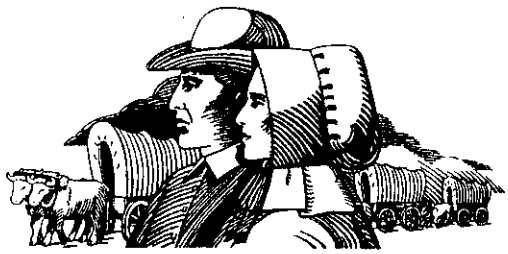
CITY OF OREGON CITY

PLANNING COMMISSION

320 WARNER MILNE ROAD OREGON CITY, OREGON 97045
TEL (503) 657-0891 FAX (503) 657-7892



AGENDA

Planning Commission Agendas, Staff Reports and Minutes are available on the Oregon City Web Page (www.orcity.org) under PLANNING.

The June 13, 2005 Planning Commission Hearing and June 20, 2005 Planning Commission Work Session are Cancelled.

NOTE: HEARING TIMES AS NOTED ABOVE ARE TENTATIVE. FOR SPECIAL ASSISTANCE DUE TO DISABILITY, PLEASE CALL CITY HALL, 657-0891, 48 HOURS PRIOR TO MEETING DATE.

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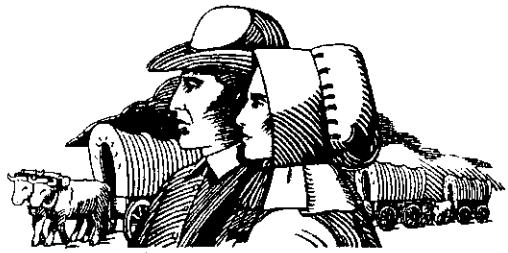


AGENDA

City Commission Chambers - City Hall
June 27, 2005 at 7:00 P.M.

The 2005 Planning Commission Agendas, including Staff Reports and Minutes, are available on the Oregon City Web Page (www.orcity.org) under PLANNING.

PLANNING COMMISSION MEETING

1. **CALL TO ORDER**

2. **PUBLIC COMMENT ON ITEMS NOT LISTED ON AGENDA**

3. **HEARING:**

   L 05-03 ***(Legislative Hearing),*** Applicant: City of Oregon City, Nancy Kraushaar. Adoption by ordinance of the Beavercreek Road Access Management Plan as an amendment to the Oregon City Transportation System Plan, which is an ancillary document to the Oregon City Comprehensive Plan. The Access Management Plan is applicable on Beavercreek Road from Fir Street to Molalla Avenue.

4. **ADJOURN PLANNING COMMISSION MEETING**

NOTE: HEARING TIMES AS NOTED ABOVE ARE TENTATIVE. FOR SPECIAL ASSISTANCE DUE TO DISABILITY, PLEASE CALL CITY HALL, 657-0891, 48 HOURS PRIOR TO MEETING DATE.

CITY OF OREGON CITY

PLANNING COMMISSION

320 WARNER MILNE ROAD OREGON CITY, OREGON 97045
TEL 657-0891 FAX 657-7892

FILE NO.: L 05-03

APPLICATION TYPE: Legislative

HEARING DATE: June 27, 2005 – 7:00 p.m., City Hall
320 Warner Milne Road
Oregon City, OR 97045

APPLICANT/ OWNER: City of Oregon City
Nancy Kraushaar, PE – City Engineer/Public Works Director
320 Warner Milne Road
Oregon City, Oregon 97045

REQUEST: Adoption by ordinance of the Beavercreek Road Access Management Plan as an amendment to the Oregon City Transportation System Plan, which is an ancillary document to the Oregon City Comprehensive Plan.

LOCATION: Beavercreek Road from Fir Street to Molalla Avenue.

REVIEWER: Tony Konkol, Senior Planner

RECOMMENDATION: Staff recommends approval of this application based on the satisfaction of all required criteria for a Legislative action.

Legislative actions involve the adoption or amendment of the city's land use regulations, comprehensive plan, maps, inventories and other policy documents that affect the entire city or large portions of it. Legislative actions which affect land use must begin with a public hearing before the planning commission.

B. Planning Commission Review.

1. Hearing Required. The planning commission shall hold at least one public hearing before recommending action on a legislative proposal. Any interested person may appear and provide written or oral testimony on the proposal at or prior to the hearing. The planning manager shall notify the Oregon Department of Land Conservation and Development (DLCD) as required by the post-acknowledgment procedures of ORS 197.610 to 197.625, as applicable.
2. Planning Manager's Report. Once the planning commission hearing has been scheduled and noticed in accordance with Section 17.50.090(C) and any other applicable laws, the planning manager shall prepare and make available a report on the legislative proposal at least seven days prior to the hearing.
3. Planning Commission Recommendation. At the conclusion of the hearing, the planning commission shall adopt a recommendation on the proposal to the city commission. The planning commission shall make a report and recommendation to the city commission on all legislative proposals. If the planning commission recommends adoption of some form of the proposal, the planning commission shall prepare and forward to the city commission a report and recommendation to that effect.

C. City Commission Review.

1. City Commission Action. Upon a recommendation from the planning commission on a legislative action, the city commission shall hold at least one public hearing on the proposal. Any interested person may provide written or oral testimony on the proposal at or prior to the hearing. At the conclusion of the hearing, the city commission may adopt, modify or reject the legislative proposal, or it may remand the matter to the planning commission for further consideration. If the decision is to adopt at leastsome form of the proposal, and thereby amend the city's land use regulations, comprehensive plan, official zoning maps or some component of any of these documents, the city commission decision shall be enacted as an ordinance.
2. Notice of Final Decision. Not later than five days following the city commission final decision, the planning manager shall mail notice of the decision to DLCD in accordance with ORS 197.615(2). (Ord. 98-1008 §1(part), 1998)

IF YOU HAVE ANY QUESTIONS ABOUT THIS APPLICATION, PLEASE CONTACT TONY KONKOL IN THE PLANNING DIVISION OFFICE AT 657-0891.

I. PROPOSED PROJECT

The proposal is to amend the Transportation System Plan with the Beavercreek Road Access Management Plan (Plan), which identifies short-term and long-term strategies for access management along Beavercreek Road from Fir Street to Molalla Avenue (Exhibit 1). The City is in the process of designing improvements for Beavercreek Road, which is identified in the Oregon City Transportation System Plan, and will include the modification of existing driveways to improve the safety and capacity of the roadway. After the first pubic meeting for the Beavercreek Road improvements, it was determined that an access management plan was needed to evaluate the short-term and long-term access needs for businesses prior to construction of the improvements.

The strategies of the Plan are to promote the safe and efficient operation of the roadway while providing access to adjacent properties and improving mobility to travelers. A primary goal of the Plan is to conform to state and local plans, policies and standards that are currently in place. The Plan provides an inventory of the existing conditions of the public and private approaches and the land uses, traffic conditions and roadway. The short-term access management plan (Exhibit 1, page 16) includes access modifications that would occur as part of the planned Beavercreek Road improvement project. The long-term access management plan (Exhibit 1, page 21) will be implemented as development and re-development of the existing properties along the roadway occurs.

II. FACTS

A. Location and Current Use

The proposed Plan recommends short-term and long-term access management plans for Beavercreek Road from Fir Street west to Molalla Avenue. The land uses adjacent to Beavercreek Road include general industrial and general commercial on the south side of the road and Mixed Use Corridor 2 and Multi-family on the north side of the road.

B. Public Involvement and Public Comment

The project team has met individually with a majority of the property owners and business owners to discuss both the Beavercreek Road improvement project and the access management plan (Exhibits 2, 3, 4 and 5). The feedback provided at these meetings and an initial open house helped form the first iteration of the plans. After a draft of the short-term and long-term plans was completed, the project team held two public open houses where additional feedback was provided. The open house attendee's were also given the opportunity to set up individual meetings to discuss individual properties needs with the project team. The short-term and long-term plans as currently shown have been modified to address comments received from local property owners.

Notice of the public hearing for the proposal was published on June 1, 2005 in the Clackamas Review, mailed to property owners within 500 feet of Beavercreek Road, the affected agencies and CIC on May 25, 2005. The Oregon City Public Works Department created two signs that were posted on Beavercreek Road indicating the time and location that the Public Meeting would be held to discuss the proposed Plan.

Comments were received from Mr. Schaefer of Schwabe, Williamson & Wyatt concerning access to the Southridge Shopping Center (Exhibit 6).

III. DECISION-MAKING CRITERIA:

Section 2 – Land Use of the 2004 Oregon City Comprehensive Plan indicates that the regular review and updated of the Comprehensive Plan should consider the following:

1. *Plan implementation process.*
2. *Adequacy of the Plan to guide land use actions, including an examination of trends.*

3. *Whether the Plan still reflects community needs, desires, attitudes and conditions. This shall include changing demographic patterns and economics.*
4. *Addition of updated factual information including that made available to the City of regional, state and federal governmental agencies.*

The Beavercreek Road Access Management Plan will amend the Oregon City Transportation System Plan, which is an ancillary document to the Oregon City Comprehensive Plan.

IV. ANALYSIS AND FINDINGS

A. Section 2. Land Use Review and Update (page 16)

Regular Review and Update

Plan maintenance and updating is a continuous technical review of the Plan by the Planning staff. This review and any subsequent recommendations for Plan updating should be presented to the Neighborhood Associations, Planning Commission and City Commission for input and discussion in the same manner as requested Plan changes. The continuous review should consider:

1. Plan implementation process;

The public involvement process included individual meetings with a majority of the property and business owners to discuss both the Beavercreek Road improvement project and the access management plan. The feedback provided at these meetings and an initial open house on December 8, 2004 helped form the first iteration of the short-term and long-term access management plan. After a draft of the short-term and long-term access management plan figures were completed, the project team held two open houses on March 9th and March 17th 2005 where additional feedback was gathered from the public. The open house attendee's were given the opportunity to set up individual meetings with the project team to discuss individual property needs. The project team followed up with these meetings providing detailed input in regards to the access management plans. The short-term and long-term plans as currently shown have been modified numerous times to address comments received from the surrounding property owners.

The public hearings for the proposed plan was advertised in the Clackamas Review on June 1, 2005, and mailed to property owners within 500 feet of Beavercreek Road and affected agencies and the CIC on May 25, 2005 indicating that the Planning Commission would hold a public hearing on June 27, 2005 and that the City Commission would hold a public hearing on August 3, 2005. The notice indicated that any interested party may testify at the public hearing or submit written testimony at or prior to the hearing. The Department of Land Conservation and Development was notified as required by ORS 197.610 – 197.625. The Planning Manager's report was made available at least seven days prior to the public hearing and the application was processed according to the Legislative Hearing Process as required under Oregon City Municipal Code 17.50.170. Implementation of the Plan is discussed further in Criterion 2.

2. Adequacy of the Plan to guide land use actions, including an examination of trends.

Because there is no specific access management plan in the Transportation System Plan, staff considers the plan necessary to meet the demands of a growing city by providing a short-term and long-term access management plan that fulfills the requirements of the Transportation Planning Rule and the needs of the City and adjacent property owners by:

1) Improving safety for vehicles, pedestrians and bicycles;
2) Improving the traffic flow and vehicle capacity of Beavercreek Road
3) Improving freight mobility; and
4) Providing permanent, efficient and safe business access using traffic signals at appropriate locations.

The proposed Plan relied on the existing Transportation System Plan and the Transportation Planning Rule included in the Oregon Administration Rules to guide the vision and development of the final document.

The Plan identifies short-term and long-term access management strategies that, when implemented, will allow the intersections along Beavercreek Road to function at acceptable levels of service through 2020. A detailed short-term access management plan is identified in section 5.2 and a detailed long-term access management plan is identified in section 5.3. The plans include the necessary roadway improvements and specific property-by-property recommendations. The Plan considered the existing physical and traffic conditions along Beavercreek and reviewed previous land use decisions and the projected traffic increase through 2020. 2020 was chosen as the date to be utilized for forecasting since the TSP assumptions and recommended improvements were based on the forecasted traffic volumes in 2020.

The short-term improvements identified in the Plan will be implemented as part of the Beavercreek Road improvements. The long-term improvements will be implemented as development and re-development along Beavercreek Road occurs. The Plan specifically identifies the needed improvements, including traffic signal locations, driveway closures and consolidations and street designs. The proposed plan will adequately guide the street improvements and access management requirements for land uses and decisions along Beavercreek Road.

3. *Whether the Plan still reflects community needs, desires, attitudes and conditions. This shall include changing demographic patterns and economics.*

The proposed Plan implements access management measures to limit the number of redundant access points along Beavercreek Road as described in the Oregon City Transportation System Plan (TSP). The TSP identifies the need for access management to enhance roadway capacity and to improve circulation, but also points out that closing a driveway without a parallel road system and/or other local access could seriously affect the viability of the impacted properties. An alternative access should be developed prior to "land-locking" a given property.

The short-term and long-term access management plan was developed to avoid land-locking a property and will provide for a more efficient transportation system and safe access from the roadway to adjacent properties. The Plan will also improve the capacity and safety of Beavercreek Road, a major arterial and important transportation route for the city. The TSP was adopted in April of 2001, as an ancillary document to the Oregon City Comprehensive Plan, which reflects the communities needs, desires and attitude concerning access management and street improvements.

4. *Addition of updated factual information including that made available to the City by regional, state and federal governmental agencies.*

Section 4.2 of the Plan identifies the traffic volumes and collision data that were collected to determine the traffic characteristics of the study. The resulting traffic characteristics were utilized to develop and evaluate the access management strategies so that the mobility and safety of Beavercreek Road and the surrounding properties could be preserved and/or enhanced.

The traffic characteristics included the existing traffic volumes, the level of service of the signalized and un-signalized intersections, the projected 2020 level of service for the signalized intersections when the long-term plan is implemented and the collision data along Beavercreek Road. No additional factual information was provided from regional, state or federal governmental agencies.

V. RECOMMENDATION

Staff recommends that the Planning Commission recommend approval to the City Commission for their consideration at the August 3, 20055 hearing of the Beavercreek Road Access Management Plan (Exhibit 1).

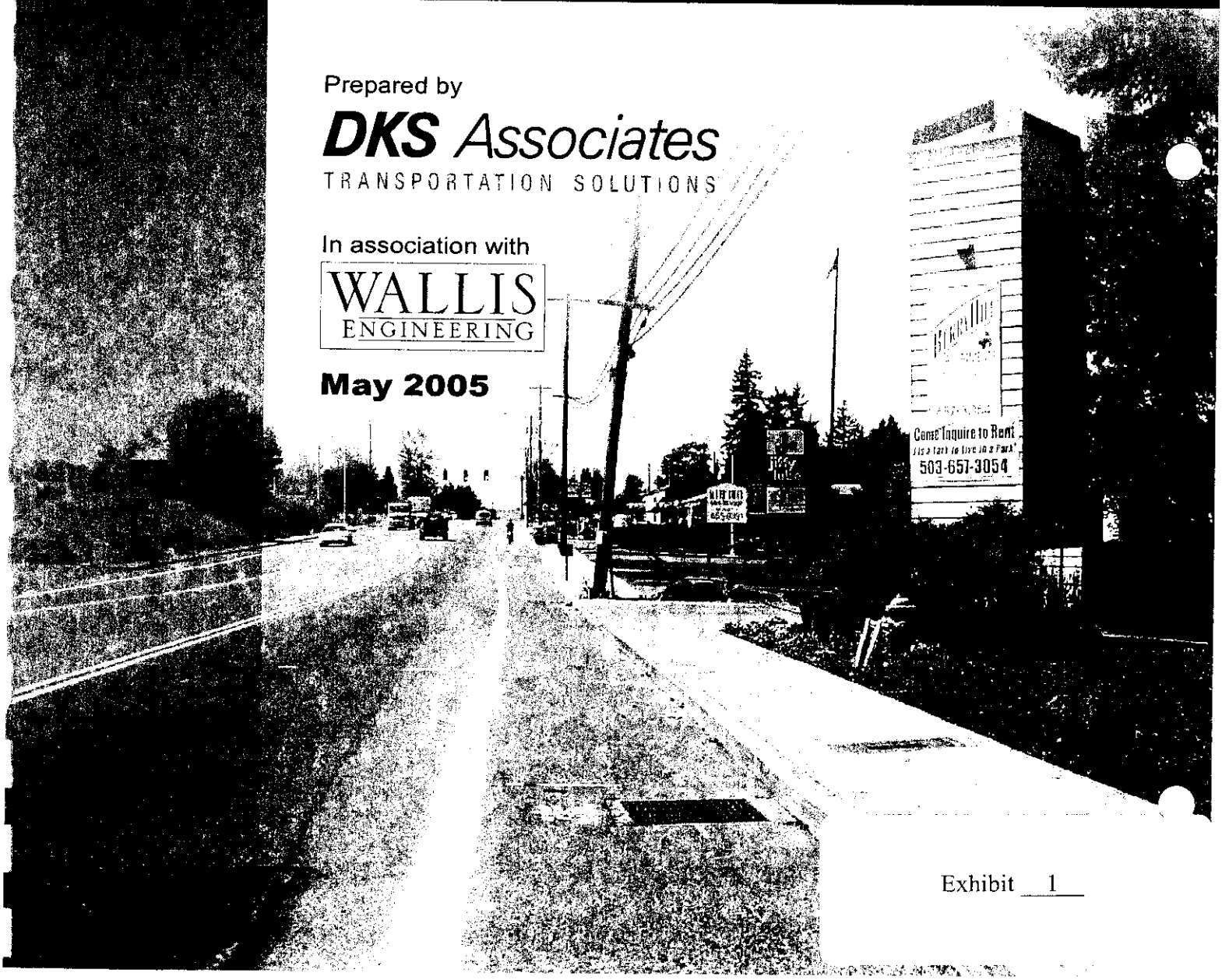
VI. EXHIBITS

1. Beavercreek Road Access Management Plan
2. Summary of Plan changes, dated April 14, 2005
3. Email concerning Pioneer Car Wash conditions of approval, dated April 8, 2005
4. March 17, 2005 presentation sign-in sheet
5. Summary of March 9, 2005 public workshop
6. Letter from Mr. Schaefer, dated May 4, 2005

Report for

City of Oregon City

Beavercreek Road
Access Management Plan



Prepared by

DKS *Associates*
TRANSPORTATION SOLUTIONS

In association with

WALLIS
ENGINEERING

May 2005

Exhibit 1

DKS *Associates*
TRANSPORTATION SOLUTIONS

May 10, 2005

Nancy Kraushaar, P.E.
City Engineer/Public Works Director
City of Oregon City
320 Warner Milne Road
Oregon City, OR 97045

P#04031-001-000

Subject: Beavercreek Road Access Management Plan

Dear Nancy:

DKS Associates is pleased to submit this Final Access Management Plan for Beavercreek Road between Fir Street and Molalla Avenue in the City of Oregon City. As you requested, we have included 25 copies for distribution. Please feel free to call Scott Mansur or me if you have any questions or comments regarding this study.

Sincerely,

***DKS** Associates*
An Oregon Corporation

Peter L. Coffey, P.E.
Principal

CC: Ki Bealey, Wallis Engineering

400 SW Fifth Avenue
Suite 500
Portland, OR 97201

(503) 243-3500
(503) 243-1934 fax
www.dksassociates.com

TABLE OF CONTENTS

TABLES

FIGURES

1.0 INTRODUCTION

The City of Oregon City is in the process of designing improvements for Beavercreek Road between Fir Street and Beavercreek Way as identified in the City's Transportation System Plan (TSP). As part of this improvement project, the City was seeking to improve safety and capacity on Beavercreek Road by modifying existing driveways to businesses. After the first public meeting for the Beavercreek Road improvement project, it was determined that an access management plan was needed to evaluate the short-term and long-term access needs for businesses prior to construction of the improvements.

The goal of this access management plan (AMP) is to identify short-term and long-term strategies for access management along Beavercreek Road from Fir Street to Molalla Avenue that promote safe and efficient operation. The study area for this access management plan is shown in Figure 1. The two main functions of Beavercreek Road are to provide access to adjacent properties and to provide mobility to travelers. Balance must be attained between access to land development and safe and efficient operation based on a roadway's functional classification. For instance, arterials are designed to have fewer access points than local streets in order to increase long-distance mobility. Local streets are often designed with many closely spaced entry points in order to increase access to local properties.

Why is Access Management Important?

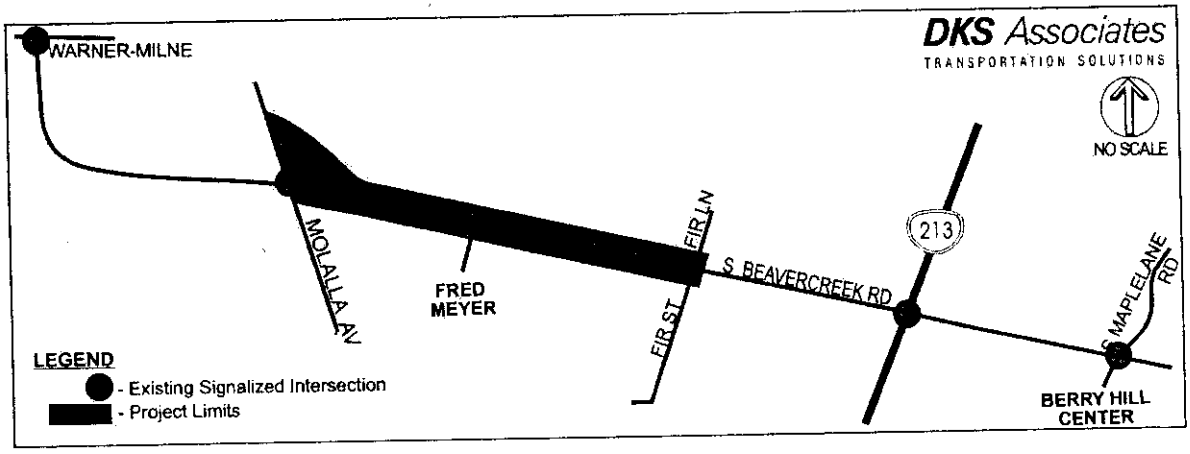
- Improves safety for vehicles, pedestrians, and bicycles.
- Improves traffic flow and vehicle capacity.
- Improves freight mobility by getting goods and services to businesses more efficiently.
- Provides permanent, efficient, and safe business access using traffic signals at appropriate locations.

The Transportation Planning Rule provides the following access management definition:

> *""Access Management" means measures regulating access to streets, roads and highways from public roads and private driveways. Measures may include but are not limited to restrictions on the siting of interchanges, restrictions on the type and amount of access to roadways, and use of physical controls, such as signals and channelization including raised medians, to reduce impacts of approach road traffic on the main facility."*[1]

[1] *Oregon Administrative Rule 660-012-0005 (Division 12- Transportation Planning)*, Oregon Land Conservation and Development Department, July 15, 2004.

Figure 1. Vicinity Map



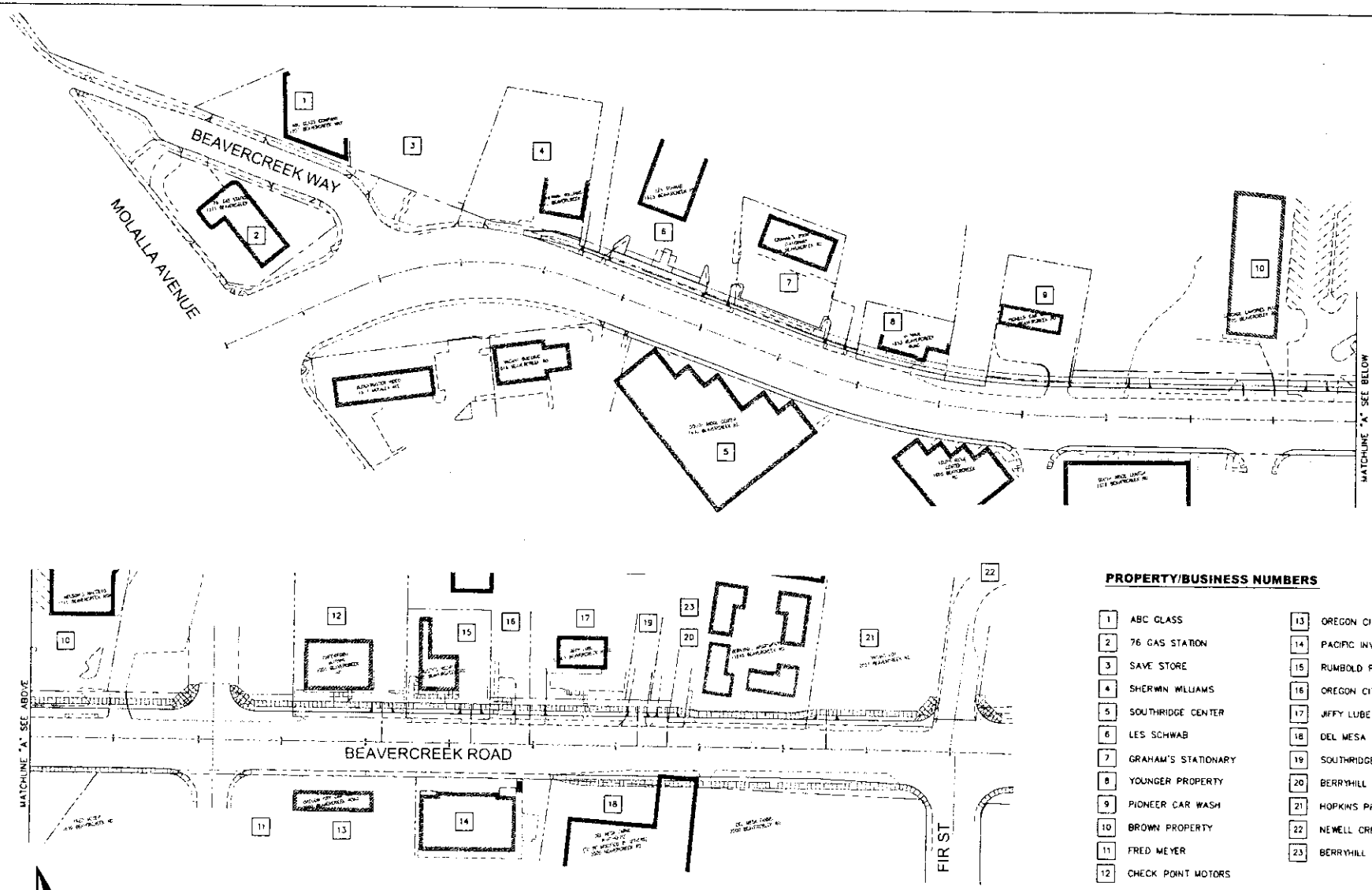
1.1 *Project Objectives*

The objectives of this Access Management Plan include the following:

- Comply with local standards, plans, and policies.
- Inventory the public and private approaches on Beavercreek Road and Beavercreek Way within the study area.
- Identify short-term and long-term access management strategies in the project area.
- Implement the short-term access management strategy in the Beavercreek Road improvement project that is currently being designed.
- Coordinate with local governments and affected property/business owners during the access management plan development.
- Adopt this Access Management Plan into the *City of Oregon City Transportation System Plan (TSP).*

2.0 STUDY AREA

The study area includes twenty-three properties adjacent to Beavercreek Road and Beavercreek Way as shown in Figure 2. The study area intersections, both existing and proposed, are located within the City of Oregon City. Traffic signals are located today at the intersection of Beavercreek Road and the Fred Meyer access and Beavercreek Road and Molalla Avenue. All private driveways are currently unsignalized two-way stop controlled intersections with Beavercreek Road being the major street and the private driveways being the minor street stopped approach. The following sections include a description of the roadway network and jurisdictional responsibilities.



PROPERTY/BUSINESS NUMBERS

1	ABC GLASS
2	76 GAS STATION
3	SAVE STORE
4	SHERWIN WILLIAMS
5	SOUTHRIDGE CENTER
6	LES SCHWAB
7	GRAHAM'S STATIONARY
8	YOUNGER PROPERTY
9	PIONEER CAR WASH
10	BROWN PROPERTY
11	FRED MEYER
12	CHECK POINT MOTORS
13	OREGON CITY CAR WASH
14	PACIFIC INVESTMENT PROPERTIES
15	RUMBOLD PROPERTY
16	OREGON CITY AUTO SERVICE
17	JIFFY LUBE
18	DEL MESA FARMS
19	SOUTHRIDGE MINI STORAGE
20	BERRYHILL APARTMENTS
21	HOPKINS PROPERTY
22	NEWELL CREEK APARTMENTS
23	BERRYHILL TOWNHOMES

Not to Scale

DKS *Associates*
TRANSPORTATION SOLUTIONS

LEGEND:
EXISTING DRIVEWAY
[X] PROPERTY NUMBER

Figure 2
EXISTING PROPERTIES WITH ACCESS TO BEAVERCREEK ROAD

2.1 Roadway Network

Within the study area, Beavercreek Road, Fir Street and Beavercreek Way are all public streets owned and maintained by the City of Oregon City. Beavercreek Road currently carries approximately 1,200 to 2,000 vehicles (two-way total) during the PM peak hour and has an average daily traffic volume ranging from 16,000 to 23,000 vehicles bi-directional[2].

The TSP[3] classifies ***Beavercreek Road*** as a major arterial and it has a posted speed of 35 mph. Regional Transportation Plan (RTP) and TSP designations for Beavercreek Road are summarized in Table 1.[4]

Table 1: Beavercreek Road Roadway Designations as defined in the 2000 RTP (From Beavercreek Way to Fir Street)

	City TSP Designation	Metro RTP Designation
Motor Vehicle Functional Classification	Major Arterial	Minor Arterial
Street Design	No Designation	Regional Street
Public Transportation	TriMet Route #32	No Designation
Bike	Striped Bike Lanes	Community Connector
Pedestrian	Sidewalks on both sides	No Designation
Freight	No Designation	Road Connector

Beavercreek Road is typically a three-lane section, one travel lane in each direction and a center turn lane, with wide paved shoulders and sporadic sidewalks. The south side shoulder, adjacent to the South Ridge Center, is used for parking and loading.

Fir Street (south of Beavercreek Road) TSP classification is a Collector. It has sidewalks and bike lanes on both sides with no on-street parking.

Beavercreek Way serves as an access roadway to three businesses between Molalla Avenue and Beavercreek Road. The TSP classifies it as a Local Street.

[2] Based on 24-hour traffic volume counts conducted during April of 2004.
[3] *City of Oregon City Transportation System Plan*, Adopted April 2001.
[4] *2000 Regional Transportation Plan*, Metro, August 10, 2000 (Ordinance No. 00-869A and Resolution No. 00-2968B).

3.0 PLANS, POLICIES, AND STANDARDS

A primary goal of this *Access Management Plan* is to conform to state and local plans, policies, and standards already in place. This section includes a summary of relevant documents that were referred to during the plan development. Sections 3.1 through 3.3 describe the general access management strategies set forth in each applicable document and Section 3.4 summarizes the access management spacing standards from these documents that apply to the study area.

3.1 Oregon Laws and Rules

Oregon state laws and regulations pertaining to transportation are included in the Oregon Revised Statutes (ORS's) and the Oregon Administrative Rules (OAR's). The ORS's consist of laws and the OAR's include rules that are standards or regulations that are meant to interpret or prescribe the laws. This section highlights the laws and rules that pertain to access management on Beavercreek Road: OAR 660-012.

3.1.1 OAR 660-012: Transportation Planning Rule (TPR)[5]

The Transportation Planning Rule requires that all transportation system plans include access control measures that are consistent with a roadway's functional classification.

3.2 City of Oregon City Access Management Standards

Access management standards for the City of Oregon City are included in the City's Transportation System Plan.

3.2.1 City of Oregon City Transportation System Plan (TSP)[6]

The *City of Oregon City Transportation System Plan* includes guidance for access management for public street intersections and private driveways as well as management techniques to implement access management standards as follows:

As part of Section 5- City Standards for Access Management:

> *"The Oregon City Street Design Standards manual details the recommended City of Oregon City access spacing standards for traffic signal spacing, non-traversable median spacing, public intersections spacing, and private access driveway spacing. Table 5-7 summarizes the minimum public street intersection spacing standards for the City of Oregon City roadway network presented in the Street Design Standards manual, as they relate to new development and redevelopment."*

[5] *Oregon Administrative Rule 660-012 (Division 12- Transportation Planning)*, Oregon Land Development and Conservation Department, July 15, 2004.
[6] *Transportation System Plan*, City of Oregon City, adopted April 2001.

Table 5-7. Minimum City Street Intersection Spacing Standards

Functional Classification	Major Arterial	Minor Arterial	Collector	Neighborhood Collector	Local Street
Major Arterial	2 miles	1 mile	¼ mile	1,000 feet	500 feet
Minor Arterial	1 mile	½ mile	1,000 feet	800 feet	400 feet
Collector	¼ mile	1000 feet	800 feet	600 feet	300 feet
Neighborhood Collector	1000 feet	800 feet	600 feet	500 feet	200 feet
Local Street	500 feet	400 feet	300 feet	200 feet	100 feet

As part of Section 5- Management Techniques:

> *From an operational perspective, the City of Oregon City will implement access management measures to limit the number of redundant access points along roadways. This will enhance roadway capacity and benefit circulation. Improvements to be considered include:*
>
> - *Planning for and developing intersection improvement programs in order to regularly monitor intersection operations and safety problems;*
> - *Purchasing right-of-way and closing driveways; and,*
> - *Installing positive channelization and driveway access controls as necessary.*
>
> *Enforcement of the access spacing standards will be complemented with the provision of alternative access points. Purchasing right-of-way and closing driveways without a parallel road system and/or other local access could seriously affect the viability of the impacted properties. Thus, if an access management approach is taken, alternative access should be developed prior to "land-locking" a given property.*
>
> *As part of every land use action, the City of Oregon City will evaluate the potential need for conditioning a given development proposal with the following items, in order to maintain and/or improve traffic operations and safety along the arterial and collector roadways."*

3.3 Summary of Access Management Spacing Standards in Study Area

Access management spacing standards for Beavercreek Road within the study area are governed by the *City of Oregon City Transportation System Plan*. Table 5-7 as shown above outlines the access spacing standards that apply to Beavercreek Road based on the classification of roadway.

4.0 INVENTORY OF EXISTING CONDITIONS

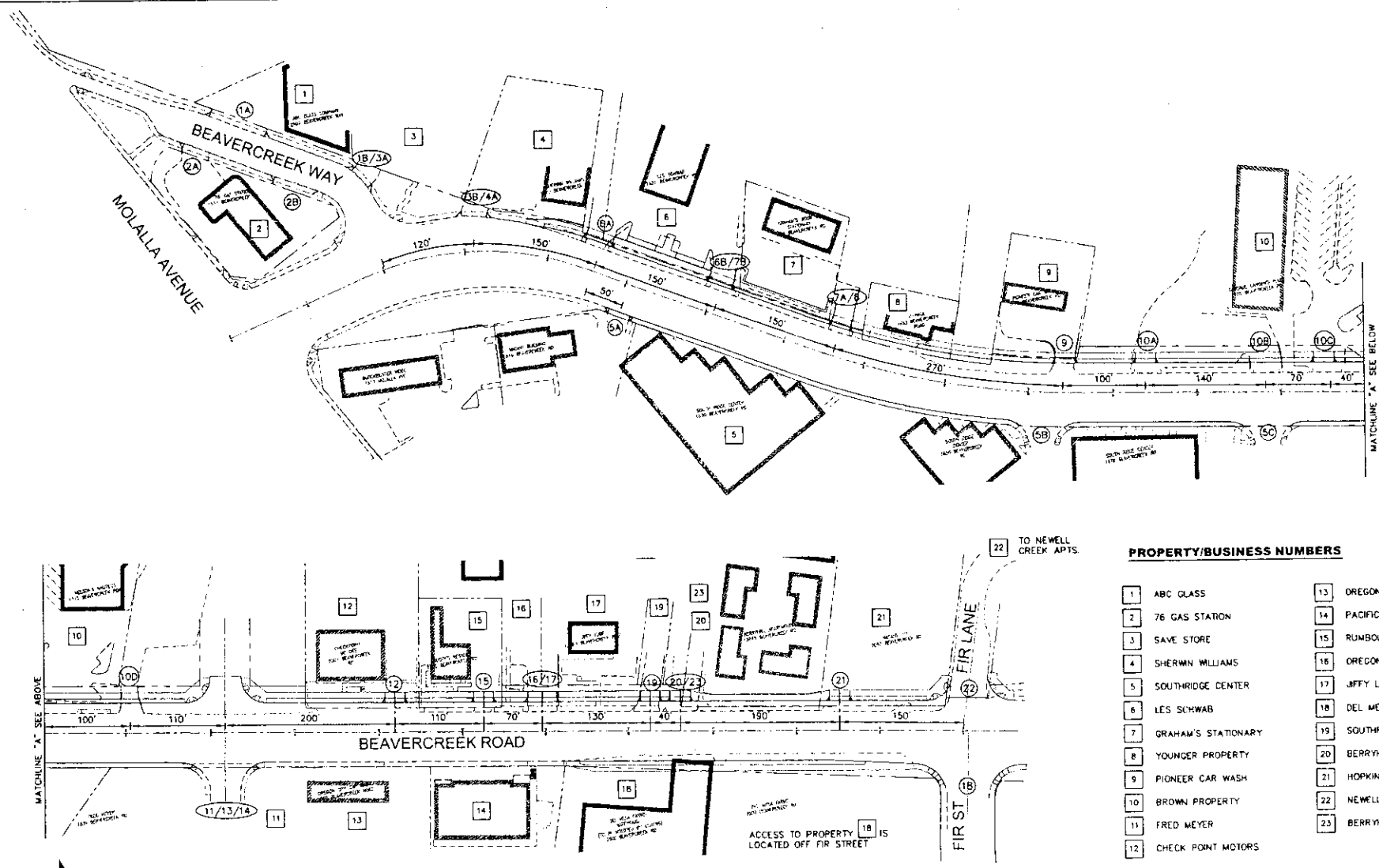
This section includes an inventory of existing conditions that summarizes the public and private approaches in existence today as well as the characteristics of the roadway, land uses, and traffic conditions.

4.1 Public and Private Approach Inventory

Numerous public and private approaches exist today along Beavercreek Road and Beavercreek Way within the study area. Figure 3 illustrates the existing public and private approaches in the study area. Photographs of each of these public and private approaches in the study area are attached in the appendix.

Existing access spacing along Beavercreek Road varies greatly as shown in Figure 3. The distance between public and private intersections ranges from 50 feet to 300. None of these segments meet the City's current access spacing standards for a minor arterial roadway of 500 feet (for local street) or ¼ mile (for collectors). The existing private and public intersections were laid out long before access spacing standards were developed for the City of Oregon City and there are no plans to ensure that each approach meets these standards.

Table 2 summarizes the private approach inventory for each study area property.



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Not to Scale

DKS *Associates*
TRANSPORTATION SOLUTIONS

LEGEND:
- EXISTING DRIVEWAY
- (XX) EXISTING DRIVEWAY REFERENCE NUMBER
- [X] PROPERTY NUMBER

Figure 3
EXISTING ACCESS TO BEAVERCREEK ROAD

Table 2. Background Property Information

Property Number	Business/Tax Lot #	Driveway Number*	Roadway Frontage	Property Usage	Current Usage
1	ABC Glass/ 3-2E-05D-00800	1A	Beavercreek Way	Retail	Full Access
		1B/3A	Beavercreek Way		Full Access
2	Union 76 Gas Station/ 3-2E-05D-00900	2A	Beavercreek Way	Gas Station	Full Access
		2B	Beavercreek Way		Full Access
3	Save Stores/ 3-2E-05D-00700	1B/3A	Beavercreek Way	Retail	Full Access
		3B/4A	Beavercreek Road		Full Access
4	Sherwin Williams/ 3-2E-05D-00702	3B/4A	Beavercreek Road	Retail	Full Access
5	Southridge Center/ 3-2E-05D-01211	5A	Beavercreek Road	Retail	Full Access
		5B	Beavercreek Road		Full Access
		5C	Beavercreek Road		Full Access
6	Les Schwab/ 3-2E-05D-00600 3-2E-05D-00602	6A	Beavercreek Road	Retail	Full Access
		6B/7A	Beavercreek Road		Full Access
7	Graham's Stationary 3-2E-05D-00503	6B/7A	Beavercreek Road	Retail	Full Access
		7B/8	Beavercreek Road		Full Access
8	Younger Property-UHaul/3-2E-05D-00500 3-2E-05D-00401	7B/8	Beavercreek Road	Vacant	Full Access
9	Pioneer Car Wash/ 3-2E-05D-00402	9	Beavercreek Road	Retail	Full Access
10	Milton Brown Property Owner-Nelson's Nautilus, Clark's Lawn & Garden, Mobile Motor Medic, and Cascade Canopies/ 3-2E-05D-00202 3-2E-05D-00204 3-2E-05D-00208	10A	Beavercreek Road	Retail/ Automotive	Full Access
		10B	Beavercreek Road		Full Access
		10C	Beavercreek Road		Full Access
		10D	Beavercreek Road		Closed
11	Fred Meyer 3-2E-05D-01204	11/13/14	Beavercreek Road	Retail	Full Access (Signal)
12	Checkpoint Motors 3-2E-05D-00209	12	Beavercreek Road	Automotive	Full Access
13	Oregon City Car Wash 3-2E-05D-01204	11/13/14	Beavercreek Road	Retail	Full Access (Signal)
14	Pacific Investment Properties 3-2E-05D-01212	11/13/14	Beavercreek Road	Retail	Full Access (Signal)
15	Rumbold's Heating/Rusty's Resale 3-2E-05D-00205	15	Beavercreek Road	Retail	Full Access

Table 2 (Cont). Background Property Information

Property Number*	Business/Tax Lot #	Driveway Number*	Roadway Frontage	Property Usage	Current Usage
16	Oregon City Auto Service/ 3-2E-05D-00207	16/17	Beavercreek Road	Automotive	Full Access
17	Jiffy Lube 3-2E-05D-00214	16/17	Beavercreek Road	Automotive	Full Access
18	Del Mesa Farms 3-2E-05D-01300	18	Fir Street	Industrial	Full Access
19	Southridge Mini Storage/ 3-2E-05D-00100	19	Beavercreek Road	Industrial	Full Access
20	Berryhill Apartments/ 3-2E-04C-00803	20/23	Beavercreek Road	Multi-Family Residential	Full Access
21	Steve Hopkins Property/ 3-2E-04C-00800	21	Beavercreek Road	Vacant	Full Access
22	Newell Creek Apartments/ 3-2E-04C-00808	22	Beavercreek Road via Fir Lane	Multi-Family Residential	Full Access
23	Berryhill Townhomes/ 3-2E-04C-90000	20/23	Beavercreek Road	Single-Family Residential	Full Access

*Note- See Figure 3 for property and driveway reference numbers.

4.2 Traffic Characteristics

Traffic volumes were collected and collision data were compiled to determine the traffic characteristics of the study area. These characteristics play a key role in evaluating access management strategies so that mobility and safety can be preserved and/or enhanced.

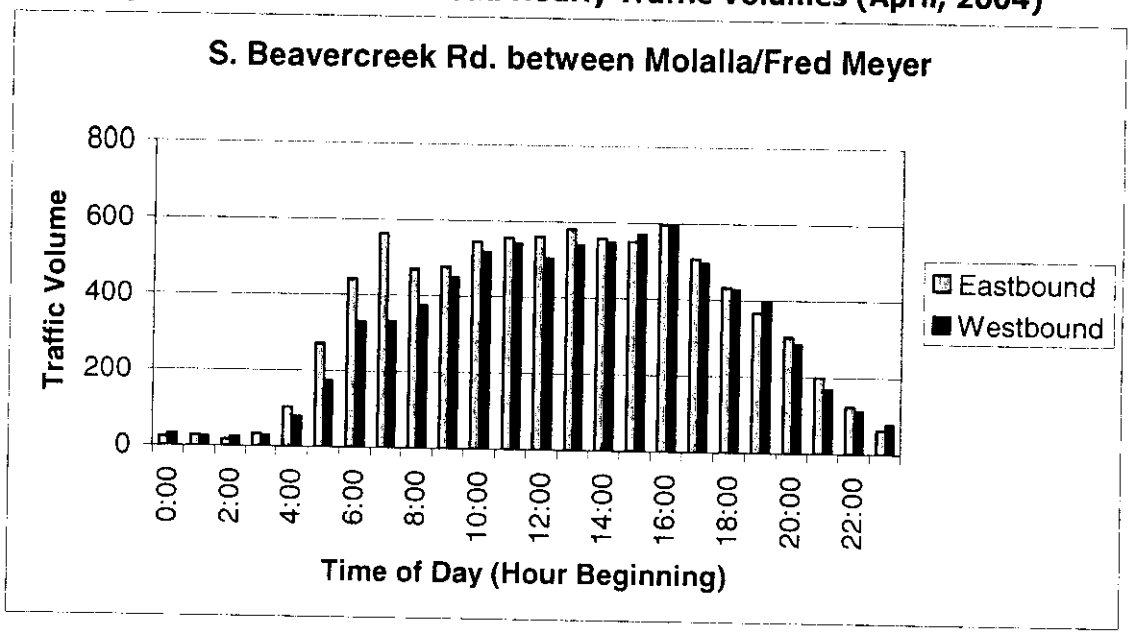
4.2.1 Traffic Volumes

In order to determine the traffic volumes present on Beavercreek Road, 24-hour bi-directional traffic volume counts were conducted on Beavercreek Road west of the Fred Meyer signalized access[7]. The daily bi-direction traffic volumes at this location were 16,000 vehicles. The hourly profile is shown in Figure 4.

Recent vehicle turn movement counts were conducted at the existing unsignalized private driveway and public street intersections during the PM peak period (4:00 p.m. to 6:00 p.m.) to determine the existing trip activity within the study area. The peak hour counts are shown in Figure 6 with the traffic counts attached in the appendix.

[7] 24-hour traffic volume/speed counts conducted in April 2004.

Figure 4. Beavercreek Road Hourly Traffic Volumes (April, 2004)



4.2.2 Existing Intersection Operations

Based on the intersection turn movement counts as previously discussed, intersection operations were evaluated based on the *2000 Highway Capacity Manual* methodology for signalized and unsignalized intersections[8]. The City of Oregon City identifies level of service "D" as their minimum performance standard[9].

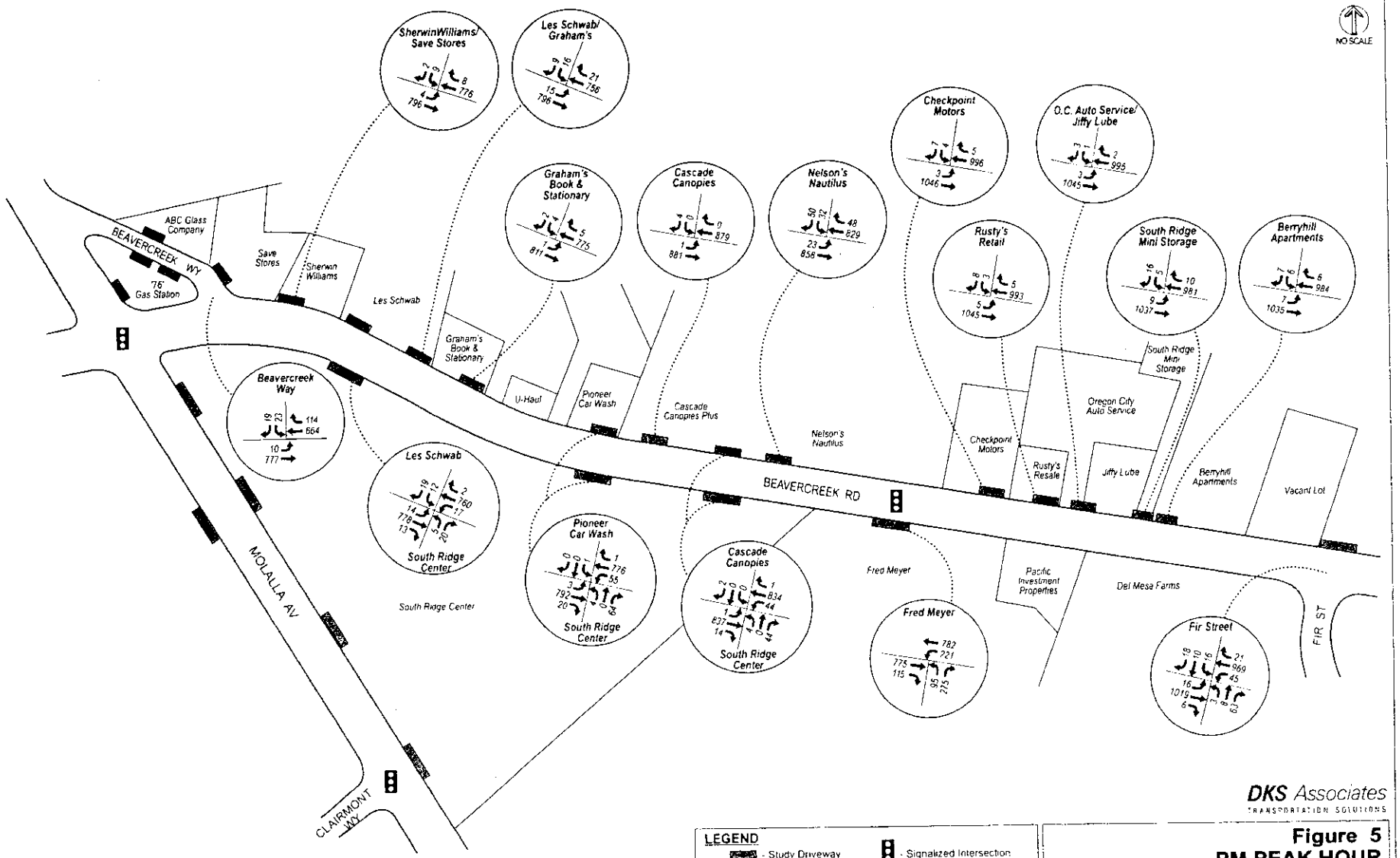
Minimum Transportation Performance Standard. The City of Oregon City identifies LOS D (average vehicle delay below 55.0 seconds for signalized intersections and 35.0 seconds for unsignalized intersections) as the minimum performance standard for both signalized and unsignalized intersections.

Table 3 represents the level of service analysis for existing conditions at study area intersections/driveways. The majority of the unsignalized intersections/driveways do not meet the City's level of service standard due to the minor street approach to Beavercreek Road. Minor street left turn and through movements incur long delays due to the limited gaps created by heavy through volumes on Beavercreek Road. Only 1% to 5% of the total unsignalized intersection volume would experience unacceptable levels of service. But as the delays increase to minor street left turning traffic, drivers can become impatient and may try to take unacceptable gaps in through traffic thus increasing the potential for collisions along Beavercreek Road.

[8] *2000 Highway Capacity Manual,* Transportation Research Board, Washington D.C. Chapters 16 & 17, 2000.
[9] City of Oregon City Transportation System Plan, Adopted April 2001, p.2-56.

Beavercreek Road
Access Management Plan

NO SCALE



DKS Associates
TRANSPORTATION SOLUTIONS

LEGEND

- Study Driveway
- Signalized Intersection
- 00 - PM Peak Volumes

NOTE Peak Hour of the Beavercreek Corridor Occurred Between 4:00-5:00 PM

Figure 5
PM PEAK HOUR STUDY AREA VOLUMES

Table 3. Existing Level of Service Results

Intersection/Driveways	PM Peak Hour		
	Delay (sec)	*LOS*	*V/C*
Signalized Intersection			
Beavercreek Road/Fred Meyer Access	34.3	C	0.92
Unsignalized Intersection			
Beavercreek Road/Fir Street	>50	B/F	
Beavercreek Road/Berryhill Apts.	43.4	B/E	
Beavercreek Road/Southridge Mini Storage	35.6	B/E	
Beavercreek Road/Jiffy Lube	32.5	B/D	
Beavercreek Road/Rusty's Resale	35.8	B/E	
Beavercreek Road/Checkpoint Motors	41.9	B/E	
Beavercreek Road/Nelson's Nautilus	56.7	B/F	
Beavercreek Road/Southridge Center-Nelson's Nautilus	22.3	A/C	
Beavercreek Road/Cascade Canopies	16.1	A/C	
Beavercreek Road/Southridge Center-Pioneer Car Wash	>50	A/F	
Beavercreek Road/Graham's Stationary	31.7	A/D	
Beavercreek Road/Graham's Stationary-Les Schwab	36.2	A/E	
Beavercreek Road/Les Schwab-Southridge Center	36.1	A/E	
Beavercreek Road/Sherwin Williams	37.3	A/E	
Beavercreek Road/Beavercreek Way	30.3	A/D	

Signalized intersection:

Delay = Average intersection delay
LOS = Level of service
V/C = Volume-to-capacity ratio

Unsignalized intersection:

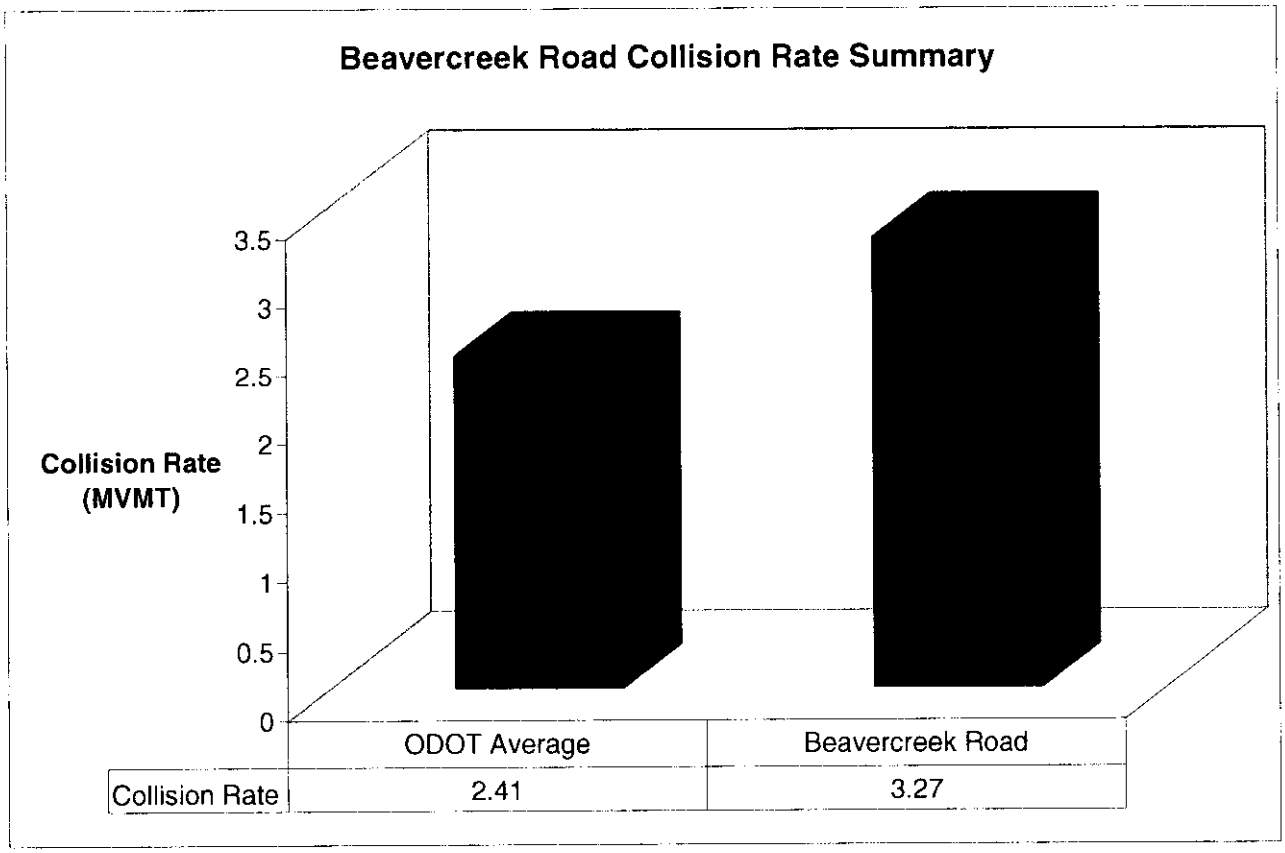
Delay = Average Critical Approach Delay (Minor St.)
LOS = Major Street Left Turn/Minor Street Approach

4.2.3 Collision Data

Collision data for the study area corridor was collected from Clackamas County Sheriff's department and ODOT. There were 27 reported collisions over the last three years of data that resulted in 19 injuries and no fatalities[10]. The majority of these collisions were turning (9 collisions) and rear end (12 collisions) type collisions. It was determined that 12 of the 27 collisions occurred at private unsignalized driveways. The collision rate for this segment of Beavercreek Road was 3.27 collisions per million vehicle miles traveled. The collision rate for Beavercreek Road was compared to the statewide average collision rate of 2.41 collisions per million vehicle miles traveled for similar facilities[11] and was found to be 35% higher. The Beavercreek Road collision rate comparison is summarized in Table 4.

Based on the details of the collision data, the specific driveway location of all of the collisions could not be identified. As the data allowed, collisions were separated into two Beavercreek Road segments to show the approximate location and frequency of the collisions that occurred. The collision data is summarized in Figure 6.

Table 4. Collision Rate Summary

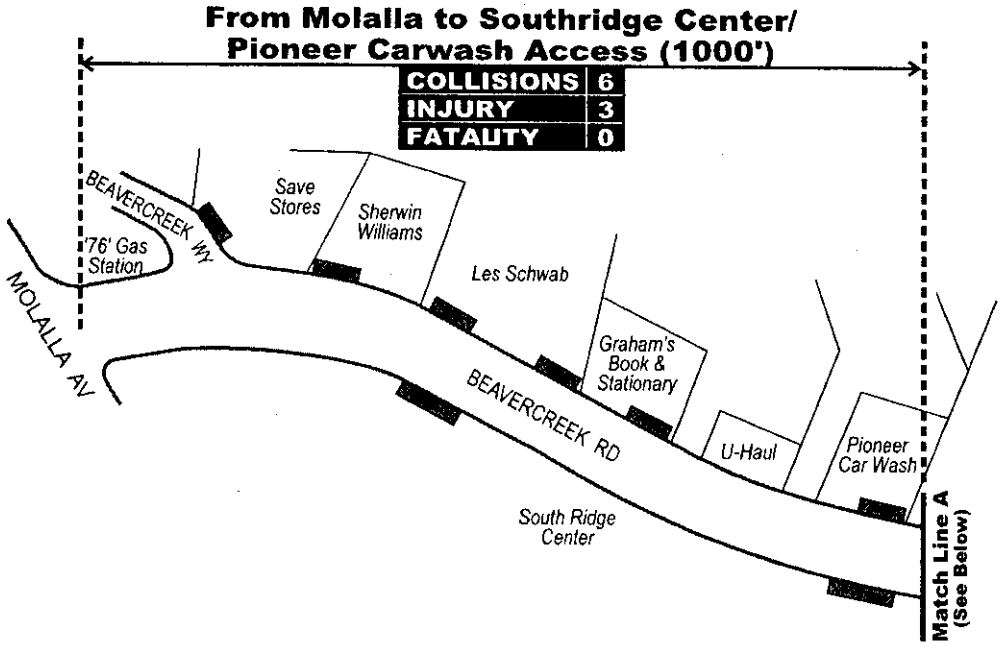


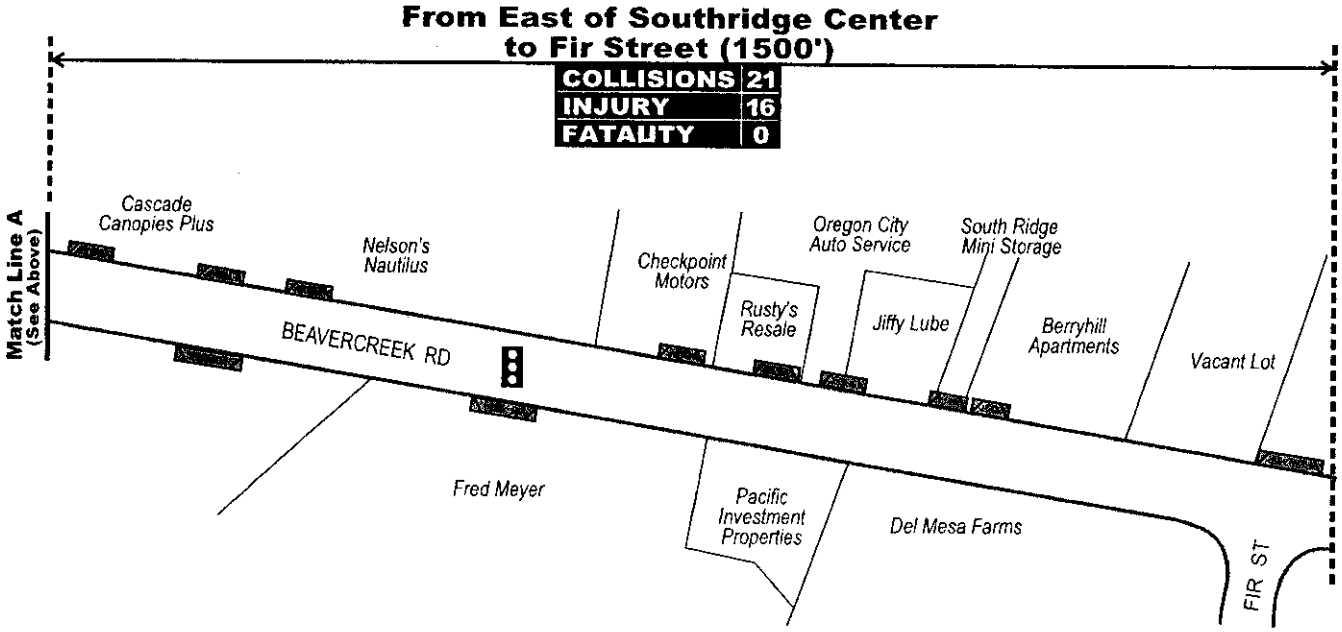
MVMT=Million Vehicle Miles Traveled

[10] Based on collision data provided by ODOT and Clackamas County Sheriff's Department from 2000 to 2002.
[11] *2003 State Highway Crash Rate Tables*, ODOT, January 2005, urban minor arterial classification. This classification was considered most appropriate to Beavercreek Road.

Beavercreek Road
Access Management Plan

NO SCALE





DKS Associates
TRANSPORTATION SOLUTIONS

LEGEND
- Study Driveway
- Existing Traffic Signal

Figure 6
THREE-YEAR COLLISION HISTORY

5.0 ACCESS MANAGEMENT STRATEGIES

The recommended access management strategy for the study area consists of a short-term plan and a long-term plan. It is important to work with each parcel owner individually to meet their access needs, since significant access management changes implemented in the short-term may adversely affect or limit access to existing businesses and properties. Every effort has been made to ensure that property owners have, and continue to have, reasonable access to their properties.

5.1 Property Owner Meetings/Open Houses

The project team has met individually with the majority of the property owners and business owners to discuss both the Beavercreek Road improvement project and the access management plan. The feedback provided at these meetings and an initial open house[12] helped form the first iteration of the short-term and long-term access management plans. After a draft of the short-term and long-term access management plan figures were completed, the project team had two public open houses where additional feedback was provided[13]. The open house attendee's were also given the opportunity to set up individual meetings to discuss individual property needs. The project team followed up with these meetings providing detailed input in regards to the access management plans. The short-term and long-term plans as currently shown, have been modified numerous times to address comments received from local property owners.

5.2 Short-Term Access Management Plan

The short-term access management plan involves modification to access that would occur as part of the planned Beavercreek Road improvement project. These improvements would be constructed when funding is secured. The Beavercreek Road improvement project was identified in the City's TSP to improve the safety for motorists, pedestrians, bicyclists, and to reduce vehicle congestion along the corridor. The TSP identified the following projects to be incorporated along the Beavercreek Road corridor within the project study area (between Beavercreek Way and Fir Street):

- Maintain a typical five-lane cross section with planted median, striped bike lanes, planter strip, as well as sidewalk with curb and gutter on both sides within the project limits (Beavercreek Way to Fir Street) based on the major arterial functional classification.
- Modify Beavercreek Road/Fred Meyer Access traffic signal to provide future signalized access to existing businesses to the north.
- Signalize and provide exclusive left turn lanes at the Beavercreek Road/Fir Street intersection.

The short-term plan would include the improvements as identified above and would also modify the Beavercreek Road/Fred Meyer driveway intersection that would allow for a

[12] Beavercreek Road Improvement Project Open House, December 8, 2004, Oregon City Commission Chambers.
[13] Beavercreek Road Access Management Plan Public Open House, March 8 and 17th, 2005, Oregon City Commission Chambers.

fourth leg to the north. This new roadway (to be built by others) could provide signalized access to fronting business once the roadway to the north is built.

The short-term plan would install raised traffic separators and medians in selective locations to enhance operations and improve safety on Beavercreek Road and would also provide an area for additional landscaping. The short-term access management plan is shown in Figure 7.

The short-term plan will improve the location of approaches and circulation of existing business traffic, while also working towards meeting access management standards, improving safety, and efficiency.

5.2.1 Short-Term Access Management Plan by Driveway

Table 5 describes and Figure 7 illustrates the recommended short-term access management plan that includes the proposed driveway modifications and enhancements that will be required under this plan.

Table 5. Short-Term Access Management Plan by Driveway

Driveway Reference Number*	Tax lot #'s	Roadway Frontage (Side)	Short-Term Plan Driveway Comments**
1A	3-2E-05D-00800	Beavercreek Way (E)	No Change.
1B/3A	3-2E-05D-00800/ 3-2E-05D-00700	Beavercreek Way (E)	No Change.
2A	3-2E-05D-00900	Beavercreek Way (W)	No Change.
2B	3-2E-05D-00900	Beavercreek Way (W)	No Change.
3B/4A	3-2E-05D-00700/ 3-2E-05D-00702	Beavercreek Road (N)	No Change.
5A	3-2E-05D-01211	Beavercreek Road (S)	No Change.
5B	3-2E-05D-01211	Beavercreek Road (S)	Modify existing driveway to allow left in, right in and right out movements. The left out movement shall be prohibited.
5C	3-2E-05D-01211	Beavercreek Road (S)	Modify existing driveway to allow right in and right out movements. The left in and left out movements shall be prohibited.
6A	3-2E-05D-00600 3-2E-05D-00602	Beavercreek Road (N)	No Change.
6B/7A	3-2E-05D-00600/ 3-2E-05D-00503	Beavercreek Road (N)	No Change.
7B/8	3-2E-05D-00401 3-2E-05D-00500	Beavercreek Road (N)	Modify existing driveway to allow right in and right out movements. The left in and left out movements shall be prohibited. This driveway should be modified by removing the median to allow full access to this driveway if tax lot #3-2E-05D-00500 redevelops and the traffic signal is not yet warranted. See long-term plan for traffic signal configuration.

Table 5 (cont.). Short-Term Access Management Plan by Driveway

Driveway Reference Number*	Tax lot #'s	Roadway Frontage (Side)	Short-Term Plan Driveway Comments**
9	3-2E-05D-00402	Beavercreek Road (N)	Relocate the existing access to the western property line (approximately station 19+53) to provide a 24-foot wide access. This driveway shall provide left in, right in and right out movements. The left out movement shall be prohibited per the "Assignment Agreement" SP 98-17 Design Review File #32E0500400.
10A	3-2E-05D-00202 3-2E-05D-00204 3-2E-05D-00208	Beavercreek Road (N)	Modify existing driveway to allow right in and right out movements. The left in and left out movements shall be prohibited. Modify internal circulation to provide connectivity to all project buildings as shown on the short-term plan (see Figure 7).
10B	3-2E-05D-00202 3-2E-05D-00204 3-2E-05D-00208	Beavercreek Road (N)	Remove existing driveway. Modify internal circulation to provide connectivity to all project buildings as shown on the short-term plan (see Figure 7).
10C	3-2E-05D-00202 3-2E-05D-00204 3-2E-05D-00208	Beavercreek Road (N)	Modify existing driveway to allow left in, right in and right out movements. The left out movement shall be prohibited.
10D	3-2E-05D-00202 3-2E-05D-00204 3-2E-05D-00208	Beavercreek Road (N)	No Change. Access is currently closed.
11/13/14	3-2E-05D-01204/ 3-2E-05D-01212	Beavercreek Road (S)	No Change.
12	3-2E-05D-00209	Beavercreek Road (N)	No Change.
15	3-2E-05D-00205	Beavercreek Road (N)	No Change.
16/17	3-2E-05D-00207/ 3-2E-05D-00214	Beavercreek Road (N)	No Change.
18	3-2E-05D-01300	Fir Street	Traffic signal would be constructed at Beavercreek Road/Fir Street.
19	3-2E-05D-00100	Beavercreek Road (N)	No Change.
20/23	3-2E-04C-00803	Beavercreek Road (N)	No Change.
21	3-2E-04C-00800	Beavercreek Road (N)	Property is currently vacant. When development occurs, this driveway should allow for right in and right out movements only. Obtain cross-access agreement with property 22 (tax lot #3-2E-04C-00808) to provide signalized access. Once property 21 has access to signal, access 21 should be removed.
22	3-2E-04C-00808	Beavercreek Road (N)	Traffic signal would be constructed at Beavercreek Road/Fir Street.

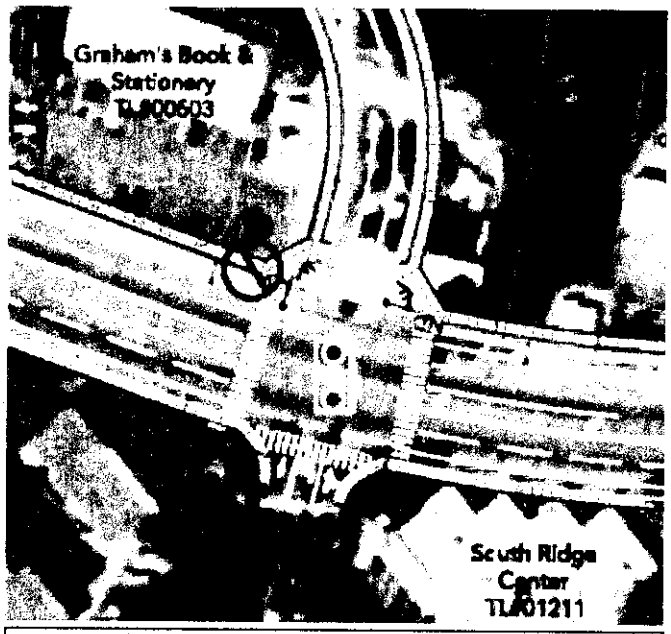
Note- *See Figure 7 for driveway reference numbers.
**See Figure 7 for graphical representation of driveway description.

5.3 Long-Term Access Management Plan

The long-term access management plan includes strategies for private approaches when and if new development or redevelopment occurs beyond the short-term plan. It is expected that the long-term plan could take numerous years to be implemented since it is dependant upon economic redevelopment. By identifying and adopting these long-term strategies now, it will help the City of Oregon City gradually improve roadway operation and safety through sound access management strategies in future years. The main goal of the long-term plan is to improve safety and operations on the corridor while maintaining reasonable access to each parcel through local access to traffic signals. The long-term plan is illustrated in Figure 8.

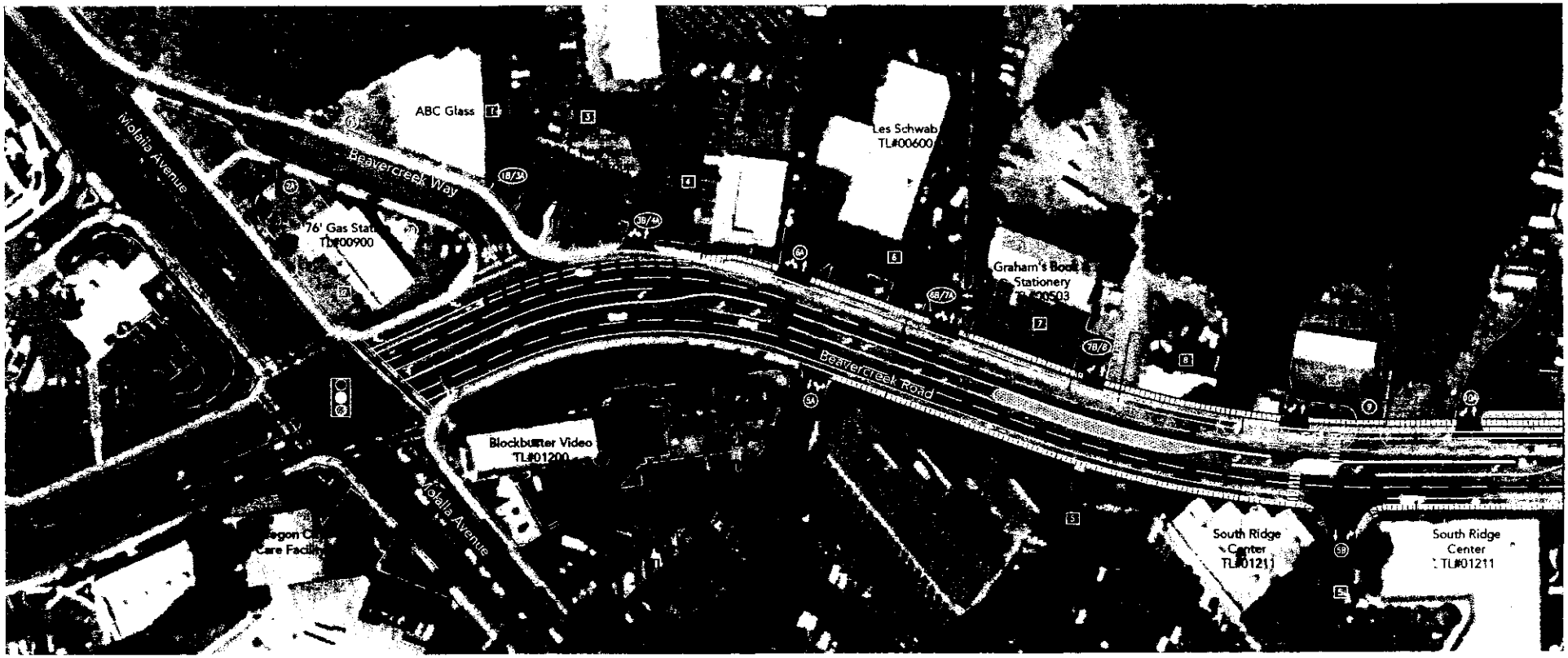
It is the intention of this plan that Beavercreek Way be vacated as part of the long-term access management plan. This roadway shall be vacated when both the Union 76 gas station (tax lot #3-2E-05D-00900) and ABC Glass (tax lot #3-2E-05D-00800) properties redevelop. The Beavercreek Way street vacation should preserve utility easements, giving the previous right-of-way to the adjacent property owners, and requiring cross access easements between fronting businesses.

The long-term plan would include a new traffic signal adjacent to the Younger property (tax lot #3-2E-05D-00501) and Southridge Center (tax lot #3-2E-05D-01211). The purpose of this traffic signal is to provide signalized access to multiple businesses as shown on the long-term access management plan as well as the undeveloped commercial property to the north (this property is currently owned by WalMart). This traffic signal could be constructed at any point in the future as long as traffic signal warrants are met. The intersection layout as shown on the long-term plan is a schematic layout. The final location/geometry should be determined during final design but shall be aligned to provide safe signalized access to properties on the north and south side of Beavercreek Road.



Future Long-Term Traffic Signal on Beavercreek Road

The long-term plan includes a raised median for the entire length of Beavercreek Road from Molalla Avenue to Fir Street with the exception of median breaks at existing and planned traffic signals. Unsignalized driveways as shown in Figure 8 shall be consolidated on property lines as redevelopment occurs to the maximum extent as feasible.



Legend

- Landscaping Areas
- Cement Concrete Surfacing
- Driveway
- Street Lights
- Property Number
- Existing Driveway Reference Number
- Traffic Signals

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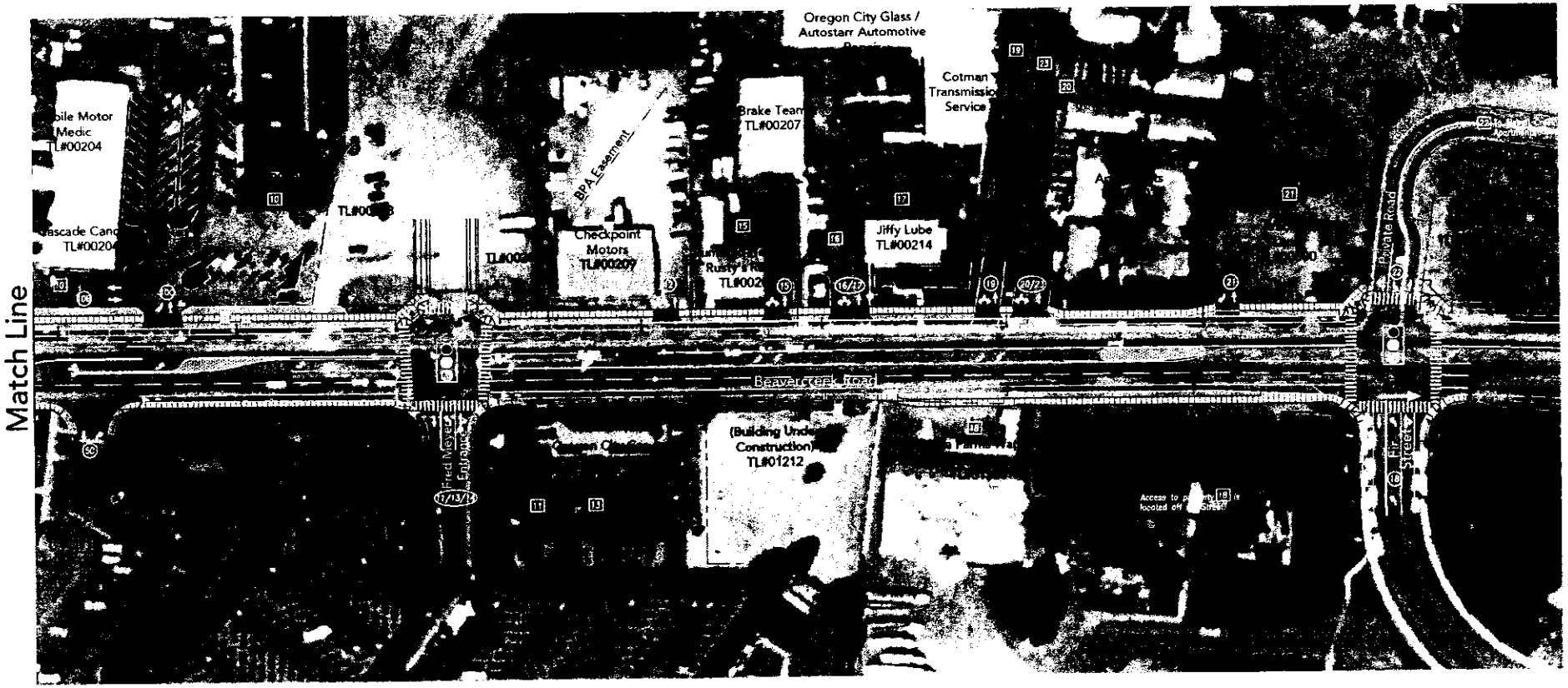
DKS Associates TRANSPORTATION SOLUTIONS

Figure 7
Short-Term Access Management Plan

May 2005 - Page 1 of 2



Legend

- Landscaping Areas
- Cement Concrete Surfacing
- Driveway
- Street Lights
- Property Number
- Existing Driveway Reference Number
- Traffic Signals

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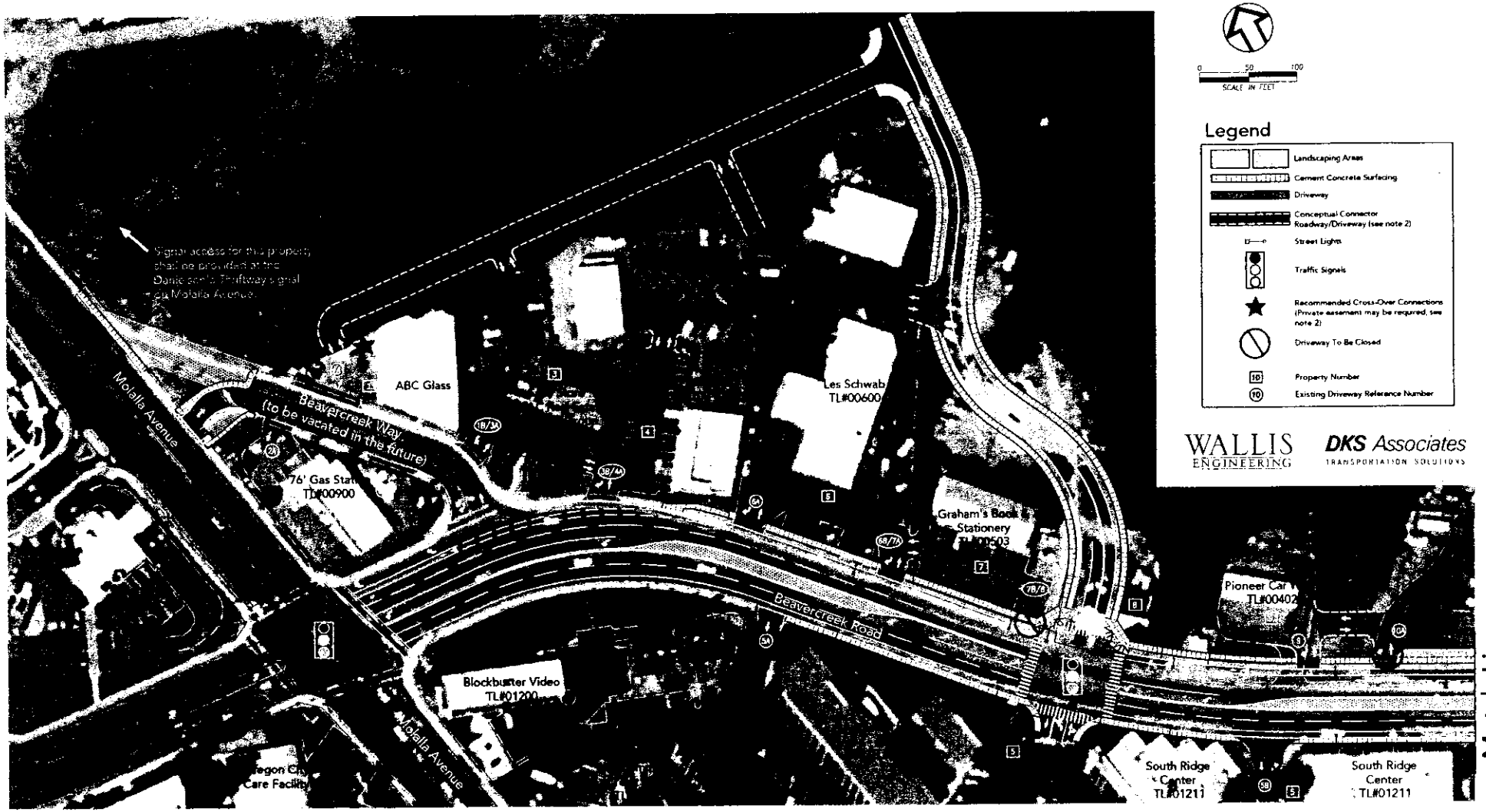
Figure 7 (cont.) Short-Term Access Management Plan

May 2005 - Page 2 of 2



Notes:

1. The goal of the Long Term Access Management Plan is to reduce conflict points, improve safety, and increase vehicle capacity of Beavercreek Road. The specific objectives of the Long Term Access Management Plan are to provide all properties adjacent to Beavercreek Road connectivity to a signalized intersection on Beavercreek Road, and to close and/or consolidate driveways to reduce conflict points and improve overall safety.
2. Crossover agreements between properties shall be provided during redevelopment to meet the above goals and objectives. Locations of crossover connections have been shown conceptually. Final locations may be adjusted during the site plan process provided the goal of the Long Term Plan is met.
3. This plan shall be implemented as redevelopment and/or property consolidation occurs along Beavercreek Road.

Figure 8
Long-Term Access Management Plan

May 2005 - Page 1 of 2

Figure 8 (cont.) Long-Term Access Management Plan

May 2005 - Page 2 of 2

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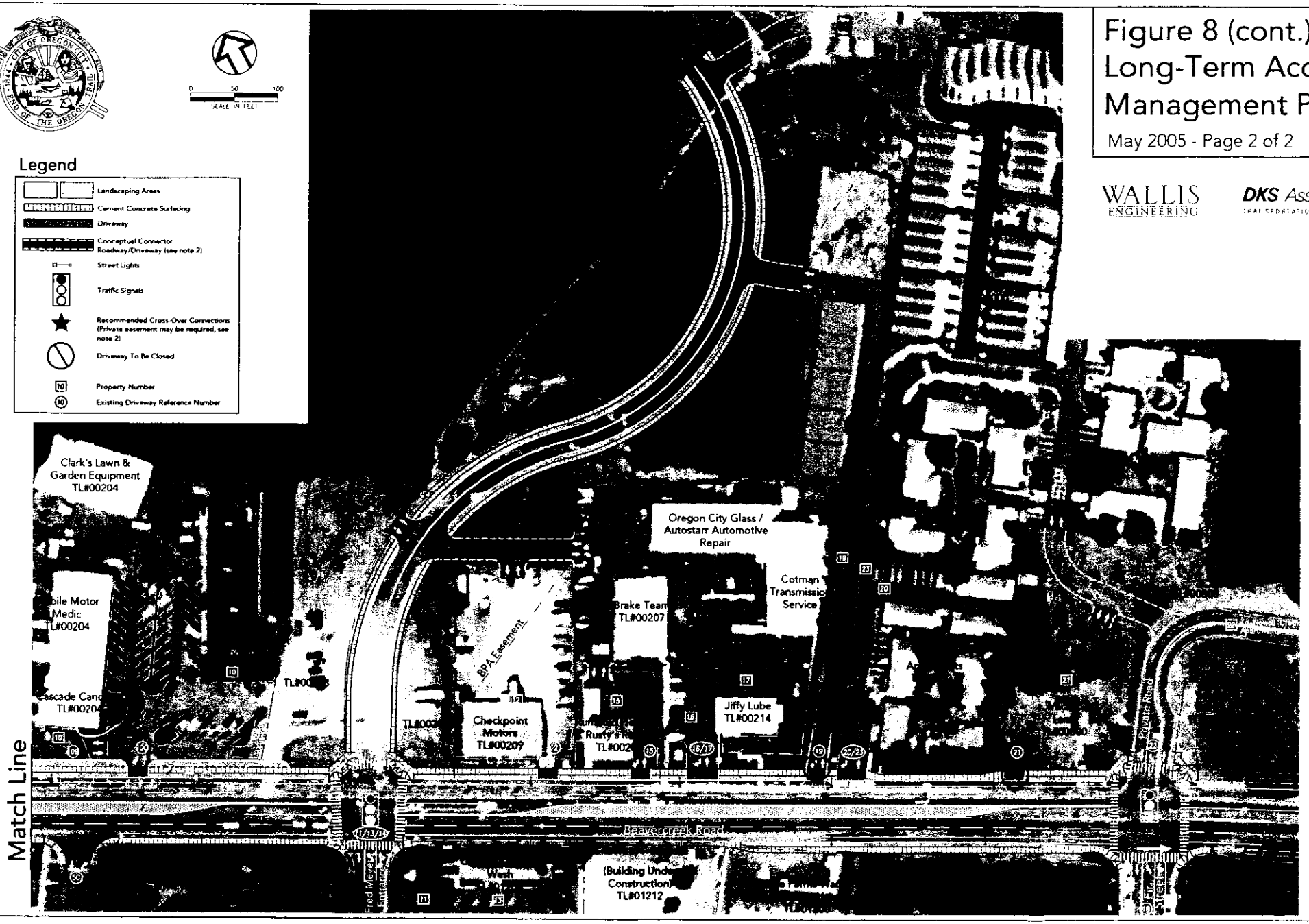


5.3.1 Long-Term Access Management Plan Signalized Intersection Analysis

The long-term access management plan is dependant upon existing and future traffic signals to provide access to businesses. To assure capacity is provided, future 2020 analysis was conducted at the proposed signalized intersections as shown on the long-term access management plan. The 2020 scenario was selected since it is consistent with the horizon year in the City of Oregon City TSP. No analysis was conducted for the unsignalized study area driveways since medians are shown to restrict all unsignalized access to right-in/right out and would therefore operate acceptably. This scenario assumes that the long-term access management plan has been implemented in it's entirety within the next 15-years. The future traffic volumes are shown in Figure 9 and the intersection operations are summarized in Table 6.

Table 6. Future 2020 Level of Service Results with Long-Term (AMP)

Signalized Intersection	PM Peak Hour		
	Delay (sec)	*LOS*	*V/C*
Beavercreek Road/Fir Street	14.2	B	0.59
Beavercreek Road/Fred Meyer Access	28.3	C	0.73
Beavercreek Road/Southridge Center-Younger Property	23.4	C	0.63

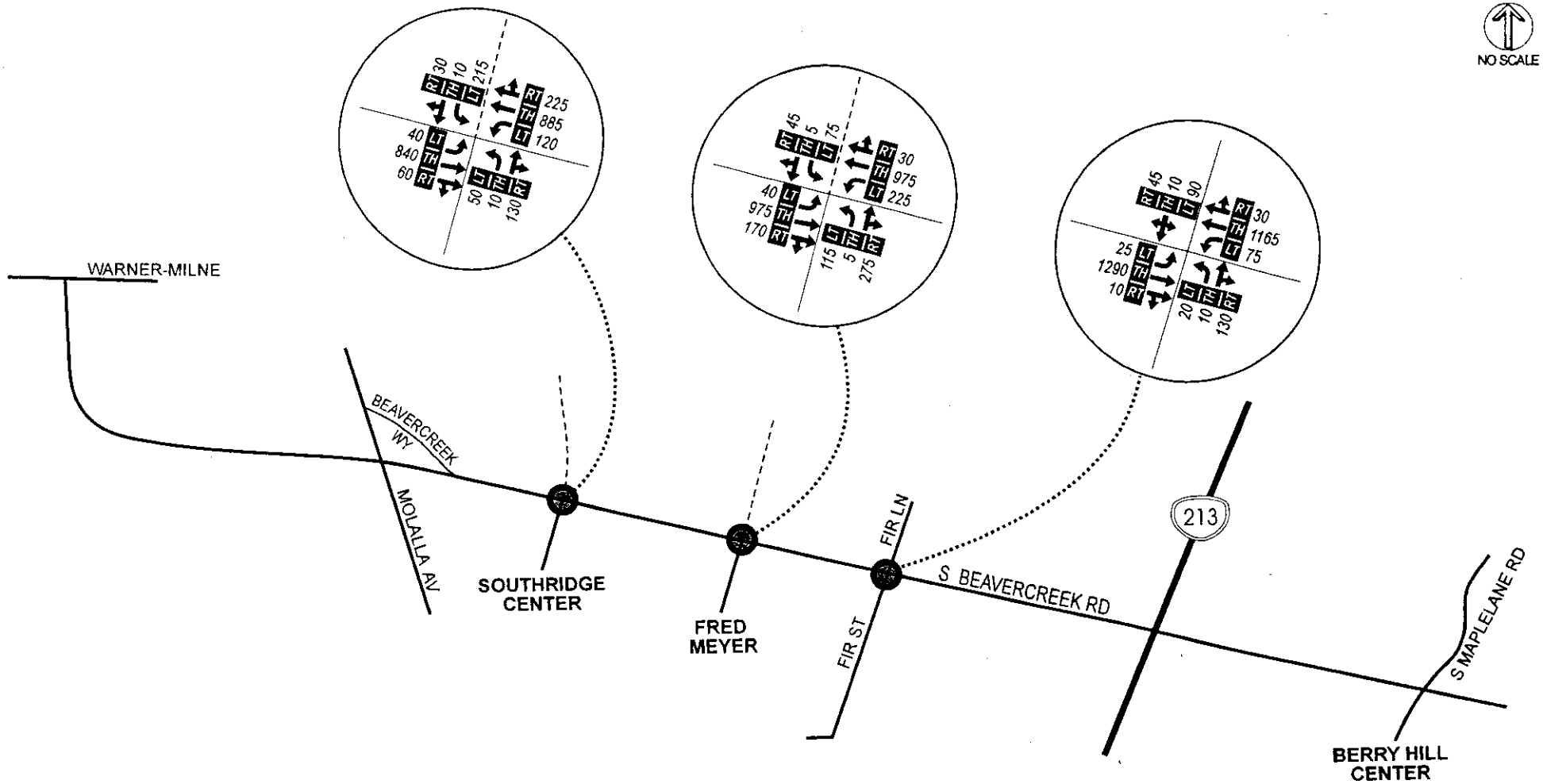
Signalized intersection:

Delay = Average intersection delay
LOS = Level of service
V/C = Volume-to-capacity ratio

5.3.2 Long-Term Access Management Plan by Driveway

The recommended long-term plan, as detailed in Table 7 and Figure 8 (shown previously), includes a strategy to improve safety and operations on the corridor while maintaining reasonable access to each parcel.

Beavercreek Road
Access Management Plan



DKS Associates
TRANSPORTATION SOLUTIONS

LEGEND

- Study Intersection
- Lane Configuration
- Proposed Connection
- XXX - 2020 PM Peak Hour Traffic Volume
- RT - Right Turn Movement
- TH - Through Movement
- LT - Left Turn Movement

Figure 9
FUTURE 2020 PM PEAK HOUR TRAFFIC VOLUMES WITH LONG-TERM ACCESS MANAGEMENT PLAN IMPLEMENTED

Table 7. Long-Term Access Management Plan by Driveway

Driveway Reference Number*	Tax lot #'s	Roadway Frontage (Side)	Long-Term Plan Driveway Comments**
1A	3-2E-05D-00800	Beavercreek Way (E)	Beavercreek Way to be vacated when tax lot parcels 3-2E-05D-00800, 3-2E-05D-00700 and 3-2E-05D-00900 redevelop. Obtain access to future signal by cross access easement to the north (WalMart property tax lot #3400).
1B/3A	3-2E-05D-00800/ 3-2E-05D-00700	Beavercreek Way (E)	Beavercreek Way to be vacated when tax lot parcels 3-2E-05D-00800, 3-2E-05D-00700 and 3-2E-05D-00900 redevelop. Obtain access to future signal by cross access easement to the north (WalMart property tax lot #3400).
2A	3-2E-05D-00900	Beavercreek Way (W)	Beavercreek Way to be vacated when tax lot parcels 3-2E-05D-00800, 3-2E-05D-00700 and 3-2E-05D-00900 redevelop. Obtain access to future signal by cross access easement to the north (WalMart property tax lot #3400).
2B	3-2E-05D-00900	Beavercreek Way (W)	Beavercreek Way to be vacated when tax lot parcels 3-2E-05D-00800, 3-2E-05D-00700 and 3-2E-05D-00900 redevelop. Obtain access to future signal by cross access easement to the north (WalMart property tax lot #3400).
3B/4A	3-2E-05D-00700/ 3-2E-05D-00702	Beavercreek Road (N)	Modify existing driveway to allow right in and right out movements. The left in and left out movements shall be prohibited. Obtain a cross access easement with property 6 (tax lot #3-2E-05D-00600).
5A	3-2E-05D-01211	Beavercreek Road (S)	Modify existing driveway to allow right in movements only. The right out, left in and left out movements shall be prohibited. Access to a future traffic signal is provided with this plan.
5B	3-2E-05D-01211	Beavercreek Road (S)	Close existing driveway. Access to a future traffic signal is provided with this plan.
5C	3-2E-05D-01211	Beavercreek Road (S)	Modify existing driveway to allow right in and right out movements. The left in and left out movements shall be prohibited. Access to a future traffic signal is provided with this plan.
6A	3-2E-05D-00600 3-2E-05D-00602	Beavercreek Road (N)	Modify existing driveway to allow right in and right out movements. The left in and left out movements shall be prohibited. Obtain cross access easements to the north and east to provide signalized access.
6B/7A	3-2E-05D-00600/ 3-2E-05D-00503	Beavercreek Road (N)	Modify existing driveway to allow right in and right out movements. The left in and left out movements shall be prohibited. Obtain cross access easements to the north and east to provide signalized access.
7B/8	3-2E-05D-00401 3-2E-05D-00500	Beavercreek Road (N)	Close existing driveway when adjacent traffic signal is constructed as shown. Access to traffic signal via cross access agreement with Les Schwab.

Table 7 (cont.). Long-Term Access Management Plan by Driveway

Driveway Reference Number*	Tax lot #'s	Roadway Frontage (Side)	Long-Term Plan Driveway Comments**
9	3-2E-05D-00402	Beavercreek Road (N)	Modify existing driveway to allow right in and right out movements. The left in and left out movements shall be prohibited. Obtain cross access easement to the parcel to east (tax lot #3-2E-05D-00204).
10A	3-2E-05D-00204	Beavercreek Road (N)	Consolidate existing driveway with driveway 9.
10B	3-2E-05D-00204	Beavercreek Road (N)	No change from short-term plan.
10C	3-2E-05D-00204	Beavercreek Road (N)	Modify existing driveway to allow right in and right out movements. The left in and left out movements shall be prohibited.
10D	3-2E-05D-00204	Beavercreek Road (N)	Same as short-term plan.
11/13/14	3-2E-05D-01204/ 3-2E-05D-01212	Beavercreek Road (S)	No Change.
12	3-2E-05D-00209	Beavercreek Road (N)	Modify existing driveway to allow right in and right out movements. The left in and left out movements shall be prohibited. Obtain cross access easement to the parcel to the west (tax lot #3-2E-05D-00202) to allow access to traffic signal.
15	3-2E-05D-00205	Beavercreek Road (N)	Modify existing driveway to allow right in and right out movements. The left in and left out movements shall be prohibited. Obtain cross access easements to the adjacent parcel to the north (tax lot #3-2E-05D-00207) and/or to the east (tax lot #3-2E-05D-00209) to allow access to traffic signal.
16/17	3-2E-05D-00207/ 3-2E-05D-00214	Beavercreek Road (N)	Modify existing driveway to allow right in and right out movements. Obtain cross access easement to adjacent parcel to the west (tax lot #3-2E-05D-00202).
18	3-2E-05D-01300	Fir Street	Same as short-term plan.
19	3-2E-05D-00100	Beavercreek Road (N)	Remove existing driveway. Obtain a cross access easement to the parcel to the east (tax lot #3-2E-05D-00202) to provide access to the traffic signal.
20/23	3-2E-04C-00803	Beavercreek Road (N)	Modify existing driveway to allow right in and right out movements. Obtain a cross access easement to the east (tax lot #3-2E-04C-00800) to provide access to the Fir Lane traffic signal.
21	3-2E-04C-00800	Beavercreek Road (N)	Same as short-term plan.
22	3-2E-04C-00808	Beavercreek Road (N)	Same as short-term plan.

Note- *See Figure 8 for driveway reference numbers.
**See Figure 8 for graphical representation of driveway description.

5.4 Access Management Plan by Property

The following section provides a detailed summary of how the short-term and long-term access management plans would affect each property.

5.4.1 Property #1 (ABC Glass)-Tax lot #3-2E-05D-00800

No short-term access changes are required.

In the long-term plan, the city would vacate Beavercreek Way when properties #1, #2 (tax lot #3-2E-05D-00900) and #3 (tax lot #3-2E-05D-00700) redevelop. The City with the street vacation would preserve utility easements (as required) with the associated right-of-way being given to the adjacent property owners. The street vacation would require cross access easements between fronting businesses. An additional cross access easement to the north should be provided with the WalMart property (tax lot #3400) to provide this property with access to a future traffic signal as shown on the long-term plan when redevelopment occurs with either parcel. At the point properties #1, #2, and #3 redevelop, a traffic separator shall be installed on Beavercreek Road as shown on the long-term plan.

5.4.2 Property #2 (Union 76 Gas Station)- Tax lot #3-2E-05D-00900

No short-term access changes are required.

In the long-term plan, the city would vacate Beavercreek Way when properties #1 (tax lot #3-2E-05D-00800), #2 and #3 (tax lot #3-2E-05D-00700) redevelop. The City with the street vacation would preserve utility easements with the associated right-of-way being given to the adjacent property owners. The street vacation would require cross access easements between fronting businesses. At the point properties #1, #2, and #3 redevelop, a traffic separator shall be installed on Beavercreek Road as shown on the long-term plan.

5.4.3 Property #3 (Save Store)- Tax lot #3-2E-05D-00700

No short-term access changes are required.

In the long-term plan, the city would vacate Beavercreek Way when properties #1 (tax lot #3-2E-05D-00800), #2 (tax lot #3-2E-05D-00900) and #3 redevelop. The City with the street vacation would preserve utility easements with the associated right-of-way being given to the adjacent property owners. The street vacation would require cross access easements between fronting businesses. At the point properties #1, #2, and #3 redevelop, a traffic separator shall be installed on Beavercreek Road as shown on the long-term plan.

In the long-term plan, a cross access easement will be required with the WalMart property (tax lot #3400) to the north to provide property #3 with access to the future traffic signal when redevelopment of either parcel occurs.

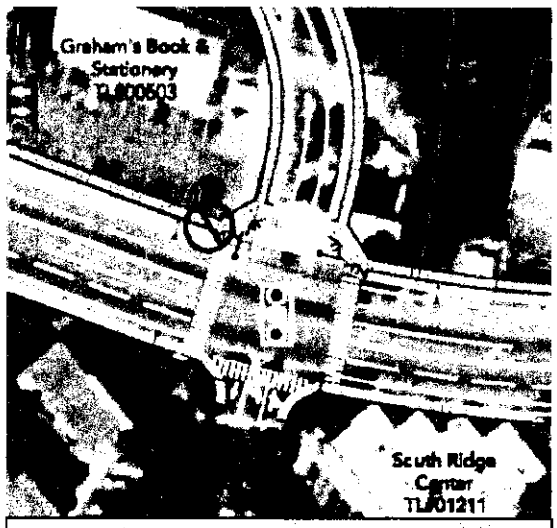
5.4.4 Property #4 (Sherwin Williams)- Tax lot #3-2E-05D-00702

No short-term access changes are required.

The long-term plan would modify the existing access 3B/4A to allow right in and right out movements with a raised median located on Beavercreek Road. A cross access easement with Les Schwab property #6 (tax lot #3-2E-05D-00600) shall be provided when redevelopment of either parcel occurs.

5.4.5 Property #5 (Southridge Center)- Tax lot #3-2E-05D-01211

The short-term plan would modify access 5B to allow for left in, right in and right out movements. The left out movement at access 5B shall be prohibited. Access 5C would be modified in the short-term plan to allow right in and right out movements with a raised median located on Beavercreek Road.



Property #5- Southridge Center Future Signalized Access

The long-term plan would provide Southridge Center with new signalized access. This traffic signal could be constructed at some point in the future as long as traffic signal warrants are met. The intersection layout as shown on the long-term plan is a schematic layout. The final location/geometry should be determined during final design but shall be aligned to provide safe signalized access to Southridge Center and properties on the north side of Beavercreek Road. The construction of a traffic signal as shown on the long-term plan would require Southridge Center to make on-site circulation improvements to accommodate the traffic signal.

With the addition of the new traffic signal, Southridge Center access 5A shall be modified for right in movements only, access 5B shall be removed, and access 5C shall be modified for right in and right out movements only.

5.4.6 Property #6 (Les Schwab)- Tax lot #3-2E-05D-00600 and #3-2E-05D-00602

No short-term access changes are required for this property.

As redevelopment occurs, the long-term plan would modify both accesses 6A and 6B/7A to allow for right in and right out movements only with a raised median located on Beavercreek Road. Cross access agreements shall be obtained to the east from property #6 to property #8 (tax lot #3-2E-05D-00500), to the north from property #6 to the WalMart property (tax lot #3400), and to the west from property #6 to property #4 (tax lot #3-2E-05D-00702) to provide connectivity to the future traffic signal as shown. Accesses 6A and 6B/7A shall be restricted by the raised median as shown on the long-term plan once access to the future traffic signal is provided.

5.4.7 Property #7 (Graham's Stationery)- Tax lot #3-2E-05D-00503

This property currently has a cross-access agreement with property #6 (tax lot #3-2E-05D-00600) and property #8 (tax lot #3-2E-05D-00500).

The short-term plan would modify access 7B/8 to right in right out movements only with a raised median located on Beavercreek Road.

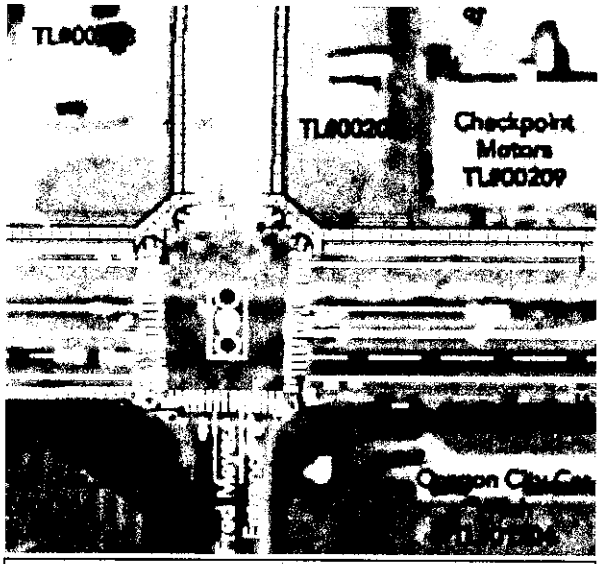
The long-term plan would modify access 6B/7A to right in right out movements only with a raised median located on Beavercreek Road. Access 7B/8 would be removed with the

construction of the adjacent traffic signal as shown on the long-term plan. This property would have connectivity to the future traffic signal through the Les Schwab site.

5.4.8 Property #8 (Younger Property)- Tax lot #3-2E-05D-00500 and Tax lot #3-2E-05D-00401

This property is currently vacant (with the exception of UHaul). The short-term plan would construct a median along the frontage of property #8 restricting access 7B/8 to right in right out movements only. This driveway could be modified by removing the median to allow full access to these properties if tax lots #3-2E-05D-00500 or #3-2E-05D-00401 redevelop and the traffic signal is not yet constructed.

The long-term plan would provide this property with signalized access. A cross access agreement between this property and the Les Schwab Property #6 (tax lot #3-2E-05D-00600) to the west shall be provided when redevelopment of either parcel occurs.



Future signalized access to property #10

5.4.9 Property #9 (Pioneer Carwash)- Tax lot #3-2E-05D-00402

The short-term plan would relocate the existing access 9 to the western property line to provide a 24-foot wide access. This driveway shall provide left in, right in and right out movements. The left out movement shall be prohibited per the "Assignment Agreement" SP 98-17 Design Review File #32E0500400.

The long-term plan would modify access 9 to right in right out movements only with a raised median located on Beavercreek Road. A cross access easement shall be provided to the east between property #9 and property #10 (tax lot #3-2E-05D-00204).

5.4.10 Property #10 (Milton Brown Property)- Tax lot #3-2E-05D-00202, #3-2E-05D-00204 and #3-2E-05D-00208

The short-term plan shows this property being served with a new traffic signal when redevelopment occurs. The signalized access to property #10 would be provided opposite the existing Fred Meyer signalized access. The utilization of the traffic signal would require this property to construct a new roadway to the north as shown on the long-term plan.

The short-term plan would keep access 10D closed as is today. Access 10B would be removed. The internal circulation should be modified to provide connectivity to all project buildings as shown on the short-term plan. Access 10A would be modified to allow right in and right out movements with a raised traffic separator located on Beavercreek Road. Access 10C would be modified to allow for left in, right in and right out movements. The left out movement shall be prohibited as shown on the short-term plan.

The long-term plan would consolidate access 10A with access 9 (property #9). Access 10C would be modified for right in and right out movements with a raised median located on Beavercreek Road.

As redevelopment occurs, cross access easements shall be provided as shown on the long-term plan. These cross access easements are needed between property #10 and property #9 (tax lot #3-2E-05D-00402) to the west, and properties #12 (tax lot #3-2E-05D-00209), #16 (tax lot #3-2E-05D-00207), #19 (tax lot #3-2E-05D-00100), and #23 (tax lot #3-2E-04C-90000) to the east. The overall site circulation of this property should be evaluated during redevelopment to make sure long-term access will accommodate all businesses (i.e. all businesses have access to traffic signal).

5.4.11 Property #11 (Fred Meyer)- Tax lot #3-2E-05D-01204

There are no short-term or long-term access changes with this property.

5.4.12 Property #12 (Checkpoint Motors)- Tax lot #3-2E-05D-00209

There are no short-term access changes with this property. The frontage of this property will be improved creating a formal driveway.

The long-term plan would modify access 12 for right in and right out movements with a raised median located on Beavercreek Road. As redevelopment occurs, a cross access easement shall be provided between property #12 and property #10 (tax lot #3-2E-05D-00202) to provide future access to a traffic signal from this property. Access 12 shall be restricted by the raised median as shown on the long-term plan once access to the Fred Meyer traffic signal is provided.

5.4.13 Property #13 (Oregon City Car Wash)- Tax lot #3-2E-05D-01204

There are no short-term or long-term access changes with this property.

5.4.14 Property #14 (Pan Pacific Properties)- Tax lot #3-2E-05D-01212

There are no short-term or long-term access changes with this property.

5.4.15 Property #15 (Rumbold Property)- Tax lot #3-2E-05D-00205

There are no short-term access changes with this property.

The long-term plan would modify access 15 for right in and right out movements with a raised median located on Beavercreek Road. As redevelopment occurs, a cross access easement shall be provided between property #15 and property #16 (tax lot #3-2E-05D-00207) to provide future access to a traffic signal from this property. Access 15 shall be restricted by the raised median as shown on the long-term plan once access to the Fred Meyer traffic signal is provided with cross access easements.

5.4.16 Property #16 (Oregon City Auto Service)- Tax lot #3-2E-05D-00207

There are no short-term access changes with this property.

The long-term plan would modify access 16/17 for right in and right out movements with a raised median located on Beavercreek Road. As redevelopment occurs, a cross access easement shall be provided between property #16 and properties #15 (tax lot #3-2E-05D-

00205) and #10 (tax lot #3-2E-05D-00202) to provide future access to a traffic signal from this property and adjacent properties. Access 16/17 shall be restricted by the raised median as shown on the long-term plan once access to the Fred Meyer traffic signal is provided with cross access easements.

5.4.17 Property #17 (Jiffy Lube)- Tax lot #3-2E-05D-00214

There are no short-term access changes with this property.

The long-term plan would modify access 16/17 for right in and right out movements with a raised median located on Beavercreek Road. Access 16/17 shall be restricted by the raised median as shown on the long-term plan once access to the Fred Meyer traffic signal is provided with cross access easements.

5.4.18 Property #18 (Del Mesa Farms)- Tax lot #3-2E-05D-01300

The short-term plan would enhance access to this property with the construction of a traffic signal at the Beavercreek Road/Fir Street-Fir Lane intersection.

There are no long-term access changes with this property.

5.4.19 Property #19 (Southridge Mini Storage)- Tax lot #3-2E-05D-00100

There are no short-term access changes with this property.

As redevelopment of this property occurs, the long-term plan would remove access 19. A cross access easement shall be provided to and from property #10 (tax lot #3-2E-05D-00202) to provide future access to a traffic signal from this property. Access 19 shall be removed once access to the Fred Meyer traffic signal is provided with cross access easements.

5.4.20 Property #20 (Berryhill Apartments)- Tax lot #3-2E-04C-00803

There are no short-term access changes with this property.

The long-term plan would modify access 20/23 for right in and right out movements with a raised median located on Beavercreek Road. During redevelopment, a cross access easement with property #21 (tax lot #3-2E-04C-00800) and property #22 (tax lot #3-2E-04C-00808) to the east shall be obtained to provide access to and from the Fir Lane traffic signal. Access 20/23 shall be restricted by the raised median as shown on the long-term plan once access to the future Fir Street traffic signal is provided with cross access easements.

5.4.21 Property #21 (Hopkins Property)- Tax lot #3-2E-04C-00800

This parcel is currently vacant. When this property redevelops, access 21 would provide right in and right out access as shown on the short-term plan. A cross access agreement shall be obtained with property #22 (tax lot #3-2E-04C-00808) for shared access to the traffic signal. Once an agreement is in place that would provide signalized access to this property, access 21 shall be removed. A cross access easement shall be provided from this property during redevelopment to property #20 (tax lot #3-2E-04C-00803) and/or property #23 (tax lot #3-2E-04C-90000) to provide future access to the traffic signal.

5.4.22 Property #22 (Newell Creek Apartments)- Tax lot #3-2E-04C-00808

The short-term plan would enhance access to this property with the construction of a traffic signal at the Beavercreek Road/Fir Street-Fir Lane intersection.

There are no long-term access changes with this property.

When this property redevelops, an agreement shall be provided with property #21 (tax lot #3-2E-04C-00800), property #20 (tax lot #3-2E-04C-00803) and property #23 (tax lot #3-2E-04C-90000) for shared access to the traffic signal via Fir Lane.

5.4.23 Property #23 (Berryhill Townhomes)- Tax lot #3-2E-04C-90000

There are no short-term access changes with this property.

The long-term plan would modify access 20/23 for right in and right out movements with a raised median located on Beavercreek Road. Access to the future traffic signal would be provided to this property with a cross access easement between either property #23 or property #20 (tax lot #3-2E-04C-00803) with property #21 (tax lot #3-2E-04C-00800). Access 20/23 shall be restricted by the raised median as shown on the long-term plan once access to the future Fir Street traffic signal is provided with cross access easements.

As redevelopment occurs, a cross access easement shall be provided between property #23 and property #10 (tax lot #3-2E-05D-00202) to provide future access to a traffic signal from this property.

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Appendix

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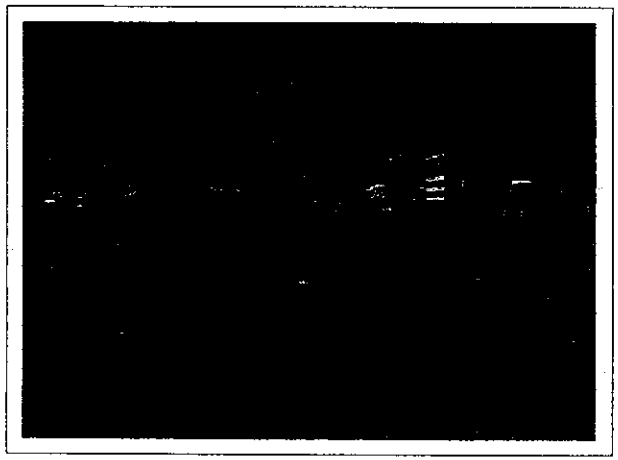
Existing Access Pictures



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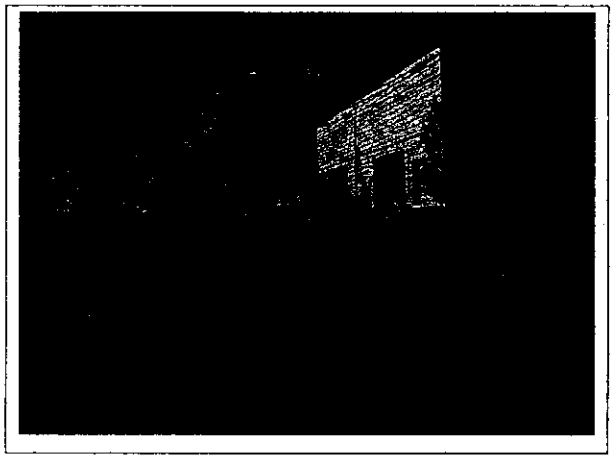

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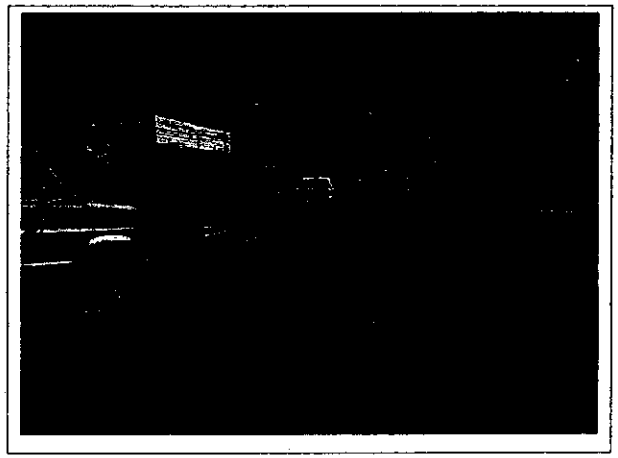

Access 2A

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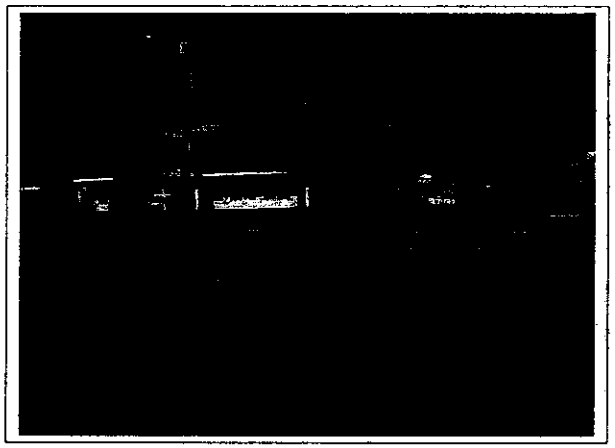

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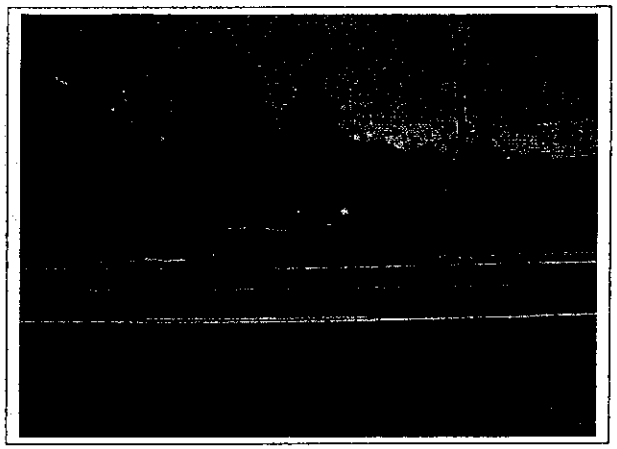

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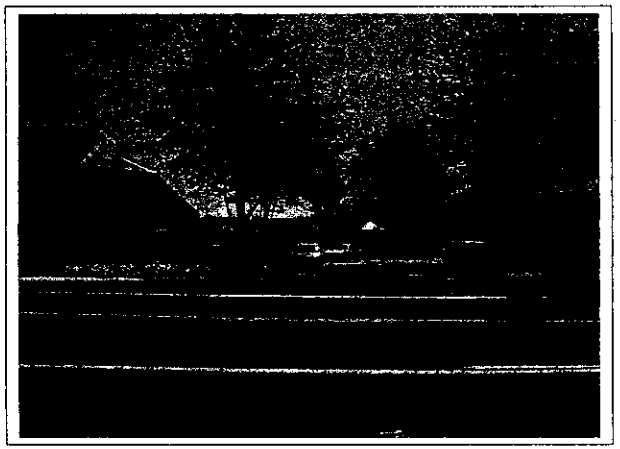

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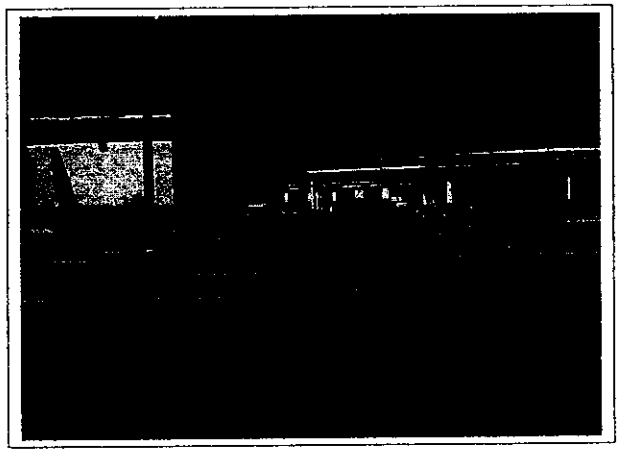
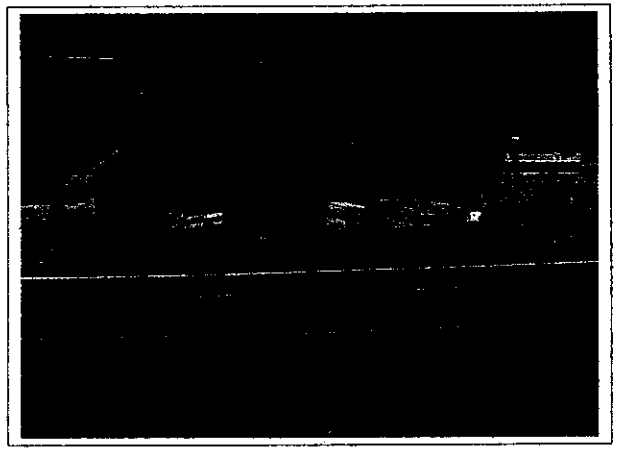


Access 6A

Access 6B/7A



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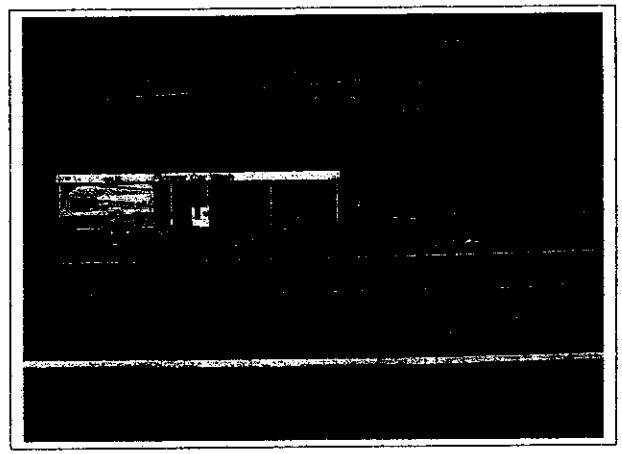

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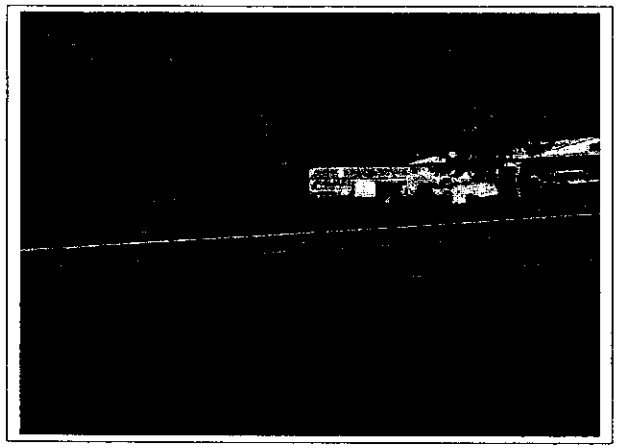

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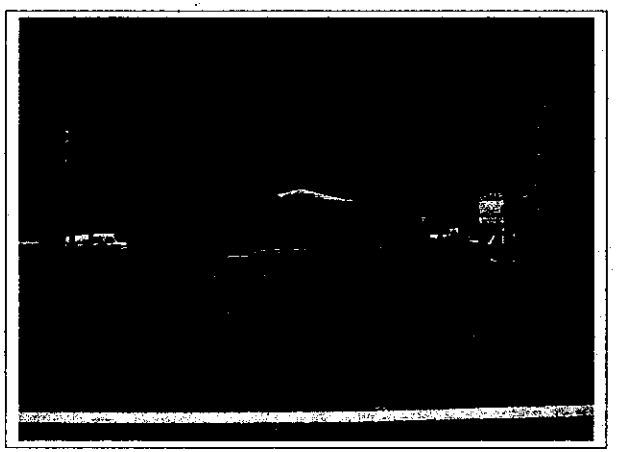
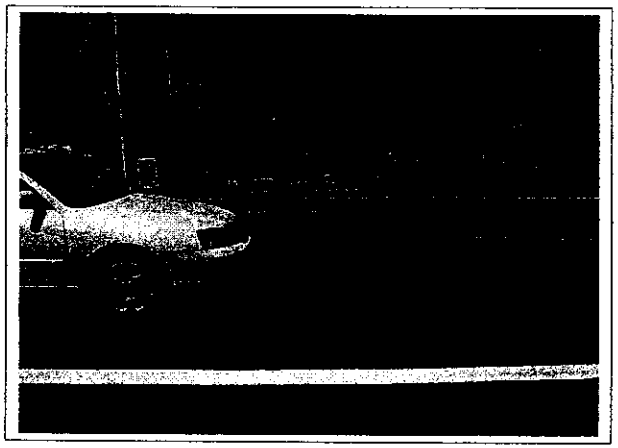


Access 10B

Access10C



Access 10D

Access 11/13/14

Access 12

Access 15

Access 16/17

Access 18

Access 19

Access 20/23

Access 21

Access 22

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Level of Service Descriptions

TRAFFIC LEVELS OF SERVICE

Analysis of traffic volumes is useful in understanding the general nature of traffic in an area, but by itself indicates neither the ability of the street network to carry additional traffic nor the quality of service afforded by the street facilities. For this, the concept of *level of service* has been developed to subjectively describe traffic performance. Level of service can be measured at intersections and along key roadway segments.

Level of service categories are similar to report card ratings for traffic performance. Intersections are typically the controlling bottlenecks of traffic flow and the ability of a roadway system to carry traffic efficiently is generally diminished in their vicinities. Levels of Service A, B and C indicate conditions where traffic moves without significant delays over periods of peak travel demand. Level of service D and E are progressively worse peak hour operating conditions and F conditions represent where demand exceeds the capacity of an intersection. Most urban communities set level of service D as the minimum acceptable level of service for peak hour operation and plan for level of service C or better for all other times of the day. The *Highway Capacity Manual* provides level of service calculation methodology for both intersections and arterials.[1] The following three sections provide interpretations of the analysis approaches.

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1 *2000 Highway Capacity Manual*, Transportation Research Board, Washington D.C., 2000, Chapters 16 and 17.

UNSIGNALIZED INTERSECTIONS (Two-Way Stop Controlled)

Unsignalized intersection level of service is reported for the major street and minor street (generally, left turn movements). The method assesses available and critical gaps in the traffic stream which make it possible for side street traffic to enter the main street flow. The *2000 Highway Capacity Manual* describes the detailed methodology. It is not unusual for an intersection to experience level of service E or F conditions for the minor street left turn movement. It should be understood that, often, a poor level of service is experienced by only a few vehicles and the intersection as a whole operates acceptably.

Unsignalized intersection levels of service are described in the following table.

Level of Service	Expected Delay	(Sec/Veh)
A	Little or no delay	0-10.0
B	Short traffic delay	>10.1-15.0
C	Average traffic delays	>15.1-25.0
D	Long traffic delays	>25.1-35.0
E	Very long traffic delays	>35.1-50.0
F	Extreme delays potentially affecting other traffic movements in the intersection	> 50

Source: 2000 *Highway Capacity Manual*, Transportation Research Board Washington, D.C.

SIGNALIZED INTERSECTIONS

For signalized intersections, level of service is evaluated based upon average vehicle delay experienced by vehicles entering an intersection. Control delay (or signal delay) includes initial deceleration delya, queue move-up time, stopped delay, and final acceleration delay. In previous versions of this chapter of the HCM (1994 and earlier), delay included only stopped delay. As delay increases, the level of service decreases. Calculations for signalized and unsignalized intersections are different due to the variation in traffic control. The *2000 Highway Capacity Manual* provides the basis for these calculations.

Level of Service	Delay (secs.)	Description
A	≤10.00	**Free Flow/Insignificant Delays:** No approach phase is fully utilized by traffic and no vehicle waits longer than one red indication. Most vehicles do not stop at all. Progression is extremely favorable and most vehicles arrive during the green phase.
B	10.1-20.0	**Stable Operation/Minimal Delays:** An occasional approach phase is fully utilized. Many drivers begin to feel somewhat restricted within platoons of vehicles. This level generally occurs with good progression, short cycle lengths, or both.
C	20.1-35.0	**Stable Operation/Acceptable Delays:** Major approach phases fully utilized. Most drivers feel somewhat restricted. Higher delays may result from fair progression, longer cycle lengths, or both. Individual cycle failures may begin to appear at this level, and the number of vehicles stopping is significant.
D	35.1-55.0	**Approaching Unstable/Tolerable Delays:** The influence of congestion becomes more noticeable. Drivers may have to wait through more than one red signal indication. Longer delays may result from some combination of unfavorable progression, long cycle lengths, or high v/c ratios. The proportion of vehicles not stopping declines, and individual cycle failures are noticeable.
E	55.1-80.0	**Unstable Operation/Significant Delays:** Volumes at or near capacity. Vehicles may wait though several signal cycles. Long queues form upstream from intersection. These high delay values generally indicate poor progression, long cycle lengths, and high v/c ratios. Individual cycle failures are a frequent occurrence.
F	≥80.0	**Forced Flow/Excessive Delays:** Represents jammed conditions. Queues may block upstream intersections. This level occurs when arrival flow rates exceed intersection capacity, and is considered to be unacceptable to most drivers. Poor progression, long cycle lengths, and v/c ratios approaching 1.0 may contribute to these high delay levels.

Source: *2000 Highway Capacity Manual*, Transportation Research Board, Washington D.C.

DKS Associates
TRANSPORTATION SOLUTIONS

Level of Service Calculations

Beavercreek Road Access Management Plan
Existing Conditions
PM Peak

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #5 Beavercreek Road/Fir Street

Average Delay (sec/veh): 2.5 Worst Case Level Of Service: F[71.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:	>> Count Date: 8 Apr 2004 << 4-6											
Base Vol:	3	8	63	16	1	18	16	1019	6	45	969	21
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	3	8	63	16	1	18	16	1019	6	45	969	21
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96	0.96
PHF Volume:	3	8	66	17	1	19	17	1061	6	47	1009	22
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	3	8	66	17	1	19	17	1061	6	47	1009	22
Critical Gap Module:												
Critical Gp:	7.5	6.5	6.9	7.5	6.5	6.9	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	4.0	3.3	3.5	4.0	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1697	2223	534	1682	2215	516	1031	xxxx	xxxxx	1068	xxxx	xxxxx
Potent Cap.:	61	44	496	63	44	510	669	xxxx	xxxxx	648	xxxx	xxxxx
Move Cap.:	54	40	496	42	40	510	669	xxxx	xxxxx	648	xxxx	xxxxx
Volume/Cap:	0.06	0.21	0.13	0.39	0.03	0.04	0.02	xxxx	xxxx	0.07	xxxx	xxxx
Level Of Service Module:												
Queue:	0.2	xxxx	xxxxx	1.4	xxxx	xxxxx	0.1	xxxx	xxxxx	0.2	xxxx	xxxxx
Stopped Del:	76.3	xxxx	xxxxx	136.6	xxxx	xxxxx	10.5	xxxx	xxxxx	11.0	xxxx	xxxxx
LOS by Move:	F	*	*	F	*	*	B	*	*	B	*	*
Movement:	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT	LT - LTR		RT
Shared Cap.:	xxxx	xxxx	216	xxxx	xxxx	315	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	1.4	xxxxx	xxxx	0.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	30.1	xxxxx	xxxx	17.2	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	D	*	*	C	*	*	*	*	*	*
ApproachDel:	32.0			71.7			xxxxxx			xxxxxx		
ApproachLOS:	D			F			*			*		

Beavercreek Road Access Management Plan
Existing Conditions
PM Peak

Level Of Service Computation Report
2000 HCM Operations Method (Base Volume Alternative)

Intersection #9 Beavercreek Rd/Fred Meyer

Cycle (sec): 100 Critical Vol./Cap. (X): 0.920
Loss Time (sec): 12 (Y+R = 4 sec) Average Delay (sec/veh): 34.3
Optimal Cycle: 120 Level Of Service: C

Approach:	North Bound					South Bound					East Bound					West Bound				
Movement:	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R	L	-	T	-	R
Control:	Protected					Protected					Protected					Protected				
Rights:	Include					Include					Include					Include				
Min. Green:	0		0		0	0		0		0	0		0		0	0		0		0
Lanes:	1 0	0	0	0	1	0	0	0	0	0	0	0	0	1	0	1	0	1	0	0
Volume Module:	>> Count Date: 8 Apr 2004 << 4-6 PM																			
Base Vol:	95		0		275	0		0		0	0		775		115	221		782		0
Growth Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Initial Bse:	95		0		275	0		0		0	0		775		115	221		782		0
User Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
PHF Adj:	0.95	0.95		0.95		0.95	0.95		0.95		0.95	0.95		0.95		0.95	0.95		0.95	
PHF Volume:	100		0		289	0		0		0	0		816		121	233		823		0
Reduct Vol:	0		0		0	0		0		0	0		0		0	0		0		0
Reduced Vol:	100		0		289	0		0		0	0		816		121	233		823		0
PCE Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
MLF Adj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	
Final Vol.:	100		0		289	0		0		0	0		816		121	233		823		0
Saturation Flow Module:																				
Sat/Lane:	1900	1900		1900		1900	1900		1900		1900	1900		1900		1900	1900		1900	
Adjustment:	0.95	1.00		0.85		1.00	1.00		1.00		1.00	1.00		0.98		0.98	0.95		1.00	
Lanes:	1.00	0.00		1.00		0.00	0.00		0.00		0.00	0.00		0.87		0.13	1.00		1.00	
Final Sat.:	1805		0		1615	0		0		0	0		1626		241	1805		1900		0
Capacity Analysis Module:																				
Vol/Sat:	0.06	0.00		0.18		0.00	0.00		0.00		0.00	0.00		0.50		0.50	0.13		0.43	0.00
Crit Moves:				****										****			****			
Green/Cycle:	0.19	0.00		0.19		0.00	0.00		0.00		0.00	0.00		0.55		0.55	0.14		0.69	0.00
Volume/Cap:	0.28	0.00		0.92		0.00	0.00		0.00		0.00	0.00		0.92		0.92	0.92		0.63	0.00
Delay/Veh:	34.8	0.0		70.4		0.0	0.0		0.0		0.0	0.0		33.8		33.8	78.3		9.8	0.0
User DelAdj:	1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00		1.00	1.00		1.00	1.00
AdjDel/Veh:	34.8	0.0		70.4		0.0	0.0		0.0		0.0	0.0		33.8		33.8	78.3		9.8	0.0
HCM2kAvg:	3	0		13		0	0		0		0	0		31		31	11		14	0

Beavercreek Road Access Management Plan
Existing Conditions
PM Peak

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #10 Beavercreek Road/Berryhill Apts.

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: E[43.4]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0		0 0 1!	0 0		1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	6	0	7	7	1035	0	0	984	6
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	6	0	7	7	1035	0	0	984	6
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99
PHF Volume:	0	0	0	6	0	7	7	1045	0	0	994	6
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	6	0	7	7	1045	0	0	994	6
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	2057	xxxx	997	1000	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	61	xxxx	299	692	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	61	xxxx	299	692	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.10	xxxx	0.02	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.3	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	107	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	43.4	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	E	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			43.4			xxxxxx			xxxxxx		
ApproachLOS:	*			E			*			*		

Beavercreek Road Access Management Plan
Existing Conditions
PM Peak

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #11 Beavercreek Road/SR Mini Storage

Average Delay (sec/veh): 0.4 Worst Case Level Of Service: E[35.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0 0		0 0 1!	0 0		1 0	1 0	0	0 0	0 1	0
Volume Module:												
Base Vol:	0	0	0	5	0	16	9	1037	0	0	981	10
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	5	0	16	9	1037	0	0	981	10
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	5	0	17	9	1092	0	0	1033	11
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	5	0	17	9	1092	0	0	1033	11
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	2148	xxxx	1038	1043	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	54	xxxx	283	667	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	53	xxxx	283	667	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.10	xxxx	0.06	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	140	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	35.6	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	E	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			35.6			xxxxxx			xxxxxx		
ApproachLOS:	*			E			*			*		

Beavercreek Road Access Management Plan
Existing Conditions
PM Peak

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #12 Beavercreek Road/Jiffy Lube Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: D[32.5]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	0 0	1!	0 0	1 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	0	0	1	0	3	3	1045	0	0	995	2
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	1	0	3	3	1045	0	0	995	2
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	1	0	3	3	1100	0	0	1047	2
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	1	0	3	3	1100	0	0	1047	2
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	2155	xxxx	1048	1049	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	53	xxxx	279	663	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	53	xxxx	279	663	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.02	xxxx	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	135	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.1	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	32.5	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	D	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			32.5			xxxxxx			xxxxxx		
ApproachLOS:	*			D			*			*		

Beavercreek Road Access Management Plan
Existing Conditions
PM Peak

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #13 Beavercreek Road/Rusty's Resail Access

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: E[35.8]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	0 0	1!	0 0	1 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	0	0	3	0	8	5	1045	0	0	993	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	3	0	8	5	1045	0	0	993	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	3	0	8	5	1100	0	0	1045	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	3	0	8	5	1100	0	0	1045	5
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	2158	xxxx	1048	1051	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	53	xxxx	279	663	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	53	xxxx	279	663	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.06	xxxx	0.03	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	129	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	35.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	E	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			35.8			xxxxxx			xxxxxx		
ApproachLOS:	*			E			*			*		

Beavercreek Road Access Management Plan
Existing Conditions
PM Peak

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #14 Beavercreek Road/Checkpoint Motors Driveway

Average Delay (sec/veh): 0.2 Worst Case Level Of Service: E[41.9]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	0 0	1!	0 0	1 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	0	0	4	0	7	3	1046	0	0	996	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	4	0	7	3	1046	0	0	996	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	4	0	7	3	1101	0	0	1048	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	4	0	7	3	1101	0	0	1048	5
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	2158	xxxx	1051	1054	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	53	xxxx	278	661	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	53	xxxx	278	661	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.08	xxxx	0.03	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	109	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	41.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	E	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			41.9			xxxxxx			xxxxxx		
ApproachLOS:	*			E			*			*		

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #15 Beavercreek Road/Nelson's Nautilus

Average Delay (sec/veh): 2.7 Worst Case Level Of Service: F[56.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	0 0	1!	0 0	1 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	0	0	32	0	50	23	858	0	0	829	48
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	32	0	50	23	858	0	0	829	48
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	34	0	53	24	903	0	0	873	51
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	34	0	53	24	903	0	0	873	51
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1849	xxxx	898	923	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	83	xxxx	341	740	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	81	xxxx	341	740	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.42	xxxx	0.15	0.03	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	10.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	B	*	*	*	*	*
Movement:	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT	LT	LTR	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	151	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	2.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	56.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	F	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			56.7			xxxxxx			xxxxxx		
ApproachLOS:	*			F			*			*		

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #17 Beavercreek Road/CC Access

Average Delay (sec/veh): 0.0 Worst Case Level Of Service: C[16.1]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	0	0	0	0	0	1	1	0	1	0	0	0	1	0	0
Volume Module:																	
Base Vol:	0	0	0	0	0	4	1	881	0	0	879	0					
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Initial Bse:	0	0	0	0	0	4	1	881	0	0	879	0					
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95					
PHF Volume:	0	0	0	0	0	4	1	927	0	0	925	0					
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0					
Final Vol.:	0	0	0	0	0	4	1	927	0	0	925	0					
Critical Gap Module:																	
Critical Gp:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
FollowUpTim:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Capacity Module:																	
Cnflict Vol:	xxxx	xxxx	xxxxx	xxxx	xxxx	925	925	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Potent Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	329	739	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Move Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	329	739	xxxx	xxxxx	xxxx	xxxx	xxxxx					
Volume/Cap:	xxxx	xxxx	xxxx	xxxx	xxxx	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx					
Level Of Service Module:																	
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	16.1	9.9	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
LOS by Move:	*	*	*	*	*	C	A	*	*	*	*	*					
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT					
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*					
ApproachDel:	xxxxxx			16.1			xxxxxx			xxxxxx							
ApproachLOS:	*			C			*			*							

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #18 Beavecreek Road/CC and SRC Accesses

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: C[22.3]

Approach:	North Bound				South Bound				East Bound				West Bound			
Movement:	L	- T	- R		L	- T	- R		L	- T	- R		L	- T	- R	
Control:	Stop Sign				Stop Sign				Uncontrolled				Uncontrolled			
Rights:	Include				Include				Include				Include			
Lanes:	0	0	1!	0	0	0	0	0	1	1	0	0	1	0	1	0	0
Volume Module:																	
Base Vol:	4	0	44	0	0	2	1	837	14	44	834	1					
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
Initial Bse:	4	0	44	0	0	2	1	837	14	44	834	1					
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00					
PHF Adj:	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99	0.99					
PHF Volume:	4	0	44	0	0	2	1	845	14	44	842	1					
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0					
Final Vol.:	4	0	44	0	0	2	1	845	14	44	842	1					
Critical Gap Module:																	
Critical Gp:	7.1	xxxx	6.2	xxxxx	xxxx	6.2	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx					
FollowUpTim:	3.5	xxxx	3.3	xxxxx	xxxx	3.3	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx					
Capacity Module:																	
Cnflict Vol:	1787	xxxx	853	xxxx	xxxx	843	843	xxxx	xxxxx	860	xxxx	xxxxx					
Potent Cap.:	64	xxxx	362	xxxx	xxxx	367	793	xxxx	xxxxx	782	xxxx	xxxxx					
Move Cap.:	61	xxxx	362	xxxx	xxxx	367	793	xxxx	xxxxx	782	xxxx	xxxxx					
Volume/Cap:	0.07	xxxx	0.12	xxxx	xxxx	0.01	0.00	xxxx	xxxx	0.06	xxxx	xxxx					
Level Of Service Module:																	
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	0.0	0.0	xxxx	xxxxx	0.2	xxxx	xxxxx					
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	14.9	9.5	xxxx	xxxxx	9.9	xxxx	xxxxx					
LOS by Move:	*	*	*	*	*	B	A	*	*	A	*	*					
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT					
Shared Cap.:	xxxx	256	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx					
SharedQueue:	xxxxx	0.7	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shrd StpDel:	xxxxx	22.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx					
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*					
ApproachDel:	22.3			14.9			xxxxxx			xxxxxx							
ApproachLOS:	C			B			*			*							

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #19 Beavercreek Road/Pioneer Carwash-SRC Access

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: F[75.6]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 1	0	0	1	0 0	0 0	1	0 0	1 0	1	0 0	1 0
Volume Module:												
Base Vol:	4	0	64	1	0	0	3	792	20	55	776	1
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	4	0	64	1	0	0	3	792	20	55	776	1
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98	0.98
PHF Volume:	4	0	65	1	0	0	3	808	20	56	792	1
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	4	0	65	1	0	0	3	808	20	56	792	1
Critical Gap Module:												
Critical Gp:	7.1	xxxx	6.2	7.1	xxxx	xxxxx	4.1	xxxx	xxxxx	4.1	xxxx	xxxxx
FollowUpTim:	3.5	xxxx	3.3	3.5	xxxx	xxxxx	2.2	xxxx	xxxxx	2.2	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	1729	xxxx	818	1762	xxxx	xxxxx	793	xxxx	xxxxx	829	xxxx	xxxxx
Potent Cap.:	70	xxxx	379	67	xxxx	xxxxx	828	xxxx	xxxxx	803	xxxx	xxxxx
Move Cap.:	66	xxxx	379	52	xxxx	xxxxx	828	xxxx	xxxxx	803	xxxx	xxxxx
Volume/Cap:	0.06	xxxx	0.17	0.02	xxxx	xxxx	0.00	xxxx	xxxx	0.07	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.1	xxxx	xxxxx	0.0	xxxx	xxxxx	0.2	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	75.6	xxxx	xxxxx	9.4	xxxx	xxxxx	9.8	xxxx	xxxxx
LOS by Move:	*	*	*	F	*	*	A	*	*	A	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	297	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	0.9	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	20.8	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	C	*	*	*	*	*	*	*	*	*	*
ApproachDel:		20.8			75.6			xxxxxx			xxxxxx	
ApproachLOS:		C			F			*			*	

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #20 Beavercreek Road/Grahams Access

Average Delay (sec/veh): 0.1 Worst Case Level Of Service: D[31.7]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0 0	0	0	1	0 0	0 1	1	0 1	0 0	0	0 0	1 0
Volume Module:												
Base Vol:	0	0	0	4	0	2	1	811	0	0	775	5
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	4	0	2	1	811	0	0	775	5
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	4	0	2	1	854	0	0	816	5
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	4	0	2	1	854	0	0	816	5
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1674	xxxx	818	821	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	106	xxxx	379	808	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	106	xxxx	379	808	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.04	xxxx	0.01	0.00	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.1	xxxx	0.0	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	40.3	xxxx	14.6	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	E	*	B	A	*	*	*	*	*
Movement:	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT	LT -	LTR -	RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:		xxxxxx			31.7			xxxxxx			xxxxxx	
ApproachLOS:		*			D			*			*	

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Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #21 Beavercreek Road/Les Schwab-Grahams Access

Average Delay (sec/veh): 0.6 Worst Case Level Of Service: E[36.2]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	0	0	0		0	0	1!	0	0		1	0	1	0	0		0	0	0	1	0	
Volume Module:																								
Base Vol:	0		0		0		16		0		9		15		796		0		0		756		21	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	0		0		0		16		0		9		15		796		0		0		756		21	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.95		0.95		0.95		0.95		0.95		0.95		0.95		0.95		0.95		0.95		0.95		0.95	
PHF Volume:	0		0		0		17		0		9		16		838		0		0		796		22	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	0		0		0		17		0		9		16		838		0		0		796		22	
Critical Gap Module:																								
Critical Gp:	xxxxx	xxxx	xxxxx				6.4	xxxx		6.2			4.1	xxxx	xxxxx		xxxxx	xxxx	xxxxx					
FollowUpTim:	xxxxx	xxxx	xxxxx				3.5	xxxx		3.3			2.2	xxxx	xxxxx		xxxxx	xxxx	xxxxx					
Capacity Module:																								
Cnflict Vol:	xxxx	xxxx	xxxxx				1676	xxxx		807			818	xxxx	xxxxx		xxxx	xxxx	xxxxx					
Potent Cap.:	xxxx	xxxx	xxxxx				106	xxxx		385			810	xxxx	xxxxx		xxxx	xxxx	xxxxx					
Move Cap.:	xxxx	xxxx	xxxxx				104	xxxx		385			810	xxxx	xxxxx		xxxx	xxxx	xxxxx					
Volume/Cap:	xxxx	xxxx	xxxx				0.16	xxxx		0.02			0.02	xxxx	xxxx		xxxx	xxxx	xxxx					
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx						
LOS by Move:	*	*	*	*	*	*							A	*	*	*	*	*						
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx			141	xxxxx					xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx			0.7	xxxxx					xxxxx	xxxx	xxxxx	xxxxx			xxxxx	xxxx	xxxxx	xxxxx		
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx			36.2	xxxxx					xxxxx	xxxx	xxxxx	xxxxx			xxxxx	xxxx	xxxxx	xxxxx		
Shared LOS:	*	*	*	*			E	*					*	*	*	*			*	*	*	*		
ApproachDel:	xxxxxx						36.2						xxxxxx						xxxxxx					
ApproachLOS:	*						E						*						*					

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2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #22 Beavercreek Road/Les Schwab-SRC Access

Average Delay (sec/veh): 1.2 Worst Case Level Of Service: E[36.1]

Approach:	North Bound						South Bound						East Bound						West Bound					
Movement:	L	-	T	-	R		L	-	T	-	R		L	-	T	-	R		L	-	T	-	R	
Control:	Stop Sign						Stop Sign						Uncontrolled						Uncontrolled					
Rights:	Include						Include						Include						Include					
Lanes:	0	0	1!	0	0		0	0	1!	0	0		1	0	0	1	0		1	0	0	1	0	
Volume Module:																								
Base Vol:	5		0		20		12		0		19		14		778		13		17		760		2	
Growth Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
Initial Bse:	5		0		20		12		0		19		14		778		13		17		760		2	
User Adj:	1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00		1.00	
PHF Adj:	0.98		0.98		0.98		0.98		0.98		0.98		0.98		0.98		0.98		0.98		0.98		0.98	
PHF Volume:	5		0		20		12		0		19		14		794		13		17		776		2	
Reduct Vol:	0		0		0		0		0		0		0		0		0		0		0		0	
Final Vol.:	5		0		20		12		0		19		14		794		13		17		776		2	
Critical Gap Module:																								
Critical Gp:	7.1	xxxx		6.2			7.1	xxxx		6.2			4.1	xxxx	xxxxx				4.1	xxxx	xxxxx			
FollowUpTim:	3.5	xxxx		3.3			3.5	xxxx		3.3			2.2	xxxx	xxxxx				2.2	xxxx	xxxxx			
Capacity Module:																								
Cnflict Vol:	1650	xxxx		801			1651	xxxx		777			778	xxxx	xxxxx				807	xxxx	xxxxx			
Potent Cap.:	80	xxxx		388			80	xxxx		400			843	xxxx	xxxxx				818	xxxx	xxxxx			
Move Cap.:	74	xxxx		388			73	xxxx		400			843	xxxx	xxxxx				818	xxxx	xxxxx			
Volume/Cap:	0.07	xxxx		0.05			0.17	xxxx		0.05			0.02	xxxx	xxxx				0.02	xxxx	xxxx			
Level Of Service Module:																								
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							0.1	xxxx	xxxxx				0.1	xxxx	xxxxx			
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx							9.3	xxxx	xxxxx				9.5	xxxx	xxxxx			
LOS by Move:	*	*	*	*	*	*							A	*	*				A	*	*			
Movement:	LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT		LT	-	LTR	-	RT	
Shared Cap.:	xxxx	209	xxxxx	xxxx	147	xxxxx							xxxx	xxxx	xxxxx				xxxx	xxxx	xxxxx			
SharedQueue:	xxxxx	0.4	xxxxx	xxxxx	0.8	xxxxx							xxxxx	xxxx	xxxxx	xxxxx			xxxxx	xxxx	xxxxx	xxxxx		
Shrd StpDel:	xxxxx	24.6	xxxxx	xxxxx	36.1	xxxxx							xxxxx	xxxx	xxxxx	xxxxx			xxxxx	xxxx	xxxxx	xxxxx		
Shared LOS:	*	C	*	*	E	*							*	*	*	*			*	*	*	*		
ApproachDel:	24.6				36.1								xxxxxx						xxxxxx					
ApproachLOS:	C				E								*						*					

Beavercreek Road Access Management Plan
Existing Conditions
PM Peak

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #23 Beavercreek Road/Sherwin Williams

Average Delay (sec/veh): 0.3 Worst Case Level Of Service: E[37.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	0 0	1! 0	0	1 0	1	0 0	0 0	0	1 0
Volume Module:												
Base Vol:	0	0	0	9	0	2	4	796	0	0	776	8
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	9	0	2	4	796	0	0	776	8
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	9	0	2	4	838	0	0	817	8
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	9	0	2	4	838	0	0	817	8
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1667	xxxx	821	825	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	107	xxxx	377	805	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	107	xxxx	377	805	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.09	xxxx	0.01	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	*	*	*	A	*	*	*	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	123	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	0.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	37.3	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	E	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			37.3			xxxxxx			xxxxxx		
ApproachLOS:	*			E			*			*		

Beavercreek Road Access Management Plan
Existing Conditions
PM Peak

Level Of Service Computation Report
2000 HCM Unsignalized Method (Base Volume Alternative)

Intersection #24 Beavercreek Road/Beavercreek Way

Average Delay (sec/veh): 0.9 Worst Case Level Of Service: D[30.3]

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Stop Sign			Stop Sign			Uncontrolled			Uncontrolled		
Rights:	Include			Include			Include			Include		
Lanes:	0 0	0	0 0	0	0	0	1 0	0	1	1 0	1	0 0
Volume Module:												
Base Vol:	0	0	0	23	0	19	10	777	0	0	664	114
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	0	0	0	23	0	19	10	777	0	0	664	114
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	0	0	0	24	0	20	11	818	0	0	699	120
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	0	0	24	0	20	11	818	0	0	699	120
Critical Gap Module:												
Critical Gp:	xxxxx	xxxx	xxxxx	6.4	xxxx	6.2	4.1	xxxx	xxxxx	xxxxx	xxxx	xxxxx
FollowUpTim:	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3	2.2	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Capacity Module:												
Cnflict Vol:	xxxx	xxxx	xxxxx	1598	xxxx	759	819	xxxx	xxxxx	xxxx	xxxx	xxxxx
Potent Cap.:	xxxx	xxxx	xxxxx	118	xxxx	410	810	xxxx	xxxxx	xxxx	xxxx	xxxxx
Move Cap.:	xxxx	xxxx	xxxxx	117	xxxx	410	810	xxxx	xxxxx	xxxx	xxxx	xxxxx
Volume/Cap:	xxxx	xxxx	xxxx	0.21	xxxx	0.05	0.01	xxxx	xxxx	xxxx	xxxx	xxxx
Level Of Service Module:												
Queue:	xxxxx	xxxx	xxxxx	0.7	xxxx	0.2	0.0	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Stopped Del:	xxxxx	xxxx	xxxxx	43.6	xxxx	14.2	9.5	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move:	*	*	*	E	*	B	A	*	*	*	*	*
Movement:	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT	LT	- LTR	- RT
Shared Cap.:	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx
SharedQueue:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shrd StpDel:	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
Shared LOS:	*	*	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx			30.3			xxxxxx			xxxxxx		
ApproachLOS:	*			D			*			*		

Beavercreek Road Access Management Plan
2020 Long Term Scenario
PM Peak

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #5 Beavercreek Road/Fir Street

Cycle (sec):	120	Critical Vol./Cap. (X):	0.591
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	14.2
Optimal Cycle:	49	Level Of Service:	B

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	1	0 0	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:	>> Count Date: 8 Apr 2004 << 4-6											
Base Vol:	20	10	130	90	10	45	25	1290	10	75	1165	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	20	10	130	90	10	45	25	1290	10	75	1165	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	20	10	130	90	10	45	25	1290	10	75	1165	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	21	11	137	95	11	47	26	1358	11	79	1226	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	21	11	137	95	11	47	26	1358	11	79	1226	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	21	11	137	95	11	47	26	1358	11	79	1226	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.72	0.86	0.86	0.50	0.88	0.87	0.93	0.93	0.93	0.93	0.93	0.93
Lanes:	1.00	0.07	0.93	1.00	0.18	0.82	1.00	1.98	0.02	1.00	1.95	0.05
Final Sat.:	1363	116	1514	948	302	1358	1769	3507	27	1769	3435	88
Capacity Analysis Module:												
Vol/Sat:	0.02	0.09	0.09	0.10	0.03	0.03	0.01	0.39	0.39	0.04	0.36	0.36
Crit Moves:				****				****		****		
Green/Cycle:	0.17	0.17	0.17	0.17	0.17	0.17	0.68	0.66	0.66	0.76	0.70	0.70
Volume/Cap:	0.09	0.53	0.53	0.59	0.21	0.21	0.10	0.59	0.59	0.26	0.51	0.51
Delay/Veh:	42.2	47.6	47.6	51.8	43.3	43.3	7.5	12.0	12.0	8.0	8.5	8.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	42.2	47.6	47.6	51.8	43.3	43.3	7.5	12.0	12.0	8.0	8.5	8.5
HCM2kAvg:	1	6	6	7	2	2	0	14	14	1	11	11

Beavercreek Road Access Management Plan
2020 Long-Term Scenario
PM Peak

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #9 Beavercreek Rd/Fred Meyer-Nelson's Nautilus

Cycle (sec):	120	Critical Vol./Cap. (X):	0.734
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	28.3
Optimal Cycle:	67	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Protected			Protected		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1	0 0	1 0	1	0 0	1 0	1	0 1	1 0	1	0 1	1 0
Volume Module:	>> Count Date: 8 Apr 2004 << 4-6 PM											
Base Vol:	115	0	275	75	5	45	40	975	170	225	975	30
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	115	0	275	75	5	45	40	975	170	225	975	30
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	115	0	275	75	5	45	40	975	170	225	975	30
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	121	0	289	79	5	47	42	1026	179	237	1026	32
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	121	0	289	79	5	47	42	1026	179	237	1026	32
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	121	0	289	79	5	47	42	1026	179	237	1026	32
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment:	0.72	1.00	0.81	0.33	0.87	0.86	0.95	0.93	0.93	0.95	0.95	0.95
Lanes:	1.00	0.00	1.00	1.00	0.10	0.90	1.00	1.70	0.30	1.00	1.94	0.06
Final Sat.:	1371	0	1542	620	164	1474	1805	3006	524	1805	3488	107
Capacity Analysis Module:												
Vol/Sat:	0.09	0.00	0.19	0.13	0.03	0.03	0.02	0.34	0.34	0.13	0.29	0.29
Crit Moves:			****					****		****		
Green/Cycle:	0.26	0.00	0.26	0.26	0.26	0.26	0.05	0.47	0.47	0.18	0.60	0.60
Volume/Cap:	0.35	0.00	0.73	0.50	0.13	0.13	0.49	0.73	0.73	0.73	0.49	0.49
Delay/Veh:	37.0	0.0	47.9	40.5	34.5	34.5	60.2	27.8	27.8	55.0	14.0	14.0
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	37.0	0.0	47.9	40.5	34.5	34.5	60.2	27.8	27.8	55.0	14.0	14.0
HCM2kAvg:	5	0	11	8	1	1	2	19	19	10	11	11

Beavercreek Road Access Management Plan
2020 Long Term Scenario
PM Peak

Level Of Service Computation Report
2000 HCM Operations Method (Future Volume Alternative)

Intersection #19 Beavercreek Road/Southridge Center-Younger Property

Cycle (sec):	120	Critical Vol./Cap. (X):	0.625
Loss Time (sec):	12 (Y+R = 4 sec)	Average Delay (sec/veh):	23.4
Optimal Cycle:	52	Level Of Service:	C

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
Control:	Permitted			Permitted			Prot+Permit			Prot+Permit		
Rights:	Include			Include			Include			Include		
Min. Green:	0	0	0	0	0	0	0	0	0	0	0	0
Lanes:	1 0	0	1 0	1 0	0	1 0	1 0	1	1 0	1 0	1	1 0
Volume Module:												
Base Vol:	50	10	130	215	10	30	40	840	60	120	885	225
Growth Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Initial Bse:	50	10	130	215	10	30	40	840	60	120	885	225
Added Vol:	0	0	0	0	0	0	0	0	0	0	0	0
PasserByVol:	0	0	0	0	0	0	0	0	0	0	0	0
Initial Fut:	50	10	130	215	10	30	40	840	60	120	885	225
User Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
PHF Adj:	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95	0.95
PHF Volume:	53	11	137	226	11	32	42	884	63	126	932	237
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Reduced Vol:	53	11	137	226	11	32	42	884	63	126	932	237
PCE Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
MLF Adj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
Final Vol.:	53	11	137	226	11	32	42	884	63	126	932	237
Saturation Flow Module:												
Sat/Lane:	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900	1900
Adjustment	0.73	0.86	0.86	0.60	0.89	0.89	0.93	0.92	0.92	0.93	0.90	0.90
Lanes:	1.00	0.07	0.93	1.00	0.25	0.75	1.00	1.87	0.13	1.00	1.59	0.41
Final Sat.:	1395	117	1519	1142	422	1265	1769	3269	233	1769	2736	696
Capacity Analysis Module:												
Vol/Sat:	0.04	0.09	0.09	0.20	0.02	0.02	0.02	0.27	0.27	0.07	0.34	0.34
Crit Moves:				****			****				****	
Green/Cycle:	0.32	0.32	0.32	0.32	0.32	0.32	0.50	0.46	0.46	0.62	0.54	0.54
Volume/Cap:	0.12	0.28	0.28	0.62	0.08	0.08	0.23	0.59	0.59	0.33	0.62	0.62
Delay/Veh:	29.2	31.1	31.1	38.3	28.8	28.8	18.8	24.4	24.4	13.3	19.5	19.5
User DelAdj:	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00
AdjDel/Veh:	29.2	31.1	31.1	38.3	28.8	28.8	18.8	24.4	24.4	13.3	19.5	19.5
HCM2kAvg:	2	4	4	12	1	1	1	13	13	3	15	15

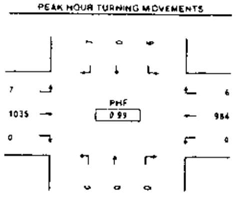
DKS Associates
TRANSPORTATION SOLUTIONS

Traffic Counts

INTERSECTION: Berry Hill Apartments Driveway--From North/Beavercreek Rd--From East
PROJECT ID#: Oregon City
QC JOB #: 10075401
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

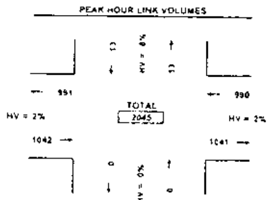
QUALITY COUNTS
16285 SW 85th Avenue, Ste 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503-620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

PEAK HOUR TURNING MOVEMENTS



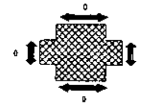
PEAK HOUR: 4:00 PM TO 5:00 PM

PEAK HOUR LINK VOLUMES



PEAK 15 MINUTES: 4:30 PM TO 4:45 PM

PEAK HOUR PED CROSSING VOLUMES



5 MINUTE COUNT PERIOD BEGINNING AT	(Southbound) Right	Thru	Left	Beavercreek Rd- From East (Westbound) Right	Thru	Left	(Northbound) Right	Thru	Left	Beavercreek Rd--From West (Eastbound) Right	Thru	Left	Crosswalk Usage (Peds By Approach) North	East	South	West	TOTAL Veh	Peds
4:00 PM	1	0	1	0	87	0	0	0	0	0	76	0	0	0	0	0	165	0
4:05 PM	0	0	0	0	85	0	0	0	0	0	88	0	0	0	0	0	173	0
4:10 PM	0	0	1	0	88	0	0	0	0	0	89	0	0	1	0	0	178	1
4:15 PM	0	0	0	0	94	0	0	0	0	0	85	0	0	0	0	0	179	0
4:20 PM	0	0	0	2	80	0	0	0	0	0	81	0	0	0	0	0	163	0
4:25 PM	1	0	1	1	76	0	0	0	0	0	79	1	0	0	0	0	159	0
4:30 PM	0	0	0	1	83	0	0	0	0	0	97	1	0	0	0	0	182	0
4:35 PM	0	0	1	0	78	0	0	0	0	0	75	0	0	0	0	0	154	0
4:40 PM	1	0	0	2	82	0	0	0	0	0	94	2	0	0	0	0	181	0
4:45 PM	1	0	1	0	67	0	0	0	0	0	94	0	0	0	0	0	163	0
4:50 PM	2	0	0	0	78	0	0	0	0	0	87	1	0	0	0	0	168	0
4:55 PM	1	0	1	0	86	0	0	0	0	0	90	2	0	0	0	0	180	0
5:00 PM	0	0	1	1	67	0	0	0	0	0	89	0	0	0	0	0	156	0
5:05 PM	0	0	1	0	69	0	0	0	0	0	94	0	0	0	0	0	164	0
5:10 PM	1	0	2	1	89	0	0	0	0	0	86	3	0	0	0	0	182	0
5:15 PM	1	0	1	3	81	0	0	0	0	0	80	1	0	0	0	0	167	0
5:20 PM	0	0	1	1	79	0	0	0	0	0	95	1	0	0	0	0	176	0
5:25 PM	0	0	1	0	69	0	0	0	0	0	91	0	0	0	0	0	161	0
5:30 PM	0	0	0	1	55	0	0	0	0	0	109	0	0	0	0	0	165	0
5:35 PM	0	0	0	3	73	0	0	0	0	0	85	1	0	0	0	0	162	0
5:40 PM	0	0	0	0	85	0	0	0	0	0	91	0	0	0	0	0	176	0
5:45 PM	1	0	0	1	69	0	0	0	0	0	71	1	0	0	0	0	143	0
5:50 PM	0	0	0	1	60	0	0	0	0	0	65	0	0	0	0	0	146	0
5:55 PM	0	0	0	0	78	0	0	0	0	0	77	1	0	0	0	0	156	0

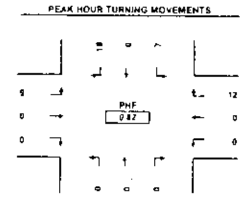
HOURLY TOTALS	Southbound Right	Thru	Left	Westbound Right	Thru	Left	Northbound Right	Thru	Left	Eastbound Right	Thru	Left	Pedestrians By Approach West	East	North	South	TOTAL Veh	Peds
4:00 PM	7	0	6	6	984	0	0	0	0	0	1035	7	0	1	0	0	2045	1
4:15 PM	7	0	8	8	949	0	0	0	0	0	1051	10	0	0	0	0	2033	0
4:30 PM	7	0	10	9	927	0	0	0	0	0	1072	11 17	0	0	0	0	2036	0
4:45 PM	6	0	9	10	897	0	0	0	0	0	1091	9 14	0	0	0	0	2022	0
5:00 PM	3	0	7	12	873	0	0	0	0	0	1053	8	0	0	0	0	1956	0

Version 3.1

INTERSECTION: SouthRidge Mini Storage Driveway--From North/Beavercreek Rd--From East
PROJECT ID#: Oregon City
QC JOB #: 10075402
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

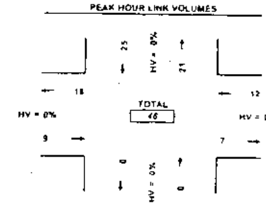
QUALITY COUNTS
16285 SW 85th Avenue, Ste. 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503-620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

PEAK HOUR TURNING MOVEMENTS



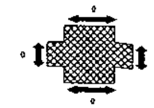
PEAK HOUR: 4:15 PM TO 5:15 PM

PEAK HOUR LINK VOLUMES



PEAK 15 MINUTES: 5:00 PM TO 5:15 PM

PEAK HOUR PED CROSSING VOLUMES



5-MINUTE COUNT PERIOD BEGINNING AT	(Southbound) Right	Thru	Left	Beavercreek Rd--From East (Westbound) Right	Thru	Left	(Northbound) Right	Thru	Left	Beavercreek Rd--From West (Eastbound) Right	Thru	Left	Crosswalk Usage (Peds By Approach) North	East	South	West	TOTAL Veh	Peds
4:00 PM	3	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	5	0
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10 PM	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	0
4:15 PM	2	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	5	0
4:20 PM	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	4	0
4:25 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	1	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	4	0
4:35 PM	1	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	3	0
4:40 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	1	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	5	0
4:50 PM	2	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	5	0
4:55 PM	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	4	0
5:00 PM	1	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	4	0
5:05 PM	2	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	5	0
5:10 PM	3	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	5	0
5:15 PM	2	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	4	0
5:20 PM	1	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0
5:25 PM	0	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	3	0
5:30 PM	1	0	3	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
5:35 PM	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
5:45 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:50 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

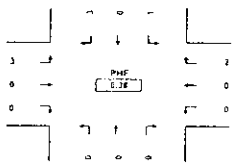
HOURLY TOTALS	Southbound Right	Thru	Left	Westbound Right	Thru	Left	Northbound Right	Thru	Left	Eastbound Right	Thru	Left	Pedestrians By Approach West	East	North	South	TOTAL Veh	Peds
4:00 PM	16	0	5	10	0	0	0	0	0	0	0	9	0	0	0	0	40	0
4:15 PM	18	0	7	12	0	0	0	0	0	0	0	9	0	0	0	0	46	0
4:30 PM	17	0	8	10	0	0	0	0	0	0	0	11	0	0	0	0	46	0
4:45 PM	16	0	9	9	0	0	0	0	0	0	0	11	0	0	0	0	45	0
5:00 PM	12	0	10	4	0	0	0	0	0	0	0	8	0	0	0	0	34	0

Version 3.1

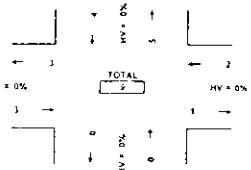
INTERSECTION: Jiffy Lube/QC Auto Service Center--From North/Beavercreek Rd--From East
PROJECT ID#: Oregon City
QC JOB #: 10075403
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

QUALITY COUNTS
19453 SW 85th Avenue, Ste 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503 620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

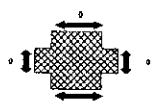
PEAK HOUR TURNING MOVEMENTS



PEAK HOUR LINK VOLUMES



PEAK HOUR PED CROSSING VOLUMES



PEAK HOUR: 4:00 PM TO 5:00 PM

PEAK 15 MINUTES: 4:00 PM TO 4:15 PM

5 MINUTE COUNT PERIOD BEGINNING AT	Jiffy Lube/QC Auto Service Center--From North (Southbound)			Beavercreek Rd--From East (Westbound)			Construction--From South (Northbound)			Beavercreek Rd--From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	3	0
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10 PM	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	3	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:25 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:35 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:00 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:05 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:10 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:15 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

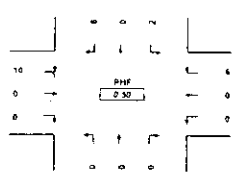
HOURLY TOTALS	Southbound			Westbound			Northbound			Eastbound			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	3	0	1	2	0	0	0	0	0	0	0	3	0	0	0	0	9	0
4:15 PM	3	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	6	0
4:30 PM	3	0	2	3	0	0	0	0	0	0	0	0	0	0	0	0	8	0
4:45 PM	3	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	7	0
5:00 PM	3	0	1	3	0	0	0	0	0	0	0	0	0	0	0	0	7	0

Version 2.1

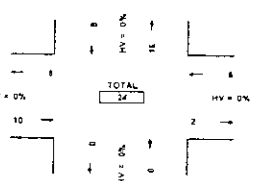
INTERSECTION: Rusty's Resale Driveway--From north/Beavercreek Rd--From East
PROJECT ID#: Oregon City
QC JOB #: 10075404
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

QUALITY COUNTS
19453 SW 85th Avenue, Ste 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503 620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

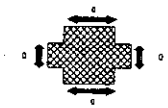
PEAK HOUR TURNING MOVEMENTS



PEAK HOUR LINK VOLUMES



PEAK HOUR PED CROSSING VOLUMES



PEAK HOUR: 5:00 PM TO 6:00 PM

PEAK 15 MINUTES: 4:15 PM TO 4:30 PM

5 MINUTE COUNT PERIOD BEGINNING AT	Rusty's Resale Driveway--From north (Southbound)			Beavercreek Rd--From East (Westbound)			Construction--From South (Northbound)			Beavercreek Rd--From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	1	0	0	1	0	5	0	0	0	0	0	0	0	0	0	0	7	0
4:05 PM	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0
4:15 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 PM	3	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	2	0
4:25 PM	2	0	0	2	0	0	0	0	0	0	0	2	0	0	0	0	7	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	4	0
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
5:30 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:35 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:40 PM	1	0	1	2	0	0	0	0	0	0	0	4	0	0	0	0	6	0
5:45 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	4	0
5:50 PM	1	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	4	0
5:55 PM	2	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	7	0

HOURLY TOTALS	Southbound			Westbound			Northbound			Eastbound			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	5	0	3	5	0	0	0	0	0	0	0	5	0	0	0	0	21	0
4:15 PM	5	0	3	4	0	0	0	0	0	0	0	4	0	0	0	0	17	0
4:30 PM	0	0	2	1	0	0	0	0	0	0	0	2	0	0	0	0	5	0
4:45 PM	2	0	3	3	0	0	0	0	0	0	0	5	0	0	0	0	13	0
5:00 PM	6	0	2	6	0	0	0	0	0	0	0	10	0	0	0	0	24	0

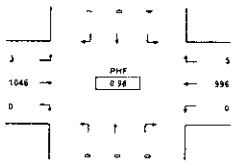
Version 2.1

INTERSECTION: Checkpoint Motors Driveway--From North/Beavercreek Rd--From East
PROJECT ID#: Oregon City
QC JOB #: 10075405

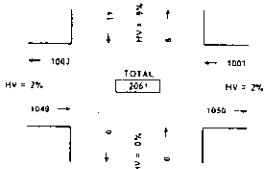
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

QUALITY COUNTS
16285 SW 85th Avenue, Ste. 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503 620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

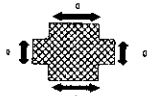
PEAK HOUR TURNING MOVEMENTS



PEAK HOUR LINK VOLUMES



PEAK HOUR PED CROSSING VOLUMES



PEAK HOUR: 4:00 PM TO 5:00 PM

PEAK 15 MINUTES: 4:00 PM TO 4:15 PM

5-MINUTE COUNT PERIOD BEGINNING AT	Checkpoint Motors Driveway--From North (Southbound)			Beavercreek Rd--From East (Westbound)			QC Job #10075405 (Northbound)			Beavercreek Rd--From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	2	0	0	1	91	0	0	0	0	0	78	0	0	0	0	0	172	0
4:05 PM	0	0	0	0	88	0	0	0	0	0	89	0	0	0	0	0	175	0
4:10 PM	0	0	0	0	87	0	0	0	0	0	92	0	0	0	0	0	179	0
4:15 PM	2	0	0	0	95	0	0	0	0	0	85	0	0	0	0	0	182	0
4:20 PM	0	0	1	1	82	0	0	0	0	0	82	2	0	0	0	0	168	0
4:25 PM	1	0	0	2	76	0	0	0	0	0	79	0	0	0	0	0	160	0
4:30 PM	0	0	1	1	83	0	0	0	0	0	95	0	0	0	0	0	180	0
4:35 PM	0	0	0	0	78	0	0	0	0	0	77	1	0	0	0	0	156	0
4:40 PM	0	0	0	0	84	0	0	0	0	0	95	0	0	0	0	0	179	0
4:45 PM	0	0	1	0	66	0	0	0	0	0	94	0	0	0	0	0	161	0
4:50 PM	0	0	0	0	80	0	0	0	0	0	89	0	0	0	0	0	169	0
4:55 PM	0	0	1	0	88	0	0	0	0	0	91	0	0	0	0	0	180	0
5:00 PM	0	0	1	0	69	0	0	0	0	0	87	0	0	0	0	0	157	0
5:05 PM	0	0	1	0	89	0	0	0	0	0	91	0	0	0	0	0	181	0
5:10 PM	1	0	0	3	89	0	0	0	0	0	91	2	0	0	0	0	186	0
5:15 PM	2	0	0	3	81	0	0	0	0	0	82	1	1	0	0	0	169	1
5:20 PM	3	0	1	1	78	0	0	0	0	0	96	0	0	0	0	0	177	0
5:25 PM	0	0	3	1	68	0	0	0	0	0	87	0	0	0	0	0	158	0
5:30 PM	0	0	2	1	56	0	0	0	0	0	104	0	0	0	0	0	163	0
5:35 PM	1	0	0	2	71	0	0	0	0	0	90	1	0	0	0	0	165	0
5:40 PM	0	0	0	1	83	0	0	0	0	0	91	2	0	0	0	0	177	0
5:45 PM	2	0	0	2	69	0	0	0	0	0	74	0	0	0	0	0	147	0
5:50 PM	0	0	0	1	59	0	0	0	0	0	84	0	0	0	0	0	144	0
5:55 PM	0	0	1	2	78	0	0	0	0	0	80	0	0	0	0	0	159	0

HOURLY TOTALS	Checkpoint Motors Driveway--From North (Southbound)			Beavercreek Rd--From East (Westbound)			QC Job #10075405 (Northbound)			Beavercreek Rd--From West (Eastbound)			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	7	0	4	5	996	0	0	0	0	0	1045	3	0	0	0	0	2061	0
4:15 PM	6	0	6	7	959	0	0	0	0	0	1056	5	0	0	0	0	2039	0
4:30 PM	6	0	9	9	931	0	6	0	0	0	1075	4	1	0	0	0	2034	1
4:45 PM	7	0	10	12	896	0	0	0	0	0	1093	6	1	0	0	0	2024	1
5:00 PM	9	0	9	13	866	0	0	0	0	0	1057	6	1	0	0	0	1964	1

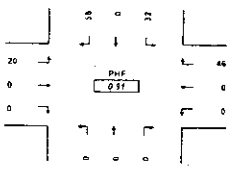
Version 3.1

INTERSECTION: Nelson's Nautilus West Driveway--From North/Beavercreek Rd--From East
PROJECT ID#: Oregon City
QC JOB #: 10075407

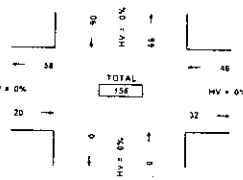
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 9/18/2005

QUALITY COUNTS
16285 SW 85th Avenue, Ste 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503 620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

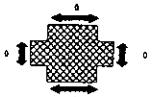
PEAK HOUR TURNING MOVEMENTS



PEAK HOUR LINK VOLUMES



PEAK HOUR PED CROSSING VOLUMES



PEAK HOUR: 4:30 PM TO 5:30 PM

PEAK 15 MINUTES: 5:15 PM TO 5:30 PM

5-MINUTE COUNT PERIOD BEGINNING AT	Nelson's Nautilus West Driveway--From North (Southbound)			Beavercreek Rd--From East (Westbound)			South Bridge Center Dr--From North (Northbound)			Beavercreek Rd--From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	1	0	3	6	0	0	0	0	0	0	0	3	0	0	0	0	13	0
4:05 PM	4	0	3	4	0	0	0	0	0	0	0	3	0	0	0	0	13	0
4:10 PM	4	0	3	5	0	0	0	0	0	0	0	2	0	0	0	0	13	0
4:15 PM	1	0	1	3	0	0	0	0	0	0	0	4	0	0	0	0	14	0
4:20 PM	5	0	4	3	0	0	0	0	0	0	0	5	0	0	0	0	17	0
4:25 PM	4	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	12	0
4:30 PM	9	0	1	5	0	0	0	0	0	0	0	1	0	0	0	0	16	0
4:35 PM	3	0	0	2	0	0	0	0	0	0	0	3	0	0	0	0	8	0
4:40 PM	2	0	3	6	0	0	0	0	0	0	0	3	0	0	0	0	14	0
4:45 PM	5	0	2	3	0	0	0	0	0	0	0	1	0	0	0	0	11	0
4:50 PM	4	0	7	3	0	0	0	0	0	0	0	0	0	0	0	0	14	0
4:55 PM	8	0	3	2	0	0	0	0	0	0	0	1	0	0	0	0	14	0
5:00 PM	2	0	3	4	0	0	0	0	0	0	0	4	0	0	0	0	13	0
5:05 PM	6	0	2	4	0	0	0	0	0	0	0	1	0	0	0	0	13	0
5:10 PM	4	0	1	4	0	0	0	0	0	0	0	3	0	0	0	0	12	0
5:15 PM	4	0	2	5	0	0	0	0	0	0	0	2	0	0	0	0	13	0
5:20 PM	9	0	4	3	0	0	0	0	0	0	0	0	0	0	0	0	16	0
5:25 PM	2	0	4	5	0	0	0	0	0	0	0	3	0	0	0	0	14	0
5:30 PM	6	0	2	1	0	0	0	0	0	0	0	2	0	0	0	0	11	0
5:35 PM	6	0	1	2	0	0	0	0	0	0	0	3	0	0	0	0	12	0
5:40 PM	5	0	2	5	0	0	0	0	0	0	0	0	0	0	0	0	12	0
5:45 PM	3	0	1	6	0	0	0	0	0	0	0	3	0	0	0	0	13	0
5:50 PM	3	0	2	6	0	0	0	0	0	0	0	0	0	0	0	0	10	0
5:55 PM	4	0	1	7	0	0	0	0	0	0	0	2	0	0	0	0	14	0

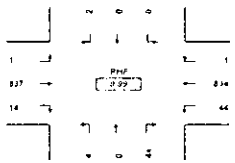
HOURLY TOTALS	Nelson's Nautilus West Driveway--From North (Southbound)			Beavercreek Rd--From East (Westbound)			South Bridge Center Dr--From North (Northbound)			Beavercreek Rd--From West (Eastbound)			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	50	0	32	48	0	0	0	0	0	0	0	23	0	0	0	0	153	0
4:15 PM	53	0	29	45	0	0	0	0	0	0	0	24	0	0	0	0	151	0
4:30 PM	58	0	32	48	0	0	0	0	0	0	0	20	0	0	0	0	156	0
4:45 PM	61	0	33	41	0	0	0	0	0	0	0	20	0	0	0	0	156	0
5:00 PM	53	0	25	52	0	0	0	0	0	0	0	21	0	0	0	0	151	0

Version 3.1

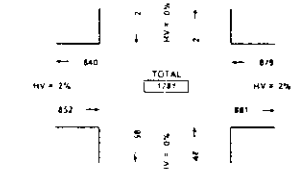
INTERSECTION: Cascade Canopies Driveway East -From North/Beavercreek Rd-From East
PROJECT ID#: Oregon City
QC JOB #: 10075408
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

QUALITY COUNTS
18285 SW 85th Avenue, Ste 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503 620-4545
email: jpw@qualitycounts.net
www.qualitycounts.net

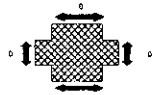
PEAK HOUR TURNING MOVEMENTS



PEAK HOUR LINK VOLUMES



PEAK HOUR PED CROSSING VOLUMES



PEAK HOUR: 4:30 PM to 5:00 PM

PEAK 15 MINUTES: 4:30 PM to 4:45 PM

5 MINUTE COUNT PERIOD BEGINNING AT	(Southbound)			Beavercreek Rd-From East (Westbound)			(Northbound)			Beavercreek Rd-From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	0	0	0	0	75	3	2	0	0	0	63	0	0	0	0	0	143	0
4:05 PM	0	0	0	1	75	4	3	0	1	1	67	0	0	0	0	0	152	0
4:10 PM	0	0	0	0	71	3	1	0	0	3	69	0	0	0	0	0	151	0
4:15 PM	0	0	0	0	73	1	1	0	0	3	75	0	0	0	0	0	153	0
4:20 PM	0	0	0	0	70	6	5	0	0	3	74	0	0	0	0	0	158	0
4:25 PM	0	0	0	0	65	4	4	0	0	1	60	0	0	0	0	0	134	0
4:30 PM	0	0	0	0	79	1	5	0	1	1	68	0	0	0	0	0	157	0
4:35 PM	1	0	0	0	74	5	1	0	0	0	72	0	0	0	0	0	153	0
4:40 PM	0	0	0	0	63	2	5	0	0	1	80	0	0	0	0	0	141	0
4:45 PM	0	0	0	0	58	4	1	0	0	1	81	0	0	0	0	0	145	0
4:50 PM	1	0	0	0	77	4	5	0	1	2	59	0	0	0	0	0	144	0
4:55 PM	0	0	0	0	69	5	5	0	1	0	69	1	0	0	0	0	150	0
5:00 PM	0	0	2	1	61	4	4	0	1	1	59	0	0	0	1	0	133	1
5:05 PM	0	0	0	0	56	3	4	0	0	1	79	0	0	0	0	0	143	0
5:10 PM	0	0	0	0	64	5	5	0	0	2	74	0	0	0	0	0	170	0
5:15 PM	0	0	0	0	66	2	6	0	0	3	64	0	0	0	0	0	141	0
5:20 PM	0	0	0	0	75	3	2	0	0	1	75	0	0	0	0	0	151	0
5:25 PM	0	0	0	0	52	3	5	0	1	2	87	1	0	0	0	0	151	0
5:30 PM	0	0	0	0	53	1	2	0	1	0	83	0	0	0	0	0	140	0
5:35 PM	0	0	0	0	52	8	2	0	0	1	68	0	0	0	0	0	132	0
5:40 PM	1	0	0	0	60	0	3	0	0	1	68	0	0	0	0	0	134	0
5:45 PM	0	0	0	0	56	3	2	0	1	0	70	0	0	0	0	0	132	0
5:50 PM	0	0	0	0	44	5	0	0	0	2	64	0	0	0	0	0	115	0
5:55 PM	0	0	0	0	57	3	5	0	2	0	65	0	0	0	0	0	132	0

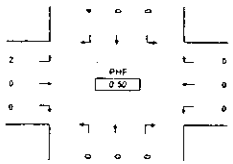
HOURLY TOTALS	Southbound			Westbound			Northbound			Eastbound			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	2	0	0	1	834	44	24	0	4	14	837	1	0	0	0	0	1781	0
4:15 PM	2	0	2	1	814	46	45	0	4	16	850	1	0	0	1	0	1781	1
4:30 PM	2	0	2	1	794	43	48	0	5	15	867	2	0	0	1	0	1778	1
4:45 PM	2	0	2	1	753	47	44	0	5	15	866	2	0	0	1	0	1734	1
5:00 PM	1	0	2	1	711	40	40	0	6	14	858	1	0	0	1	0	1674	1

Version 3.1

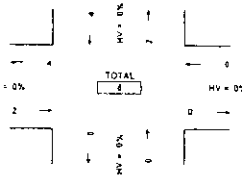
INTERSECTION: Cascade Canopies West Driveway -From north/Beavercreek Rd-From East
PROJECT ID#: Oregon City
QC JOB #: 10075409
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

QUALITY COUNTS
18285 SW 85th Avenue, Ste 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503 620-4545
email: jpw@qualitycounts.net
www.qualitycounts.net

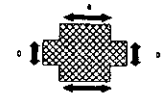
PEAK HOUR TURNING MOVEMENTS



PEAK HOUR LINK VOLUMES



PEAK HOUR PED CROSSING VOLUMES



PEAK HOUR: 4:30 PM to 5:30 PM

PEAK 15 MINUTES: 4:30 PM to 4:45 PM

5 MINUTE COUNT PERIOD BEGINNING AT	(Southbound)			Beavercreek Rd-From East (Westbound)			(Northbound)			Beavercreek Rd-From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	2	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
4:35 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:55 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

HOURLY TOTALS	Southbound			Westbound			Northbound			Eastbound			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	5	0
4:15 PM	4	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	5	0
4:30 PM	4	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	6	0
4:45 PM	2	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	4	0
5:00 PM	1	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0

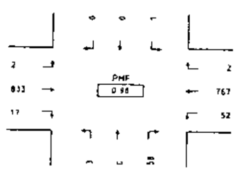
Version 3.1

INTERSECTION: Pioneer Car Wash Driveway--From North/Beavercreek Rd--From East
PROJECT ID#: Oregon City
QC JOB #: 10075410

START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

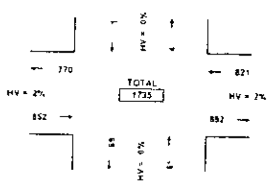
QUALITY COUNTS
15285 SW 65th Avenue, Ste. 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503-620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

PEAK HOUR TURNING MOVEMENTS



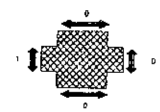
PEAK HOUR: 4:15 PM TO 5:15 PM

PEAK HOUR LINK VOLUMES



PEAK 15 MINUTES: 5:00 PM TO 5:15 PM

PEAK HOUR PED CROSSING VOLUMES



5-MINUTE COUNT PERIOD BEGINNING AT	Pioneer Car Wash Driveway--From North (Southbound)			Beavercreek Rd--From East (Westbound)			Southridge Center--From South (Northbound)			Beavercreek Rd--From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	0	0	0	0	71	2	9	0	2	1	55	0	0	0	0	0	140	0
4:05 PM	0	0	0	0	73	4	4	0	0	3	60	0	0	0	0	0	144	0
4:10 PM	0	0	0	0	62	7	4	0	0	1	66	1	0	0	0	0	141	0
4:15 PM	0	0	0	0	72	1	5	0	0	0	65	0	0	0	0	0	143	0
4:20 PM	0	0	0	1	61	6	4	0	0	0	81	0	0	0	0	0	153	0
4:25 PM	0	0	0	0	64	2	7	0	0	3	57	0	0	0	0	0	134	0
4:30 PM	0	0	0	0	70	7	7	0	1	1	80	0	0	0	0	0	165	0
4:35 PM	0	0	0	0	68	7	4	0	0	6	55	0	0	0	0	1	140	1
4:40 PM	0	0	0	0	45	7	4	0	0	3	72	1	0	0	0	0	132	0
4:45 PM	0	0	0	0	56	5	9	0	0	0	76	1	0	0	0	0	147	0
4:50 PM	0	0	1	0	69	3	1	0	0	1	63	0	0	0	0	0	138	0
4:55 PM	0	0	0	0	65	4	6	0	0	1	62	0	0	0	0	0	139	0
5:00 PM	0	0	0	0	62	3	4	0	1	1	62	0	0	0	0	0	132	0
5:05 PM	0	0	0	0	55	3	7	0	0	1	89	0	0	0	0	0	150	0
5:10 PM	0	0	0	1	80	4	5	0	1	0	71	0	0	0	0	0	162	0
5:15 PM	0	0	0	7	52	7	9	0	0	1	54	0	0	0	0	0	131	0
5:20 PM	0	0	0	1	60	13	7	0	0	2	77	0	0	0	0	0	159	0
5:25 PM	0	0	0	0	48	7	7	0	1	0	73	3	0	0	0	0	136	0
5:30 PM	0	0	0	0	46	7	6	0	0	0	88	0	0	0	0	0	148	0
5:35 PM	1	0	0	0	56	7	5	0	0	1	59	0	0	0	0	1	130	1
5:40 PM	0	0	0	1	50	7	2	0	0	2	65	0	0	0	0	0	125	0
5:45 PM	0	0	0	0	47	8	11	0	1	0	59	0	0	0	0	0	127	0
5:50 PM	0	0	0	1	40	5	7	0	0	1	62	0	0	0	1	0	116	1
5:55 PM	0	0	0	0	49	6	5	0	1	1	59	0	0	0	0	0	121	0

HOURLY TOTALS	Southbound			Westbound			Northbound			Eastbound			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	0	0	1	1	776	55	64	0	4	20	792	3	0	0	0	1	1716	1
4:15 PM	0	0	1	2	767	52	58	0	1	17	833	2	0	0	0	1	1735	1
4:30 PM	0	0	1	9	728	70	65	0	3	16	834	5	0	0	0	1	1731	1
4:45 PM	1	0	1	10	697	70	63	0	3	9	839	4	0	0	0	1	1697	1
5:00 PM	1	0	0	11	643	77	70	0	4	10	818	3	0	0	1	1	1637	2

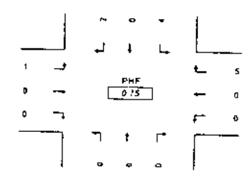
Version 1.1

INTERSECTION: Graham's Stationary--From North/Beavercreek Rd--From East
PROJECT ID#: Oregon City
QC JOB #: 10075411

START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

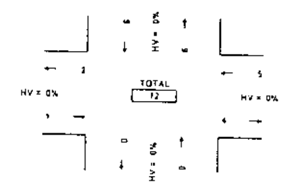
QUALITY COUNTS
15285 SW 65th Avenue, Ste. 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503-620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

PEAK HOUR TURNING MOVEMENTS



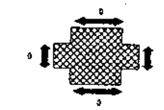
PEAK HOUR: 4:00 PM TO 5:00 PM

PEAK HOUR LINK VOLUMES



PEAK 15 MINUTES: 4:45 PM TO 5:00 PM

PEAK HOUR PED CROSSING VOLUMES



5-MINUTE COUNT PERIOD BEGINNING AT	Graham's Stationary--From North (Southbound)			Beavercreek Rd--From East (Westbound)			From South (Northbound)			Beavercreek Rd--From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:05 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:10 PM	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	3	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:25 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:30 PM	0	0	0	2	0	0	0	0	0	0	0	0	0	0	0	0	2	0
4:35 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:40 PM	1	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55 PM	0	0	2	1	0	0	0	0	0	0	0	0	0	0	0	0	3	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	3	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0

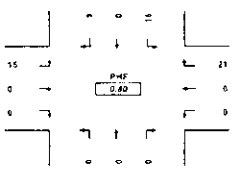
HOURLY TOTALS	Southbound			Westbound			Northbound			Eastbound			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	2	0	4	5	0	0	0	0	0	0	0	1	0	0	0	0	12	0
4:15 PM	2	0	3	3	0	0	0	0	0	0	0	0	0	0	0	0	6	0
4:30 PM	2	0	3	5	0	0	0	0	0	0	0	1	0	0	0	0	11	0
4:45 PM	0	0	3	4	0	0	0	0	0	0	0	1	0	0	0	0	8	0
5:00 PM	0	0	0	4	0	0	0	0	0	0	0	1	0	0	0	0	5	0

Version 1.1

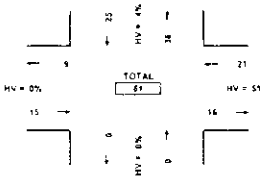
INTERSECTION: Les Schwab East Driveway--From North/Beavercreek Rd--From East
PROJECT ID#: Oregon City
QC JOB #: 10075412
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

QUALITY COUNTS
19765 SW 65th Avenue, Ste 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503 620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

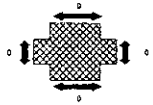
PEAK HOUR TURNING MOVEMENTS



PEAK HOUR LINK VOLUMES



PEAK HOUR PED CROSSING VOLUMES



PEAK HOUR: 4:00 PM TO 5:00 PM

PEAK 15 MINUTES: 4:30 PM TO 4:45 PM

5-MINUTE COUNT PERIOD BEGINNING AT	Les Schwab East Driveway--From North (Southbound)			Beavercreek Rd--From East (Westbound)			Shopping Center--From South (Northbound)			Beavercreek Rd--From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
4:05 PM	1	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	5	0
4:10 PM	1	0	4	3	0	0	0	0	0	0	0	1	0	0	0	0	9	0
4:15 PM	1	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	4	0
4:20 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0
4:25 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	3	4	0	0	0	0	3	0	0	0	0	0	0	0	7	0
4:35 PM	1	0	0	2	0	0	0	0	0	0	0	4	0	0	0	0	7	0
4:40 PM	1	0	1	1	0	0	0	0	0	0	0	2	0	0	0	0	5	0
4:45 PM	1	0	2	2	0	0	0	0	0	0	0	2	0	0	0	0	7	0
4:50 PM	2	0	0	4	0	0	0	0	0	0	0	1	0	0	0	0	7	0
4:55 PM	0	0	2	1	0	0	0	0	0	0	0	1	0	0	0	0	4	0
5:00 PM	1	0	0	3	0	0	0	0	0	0	0	1	0	0	0	0	5	0
5:05 PM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0
5:10 PM	0	0	2	2	0	0	0	0	0	0	0	1	0	0	0	0	5	0
5:15 PM	0	0	0	2	0	0	0	0	0	0	0	1	0	0	0	0	3	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	1	2	0	0	0	0	0	0	0	0	0	0	0	0	3	0
5:30 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0
5:35 PM	1	0	2	0	0	0	0	0	0	0	0	1	0	0	0	0	4	0
5:40 PM	1	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

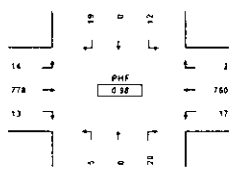
HOURLY TOTALS	Southbound			Westbound			Northbound			Eastbound			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	5	0	10	21	0	0	0	0	0	0	0	15	0	0	0	0	51	0
4:15 PM	7	0	13	24	0	0	0	0	0	0	0	13	0	0	0	0	57	0
4:30 PM	6	0	15	25	0	0	0	0	0	0	0	13	0	0	0	0	59	0
4:45 PM	5	0	14	19	0	0	0	0	0	0	0	9	0	0	0	0	48	0
5:00 PM	3	0	11	12	0	0	0	0	0	0	0	5	0	0	0	0	31	0

Version 3.1

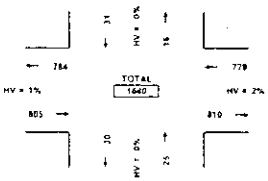
INTERSECTION: Les Schwab West Driveway--From North/Beavercreek Rd--From East
PROJECT ID#: Oregon City
QC JOB #: 10075413
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

QUALITY COUNTS
19765 SW 65th Avenue, Ste 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503 620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

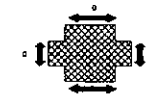
PEAK HOUR TURNING MOVEMENTS



PEAK HOUR LINK VOLUMES



PEAK HOUR PED CROSSING VOLUMES



PEAK HOUR: 4:00 PM TO 5:00 PM

PEAK 15 MINUTES: 4:30 PM TO 4:45 PM

5-MINUTE COUNT PERIOD BEGINNING AT	Les Schwab West Driveway--From North (Southbound)			Beavercreek Rd--From East (Westbound)			Shopping Center--From South (Northbound)			Beavercreek Rd--From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	1	0	0	0	75	2	2	0	1	1	52	1	0	0	0	0	135	0
4:05 PM	1	0	0	0	71	1	2	0	0	1	66	0	0	1	2	0	142	3
4:10 PM	1	0	1	0	55	3	1	0	0	0	63	0	0	0	0	0	124	0
4:15 PM	2	0	0	1	70	0	2	0	2	1	66	1	0	0	0	0	145	0
4:20 PM	0	0	0	0	61	0	0	0	0	0	72	3	0	0	0	0	136	0
4:25 PM	1	0	2	0	68	0	0	0	1	1	57	1	0	0	0	0	131	0
4:30 PM	2	0	2	1	65	1	1	0	0	0	67	1	0	0	0	0	140	0
4:35 PM	2	0	3	0	67	1	4	0	0	0	53	0	0	0	0	0	130	0
4:40 PM	3	0	0	0	54	3	0	0	0	2	86	2	0	0	0	0	150	0
4:45 PM	2	0	1	0	47	3	1	0	1	3	75	2	0	0	0	0	130	0
4:50 PM	4	0	2	0	65	1	3	0	0	1	60	1	0	0	0	0	137	0
4:55 PM	0	0	1	0	67	2	4	0	0	3	51	2	0	0	1	0	140	1
5:00 PM	2	0	1	0	48	1	1	0	0	2	45	1	0	0	0	0	104	0
5:05 PM	1	0	0	0	53	0	2	0	0	0	83	1	0	0	0	0	140	0
5:10 PM	1	0	2	0	63	1	4	0	1	0	86	0	0	0	0	0	138	0
5:15 PM	2	0	2	0	74	1	2	0	0	0	55	0	0	0	0	0	136	0
5:20 PM	1	0	0	1	63	0	1	0	0	3	68	0	0	0	0	0	138	0
5:25 PM	2	0	0	0	44	0	3	0	0	2	70	0	0	0	0	0	121	0
5:30 PM	2	0	0	0	48	1	3	0	0	3	69	2	0	0	0	0	128	0
5:35 PM	3	0	1	1	59	0	2	0	0	0	64	0	0	0	0	0	123	0
5:40 PM	1	0	0	0	39	2	1	0	0	0	66	0	0	0	0	0	109	0
5:45 PM	2	0	0	0	54	3	4	0	0	1	56	1	0	0	0	1	121	1
5:50 PM	1	0	0	0	48	2	2	0	0	0	57	0	0	0	0	0	110	0
5:55 PM	3	0	0	0	46	1	3	0	1	1	57	0	0	0	0	0	112	0

HOURLY TOTALS	Southbound			Westbound			Northbound			Eastbound			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	19	0	12	2	760	17	20	0	5	13	778	14	0	1	3	0	1640	4
4:15 PM	20	0	14	2	723	13	25	0	5	13	791	15	0	0	1	0	1621	1
4:30 PM	22	0	14	2	705	14	29	0	2	16	790	10	0	0	1	0	1804	1
4:45 PM	21	0	10	2	658	12	30	0	2	17	783	9	0	0	1	0	1544	1
5:00 PM	21	0	6	2	632	12	31	0	2	12	757	5	0	0	0	1	1480	1

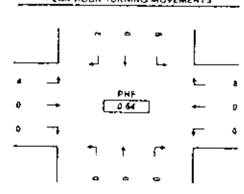
Version 3.1

INTERSECTION: Save Stores/Sherwin-Williams Dr—From North/Beavercreek Rd—From East
PROJECT ID#: Oregon City
QC JOB #: 10075414

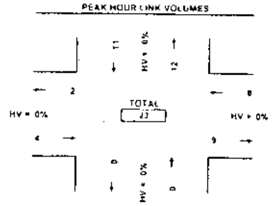
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

QUALITY COUNTS
18265 SW 85th Avenue, Ste 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503-620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

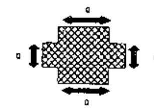
PEAK HOUR TURNING MOVEMENTS



PEAK HOUR LINK VOLUMES



PEAK HOUR PED CROSSING VOLUMES



PEAK HOUR: 4:00 PM TO 5:00 PM

PEAK 15 MINUTES: 4:45 PM TO 5:00 PM

5-MINUTE COUNT PERIOD BEGINNING AT	Save Stores/Sherwin-Williams Dr—From North (Southbound)			Beavercreek Rd—From East (Westbound)			Shopping Center (no access)—From South (Northbound)			Beavercreek Rd—From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	0	0	0	1	0	0	0	0	0	0	0	1	0	0	0	0	2	0
4:05 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
4:20 PM	1	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	4	0
4:25 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	0	0	3	0	0	0	0	0	0	0	0	0	0	0	0	3	0
4:45 PM	0	0	1	1	0	0	0	0	0	0	0	1	0	0	0	0	3	0
4:50 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:55 PM	0	0	4	1	0	0	0	0	0	0	0	0	0	0	0	0	5	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:20 PM	1	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	2	0
5:25 PM	0	0	0	0	0	0	0	0	0	0	0	1	0	0	0	0	1	0
5:30 PM	0	0	0	1	0	0	0	0	0	0	0	2	0	0	0	0	3	0
5:35 PM	0	0	1	0	0	0	0	0	0	0	0	1	0	0	0	0	2	0
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	1	1	0	0	0	0	0	0	0	0	0	0	0	0	2	0
5:50 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:55 PM	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	0	1	0

HOURLY TOTALS	Southbound			Westbound			Northbound			Eastbound			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	2	0	9	8	0	0	0	0	0	0	0	4	0	0	0	0	23	0
4:15 PM	2	0	8	8	0	0	0	0	0	0	0	3	0	0	0	0	21	0
4:30 PM	1	0	7	7	0	0	0	0	0	0	0	2	0	0	0	0	17	0
4:45 PM	1	0	7	5	0	0	0	0	0	0	0	5	0	0	0	0	18	0
5:00 PM	1	0	5	3	0	0	0	0	0	0	0	4	0	0	0	0	13	0

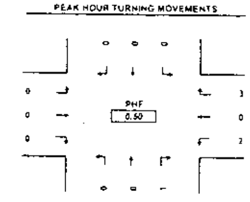
Version 2.1

INTERSECTION: Beavercreek Way—From North/Save Stores West Driveway—From East
PROJECT ID#: Oregon City
QC JOB #: 10075415

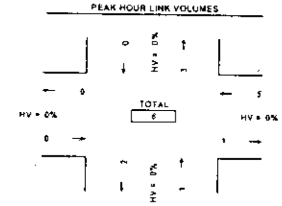
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

QUALITY COUNTS
18265 SW 85th Avenue, Ste. 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503-620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

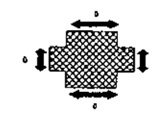
PEAK HOUR TURNING MOVEMENTS



PEAK HOUR LINK VOLUMES



PEAK HOUR PED CROSSING VOLUMES



PEAK HOUR: 4:00 PM TO 5:00 PM

PEAK 15 MINUTES: 4:45 PM TO 5:00 PM

5-MINUTE COUNT PERIOD BEGINNING AT	Beavercreek Way—From North (Southbound)			Save Stores West Driveway—From East (Westbound)			Beavercreek Way—From South (Northbound)			Fit Gazebo (no access)—From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:05 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:15 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:25 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0
4:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:40 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:55 PM	0	0	0	1	0	2	0	0	0	0	0	0	0	0	0	0	3	0
5:00 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:05 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:10 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:15 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:20 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:25 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	1	0

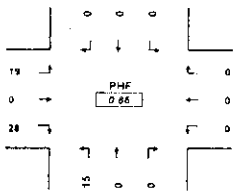
HOURLY TOTALS	Southbound			Westbound			Northbound			Eastbound			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	0	0	0	3	0	2	1	0	0	0	0	0	0	0	0	0	6	0
4:15 PM	0	0	0	2	0	2	1	0	0	0	0	0	0	0	0	0	5	0
4:30 PM	0	0	0	4	0	2	0	0	0	0	0	0	0	0	0	0	6	0
4:45 PM	0	0	0	3	0	2	0	0	0	0	0	0	0	0	0	0	5	0
5:00 PM	0	0	0	2	0	0	1	0	0	0	0	0	0	0	0	0	3	0

Version 3.1

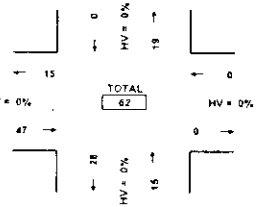
INTERSECTION: Beavercreek Way--From North/Union 76 to West--From East
PROJECT ID#: Oregon City
QC JOB #: 10075416
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

QUALITY COUNTS
16285 SW 85th Avenue, Ste. 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503 620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

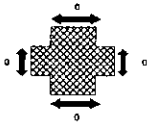
PEAK HOUR TURNING MOVEMENTS



PEAK HOUR LINK VOLUMES



PEAK HOUR PED CROSSING VOLUMES



PEAK HOUR: 4:30 PM TO 5:30 PM

PEAK 15 MINUTES: 5:00 PM TO 5:15 PM

5-MINUTE COUNT PERIOD BEGINNING AT	Beavercreek Way--From North (Southbound)			Union 76 to West--From East (Westbound)			Beavercreek Way--From South (Northbound)			To Beavercreek West Entrance--From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	0	0	0	0	0	0	0	0	2	1	0	1	0	0	0	0	4	0
4:05 PM	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	4	0
4:10 PM	0	0	0	0	0	0	0	0	2	1	0	0	0	0	0	0	3	0
4:15 PM	0	0	0	0	0	0	0	0	1	5	0	0	0	0	0	0	6	0
4:20 PM	0	0	0	0	0	0	0	0	0	3	0	1	0	0	0	0	4	0
4:25 PM	0	0	0	0	0	0	0	0	0	1	0	1	0	0	0	0	2	0
4:30 PM	0	0	0	0	0	0	0	0	0	1	0	2	0	0	0	0	3	0
4:35 PM	0	0	0	0	0	0	0	0	1	2	0	0	0	0	0	0	3	0
4:40 PM	0	0	0	0	0	0	0	0	2	5	0	0	0	0	0	0	7	0
4:45 PM	0	0	0	0	0	0	0	0	1	2	0	1	0	0	0	0	4	0
4:50 PM	0	0	0	0	0	0	0	0	2	1	0	2	0	0	0	0	5	0
4:55 PM	0	0	0	0	0	0	0	0	2	2	0	1	0	0	0	0	5	0
5:00 PM	0	0	0	0	0	0	0	0	1	3	0	2	0	0	0	0	6	0
5:05 PM	0	0	0	0	0	0	0	0	3	1	0	3	0	0	0	0	7	0
5:10 PM	0	0	0	0	0	0	0	0	0	4	0	1	0	0	0	0	5	0
5:15 PM	0	0	0	0	0	0	0	0	1	4	0	3	0	0	0	0	8	0
5:20 PM	0	0	0	0	0	0	0	0	1	1	0	2	0	0	0	0	4	0
5:25 PM	0	0	0	0	0	0	0	0	1	2	0	2	0	0	0	0	5	0
5:30 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	4	0
5:35 PM	0	0	0	0	0	0	0	0	1	3	0	1	0	0	0	0	5	0
5:40 PM	0	0	0	0	0	0	0	0	0	2	0	2	0	0	0	0	4	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	2	0	0	0	0	2	0
5:50 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	0
5:55 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	0

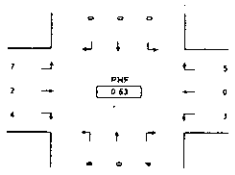
HOURLY TOTALS	Southbound			Westbound			Northbound			Eastbound			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	0	0	0	0	0	0	0	0	13	27	0	10	0	0	0	0	50	0
4:15 PM	0	0	0	0	0	0	0	0	13	30	0	14	0	0	0	0	57	0
4:30 PM	0	0	0	0	0	0	0	0	15	28	0	19	0	0	0	0	62	0
4:45 PM	0	0	0	0	0	0	0	0	13	27	0	22	0	0	0	0	62	0
5:00 PM	0	0	0	0	0	0	0	0	10	24	0	20	0	0	0	0	54	0

Version 3.1

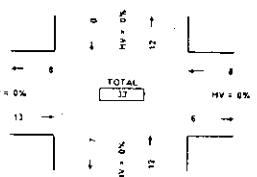
INTERSECTION: Beavercreek Way--From North/ABC Glass--From East
PROJECT ID#: Oregon City
QC JOB #: 10075417
START TIME: 4:00 PM
END TIME: 6:00 PM
DATE: 1/18/2005

QUALITY COUNTS
16285 SW 85th Avenue, Ste. 105
Tigard, OR 97224
Phone: 503-620-4242
Fax: 503 620-4545
email: jrw@qualitycounts.net
www.qualitycounts.net

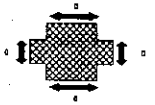
PEAK HOUR TURNING MOVEMENTS



PEAK HOUR LINK VOLUMES



PEAK HOUR PED CROSSING VOLUMES



PEAK HOUR: 4:15 PM TO 5:15 PM

PEAK 15 MINUTES: 4:15 PM TO 4:30 PM

5-MINUTE COUNT PERIOD BEGINNING AT	Beavercreek Way--From North (Southbound)			ABC Glass--From East (Westbound)			Beavercreek Way--From South (Northbound)			To Beavercreek West Entrance--From West (Eastbound)			Crosswalk Usage (Peds By Approach)				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	North	East	South	West	Veh	Peds
4:00 PM	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	0	1	0
4:05 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
4:10 PM	0	0	0	0	0	0	2	0	0	0	0	1	0	0	0	0	3	0
4:15 PM	0	0	0	0	0	1	0	0	2	2	0	0	0	0	0	0	5	0
4:20 PM	0	0	0	0	0	0	1	0	1	0	2	1	0	0	0	0	5	0
4:25 PM	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	3	0
4:30 PM	0	0	0	0	0	1	0	0	1	0	0	1	0	0	0	0	3	0
4:35 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
4:45 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	0
4:50 PM	0	0	0	1	0	0	0	0	0	0	0	0	0	0	0	0	1	0
4:55 PM	0	0	0	0	0	0	0	0	1	0	0	2	0	0	0	0	3	0
5:00 PM	0	0	0	0	0	0	0	0	1	1	0	0	0	0	0	0	2	0
5:05 PM	0	0	0	0	0	0	0	0	1	0	0	1	0	0	0	0	2	0
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5:15 PM	0	0	0	0	0	0	0	0	0	1	0	0	0	0	0	0	1	0
5:20 PM	0	0	0	1	0	0	0	0	0	1	0	0	0	0	0	0	1	0
5:25 PM	0	0	0	0	0	1	0	0	0	0	0	0	0	0	0	0	1	0
5:30 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:35 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:40 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:45 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:50 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:55 PM	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0	0

HOURLY TOTALS	Southbound			Westbound			Northbound			Eastbound			Pedestrians By Approach				TOTAL	
	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	Right	Thru	Left	West	East	North	South	Veh	Peds
4:00 PM	0	0	0	4	0	3	6	0	7	4	2	6	0	0	0	0	32	0
4:15 PM	0	0	0	5	0	3	4	0	8	4	2	7	0	0	0	0	33	0
4:30 PM	0	0	0	6	0	2	4	0	4	4	0	5	0	0	0	0	25	0
4:45 PM	0	0	0	3	0	1	1	0	4	4	0	4	0	0	0	0	17	0
5:00 PM	0	0	0	2	0	1	1	0	2	3	0	2	0	0	0	0	11	0

Version 3.1

Beavercreek Road Improvement Project
WE Job No. 1158A

Summary of Plan Changes to date (April 14, 2005):

1. Revised proposed closure of Beavercreek Way from a total closure to providing a right-in only movement from Molalla Avenue. This change was suggested by ABC Glass. ABC Glass understood that Beavercreek Way as it is today only serves as a short-cut around the Molalla Avenue/Beavercreek Road intersection. The issue ABC Glass has is that their storage facility is located to the west of Molalla Avenue, so for their trucks to get to the store they have to turn on Beavercreek Way. With right-in only access from Molalla Avenue their trucks could get to the store via Molalla Avenue rather than through Beavercreek Road to Beavercreek Way. This change has been shown on the Long Term Plan.
2. Widened several specific driveways to accommodate large trucks at the request of the property owner (Jiffy Lube/Oregon City Auto Services Center, Berryhill Apartments/Townhomes, Nelson's Nautilus/Mobile Motor Medic/Clark's Lawn & Garden).
3. Based on concerns voiced by the business owners at Southridge Center, the accesses to Southridge were revised from one full access (permits right in/out and left in/out) and two right-in/outs (no left in/out) to one full access, one right in/out + left in, and one right in/out. (This configuration may be revised further - see the discussion below regarding the possible signalized intersection at Southridge/Uhaul.)
4. Due to the concerns raised by Oregon City Day School (located at Southridge Center) regarding school buses stopping to let children off on the opposite side of the street, a crosswalk with a raised median was added to facilitate this pedestrian crossing need since the nearest signalized crossings are more than 500' away from the drop-off location.
5. Based on concerns regarding truck access to the Nelson's Nautilus site, the driveway accesses along Beavercreek Road have been revised from two right in/outs to one right in/out and one right in/out + left in. This is in addition to access to the Fred Meyer signal.
6. Revised the access to Pioneer Car Wash from right in/out to include a left in as well. This has been done at the request of the property owner and is in accordance with the conditions of approval for this site.
7. Due to concerns regarding the traffic separator proposed for Beavercreek Road at the Molalla Avenue intersection (did not permit left ins/outs to/from Beavercreek Way) it was decided that the Beavercreek Road project would begin at the end point of the Beavercreek Road/Molalla Avenue intersection improvements completed in 1996. The proposed traffic separator on Beavercreek Road to Molalla Avenue and the changes proposed for Beavercreek Way will not be included as part of the Short Term Access Management Plan, but are shown on the Long Term Plan.
8. There are on-going discussions with Southridge Center and the owner of the Uhaul property across the street regarding the construction of a signalized

intersection for these properties. The signal has been shown on the Long Term Plan. However, discussions are currently underway to determine if the signalized intersection will be included with the Short Term Plan.

Tony Konkol

From: Ki Bealey [kbealey@walliseng.net]
Sent: Friday, April 08, 2005 1:45 PM
To: Tony Konkol
Cc: Nancy Kraushaar
Subject: Fwd: BC Road - Pioneer Car Wash

Tony,

The following is in reference the conditions of approval for the Pioneer Car Wash. Let me know if you have any questions.

Thanks,
Ki

>>> Ki Bealey 03/16/05 02:41PM >>>
Nancy,

Per the "Assignment Agreement," SP 98-17 Design Review File 32E0500400, regarding the property owned by Steve Milner, 1675 S. Beavercreek Road (Pioneer Car Wash), on page 21, first paragraph, "...entrance shall have only two 12-foot wide traffic lanes with a traffic control structure which shall consist of one ingress lane and one right turn only egress lane."

In the third paragraph from the top, the report goes on to discuss the required frontage improvements, only some of which seem to have been constructed.

Also, on page 26, item 22 (under conclusions and decisions), the report states, "The street entrance is a temporary access which may be eliminated in the future when access to the site is available by an alternate route approved by the City Master Plan or other appropriate City or County approved plan. It is compatible with both the City's and County's anticipated future planning to minimize access to Beavercreek Road to the extent it is reasonably possible to do so."

This document is dated September 10, 1999.

Ki

Exhibit 3

Beavercreek Road Access Mgmt Plan Comments/Questions
From 3-10-05 Public Meeting

What do you think about the Beavercreek Road short-term and long-term access management plans? Is there anything you would like to see changed? If so, what would it be?

1) Where have accidents occurred in this area in the past? *Graham's Stationary*
2) Are there specific driveways & lighted intersections that can be dealt with without the use of medians? *Graham's Stationary*
3) Semi Trucks & Trailers getting to our site? *Clarks Lawn & Garden Equipment*
4) Milton Brown (owner of property) cooperation. *Clarks Lawn & Garden Equipment*
5) Five lanes; left and right turn both directions; two bike lanes; pedestrian crossings every so many feet. *Robert Tousignant, Save Stores*
6) Not sure we need all the medians. *BerryHill Condos*

Do you think the Access Management Plan will improve traffic flow and safety on Beavercreek Road?

1) What does more extensive data show about drivers coming west to east on Beavercreek making left hand turns into local businesses? *Graham's Stationary*
2) "Yes", *Clarks Lawn & Garden Equipment*
3) "Not at all", *Robert Tousignant, Save Stores*
4) "Yes", *BerryHill Condos*

Any other comments?

1) What does data show about the comfort level of drivers making u-turns at intersections? *Graham's Stationary*
2) If urban renewal district goes away-what improvements can be made? *Graham's Stationary*
3) Could you look into bring[ing] a r[oa]d down past mini storage into our lower parking lot? *BerryHill Condos*

Meeting Requests:

Contact	Topic
Paul & Teri Graham, Graham's Stationary 503.636.5676	[Discuss] new information about [comments], new timelines and fate of urban renewal district.
Rusty Hancock, Rusty's Resale 503.657.8099	Just some questions, a phone call would be fine.
Susan Stein, Stein Oil Co. Inc. 503.656.0375	1) Concern of land locking retail station; no value left, business will be so dramatically affected, not cost effective to run 2) If condemnation? Is necessary it might be concerned at real market value?
Jim Bean, Attorney 503.226.7677	Youngers Prof. Need signal now!
Rob Clark, Clarks Lawn & Garden 503.656.0720	Traffic Flow-Semis and Trailers

Robert Tousignant, Save Stores 503.234.9318	To talk with you [with] my attorney present.
Stephan Whybra, BerryHill Park Apts 503.657.3954	Safety/Sound Wall

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SCHWABE, WILLIAMSON & WYATT
ATTORNEYS AT LAW

Pacwest Center, 1211 SW 5th Ave., Suite 1900, Portland, OR 97204 | Phone 503-222-9981 | Fax 503-796-2900 | www.schwabe.com
JOSEPH S. SCHAEFER
LAND USE PLANNER
Direct Line: (503) 796-2091
Cellular Phone: (503) 819-4764
E-Mail: jschaefer@schwabe.com

May 4, 2005

Nancy J. T. Kraushaar
City Engineer / Public Works Director
City of Oregon City
320 Warner Milne Rd.
PO Box 3040
Oregon City, OR 97045-0304

Re: Beavercreek Road Access Management Plans

Dear Nancy:

Thank you for arranging for the project civil engineer to send us electronic copies of the short-term and long-term access management plans that were presented at the last open house. As you may recall, the research done by the City's consultants revealed a substantial amount of traffic between the Southridge Shopping Center and the Fred Meyer property.

The joint access easement was created many years ago, and when we researched its origin and terms, we discovered the enclosed Agreement from 1982. The Agreement notes the City's wish to have the access constructed between Southridge Shopping Center and the Fred Meyer property. Our client's predecessor agreed to construct the access, and actually did construct it in accordance with the Agreement.

For its part, the City agreed that when Beavercreek Road is widened, the Shopping Center has the option of creating a new access, with full left turn and right turn ingress and egress, at the location shown on the recent long-term access management plan. The short-term access management plan indicates the City's intention to widen Beavercreek Road, but does not indicate that our client has the option of creating the new access as described in the Agreement.

Of course improvements to Beavercreek Road may also occur if the Wal-Mart project moves forward. We have two comments to make regarding the pending Wal-Mart application and ask that this letter be submitted into the record. Please also add my name to the notice list for the application.

Beavercreek Road Access Management Plan
Comment Sheet

Name/Business: BERRYHILL PARK APTS STEPHEN WHYBRA
Address: 13945 BEAVERCREEK RD.
Email: MSWHYBRA@MSN.COM (optional)
Phone: 5036573054

Your feedback is important to the City and consultant team. Please provide comments to the following questions regarding the Beavercreek Road Access Management Plan.

What do you think about the Beavercreek Road short-term and long-term access management plans? Is there anything you would like to see changed? If so, what would it be?

Do you think the Access Management Plan will improve traffic flow and safety on Beavercreek Road?

Any other comments?

If you would like to meet individually with City staff and the consultant team, please mark the box below and state the subject you would like to address in this meeting. Please be sure to fill out your name, address, and phone number above.

Yes I would like to set up an individual meeting. ☒ **Meeting Topic:** SAFETY/SOUND WALL

DKS Associates
TRANSPORTATION SOLUTIONS

First, the large number of trips that will travel westbound on Beavercreek Road and turn right (north) onto the proposed new public street that will provide access to the Wal-Mart site clearly requires a right turn lane with suitable storage capacity. This is listed as a proposed mitigation measure in the February 2004 Wal-Mart traffic study. We presume the City will require construction of this mitigation measure upon approval of the Wal-Mart application, should the application be approved.

Second, for obvious safety reasons, the new public road proposed by Wal-Mart for access to the north side of Beavercreek Road must align directly with our clients' optional access point on the south side of Beavercreek Road. That access point is correctly shown on both the long-term access management plan map and on Exhibit A to the 1982 Agreement.

Thank you for working with us with respect to the proposed revisions to Beavercreek Road and the Shopping Center access. Give me a call if you have any questions.

Sincerely,

Joseph S. Schaefer
Land Use Planner

JSS:cst
Enclosure

cc: Ms. Judith Wiesberg (w/encl.)
Ms. Sarah Sumrall (w/encl.)
Mr. George L. Bean (w/encl.)
Donald Joe Willis, Esq. (w/encl.)
Terry C. Hauck, Esq. (w/encl.)

Herford

#549 eg.. City
Oreg. City, OR
6/8/82

AGREEMENT

THIS AGREEMENT is entered into on this 15th day of July, 1982, by and between South Ridge Properties, an Oregon partnership ("SRP"), the City of Oregon City, Oregon ("Oregon City"), Albertson's, Inc., a Delaware corporation ("Albertson's"), and The Bi-Mart Company ("Bi-Mart"), a division of Pay 'n Save Corporation, a Washington corporation.

RECITALS:

A. SRP is the owner of the South Ridge Center located on the real property in Oregon City, which real property is described on the attached Schedule 1. Albertson's and Bi-Mart are tenants in the South Ridge Center.

B. Fred Meyer, Inc. ("Fred Meyer") has constructed and operates a shopping center on real property that is southeast of and contiguous to the South Ridge Center. Oregon City wishes to have access constructed between the South Ridge and Fred Meyer shopping centers. The portion of the access on the Fred Meyer property is substantially complete.

C. Under the terms of their leases with SRP, the consent of Albertson's and Bi-Mart is required for any changes in the access to South Ridge Center. Construction of the proposed access would require consent.

D. Albertson's and Bi-Mart are prepared to consent to construction of access between the South Ridge and Fred Meyer shopping centers on certain terms and conditions, and SRP is willing to construct access on its property on the terms and conditions set forth in this Agreement.

AGREEMENT:

NOW, THEREFORE, for valuable consideration, receipt of which is hereby acknowledged, and in consideration of the covenants, premises, and conditions herein contained, the parties agree as follows:

1. Construction of Access. Not later than thirty (30) days following execution of this Agreement by all parties, SRP shall

construct access between the South Ridge and Fred Meyer shopping centers at the approximate location shown in red on the map attached hereto as Exhibit "A". Construction of the access shall be at the sole and exclusive cost of SRP. In constructing the access, SRP shall conform substantially to the existing portion of the access on the Fred Meyer property, with such additional improvements (such as striping, speed bumps and stop signs) as are necessary for traffic control.

2. Undertakings of City. In consideration of the agreement of SRP to construct access and the consent of Albertson's and Bi-Mart to construction of an access referred to hereinabove, Oregon City agrees as follows:

(a) The traffic island along Molalla Avenue opposite the northwest corner of the Albertson's store in South Ridge Center (shown in green on Exhibit "A") may be removed by SRP such that the existing driveway will provide access for ingress and egress to South Ridge Center from and to Molalla Avenue in accordance with the plans of the Oregon State Highway Division attached hereto as Exhibit "B". The removal of the Molalla Avenue traffic island shall permit vehicles traveling north on Molalla Avenue to turn right into the South Ridge Center and shall permit vehicles traveling south on Molalla Avenue to turn left into the South Ridge Center. Vehicles leaving the South Ridge Center at Molalla Avenue shall be permitted to turn right onto Molalla Avenue. The cost of removal shall be borne by SRP.

(b) At such time as Beaver Creek Road is improved to a four lane thoroughfare, SRP shall have the option to create additional access to South Ridge Center from and onto Beaver Creek Road opposite the present main access to South Ridge Center from Molalla Avenue (the approximate location of which is shown in blue on Exhibit "A"), with substantially the same configuration as the existing main access and with full right and left turn ingress and egress.

3. Remedies. Because the economic effect of a failure of Oregon City to perform its obligations under this Agreement would be

highly difficult to determine and any damages for nonperformance might be speculative, the parties acknowledge that the remedy at law of SRP, Albertson's and Bi-Mart for nonperformance by Oregon City is inadequate. Therefore, SRP, Albertson's and Bi-Mart shall be entitled to specific performance of the obligations of Oregon City under this Agreement. In any litigation instituted to construe, interpret or enforce the terms of this Agreement, the prevailing party or parties shall be entitled to recover from the losing party or parties all costs and attorneys' fees incurred in the litigation, both at trial and on any appeals therefrom and petitions for review thereof.

4. Entire Agreement. This Agreement contains the entire agreement among the parties with respect to the matters covered herein, and no previous discussions, understandings or promises not contained herein shall be binding upon or enforceable against the parties. This Agreement may not be modified and the rights of the parties hereunder may not be waived except in a writing executed by all parties.

EXECUTED as of the day and year first above written.

SOUTH RIDGE PROPERTIES,
an Oregon partnership

BY: _____
General Partner

CITY OF OREGON CITY

BY: _____
Mayor

ALBERTSON'S, INC.
a Delaware corporation

BY: _____
Vice President & General Counsel

BY: _____
Secretary

THE BI-MART COMPANY

BY: _____
President

BY: _____
Secretary

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STATE OF)
) ss.
County of)

On this 23rd day of June, 1982, before me, the undersigned, a Notary Public in and for said State, personally appeared J.J. Phelan and _____, to me known to be the President and _____, respectively, of THE BI-MART COMPANY, the corporation that executed the foregoing instrument, and acknowledged to me that the said instrument is the free and voluntary act and deed of said corporation, for the uses and purposes therein mentioned, and on oath stated that they are authorized to execute the said instrument and that the seal affixed is the corporate seal of said corporation.

WITNESS MY HAND and official seal hereto affixed the day, month and year in this certificate first above written.

My commission expires:

May 12, 1984

Notary Public in and for the
State of Oregon
Residing at Lane County

STATE OF OREGON)
) ss.
COUNTY OF)

The foregoing instrument was acknowledged before me this _____ day of ________________, a general partner of ________________ ...cuted the

STATE OF CALIFORNIA
COUNTY OF Contra Costa } ss.
On June 25, 1982, before me, the undersigned, a Notary Public in and for said State, personally appeared Peter B. Bedford

known to me to be General the partners of the partnership that executed the within instrument and acknowledged to me that such partnership executed the same.

WITNESS my hand and official seal.

OFFICIAL SEAL
PAMELA ANN QUIMBY MAHONEY
NOTARY PUBLIC — CALIFORNIA
CONTRA COSTA COUNTY
My Commission Expires Sept. 20, 1985

Signature Pamela Ann Quimby Mahoney

Pamela Ann Quimby Mahoney
Name (Typed or Printed)

(This area for official notarial seal)

Form 3003—(Partnership) First American Title Company

The foregoing instrument was acknowledged before me this 23rd day of June, 1982, by Joan M. Cartales, who is Mayor of the CITY OF OREGON CITY.

[signature]
NOTARY PUBLIC

(seal)

My commission expires:
3-09-84

STATE OF IDAHO)
: ss.
County of Ada)

On this 15th day of July, 1982, before me, the undersigned Notary Public in and for said State, personally appeared Thomas R. Saldin and Minnie O. Armstrong, known to me to be the Vice President and General Counsel and Secretary, respectively, of Albertson's, Inc., the corporation that executed the foregoing instrument, and acknowledged to me that the said instrument is the free and voluntary act and deed of such corporation, for the uses and purposes mentioned therein, and on oath stated that they are authorized to execute the said instrument on behalf of such corporation and that the seal affixed is the corporate seal of such corporation.

WITNESS MY HAND AND OFFICIAL SEAL affixed hereto the day and year in this certificate first above written.

Claudia C. Medlin
Notary Public for Idaho
Residing at Boise, Idaho
My commission expires: 10/30/84

The land referred to in this policy is described as SCHEDULE A

IN THE COUNTY OF CLACKAMAS AND STATE OF OREGON

PARCEL I:
A portion of the Samuel M. Vance D. L. C. No. 51, in the southeast one-quarter of Section 5, T. 3 S., R. 2 E., W. M., described as follows:

Beginning at a brass disc located at the intersection of Oregon State Highway Department State Route 213, hereinafter referred to as Molalla Avenue, and Clackamas County Market No. 11, hereinafter referred to as Beavercreek Road, said disc being the point of intersection of a 1° curve to the southeast on said Molalla Avenue and Engineer's Station 38+02.85; thence South 30° 46' 30" East, 460.0 feet to a point; thence North 88° 53' 30" East, 46.31 feet to a point on the southerly line of a tract of land conveyed to Oregon City by Warranty Deed recorded November 10, 1961, in Book 595, page 127, Deed Records, which is 5.00 feet northeasterly from the easterly boundary of a 5 foot tract of land conveyed to the State of Oregon, described as Parcel I, in Warranty Deed recorded September 3, 1959, in Book 560, page 566, Deed Records which point is the true place of beginning of the tract herein described; thence South 30° 46' 30" East, parallel with the centerline of Molalla Avenue, 556.0 feet to a point; thence North 59° 13' 30" East, 225 feet to a point; thence North 44° 52' 30" East, 280.06 feet to a point which is 10 feet Southwesterly from the southwesterly boundary of Beavercreek Road, said 10 feet being measured radially from the center of a 994.93 foot radius curve; thence Northwesterly 100.65 feet along the arc of a curve right having a radius of 994.93 feet and a central angle of 5° 47' 47", the long chord of which bears North 64° 24' 25" West, 100.61 feet to a point of tangent; thence North 61° 30' 31" West, 245.96 feet parallel with and 10 feet Southwesterly from

pf PAGE 1 OF POLICY NO 150-820 Continued

the southwesterly boundary of Beavercreek Road, to the southerly line of a tract of land conveyed to Howard White by Personal Representative's Deed recorded February 9, 1977, Fee No. 77 5018; thence South 88° 53' 30" West, 368.51 feet to the true place of beginning.

EXCEPT the following described tract:

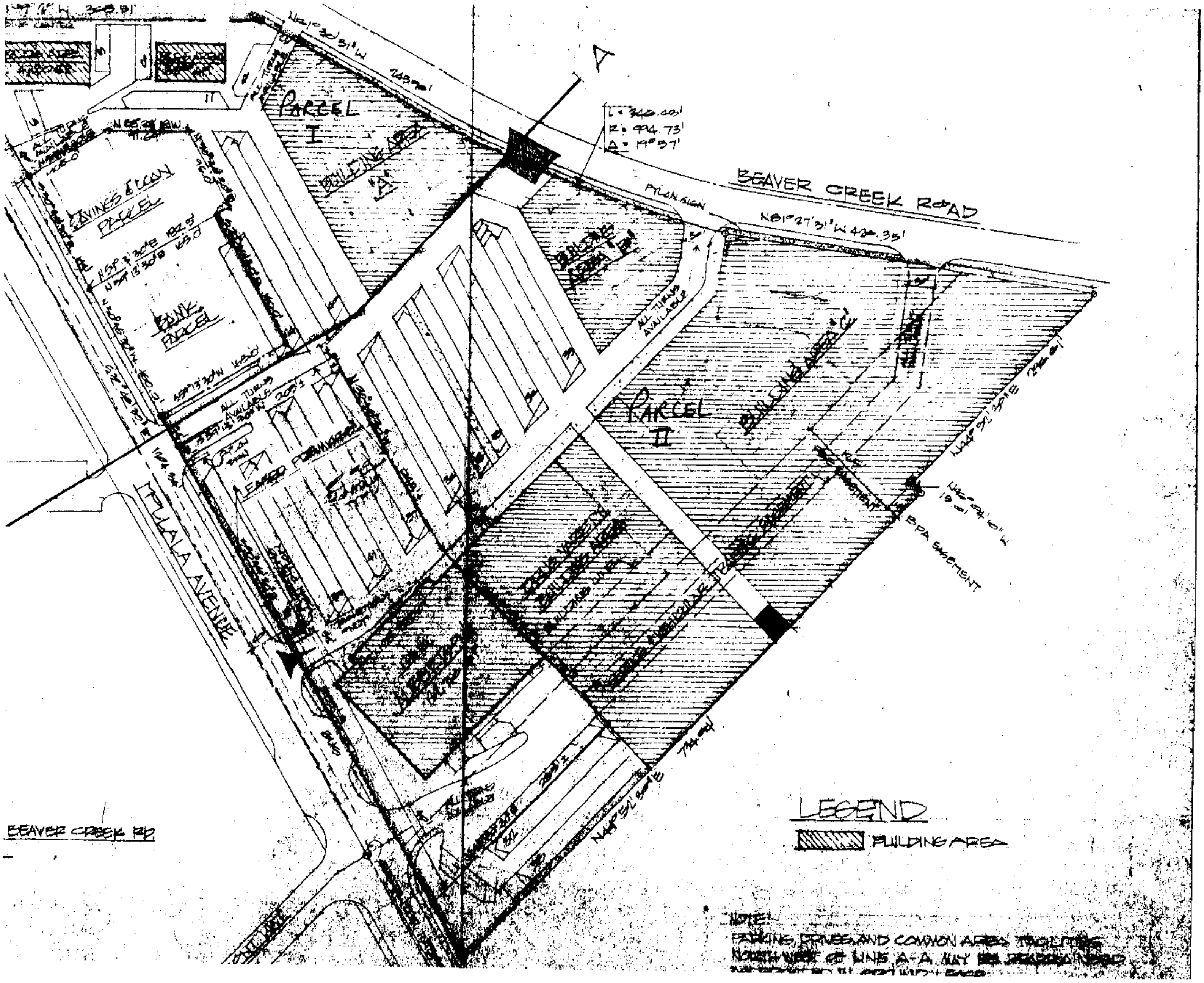
Beginning at a brass disc located at the intersection of Oregon State Highway Department-State Route 213 and Clackamas County Market Road No. 11, said brass disc being the point of intersection of a 1° curve to the southeast on said Highway 213 and Engineer's Station 38+02.85; thence South 30° 46' 30" East, 460 feet to a point; thence North 88° 53' 30" East, 40.96 feet to a 58 inch iron rod on the easterly right-of-way line of Oregon State Highway Department-State Route 213; thence South 30° 46' 30" East, 350 feet along the easterly right-of-way of the Oregon State Highway Department-State Route 213, or more commonly known as Molalla Avenue; thence North 59° 13' 30" East, 5.0 feet to a point which is the true place of beginning of the tract herein described; thence North 59° 13' 30" East, 182.5 feet; thence North 30° 46' 30" West, parallel with Molalla Avenue, 95 feet; thence North 88° 28' 18" West, 91.69 feet; thence South 59° 13' 30" West, 105 feet to a point which bears North 30° 46' 30" West from the true place of beginning; thence South 30° 45' 30" East, 144 feet to the true place of beginning.

ALSO EXCEPT the following described tract:

Beginning at a brass disc located at the intersection of Oregon State Highway Department-State Route 213 and Clackamas County Market Road No. 11, said brass disc being the point of intersection of a 1° curve to the southeast on said Highway 213 and Engineer's Station 38+02.85; thence South 30° 46' 30" East, 460.0 feet to a point; thence North 88° 53' 30" East, 40.96 feet to a 58 inch iron rod on the easterly right-of-way line of Oregon State Highway Department State Route 213; thence South 30° 46' 30" East, 350.0 feet along the easterly right-of-way of The Oregon State Highway Department State Route 213, or more commonly known as Molalla Avenue; thence North 59° 13' 30" East, 5.0 feet to a point, and the true point of beginning; thence North 59° 13' 30" East, 165.0 feet to a point; thence South 30° 46' 30" East, 160.0 feet and parallel with the easterly right-of-way of The Oregon State Highway State Route 213, to a point; thence South 59° 13' 30" West, 165.0 feet to a point; thence North 30° 46' 30" West, 160.0 feet and parallel with the easterly right-of-way of The Oregon State Highway Department State Route 213 to a point which is the true point of beginning.

PARCEL II:
A portion of the Samuel N. Vance D. L. C. No. 51 in the southeast one-quarter of Section 5, T. 3 S., R. 2 E., of the W. M., described as follows:

Beginning at a brass disc located at the intersection of Oregon State Highway Department State Route 213, hereinafter referred to as Molalla Avenue, and Clackamas County Market Road No. 11, hereinafter referred to as Beavercreek Road, said disc being the point of intersection of a 1° curve to the southeast on said Molalla Avenue and Engineer's Station 38+02.85; thence South 30° 46' 30" East 460.0 feet to a point; thence North 88° 53' 30" East 46.81 feet to a point on the southerly line of a tract of land conveyed to Oregon City by Warranty Deed recorded November 10, 1961, in Book 595, page 127, Deed Records, which is 5.00 feet Northeasterly from the easterly boundary of a 5 foot tract of land conveyed to the State of Oregon, described as Parcel I, in Warranty Deed recorded September 3, 1959, in Book 560, page 566, Deed Records; thence South 30° 46' 30" East parallel with the centerline of Molalla Avenue, 556.0 feet to the true place of beginning of the tract herein described; thence continuing South 30° 46' 30" East parallel with the centerline of Molalla Avenue, 648.34 feet to a point on the southeasterly line of a tract of land conveyed to Peter B. Bedford and Marc Paul, Inc., by Warranty Deed recorded February 21, 1978, Fee No. 78 7156; thence North 44° 52' 30" East, on said southeasterly line, 734.64 feet to a 5/8 inch iron rod; thence North 46° 04' 10" West, 15.0 feet to a 5/8 inch iron rod; thence North 44° 52' 30" East on said southeasterly line, 296.61 feet to a point which is 10 feet Southwesterly from the southwesterly boundary of Beavercreek Road when measured at right angles therefrom; thence North 81° 27' 31" West parallel with and 10 feet Southwesterly from the southwesterly boundary of Beavercreek Road, 426.35 feet, more or less, to a point of curve; thence Northwesterly 245.77 feet along the arc of a tangent curve right, having a radius of 994.93 feet and a central angle of 14° 09' 13", the long chord of which bears North 74° 22' 55" West, 245.15 feet to a point; thence South 44° 52' 30" West, 280.06 feet to a point; thence South 59° 13' 30" West, 225 feet to the true place of beginning.-----



PARCEL I
PARCEL II
BEAVER CREEK ROAD
PYLON SIGN
N81°27'31"W 428.35'
SAVINGS & LOAN PARCEL
BANK PARCEL
ALL TURNS AVAILABLE
MOLALLA AVENUE
BPA EASEMENT
BEAVER CREEK RD
LEGEND
BUILDING AREA
NOTE:
PARKING, DRIVES, AND COMMON AREA FACILITIES
NORTH WEST OF LINE A-A