Avenue. Thus the new project trip generation will be 8.7% of the traffic stream on Davis Avenue. If CBJ desired the developer to partially fund street improvements on Davis Avenue, this percentage could be used as a rational basis for cost sharing.





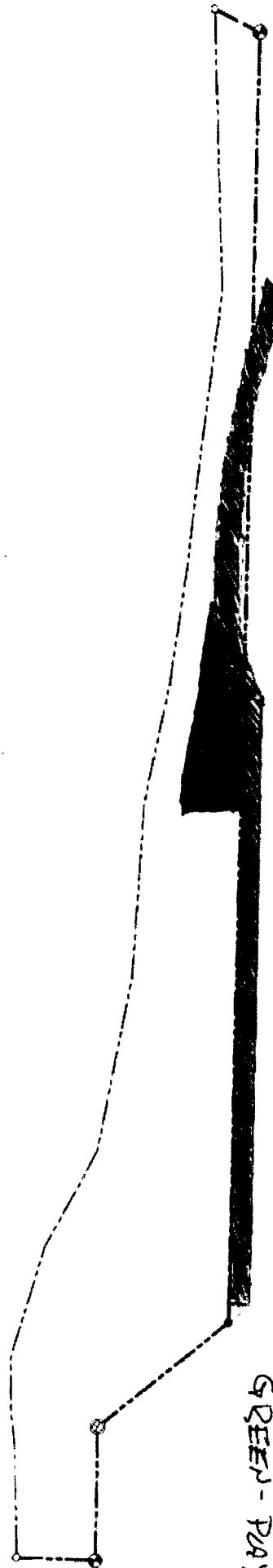


ATTACHMENT C

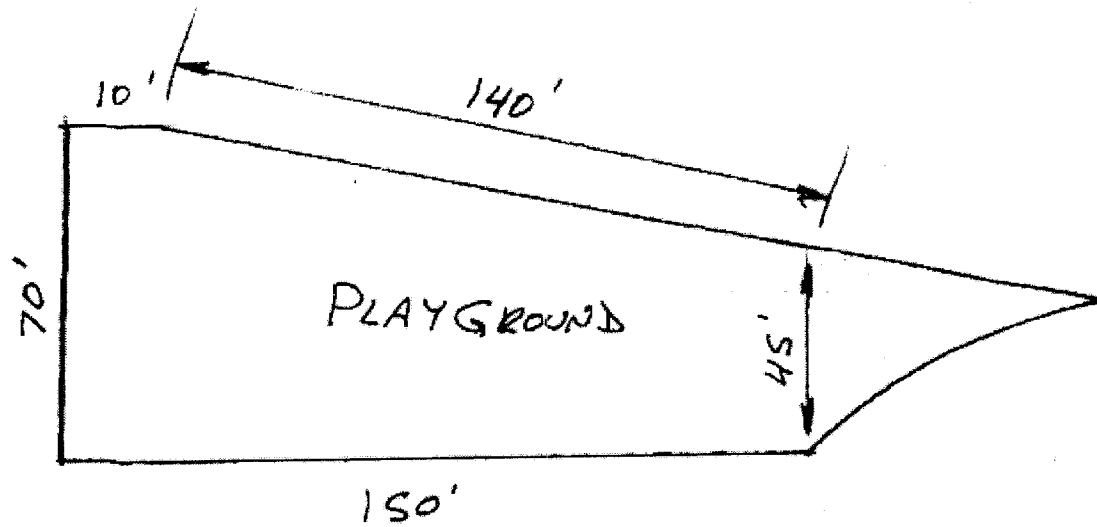
DRIVEWAY FOR DAVIS STREET PROJECT

32 | 31 | 30 | 29 | 28 | 27 | 26 | 25 | 24 | 23 | 22 | 21 | 20 | 19 | 18 |

LEGEND
RED - DRIVEWAY
GREEN - PLAYGROUNDS



DAVIS STREET
PLAYGROUND



1" = 50'