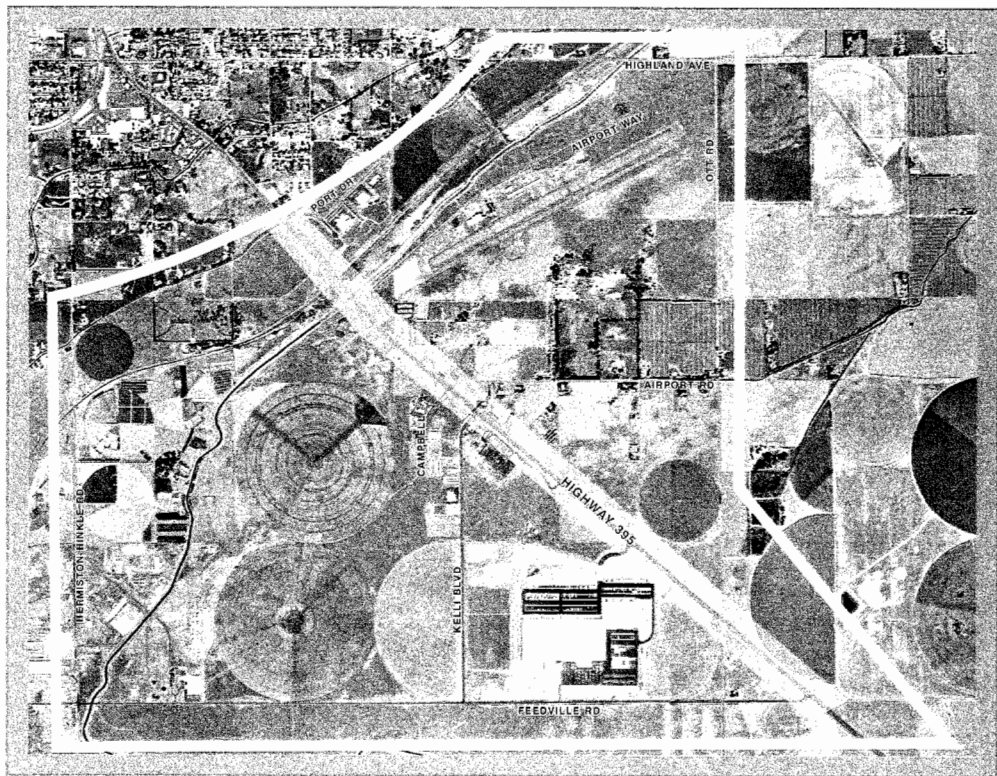


US 395 Corridor Refinement Plan

(Port Drive to Feedville Road)

City of Hermiston, Oregon



January 2003

US 395 Corridor Refinement Plan Supporting Documentation and TSP Update Notebook

Introduction

In July 2000, the *US 395 North Corridor Plan* was adopted by the Oregon Transportation Commission. As part of this plan, a raised median was recommended along a portion of US 395 (Kelli Boulevard to Rosalyn Drive) to enhance the long-term travel safety and provide better access management. Thus, the *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec.*¹ median project was placed on the STIP and funded for the 2002-2003 fiscal year.

While the *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec.* STIP median project meets the objective of the *US 395 North Corridor Plan*, the City of Hermiston Transportation System Plan (TSP) has not been expanded to address the local access and circulation needs within the City of Hermiston's Urban Growth Boundary south of Port Drive. As a result, this area does not have an established or planned street network capable of supporting a highly access-controlled corridor. Based on this concern and the aesthetics of the raised median on US 395, the City of Hermiston requested that a refinement study be completed prior to the implementation of the median project. This project became known as the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan*. The overall goal of the refinement study was to develop a long-term circulation and corridor preservation strategy that will allow economic development within the City of Hermiston Urban Growth Boundary, while maintaining the integrity and safety of the US 395 corridor.

This notebook provides documentation of the technical planning work associated with the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan* and provides a recommended set of amendments to the City of Hermiston Transportation System Plan. This implementation notebook is divided into the following sections:

- **Section 1 – Proposed Transportation System Plan Amendments**
US 395 (Port Drive to Feedville Road) Corridor Refinement Plan
- **Section 2 – Technical Memorandum #1**
Existing/Future Conditions Analysis and Access Opportunities Constraints Analysis
(Kelli Boulevard - Feedville Road)
- **Section 3 – Technical Memorandum #2**
Short-Term Circulation and Access Implementation Plan
(Kelli Boulevard - Feedville Road)
- **Section 4 – Future Volume Forecasts Memorandum**
- **Section 5 – Technical Memorandum #3**
Circulation and Access Opportunities Constraints Analysis (Port Drive - Feedville Road)
- **Section 6 – Public Involvement and Coordination Process Memorandum**
Planning Project Team and Public Involvement Process

¹ Upon inception of the *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec.* median project, ODOT originally referred to the project as the *Port Drive-NW Harding Avenue Median Project*. Half-way through the development of the US 395 Corridor Refinement Plan, ODOT changed the official name of the median project to *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec.* Because of this name change, the reader will see references to both naming conventions throughout this document.

Section 1

Proposed
Transportation
System Plan
Amendments



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8169

MEMORANDUM

Date: January 17, 2003

Project #: 5504

To: Ed Brookshier, City of Hermiston
Teresa Penninger, ODOT Region 5

cc: Planning Project Team Members

From: Marc Butorac, P.E., P.T.O.E.
Matt Hughart, AICP

Project: US 395 (Port Drive to Feedville Road) Corridor Refinement Plan

Subject: Hermiston Transportation System Plan and US 395 North Corridor Plan Amendment

INTRODUCTION

In July 2000, the Oregon Department of Transportation's (ODOT) *US 395 North Corridor Plan* was adopted by the Oregon Transportation Commission. As part of this plan, a raised median was recommended along a portion of US 395 (Kelli Boulevard to Rosalyn Drive) to enhance the long-term travel safety and provide better access management. Thus, the *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec.* median project was placed on the Statewide Transportation Improvement Plan (STIP) and funded for the 2002-2003 fiscal year.

While the *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec.* STIP median project meets the objective of the *US 395 North Corridor Plan*, the City of Hermiston Transportation System Plan (TSP) has not been expanded to address the local access and circulation needs within the City of Hermiston's Urban Growth Boundary south of Port Drive. As a result, this area does not have an established or planned street network capable of supporting a highly access-controlled corridor. Based on this concern and the aesthetics of the raised median on US 395, the City of Hermiston requested that a refinement study be completed prior to the implementation of the median project. This project became known as the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan*. The overall goal of the refinement study is to develop a long-term circulation and corridor preservation strategy that will allow economic development based on quality development principles within the City of Hermiston Urban Growth Boundary, while maintaining the integrity and safety of the US 395 corridor.

This memorandum contains proposed amendments to the City of Hermiston Transportation System Plan that implements the work completed as part of the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan*. The proposed amendment was developed to directly

supplement the various plan maps, street standards, and improvement projects previously identified in the May 2000 Transportation System Plan amendment that resulted in an updated transportation system plan for the City of Hermiston. The information in this memorandum is also intended to supplement and update ODOT's July 2000 *US 395 North Corridor Plan*. These plans will either be referred to or directly incorporated into the next published update of this plan.

US 395 (PORT DRIVE TO FEEDVILLE ROAD) CORRIDOR REFINEMENT PLAN

The US 395 (Port Drive to Feedville Road) Corridor Refinement Plan has been funded jointly by the City of Hermiston and the Oregon Department of Transportation to address the overall management direction established by the *US 395 North Corridor Plan* and the short- and long-term access and circulation issues raised as part of the ongoing *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec. STIP* median project. Through a series of technical correspondence and meetings, future highway access and roadway alignments were identified to provide for the safe and efficient movement of vehicles, pedestrians, and bicyclists within the area bounded by Port Drive, Hermiston-Hinkle Road, Feedville Road, and Ott Road.

PROPOSED TSP AMENDMENT/CHANGES TO MODAL PLANS

The last major update/modification to the City of Hermiston's Transportation System Plan was completed in May 2000. At that time, TSP amendments were adopted to implement elements of a sub-area plan known as the South Hermiston Access and Circulation Plan. Similar to this last update, an expanded set of access, circulation, pedestrian, and bicycle plans have been developed by the City, ODOT, and interested citizen stakeholders throughout the duration of the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan*. To ensure the elements of these plans are carried out, the material will need to be incorporated into the City's Transportation System Plan, the *US 395 North Corridor Plan*, and the Umatilla County Transportation System Plan.

To fully implement the modified access and circulation plans, it will be necessary to supplement the following elements to the City of Hermiston's Transportation System Plan:

- Street Classifications and Traffic Signal Plan,
- Pedestrian Facility Plan,
- Bicycle Facility Plan, and
- Project Implementation Plan.

The following sections highlight the proposed changes to the City's TSP. The transportation components presented in these sections were developed to address the requirements of Oregon's Transportation Planning Rule (TPR). These recommendations have been developed in accordance with the findings presented in Technical Memorandums #1, #2, and #3, the interests of local citizen stakeholders and business owners, and City of Hermiston/ODOT staff.

Functional Classification and Traffic Signal Plan

The Hermiston Functional Classification and Traffic Signal Plan reflects the anticipated operational and circulation needs of the City and provides guidance on how to best facilitate that

travel through the TSP horizon year. Figure 1 illustrates the proposed updated Street Classifications and Traffic Signal Plan for the City of Hermiston. This plan is identical to the plan identified in the May 2000 TSP update (Figure 1 of the May 2000 Proposed Transportation System Plan Amendment prepared by Kittelson & Associates, Inc.), with the exception of the additional roadway alignments and traffic signals developed as part of the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan*. A detailed description of these functional classification and signal components as they relate to the Functional Classification and Traffic Signal Plan are provided in the separate section of this memorandum titled "US 395 Corridor Refinement Plan Study Area."

Pedestrian Facility Plan

Providing connections between major activity centers is a key objective of the Hermiston Pedestrian Facility Plan. For the US 395 Corridor Refinement study area, this network of pedestrian connections is important for the following reasons:

- serving shorter pedestrian trips between adjacent activity centers such as businesses, commercial establishments, and existing/future transit services;
- meeting the City of Hermiston's recreational needs; and
- providing non-motorized transportation alternatives.

Figure 2 illustrates the proposed Pedestrian Facility Plan. This plan illustrates those existing urban arterial and collector street segments that currently do not have a sidewalk on either side of a given street, as well as future roadway alignments that will be developed with sidewalk facilities. It should be noted that this plan is identical to the plan identified in the May 2000 TSP update (Figure 2 of the May 2000 Proposed Transportation System Plan Amendment prepared by Kittelson & Associates, Inc.), with the exception of the additional pedestrian elements created as part of the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan*.

The City of Hermiston's current street standards call for sidewalks to be provided along all new urban arterial, collector, and local streets. As development and redevelopment occurs, and as City funding permits, sidewalk gaps in the existing roadway system will be filled.

The desire to develop a multi-use pathway system carries forward into this TSP amendment. Of particular interest is a multi-use path along the west side of US 395 that could potentially link to the existing multi-use path in the City of Stanfield. To link this path to the remainder of the City of Hermiston, a multi-use path bridge crossing of the irrigation canal and railroad tracks running along the north side of the study area will be required. A further description of this pedestrian plan component as it relates to the Pedestrian Facility Plan is provided in the separate section of this report titled "US 395 Corridor Refinement Plan Study Area."

Bicycle Facility Plan

The bicycle plan establishes a network of bicycle lanes and routes that are designed to connect the City's bicycle trip generators. Figure 3 illustrates the proposed updated Bicycle Facility Plan for the city of Hermiston. This plan is also identical to the plan identified in the May 2000 TSP update (Figure 3 of the May 2000 Proposed Transportation System Plan Amendment prepared by

Kittelson & Associates, Inc.), with the exception of the additional elements created as part of the *US 395 (Port Drive to Feedville Road) Corridor Refinement Plan*. A detailed description of these bicycle components as they relate to the Bicycle Facility Plan are provided in the separate section of this report titled "US 395 Corridor Refinement Plan Study Area."

US 395 CORRIDOR REFINEMENT PLAN STUDY AREA

Recognizing the unique transportation needs of the study area defined in the US 395 Corridor Refinement Plan, transportation elements were developed to serve the local access needs of existing development while also providing future transportation (roadway, bicycle, and pedestrian) connections that support future growth. Each of the identified system treatments are intended to promote connectivity and efficient operations on the existing facilities while preserving the access integrity and safety of the US 395 corridor.

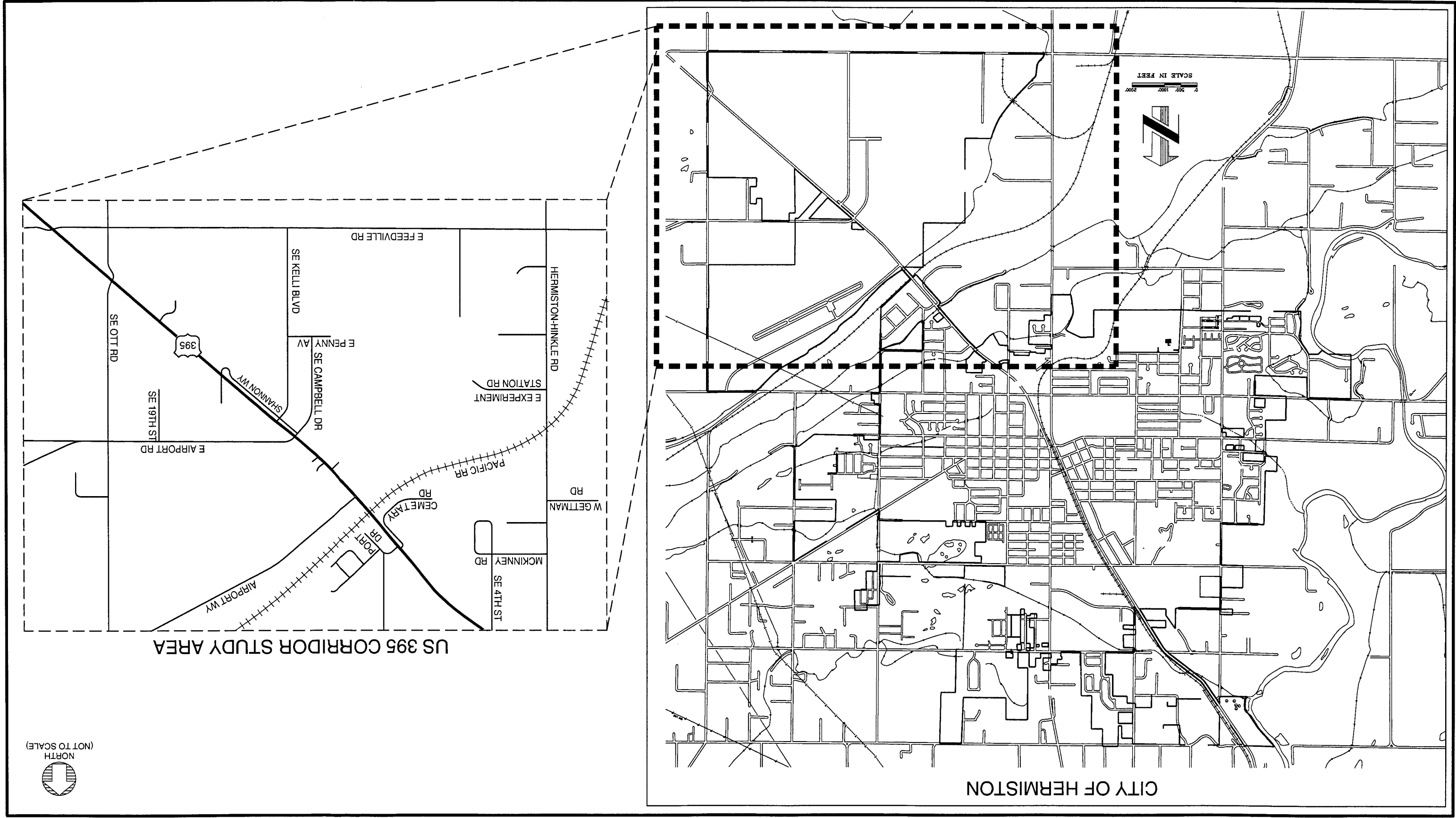
Transportation Improvement Projects

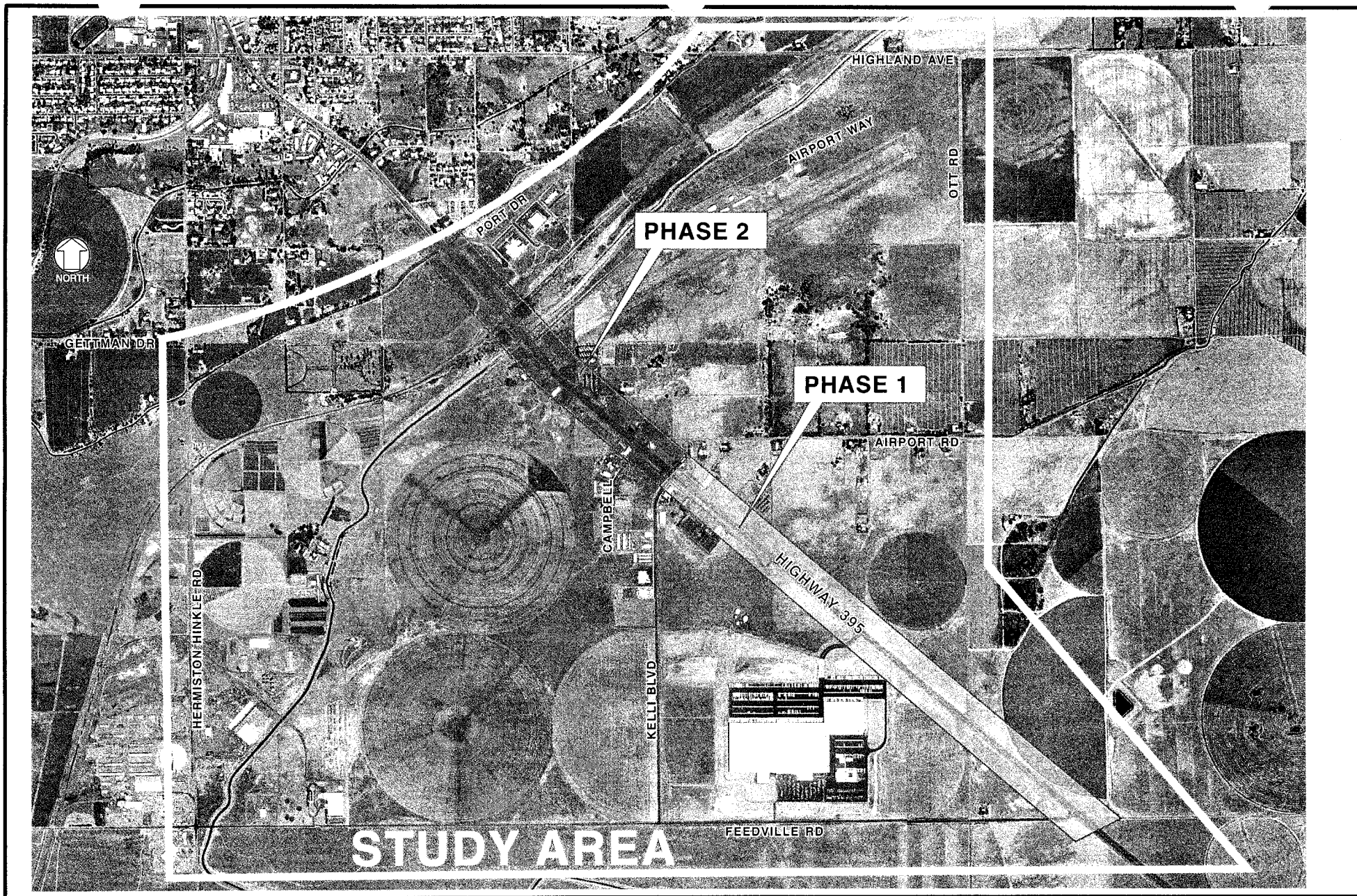
The May 2000 Transportation System Plan update identified nine additional roadway improvement projects for the 20-year planning horizon. These projects are summarized in Figures 4 and 5. As a result of consensus achieved through the *US 395 (Port Drive to Feedville Road) Corridor Refinement* planning efforts, twenty-two additional transportation improvement projects have been identified. These new improvements from the US 395 Corridor Refinement Plan are summarized in Figure 6 and Table 1. These projects include construction of new roadways and intersections, the extension of existing roadway corridors to provide better connectivity, implementation of access management measures as a result of the US 395 median project, and traffic control improvements. It should be noted that the order of projects listed in Table 1 do not reflect a prioritized ranking. Scheduling of the US 395 Corridor Refinement Study area projects is discussed in greater detail later in this memorandum.

The additional projects are expected to be implemented gradually over the planning horizon in conjunction with local development activities and so have been categorized as short-term, mid-term, and long-term needs.

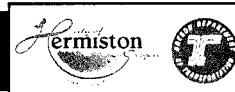
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NORTH





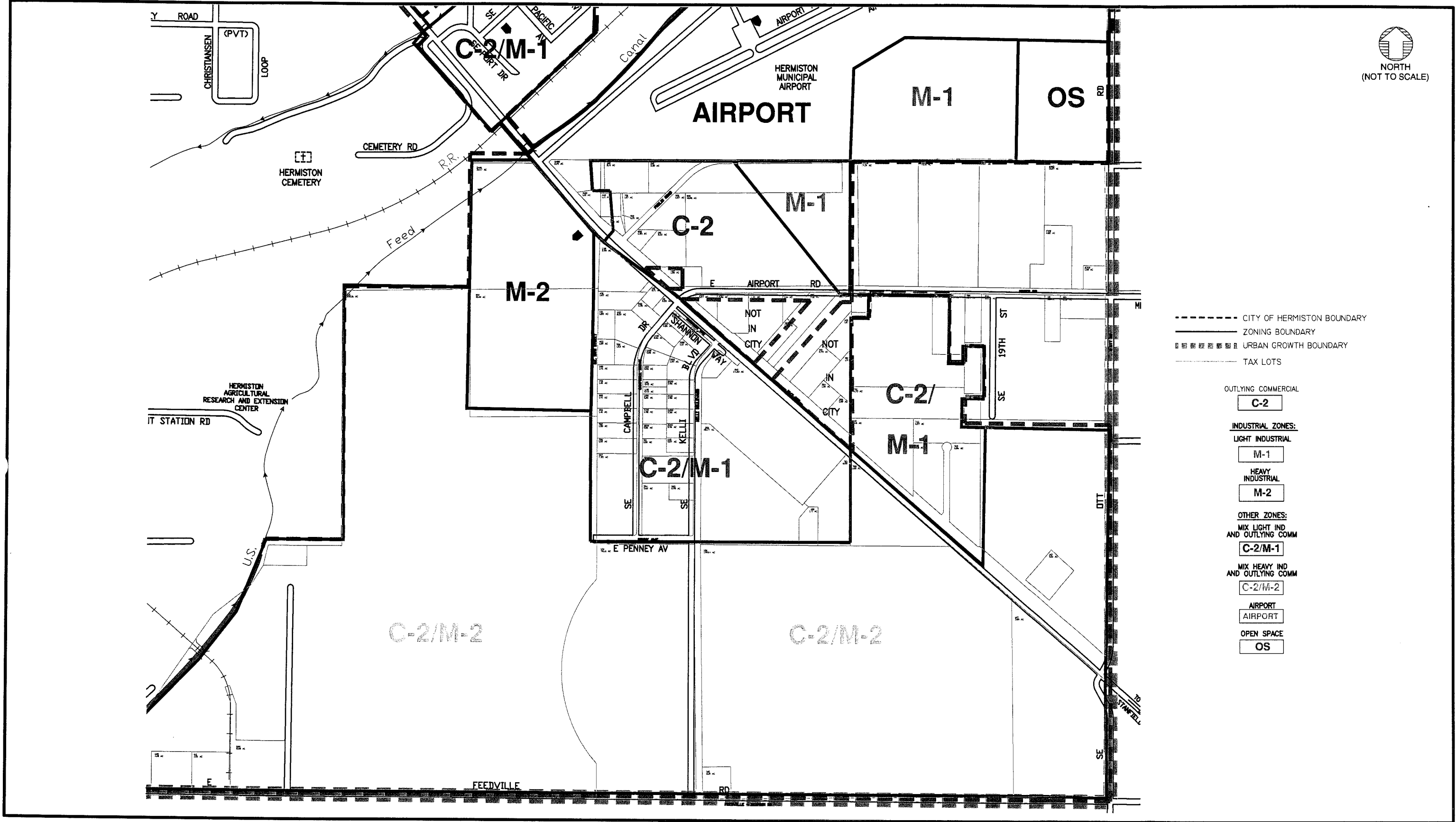
PROJECT STUDY AREA



US 395 Corridor Refinement Plan
 Port Drive to Feedville Road

FIGURE
2

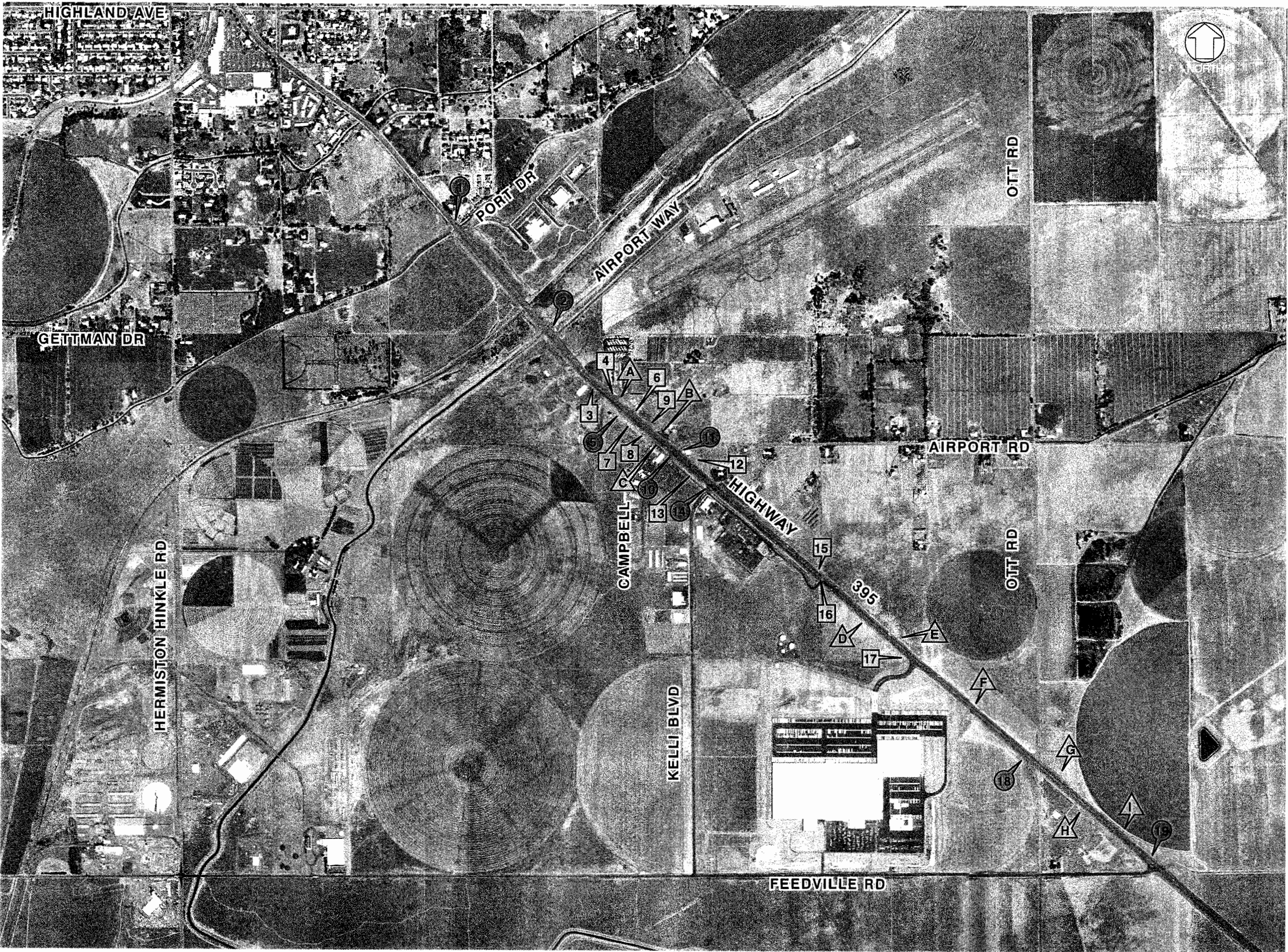




EXISTING TAX LOTS AND ZONING

PUBLIC AND PRIVATE ACCESS	CALL OUT	INTERSECTION NAME	MILE POST	SIDE
	1	Port Drive	6.61	East
	2	Airport Way	6.94	East
	3	OSHD Maintenance	7.10	West
	4	Bellinger Produce (North Dr.)	7.16	East
	5	Able Drive	7.17	West
	6	Bellinger Produce (South Dr.)	7.20	East
	7	Lanham, W.M.	7.20	West
	8	Butter Creek Equipment	7.23	West
	9	Hattenhauer Distributing & Vet.	7.24	East
	10	Campbell Drive	7.32	West
	11	Airport Road	7.33	East
	12	Rohde, Glenn	7.36	East
	13	Campbell Ranch, Inc.	7.41	West
	14	Kelli Boulevard	7.45	West
	15	EZ Storage	7.77	East
	16	Hermiston Foods	7.79	West
	17	Wal-Mart Distribution	8.08	West
	18	Ott Road	8.43	Both
	19	Feedville Road	8.82	Both

RESERVATIONS	A	Reservation	7.17	East
	B	Reservation	7.25	East
	C	Reservation	7.29	West
	D	Reservation	7.88	West
	E	Reservation	8.01	East
	F	Reservation	8.27	Both
	G	Reservation	8.51	West
	H	Reservation	8.63	East
	I	Reservation	8.75	East



- Public Approach
- Private Approach
- Reservation of Access

EXISTING HIGHWAY ACCESS LOCATIONS

US 395 Corridor Refinement Plan
 Port Drive to Feedville Road

FIGURE 5

shown in Figure 3 the majority of the undeveloped land within the study area is zoned light and heavy industrial with a mix of outlying commercial.

Roadway Facilities

US 395 is the primary roadway facility serving the study area. Feedville Road, Ott Road, and Hermiston-Hinkle Road serve as secondary roadways and make up a larger system of parallel routes providing alternative regional connections throughout the Hermiston/Stamfield region. These roadways in combination with a few local access and township-range based roadways (Port Drive, Airport Way, Airport Road, Campbell Drive, Kelli Boulevard, SE 19th Street, and East Penny Avenue) form the extents of the existing transportation facilities within the study area. Neither the Umatilla County Transportation System Plan (TSP) nor City of Hermiston TSP calls for any future roadways within the entire study area.

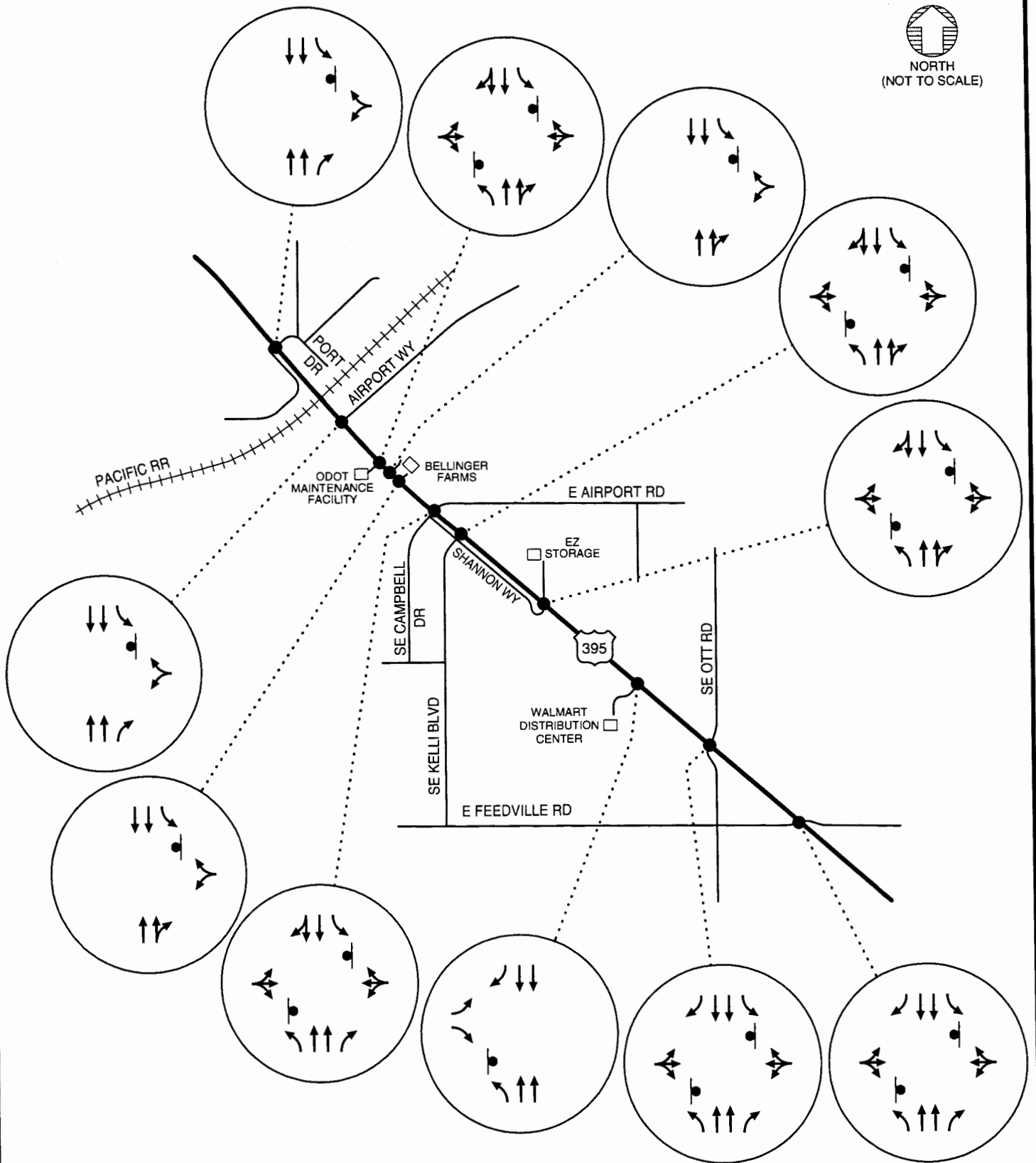
US 395 is classified by the 1999 Oregon Highway Plan as a *Statewide Highway* and by the City of Hermiston Transportation System Plan as a *Major Arterial*. US 395 runs roughly parallel to Interstate-82 and serves as the primary north-south connection between Interstate 84 to the south and the City of Umatilla to the north. The section of US 395 between Port Drive and Feedville Road consists of a five-lane cross-section (two lanes in each direction with a center two-way left-turn lane). In addition to the five-lane cross-section, right-turn deceleration lanes exist at the Port Drive, Airport Way, Airport Road, Wal-Mart distribution center driveway, Ott Road, and Feedville Road intersections.

Table 1 summarizes the characteristics of the remaining existing transportation facilities in the site vicinity. Figure 4 illustrates the existing lane configurations and traffic control devices at the study intersections.

Table 1
Existing Transportation Facilities and Roadway Designations

Roadway	Classification	Cross Section	Posted Speed	Side-walks?	Bicycle Lanes?
US 395	Major Arterial: City of Hermiston Statewide NHS Highway: ODOT	5 lanes	45 mph (North of Airport Way) 55 mph (South of Airport Way)	No	No ¹
Port Drive	Minor Collector	2 lanes	Not Posted	No	No
Airport Way	County Road	2 lanes	Not Posted	No	No
Campbell Drive	County Road	2 lanes	Not Posted	No	No
Airport Road	County Road	2 lanes	Not Posted	No	No
Kelli Boulevard	County Road	2 lanes	Not Posted	No	No
Hermiston-Hinkle Road	Rural Collector	2 lanes	Not Posted	No	No
Ott Road	Rural Collector	2 lanes	Not Posted	No	No
Feedville Road	Rural Collector	2 lanes	Not Posted	No	No

¹ There is no bicycle lane along US 395, however four-foot shoulders exist along the entire study corridor.



NOTE: US 395 IS REPRESENTED AS NORTH-SOUTH IN EACH BUBBLE

LEGEND

-  - STOP SIGN
-  - TRAFFIC SIGNAL

**EXISTING LANE CONFIGURATIONS
AND TRAFFIC CONTROL DEVICES**




US 395 Corridor Refinement Plan

Port Drive to Feedville Road



FIGURE

4

Highway Roadway Approaches

Figure 5 shows the existing public and private roadway approaches to US 395 between Port Drive and Feedville Road. In all, US 395 maintains eight public approaches and twelve private approaches within the study area. In addition to the public and private approaches, there are nine additional reservations of access along the US 395 study corridor (see Figure 5).

Public Transportation Facilities

While there is no bus transit service, the City of Hermiston currently contracts with a local taxi company to provide paratransit service to senior citizens and people with disabilities. Regular fee-based taxi service is also available within the City and surrounding communities.

Pedestrian and Bicycle Facilities

Field observations along the study corridor revealed relatively low levels of pedestrian and bicycle activity. This low level of activity is likely attributed to a lack of pedestrian and bicycle generators within the study area. However, it should be noted that US 395 maintains a paved shoulder and a separated multi-use path which extends north from the City of Stanfield on the west side of the highway and terminates south of the study area at Rosalyn Drive.

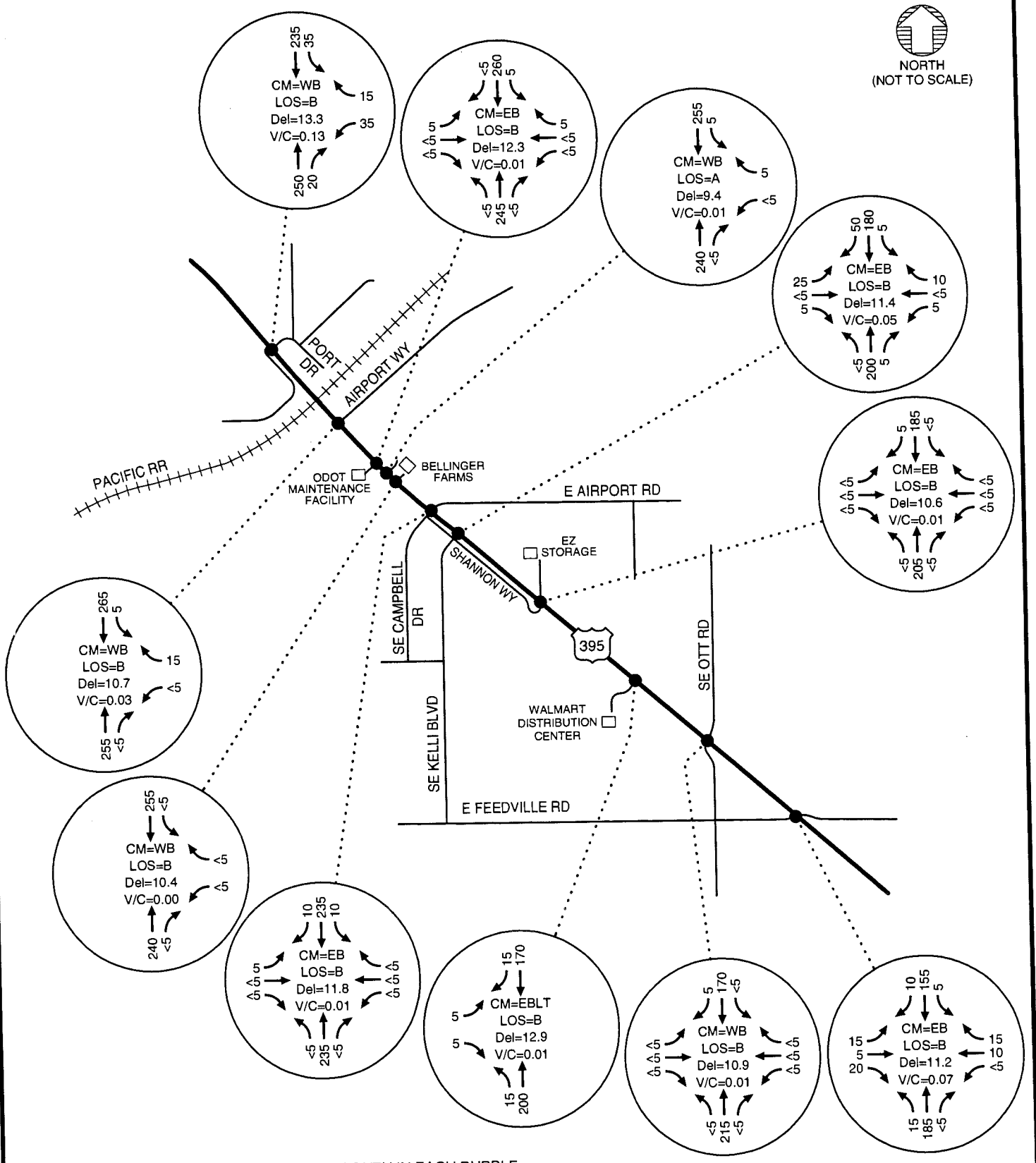
EXISTING TRAFFIC DATA

A variety of traffic data was obtained and evaluated as part of the existing conditions transportation analysis. In association with the Oregon Department of Transportation, the following specific traffic information was obtained:

- Weekday a.m., weekday midday, and weekday p.m. peak hour turning movement volumes at each of the previously identified study intersections;
- Daily traffic volumes along US 395;
- Hourly traffic volume profiles along US 395;
- Highway approach volumes during traditional business hours;
- Vehicle travel speeds; and
- Vehicle classifications.

System Peak Hour Intersection Volumes

Manual intersection turning movement counts were obtained at each of the study intersections on mid-week days in August of 2002. All study intersections were counted during the weekday morning (7:00 a.m. – 9:00 a.m.), midday (11:00 a.m. – 1:00 p.m.), and evening (4:00 p.m. to 6:00 p.m.) peak periods. Based on the peak period count data, the system peak hour was determined across all study intersections. The weekday a.m. system peak hour was found to occur from 7:15 a.m. to 8:15 a.m., the weekday midday system peak hour was found to occur from 11:45 a.m. to 12:45 p.m., and the weekday p.m. system peak hour was found to occur from 4:15 p.m. to 5:15 p.m. The turning movement counts from the weekday a.m., midday, and p.m. peak hours were summarized and rounded to the nearest five vehicles per hour as shown in Figures 6, 7, and 8. *Appendix "A" contains the traffic count sheets used in this study.*



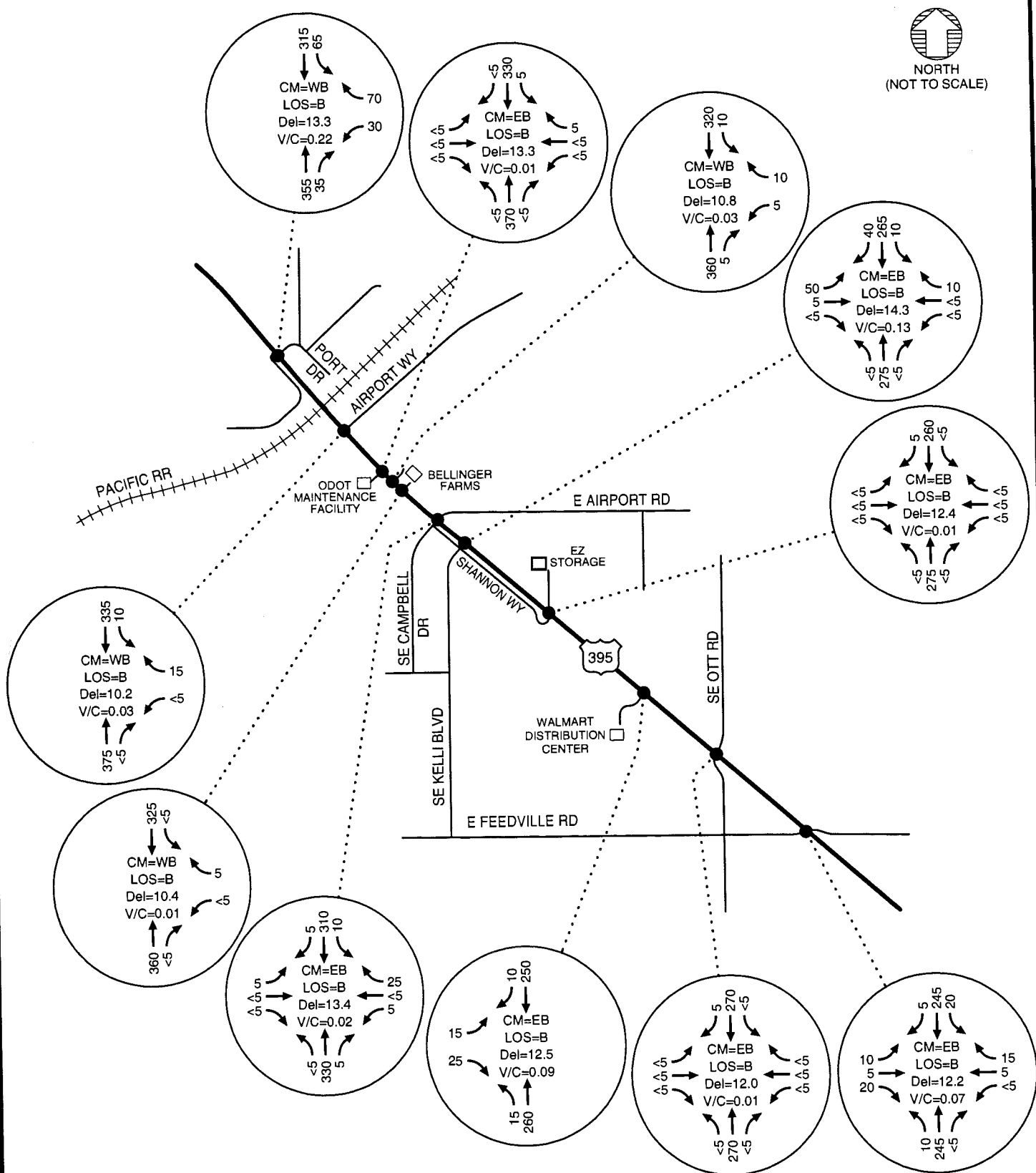
NOTE: US 395 IS REPRESENTED AS NORTH-SOUTH IN EACH BUBBLE

LEGEND
 CM = CRITICAL MOVEMENT (UNSIGNALIZED)
 LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED)/
 CRITICAL MOVEMENT LEVEL OF SERVICE
 (UNSIGNALIZED)
 Del = INTERSECTION AVERAGE DELAY (SIGNALIZED)/
 CRITICAL MOVEMENT DELAY (UNSIGNALIZED)
 V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

2002 EXISTING TRAFFIC CONDITIONS WEEKDAY AM PEAK HOUR

US 395 Corridor Refinement Plan
 Port Drive to Feedville Road

FIGURE
6



NOTE: US 395 IS REPRESENTED AS NORTH-SOUTH IN EACH BUBBLE

LEGEND

CM = CRITICAL MOVEMENT (UNSIGNALIZED)
 LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED)/
 CRITICAL MOVEMENT LEVEL OF SERVICE
 (UNSIGNALIZED)
 Del = INTERSECTION AVERAGE DELAY (SIGNALIZED)/
 CRITICAL MOVEMENT DELAY (UNSIGNALIZED)
 V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

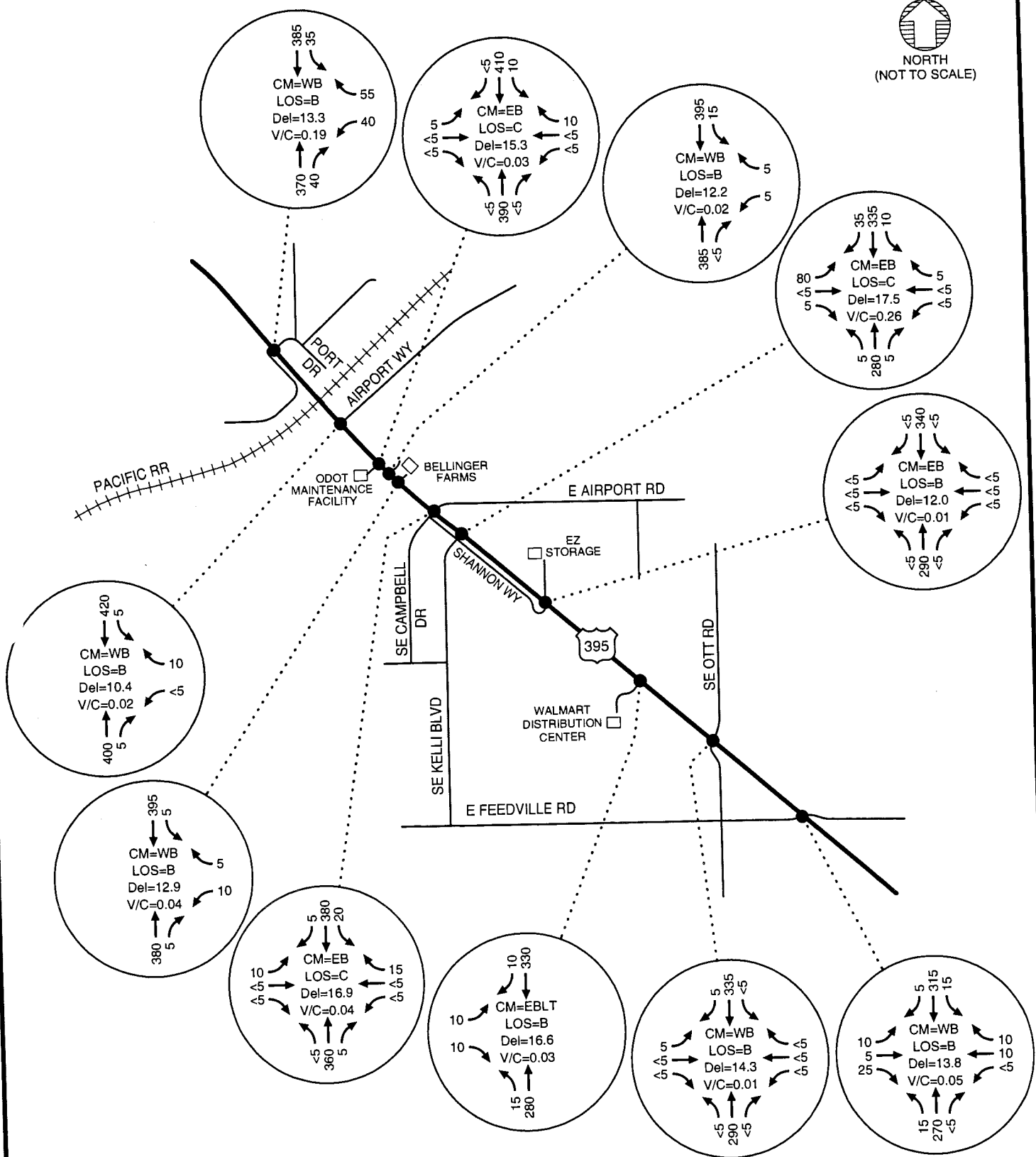
2002 EXISTING TRAFFIC CONDITIONS WEEKDAY MIDDAY PEAK HOUR



US 395 Corridor Refinement Plan
 Port Drive to Feedville Road



FIGURE
7



NOTE: US 395 IS REPRESENTED AS NORTH-SOUTH IN EACH BUBBLE

LEGEND

CM = CRITICAL MOVEMENT (UNSIGNALIZED)
 LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED)/
 CRITICAL MOVEMENT LEVEL OF SERVICE (UNSIGNALIZED)
 Del = INTERSECTION AVERAGE DELAY (SIGNALIZED)/
 CRITICAL MOVEMENT DELAY (UNSIGNALIZED)
 V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

2002 EXISTING TRAFFIC CONDITIONS WEEKDAY PM PEAK HOUR

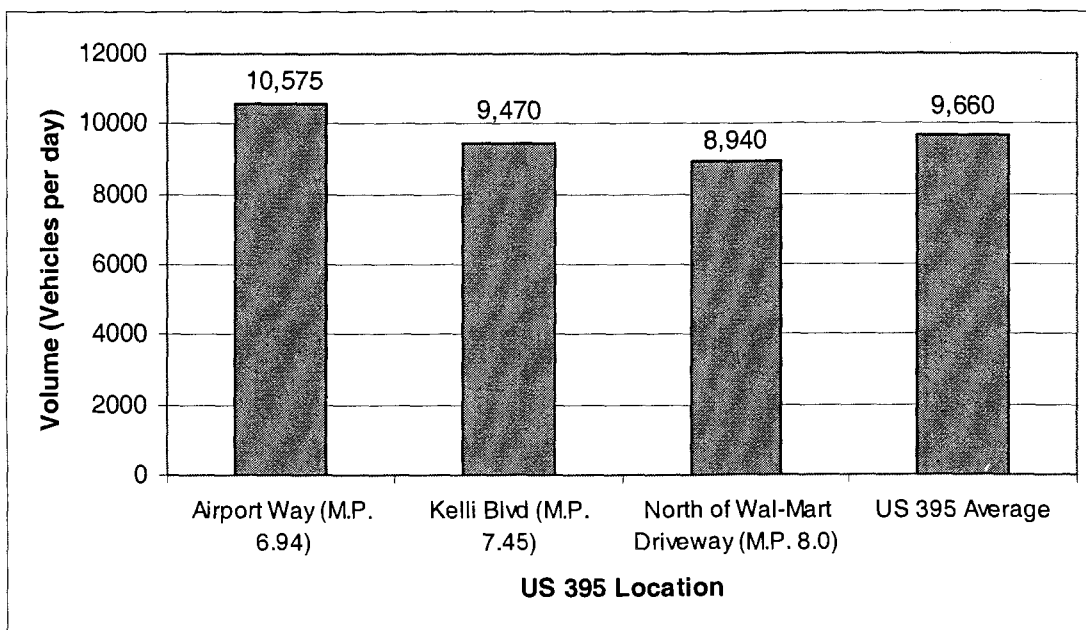


FIGURE
8

Daily Traffic Volumes

In addition to the peak hour intersection counts, 24-hour bi-directional traffic counts were obtained to capture the 24-hour daily traffic volumes along US 395. These tube counts were conducted at various locations along US 395 to identify the typical midweek day traffic profile. Figure 9 shows the daily traffic volumes for US 395 near Airport Way, Kelli Boulevard, and near the Wal-Mart Distribution Center driveway. As illustrated in the figure, the daily traffic volumes of US 395 are not constant across the study corridor. The northern half of the study corridor, which is more densely developed, has a daily traffic profile in excess of 10,500 vehicles per day. However, the less developed southern half of the corridor has a daily traffic volume of approximately 8,900 vehicles per day. On average, the US 395 study corridor is experiencing an average daily traffic volume of approximately 9,660 vehicles per day.

Figure 9
US 395 Daily Traffic Profile (at various locations)



Hourly Traffic Volume Profiles

Weekday hourly profiles were developed from the 24-hour bi-directional traffic count data on US 395. Figures 10, 11, and 12 show the hourly profile of traffic on US 395 in both northbound and southbound directions near Airport Way, Kelli Boulevard, and the Wal-Mart distribution center driveway. As shown in these figures, US 395 has a unique daily traffic profile such that there is a fairly constant increase in vehicular traffic throughout the course of a day that ultimately peaks around 4:00 p.m. At its highest peak, US 395 handles approximately 850 vehicles per hour near the Airport Way intersection, 730 vehicles per hour near the Kelli Boulevard intersection, and 690 vehicles per hour near the Wal-Mart distribution center driveway.

Figure 10
US 395 Hourly Traffic Volume Profiles
(near Airport Way)

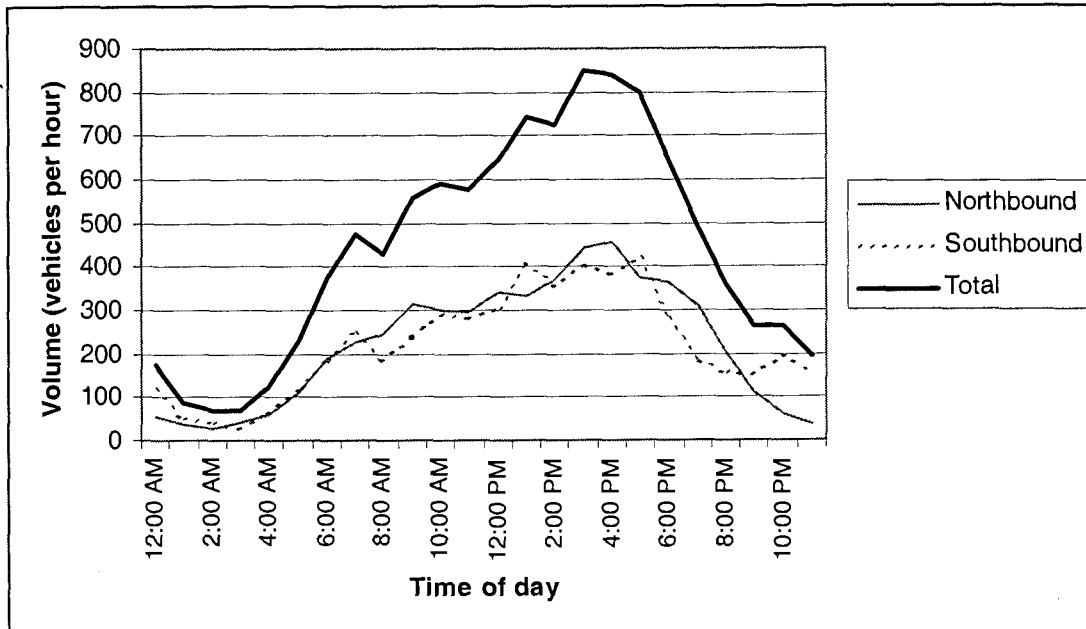


Figure 11
US 395 Hourly Traffic Volume Profiles
(near Kelli Boulevard)

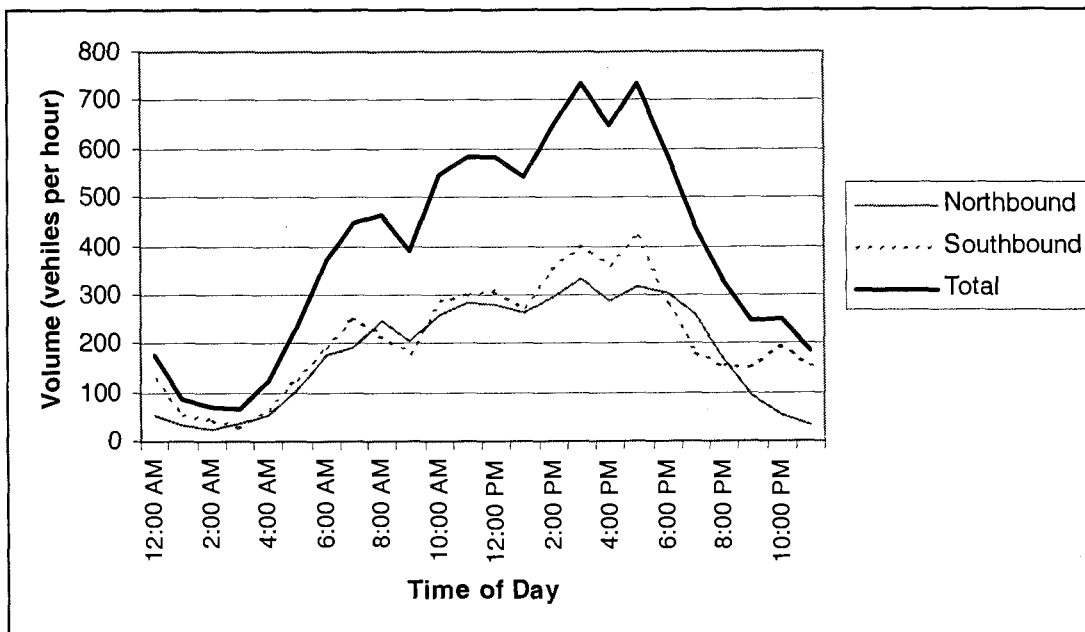
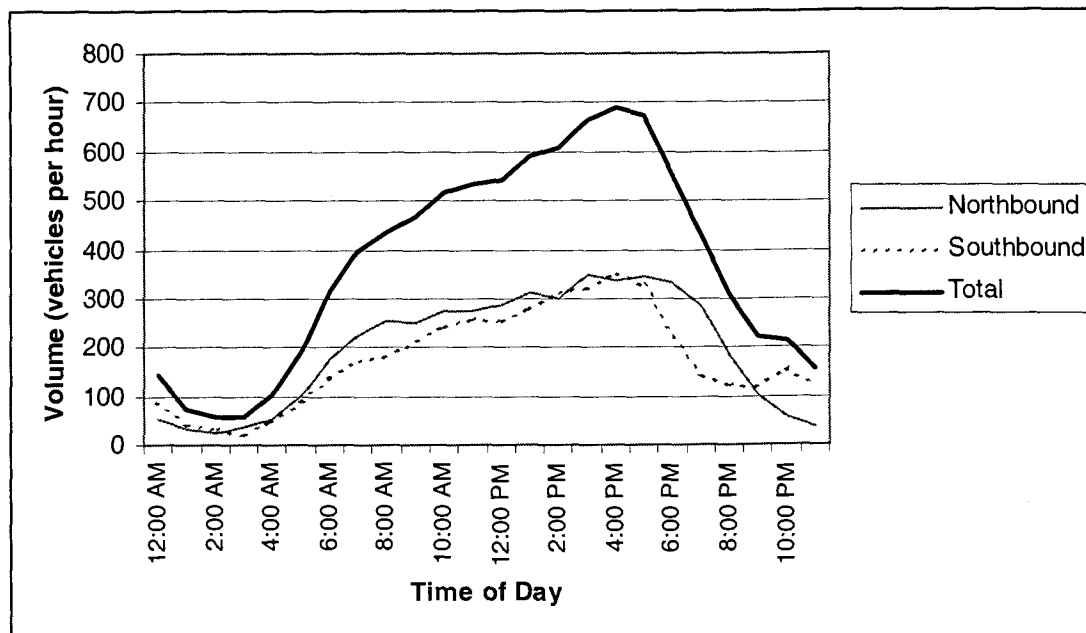


Figure 12
US 395 Hourly Traffic Volume Profiles
(near Wal-Mart distribution center driveway)



US 395 Roadway Approach Volumes

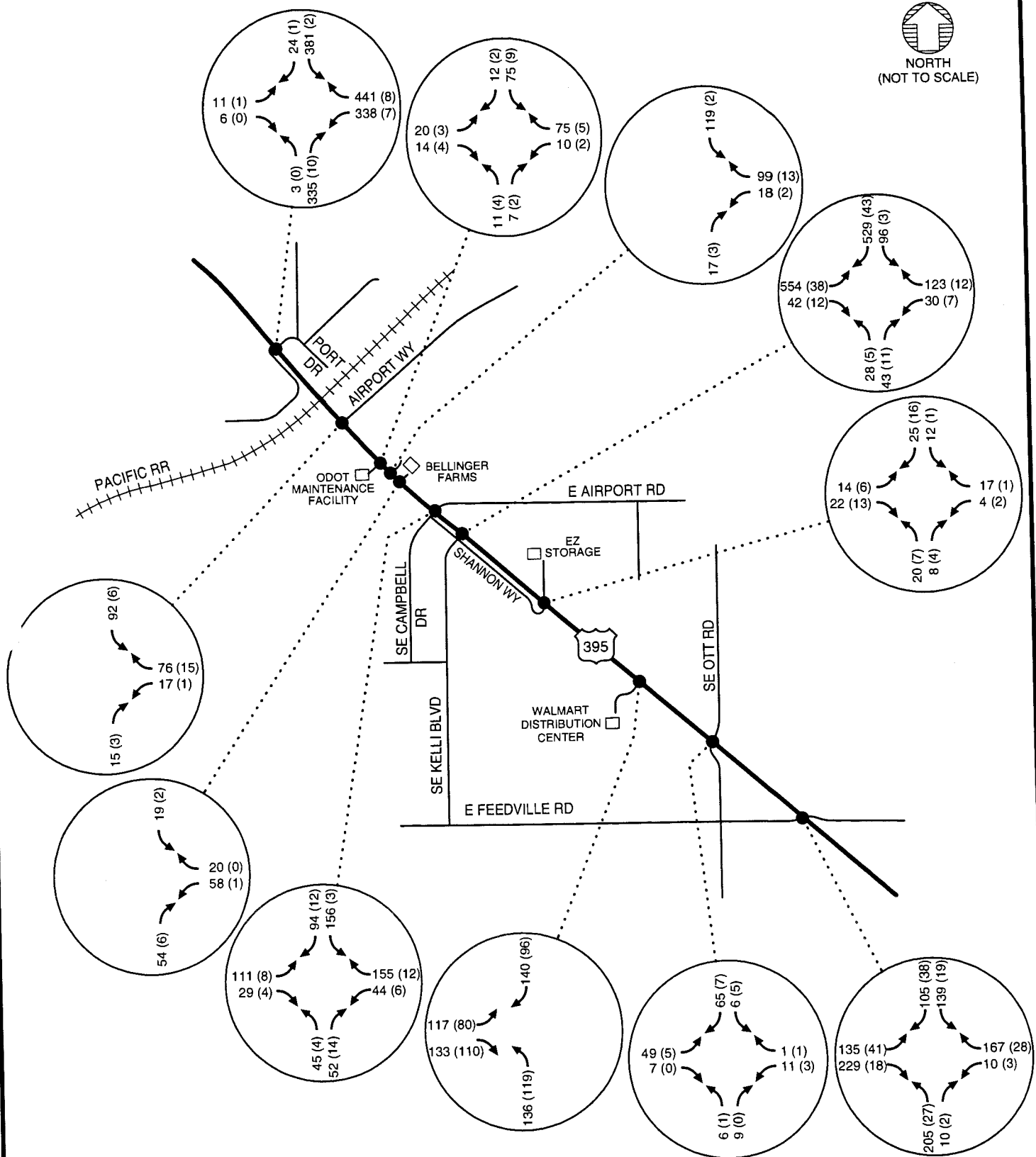
As part of the peak hour turning movement counts conducted in August 2002, 12-hour turning movement counts were conducted at each public and private approach during traditional business hours (6 a.m. and 6 p.m.) to determine the existing vehicle and truck turning movements to/from US 395. Figure 13 summarizes the 12-hour vehicle and truck turning movements. As shown in Figure 13 during this 12-hour period, approximately 6,300 vehicles (960 trucks) enter or exit US 395 within the study area.

Vehicle Travel Speeds and Vehicle Classifications

As part of the data collection efforts, a 24-hour tube counter was utilized to collect vehicular travel speed data on US 395. This tube counter was located near the Wal-Mart distribution center driveway at milepost 8.0. Speed data was collected over the course of three weekdays and then the average speeds and 85th percentile speeds were determined for each direction on US 395. In addition, vehicle classification data was collected over the same time period. Table 2 summarizes the travel speeds and heavy vehicle percentages for US 395.

Table 2
US 395 Travel Speeds and Heavy Vehicle Percentages

	Northbound	Southbound
85 th Percentile Speed	64.2 mph	63.1 mph
Average Speed	57.9 mph	57.1 mph
Truck Percentage	20%	20%



NOTE: US 395 IS REPRESENTED AS NORTH-SOUTH IN EACH BUBBLE

LEGEND

XXX = TOTAL TRAFFIC
(XX) = TRUCKS

US 395 ROADWAY APPROACH VOLUMES TRADITIONAL BUSINESS HOURS (6 AM TO 6 PM)

Sponsored by:

US 395 Corridor Refinement Plan
Port Drive to Feedville Road



FIGURE

13

5504FIGS.DWG

EXISTING PEAK HOUR TRAFFIC OPERATIONS

All level of service analyses described in this report were performed in accordance with the procedures stated in the 2000 Highway Capacity Manual (Reference 2). *A description of level of service and the criteria by which they are determined is presented in Appendix "B".* Appendix "B" also indicates how level of service is measured and what is generally considered the acceptable range of level of service.

Signalized Intersections

Level of service analyses for signalized intersections are based on the average control delay for vehicles entering the intersection. Control delay includes delays associated with acceleration, deceleration, and queue move-up time, in addition to stopped delay at the signal. In addition, there is a measure of volume-to-capacity generated as part of the HCM methodology. ODOT standards for US 395 indicate that the highway must maintain a volume-to-capacity ratio of at least 0.75 during the peak hour. City of Hermiston and Umatilla County require Level of Service (LOS) D or better during the peak 15-minutes of the peak hour. Currently, there are no signalized intersections within the project study area (however, there exists the potential for future signalized intersections).

Unsignalized Intersections

For unsignalized intersections, level of service is based on an intersection's capacity to accommodate the worst or critical movement. The City of Hermiston's level-of-service criteria stipulates that unsignalized intersections should maintain a LOS E or better during the peak 15-minutes of the peak hour. For those intersections located along ODOT controlled roadways, operation standards are defined by the *1999 Oregon Highway Plan* (Reference 3). The *Oregon Highway Plan* specifies a minimum minor street volume-to-capacity ratio of 0.80 for intersections on US 395.

Existing Intersection Operations

Figures 6, 7, and 8 summarize the intersection operations results for the eleven unsignalized study intersections under the weekday a.m., midday, and p.m. peak hours, respectively. As shown in these figures, all study intersections currently operate acceptably. *Appendix "C" contains the 2002 existing conditions intersection operation worksheets.*

In addition to the intersection operational analysis, a review of the operational and geometric characteristics at each intersection was evaluated to determine if any existing deficiencies exist within the corridor. Based on this review, comments received from the project planning team, and comments from project stakeholders, the following issues were identified:

- Trucks exiting the existing Walmart driveway and traveling north on US 395 rely heavily on the two-way left-turn pocket in order enter the roadway and accelerate into the northbound travel lanes.
- All the existing right-turn deceleration lanes are sub-standard based on their current design and the design vehicle utilizing the turn lanes. As a result, vehicles and trucks have to begin decelerating on US 395.

Signal Warrant Analysis

As part of the existing conditions analysis, a signal warrant analysis was conducted to determine whether traffic signals should be installed at any of the study intersections along US 395. The Manual on Uniform Traffic Control Devices – Millennium Edition (Reference 4) provides guidelines and factors for justifying the installation of traffic signals. Based on these guidelines, the need for a traffic signal is determined through analysis of the following traffic applicable signal warrants:

- Warrant 1: Eight-Hour Volume
- Warrant 2: Four-Hour Volume, and
- Warrant 3: Peak Hour

The 24-hour tube count data were used to identify the eighth-highest hour, fourth-highest hour, and peak hour traffic volumes for the signal warrant analyses at the study intersections. Table 3 below shows that none of the approaches to US 395 meet traffic signal warrants under existing conditions.

Table 3
Signal Warrant Analysis

Intersection	Signal Warrant Analysis		
	MUTCD Warrant #1	MUTCD Warrant #2	MUTCD Warrant #3
US 395 / Port Drive	No	No	No
US 395 / Airport Way	No	No	No
US 395 / ODOT Maintenance Facility driveway	No	No	No
US 395 / Berringer Farms driveway (north)	No	No	No
US 395 / Berringer Farms driveway (south)	No	No	No
US 395 / Campbell Drive / Airport Road	No	No	No
US 395 / Kelli Boulevard	No	No	No
US 395 / Hermiston Foods / EZ-Storage driveway	No	No	No
US 395 / Wal-Mart Distribution Center driveway	No	No	No
US 395 / Ott Road	No	No	No
US 395 / Feedville Road	No	No	No

As shown in Table 3, none of the three MUTCD signal warrants are met at the eleven study intersections. Therefore, signalization of these intersections is not recommended at this time.

Traffic Safety

The crash histories at the respective study intersections were reviewed in an effort to identify potential intersection safety issues. Crash records were obtained from ODOT for the five-year period from January 1, 1997 through December 31, 2001. A summary of the crash data is

provided in Table 2 that includes the severity and type of crashes over a five-year analysis period. It should be noted that there are no records of any crashes occurring at several of the study intersections. Reasons for this lack of data might be that the property damage limit was not exceeded or that the motorists did not report some crashes.

Table 4
Study Intersection Crash History

Intersection	Number of Crashes	Collision Type					Severity	
		Turning	Rear-End	Angle	Head On	Other	PDO	Injury
US 395 / Port Drive	3	1	0	0	1	1	2	1
US 395 / Airport Way	1	0	1	0	0	0	1	0
US 395 / ODOT Maintenance Facility driveway	0	0	0	0	0	0	0	0
US 395 / Bellinger Farms driveway (north)	1	0	0	0	1	0	0	1
US 395 / Bellinger Farms driveway (south)	0	0	0	0	0	0	0	0
US 395 / Campbell Drive / Airport Road	2	0	0	1	0	1	0	2
US 395 / Kelli Boulevard	6	3	3	0	0	0	2	4
US 395 / Hermiston Foods / EZ-Storage driveway	0	0	0	0	0	0	0	0
US 395 / Wal-Mart Distribution Center driveway	0	0	0	0	0	0	0	0
US 395 / Ott Road	2	0	1	0	0	1	1	1
US 395 / Feedville Road	5	3	2	0	0	0	3	2

PDO = Property Damage Only

As illustrated in Table 4, the patterns amongst the crashes were evaluated to determine if there are any operational or geometric deficiencies that contribute to the crash patterns. Given that there are relatively few vehicle collisions at each of the study intersections, it is difficult to determine if a significant crash pattern exists at any of the study intersections. Although the Feedville Road and Kelli Boulevard intersections have a higher number of vehicle collisions, field observations did not reveal any operational or geometric deficiencies. The higher number of vehicle crashes at these two intersections are likely the result of a larger percentage of turning movements.

Crash rates for intersection are often expressed in crashes per million entering vehicles (MEV) for evaluation purposes. Generally, a crash rate higher than 1.0 crashes/MEV indicates the need for further investigation at the intersection. These calculations are presented in Table 5 and show that all of the study intersections have relatively low crash rates. In summary, the crash history at each of the study intersections does not indicate any inherent safety issues.

Table 5
Study Intersection Crash Rate

Intersection	Number of Crashes	Crashes Per Year	Peak Hour TEV	MEV/ Year	Crashes/ MEV	>1 Crash/ MEV
US 395 / Port Drive	3	0.6	925	3.38	0.18	No
US 395 / Airport Way	1	0.2	840	3.07	0.07	No
US 395 / ODOT Maintenance Facility driveway	0	0.0	830	3.03	0.00	No
US 395 / Bellinger Farms driveway (north)	1	0.2	805	2.94	0.07	No
US 395 / Bellinger Farms driveway (south)	0	0.0	800	2.92	0.00	No
US 395 / Campbell Drive / Airport Road	2	0.4	795	2.90	0.14	No
US 395 / Kelli Boulevard	6	1.2	760	2.77	0.43	No
US 395 / Hermiston Foods / EZ-Storage driveway	0	0.0	640	2.34	0.00	No
US 395 / Wal-Mart Distribution Center driveway	0	0.0	655	2.39	0.00	No
US 395 / Ott Road	2	0.4	635	2.32	0.17	No
US 395 / Feedville Road	5	1.0	680	2.48	0.40	No

TEV = Total Entering Vehicles
MEV = Million Entering Vehicles

Although not reflected in Table 5, US 395 experienced several additional vehicle crashes that occurred at mid-block locations. In total, the US 395 study corridor experienced a total of 26 reported vehicle collisions over the five-year study period. Based on this figure, the US 395 crash records were also examined with respect to arterial crash rates for the overall roadway segment within the study area.

Crash rates for arterial segments are generally expressed in crashes per million vehicle miles (MVM). The crash rate for this segment of US 395 was then compared to the statewide average found in ODOT's State Highway Accident Rate Tables (Reference 5) in order to quantify whether a particular roadway's crash rate is lower or higher than the statewide average.

As previously described in this report, the study segment of US 395 is almost entirely located within the City of Hermiston's urban growth boundary. However, the majority of the adjacent land parcels are either undeveloped or underdeveloped resulting in higher travel speeds, fewer intersections, and fewer turning movements. The result is a roadway segment that is technically classified as urban (within the urban growth boundary), but operates more like a rural facility. Given this contradiction, the study segment of US 395 was compared to both the average rate cited for the *Rural State Highway System Non-Freeway* and the *Urban State Highway System Non-Freeway* in the ODOT 2000 rate table.

Over the five-year period of time between January 1, 1997 and December 31, 2001, a total of 26 crashes were reported along the US 395 study corridor. Table 6 shows the arterial crash rate for this segment. As shown in Table 6, the arterial crash rate of 0.67 crashes per MVM was found to be less than the statewide average rate of 0.89 for rural state highway system and less than 2.95 rate for the urban state highway system.

Table 6
Study Arterial Crash Rate

US 395	Length of Segment	Number of Crashes	ADT	Crashes / MVM	Statewide Crashes / MVM
Rural State Highway System (Primary) Non-Freeway					
Port Road (M.P. 6.61) to Feedville Road (M.P. 8.82)	2.21	26	9,600	0.67	0.89
Urban State Highway System (Primary) Non-Freeway					
Port Road (M.P. 6.61) to Feedville Road (M.P. 8.82)	2.21	26	9,600	0.67	2.95

ADT = Average Daily Traffic (vehicles)
MVM = Million Vehicle Miles

Existing Conditions Summary

Based on the existing conditions analysis presented in this section produced the following findings:

- The existing land uses and properties along the corridor rely primarily on US 395 for both local and regional access.
- US 395 has a daily traffic profile in the range of 8,900 vehicles per day to 10,500 vehicles per day, depending on the corridor location. On average, US 395 currently carries approximately 9,660 vehicles per day (1,900 trucks per day) within the 2.21-mile study area.
- US 395 maintains a five-lane section throughout the study area with occasional right-turn decelerations lanes in the northbound and southbound directions.
- All the public and private approaches to US 395 operate acceptably during the weekday a.m., midday, and p.m. peak hours.
- Seven public and eighteen private roadway approaches access US 395, and approximately 6,300 vehicles (960 trucks) per day enter and exit the facility through these approaches during traditional business hours (6 a.m. to 6 p.m.).
- There are a total of 9 access reservations and 20 existing approaches on US 395 within the study corridor.
- There have been 26 reported vehicle collisions on the US 395 study corridor between January 1, 1997 and December 31, 2001.

FUTURE CONDITIONS ANALYSIS

The future conditions analysis presents the future transportation system demand within the defined study corridor through a near-term 2005 horizon year and a long-term 2025 horizon year. The future transportation system demand includes general growth that is anticipated to occur within the larger region (background growth) and growth that could occur upon full build-out of all vacant land within the defined study area boundary. The following sections outline the specific background growth rates utilized in both the near-term and long-term forecasts as well as the near-term and long-term future vacant lands build-out assumptions.

Background Traffic Growth - No Build Scenario

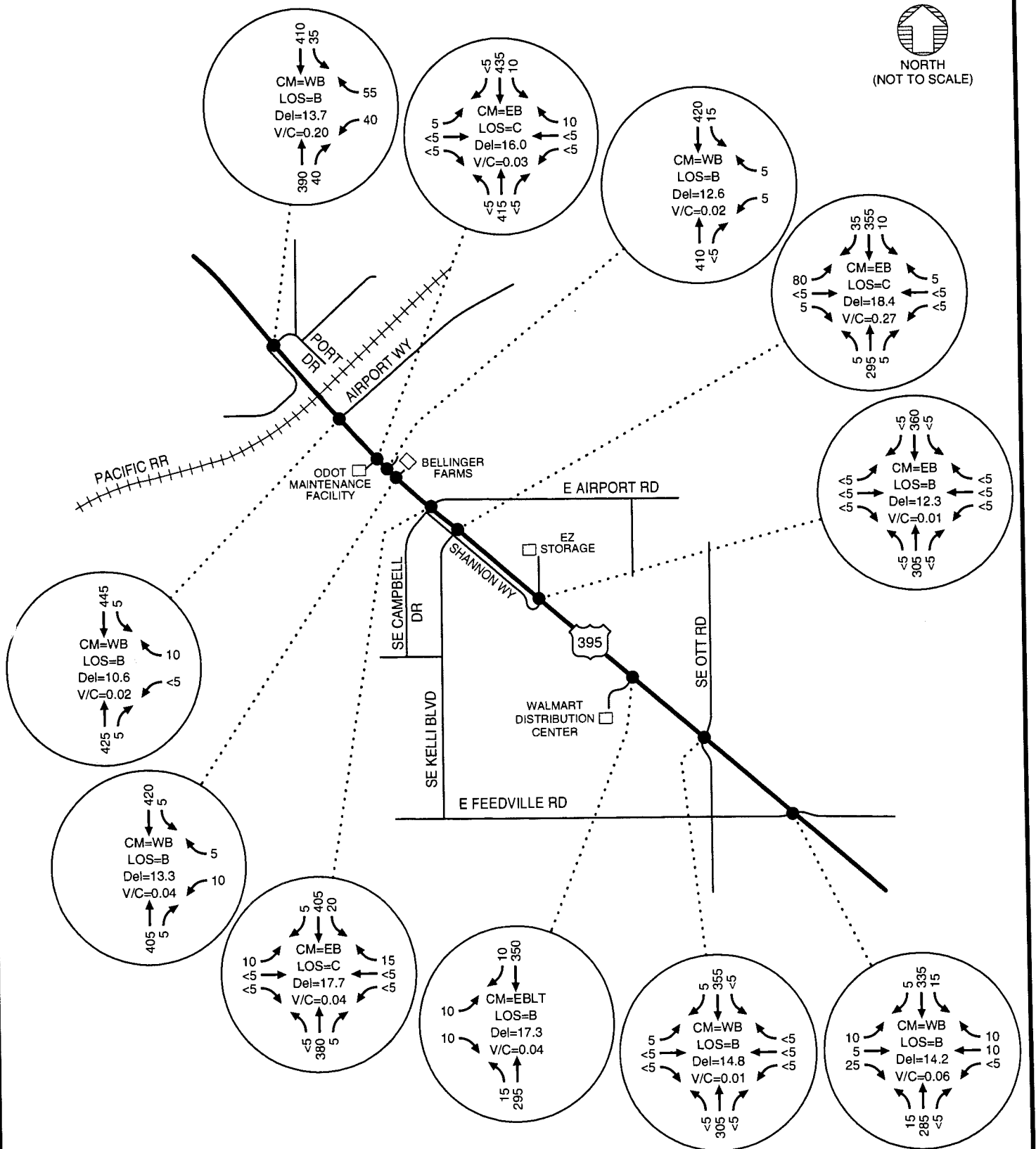
The future transportation demand (background traffic growth) within the US 395 study corridor was determined through a review of the future volume forecasts prepared as part of the US 395 North Corridor Plan. This plan carefully examined a number of planning resources and documents previously prepared for jurisdictions and land use developments located along the entire US 395 corridor from I-84 to the City of Umatilla. This extensive research led to the development of specific growth rate assumptions for different sections of US 395. Within the US 395 study area boundary, these growth rate assumptions ranged from approximately 3.0 percent per year along the northern half of the corridor to 2.0 percent per year along the southern half of the corridor. These growth rates are consistent with the present day development patterns occurring along the north half of the corridor as opposed to the southern half of the corridor.

For the purposes of this analysis, background traffic growth represents growth anticipated to occur along US 395 assuming all of the vacant land within the study area does not develop beyond current levels. Based on the findings from the US 395 North Corridor Plan, a 2.0 percent annual growth rate was determined to better represent the background traffic growth on US 395 assuming a no-build situation of all vacant lands within the study area.

In reference to Figures 10, 11, and 12, the weekday p.m. peak hour represents the highest travel period along the US 395 corridor. Given this finding, the future year traffic analysis will concentrate on the weekday p.m. peak hour time period. Figures 14 and 15 illustrate the forecast year 2005 and 2025 background traffic volumes at each of the study intersections during the weekday p.m. peak hour, assuming a no-build scenario of all vacant lands within the study area. As shown in these figures, the year 2005 and 2025 weekday p.m. peak hour traffic volumes are anticipated to continue to operate within acceptable LOS standards and volume-to-capacity ratios.

Future Development Potential

While the background traffic growth provides an estimate for regional through traffic growth on US 395, a more detailed vacant lands analysis was performed within the study area boundary to determine a reasonable maximum development potential of all vacant lands or underutilized lands. To complete this analysis, information was obtained from the City of Hermiston Zoning Map (reproduced in Figure 3), the City of Hermiston Zoning Ordinance, and tax lot records.



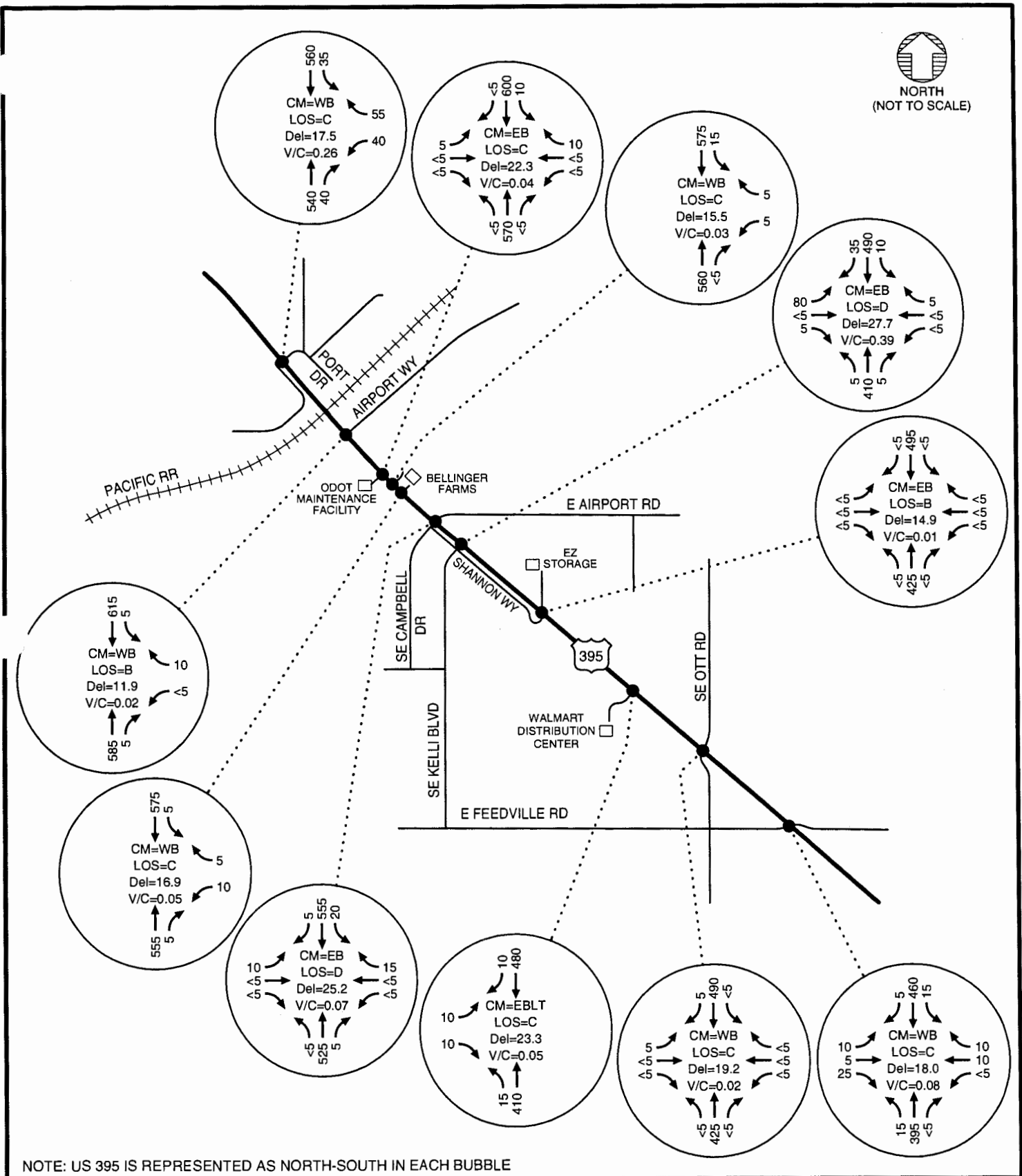
NOTE: US 395 IS REPRESENTED AS NORTH-SOUTH IN EACH BUBBLE

LEGEND

CM = CRITICAL MOVEMENT (UNSIGNALIZED)
 LOS = INTERSECTION LEVEL OF SERVICE (SIGNALIZED)/
 CRITICAL MOVEMENT LEVEL OF SERVICE
 (UNSIGNALIZED)
 Del = INTERSECTION AVERAGE DELAY (SIGNALIZED)/
 CRITICAL MOVEMENT DELAY (UNSIGNALIZED)
 V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

FUTURE 2005 BACKGROUND CONDITIONS WEEKDAY PM PEAK HOUR

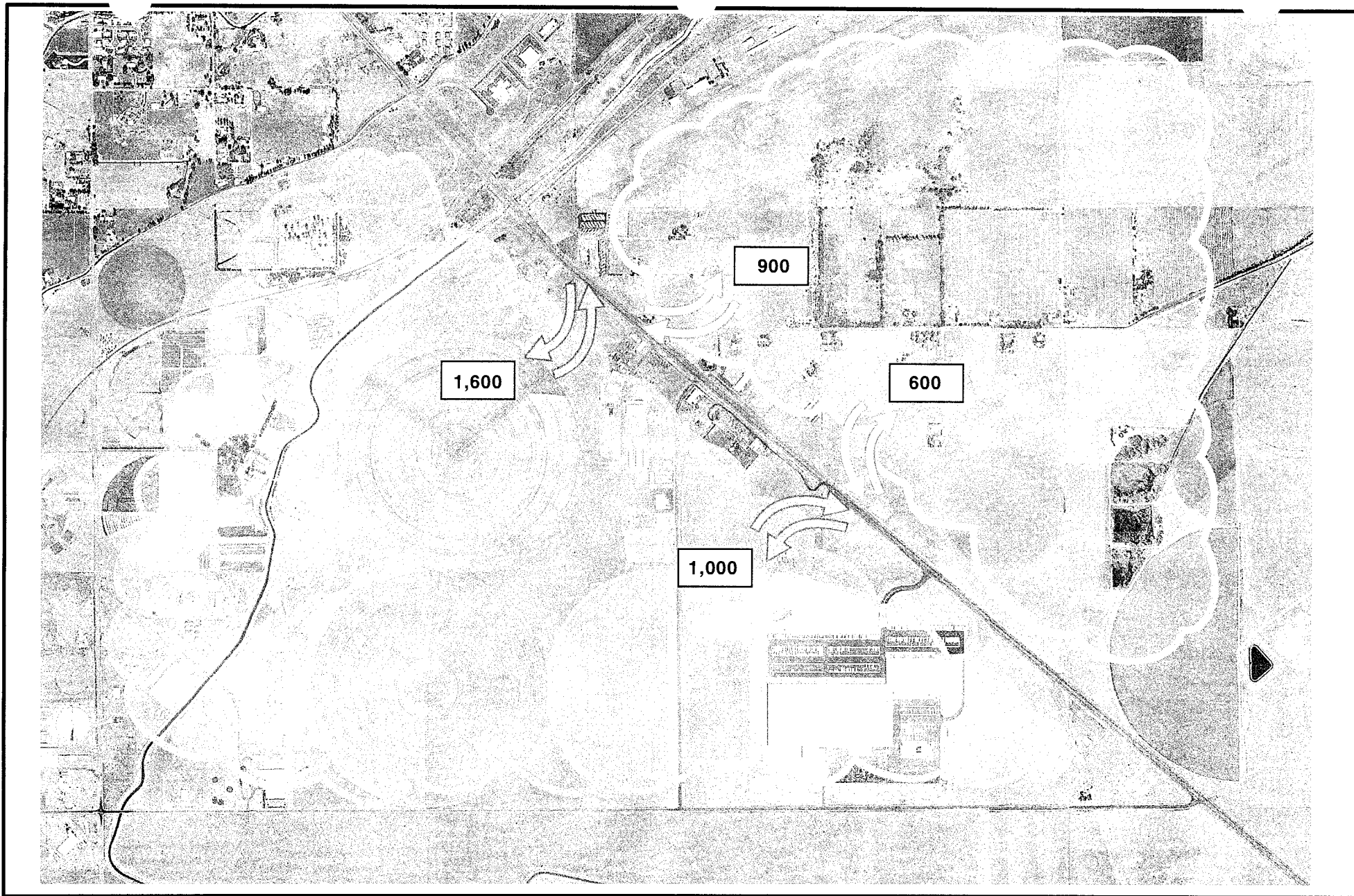




As shown in Figure 3, the majority of land uses within the study area consist of light industrial (M-1), heavy industrial (M-2), outlying commercial (C-2), or a mix of light/heavy industrial and outlying commercial (C-2/M-1) & (C-2/M-2). For reference purposes, *Appendix "D"* contains the appropriate land use text from the City of Hermiston Land Use Code. Based on conversations with City of Hermiston planning staff, it was assumed that by 2025, the most of the vacant land located within the Hermiston city Urban Growth Boundary would be developed. It was also assumed that any type of future commercial development would be limited to land parcels with frontage along US 395. All other parcels located within the study area are assumed to be more likely to developed as either industrial, manufacturing, or warehouse type uses.

While there are no specific density requirements for any of these land use zones, it was determined through consultation with City of Hermiston staff that specific development within any of these zones would be limited in terms of total development coverage. Specifically, it was assumed that commercial uses would develop at a 30 percent coverage rate, while industrial or manufacturing uses would develop at a 35 percent coverage rate. In addition to these coverage reductions, a 25 percent reduction was also applied to the total developable acreage to account for public infrastructure and right-of-way.

Using the appropriate permitted land use standards and the assumptions outlined above, the future year build-out capacity was estimated for each vacant land parcel located within the study area. To determine the traffic-related impacts that this development would have on the US 395 corridor and the study area intersections, future-year weekday p.m. peak hour trip estimates were derived. From this analysis, it is estimated that full build-out of the vacant lands located within the study area will result in approximately 4,000 additional weekday p.m. peak hour vehicle trips, 20 percent of which will be heavy vehicles. Of these trips, it is estimated that approximately 60 percent would be oriented to/from destinations north of the study corridor and 40 percent would be oriented to/from destinations south of the study corridor. This concept is illustrated in Figure 16.



4,000 = Estimated Number of Vehicle
Trips During the PM Peak Hour

FUTURE TRIP GENERATION POTENTIAL AND DISTRIBUTION



US395 Corridor Refinement Plan
Port Drive to Feedville Road

FIGURE
16



CIRCULATION AND ACCESS OPPORTUNITIES AND CONSTRAINTS ANALYSIS

The primary purpose of the opportunities and constraints analysis is to identify possible long-term circulation and highway access plans that will allow economic development based on quality development principles within the City of Hermiston Urban Growth Boundary and Umatilla County Exception Areas, while maintaining the integrity and safety of the US 395 corridor.

Access and Circulation Plan Development Approach

Based on the existing transportation network, property configurations and zoning, and the future forecasted highway and development related traffic demands within the corridor, alternative access and circulation plans were developed to address long-term highway accessibility, mobility, and safety. In addition, the following goals and objectives were established by the project planning team to serve as the guiding principles in the development of each plan.

Goal 1: Business Community

- Enhance the integrity and vitality of the local business community.

Goal 2: Access Efficiency

- Maintain safe and efficient access to adjacent properties and public streets along the corridor

Goal 3: Aesthetics and Landscaping

- Enhance the environment, attractiveness, and appeal of the area through landscaping and other aesthetic improvements.

Goal 4: Geometry

- Minimize negative impacts to businesses through proper and efficient geometric design.

Goal 5: Pedestrian and Bicycle Environment

- Provide for an interconnected system of pedestrian and bicycle facilities to serve short-distance and recreational trips.

Goal 6: Vehicular Travel

- Maintain a safe and efficient travel way for local and regional travel along the corridor.

Goal 7: Capacity

- Provide a transportation system that has sufficient capacity to serve user needs.

Goal 8: Safety

- Ensure a transportation corridor that maintains adequate levels of safety for all users.

The remainder of this sub-section summarizes the proposed alternative access and circulation plans.

Alternative #1

Figure 17 shows access and circulation Alternative #1. As illustrated in this figure, several existing roadways and intersections would be realigned to enhance circulation and access opportunities. Major roadway modifications and access opportunities include:

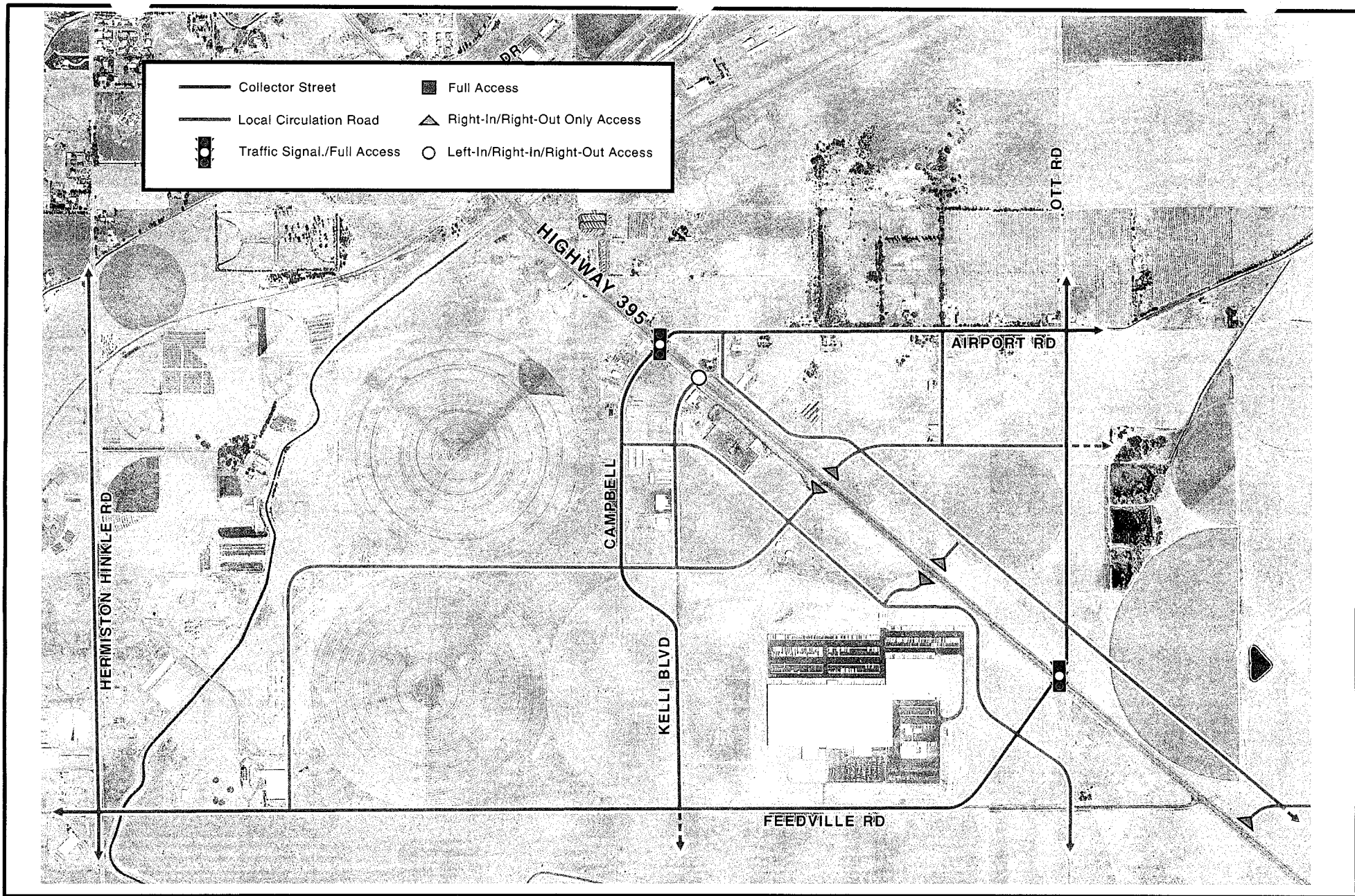
- Feedville Road would be realigned so that it intersects US 395 at the current US 395 / Ott Road intersection. This full access intersection would then be signalized.
- Campbell Road would be extended to the south so that it aligns to Kelli Boulevard and becomes a connecting roadway to Feedville Road. A small section of Kelli Boulevard would then be abandoned in order to emphasize Campbell Drive as the main north-south corridor.
- A series of local circulation roadways and feeder roads would be constructed to provide local access opportunities for developed and undeveloped parcels throughout the study area.
- The US 395/Campbell Road/Airport Road intersection would be signalized
- The US 395/Kelli Boulevard intersection would be limited to left-in/right-in/right-out access.
- The existing US 395/EZ Storage/Hermiston Foods intersection and the US 395/Wal-Mart distribution center driveway intersection would be limited to right-in/right-out access only.

Advantages:

- The collector streets and local circulation roadways would provide an efficient circulation pattern within the study area.
- The creation of local circulation backage roads promotes property development along both sides of US 395.
- The realignment of Feedville Road to Ott Road and the subsequent signalization would occur entirely within the City of Hermiston UGB.
- Feedville Road would be aligned at more of a 90 degree angle at its intersection with US 395.

Disadvantages:

- Direct truck access between the Wal-Mart Distribution Center and US 395 would be limited to right-in/right-out access. Truck movements limited by this access scenario would be forced to utilize one of the signalized access points at Ott Road or Campbell Road.
- The northern portion of Kelli Boulevard would no longer provide a direct link to Feedville Road.
- Right-of-way will need to be obtained for the local circulation roadway around the northeast corner of the Wal-Mart Distribution Center.



Alternative #1
ACCESS AND CIRCULATION PLAN (Phase 1)



US395 Corridor Refinement Plan
Port Drive to Feedville Road

FIGURE
17



Alternative #2

Figure 18 shows the access and circulation Alternative #2. As illustrated in the figure, access would be limited to several equally spaced signalized intersections between Airport Road and Feedville Road. Major roadway modifications and access opportunities include:

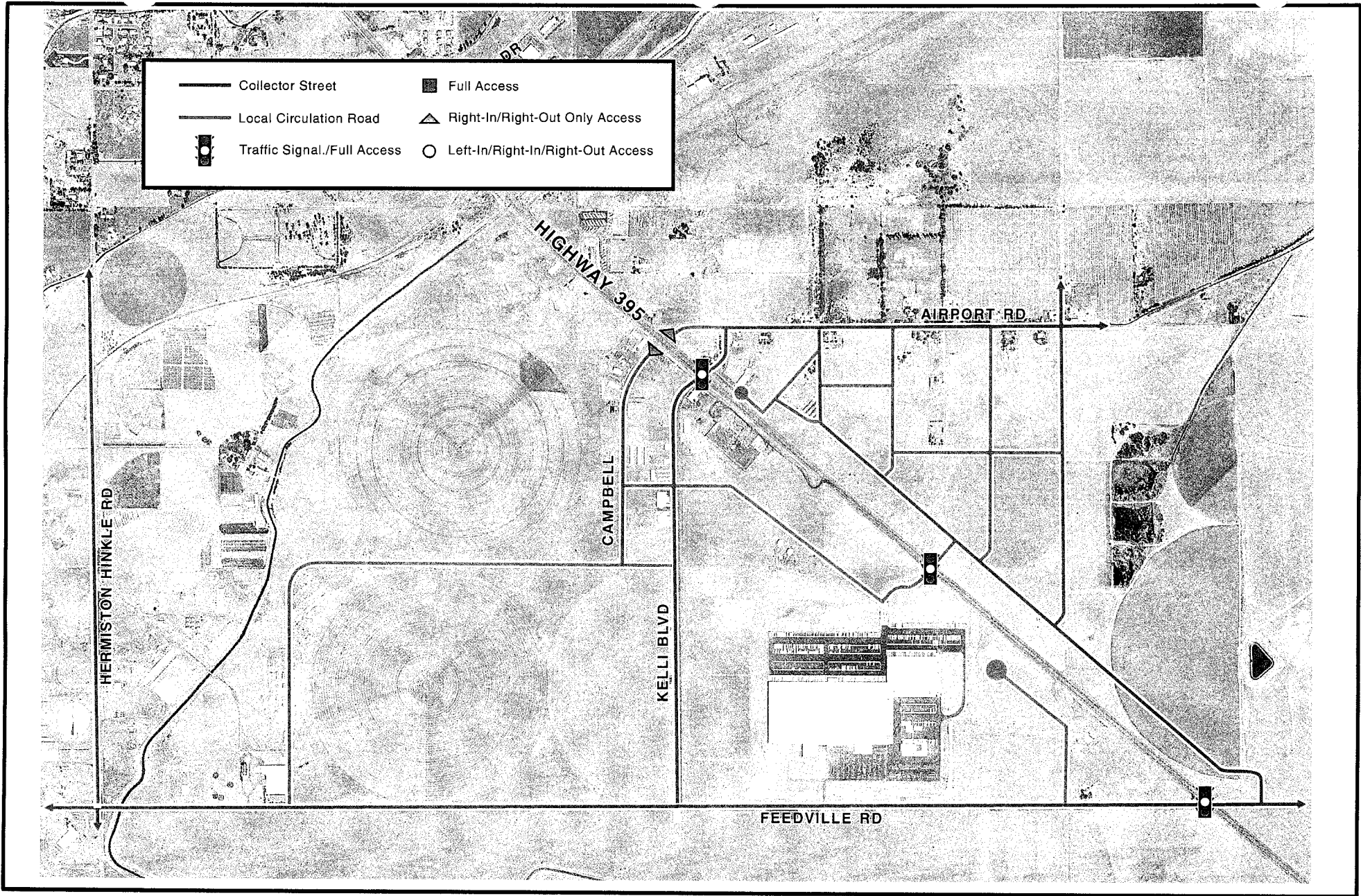
- The US 395/Campbell Road/Airport Road intersection would be limited to right-in/right-out access.
- Signalized full access would be provided at the US 395/Kelli Boulevard, US 395/Wal-Mart distribution center driveway, and the US 395/Feedville Road intersections.
- The US 395/Ott Road and US 395/Hermiston Foods/EZ Storage intersections would be removed. Access to/from these roadways would be provided via a series of local circulation and feeder roadways that would connect to US 395 via one of the signalized or limited access intersections described above.
- Kelli Boulevard would be extended north of US 395 connecting to Airport Road.

Advantages:

- With the exception of Campbell Road/Airport Road, all access to US 395 would be controlled via a series of equally spaced traffic signals. These signals would promote safe and efficient side-street access to US 395 while maintaining the efficient flow of vehicles on US 395.
- A traffic signal at the Wal-Mart truck access would address truck acceleration needs for left-turning trucks onto US 395 northbound.
- A logical system of backage roads is developed within the constraints of existing parcels.
- The majority of collector streets and local circulation roadways would follow existing property lines, requiring minimal property condemnation.

Disadvantages:

- The extension of Kelli Boulevard across US 395 to Airport Road may be difficult to implement given existing property development located along the projected alignment.
- The US 395/Feedville Road intersection is not located within the City of Hermiston UGB. As a result, the City of Hermiston would not have the authority to effectively plan for a future traffic signal at this location.
- Cul-de-sacs located near the Wal-Mart Distribution Center and US 395/Kelli Boulevard intersection limit local street connectivity within the study area.
- The right-in/right-out access at Campbell Road would create a circuitous route for vehicles heading northbound on US 395.
- Property near the existing Denny's Restaurant and Best Western motel would not have direct access to/from US 395.
- The traffic signal at the Wal-Mart Distribution Center would only serve trucks, not employees.



Alternative #2
ACCESS AND CIRCULATION PLAN (Phase 1)



US 395 Corridor Refinement Plan
 Port Drive to Feedville Road

FIGURE
18



Alternative #3

Figure 19 shows the access and circulation Alternative #3. As illustrated in the figure, multiple limited access opportunities would be provided along US 395. Major roadway modifications and access opportunities include:

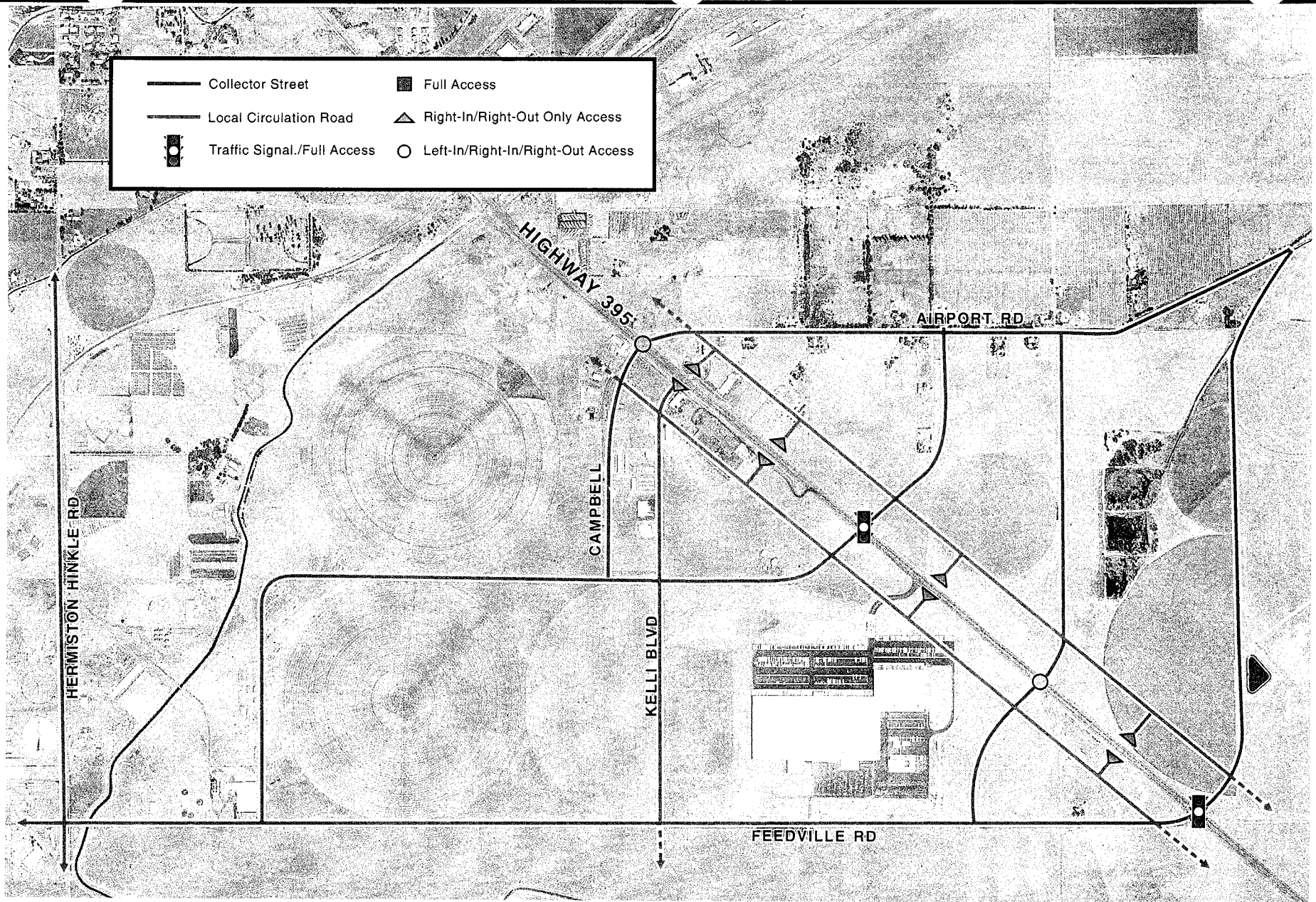
- A new collector roadway would be constructed that would ultimately connect Airport Road, US 395, Kelli Boulevard, Campbell Drive, and Feedville Road. At its intersection with US 395, this new roadway would be signalized.
- A series of local circulation roadways would be constructed parallel to US 395. These feeder roads would provide access to individual parcels located along US 395. These roadways would then provide limited access opportunities to US 395 at the general locations illustrated in the figure.
- Ott Road south of US 395 would be realigned to intersect Feedville Road further to the west.
- The US 395 / Feedville Road intersection would be signalized.

Advantages:

- Backage roads to the north and south of US 395 provide the maximum amount of property frontage for future development.
- Although not located at the existing Wal-Mart Distribution Center driveway, the northernmost traffic signal is still close enough to serve as a convenient truck access to/from US 395.

Disadvantages:

- Some collector streets such as the extension of Feedville Road north of US 395 are located outside of the City of Hermiston UGB.
- There is no full access serving Campbell Road, Kelli Boulevard, or Airport Road.
- The backage roads along the north and south sides of US 395 would impact existing land uses such as the EZ-Storage facility and a portion of the Wal-Mart Distribution Center truck parking lot.
- The US 395/Feedville Road intersection is not located within the City of Hermiston UGB. As a result, the City of Hermiston would not have the authority to effectively plan for a future traffic signal at this location.



Alternative #3
ACCESS AND CIRCULATION PLAN (Phase 1)



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

FIGURE
19



Alternative #4

Figure 20 shows the access and circulation Alternative #4. As illustrated in the figure, multiple full access opportunities would be provided along US 395 along with an expanded pattern of local circulation roadways and collector streets. Major roadway modifications and access opportunities include:

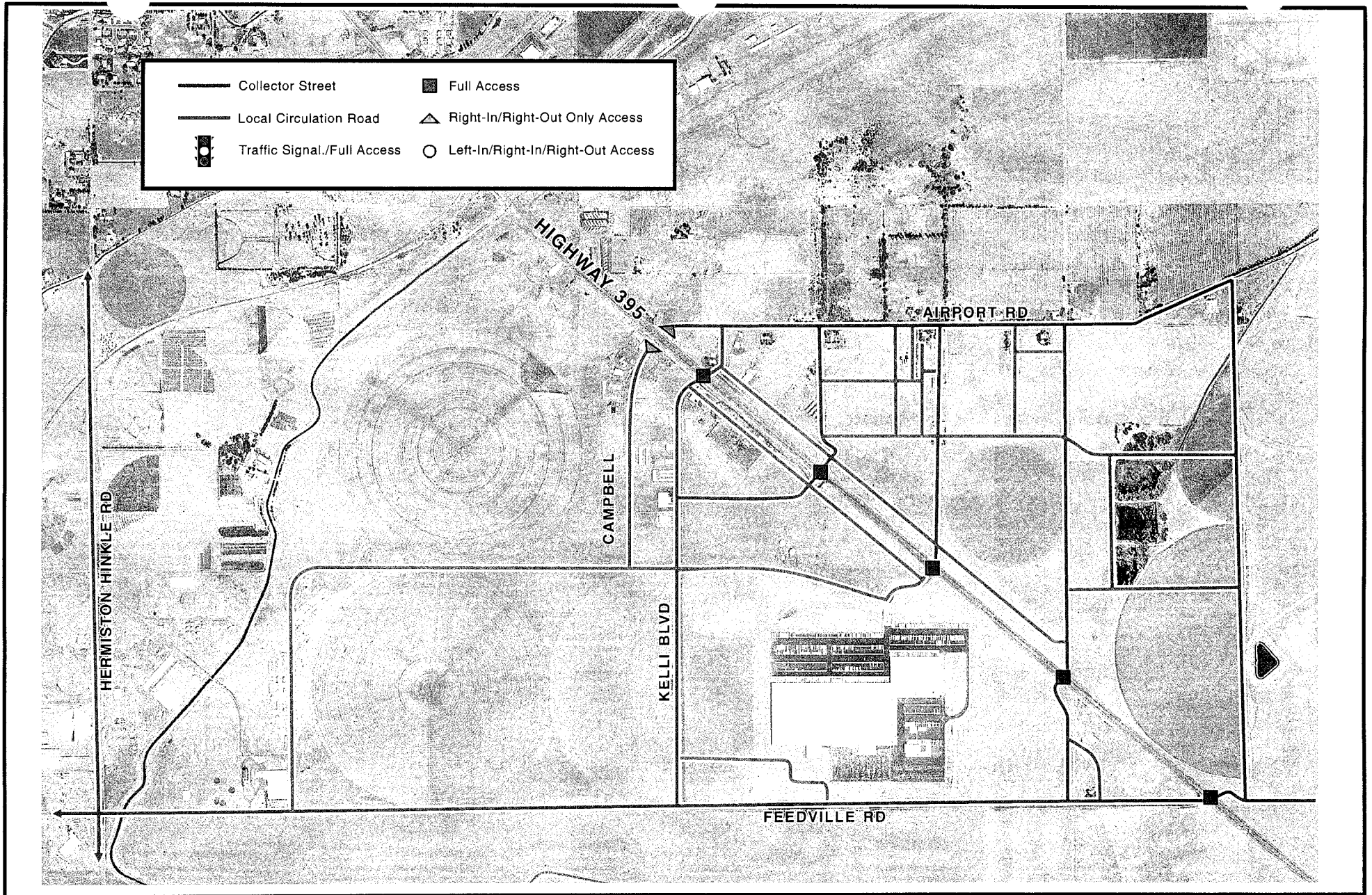
- Limited right-in/right-out access would be provided at the US 395/Campbell Road/Airport Road intersection.
- Unsignalized full access opportunities would be provided at the US 395/Kelli Boulevard, US 395/Wal-Mart distribution center driveway, US 395/Ott Road, and US 395/Feedville Road intersections.
- A new collector roadway would be provided that links Kelli Boulevard to US 395 at the present day US 395/Hermiston Foods/EZ Storage intersection. This collector roadway would then provide a connection to Airport Road.
- A new collector roadway would be constructed beginning at the US 395/Wal-Mart distribution center driveway and connect to Airport Road.
- A series of local circulation roadways and feeder roads would be constructed to provide local access opportunities for developed and undeveloped parcels throughout the study area.

Advantages:

- A series of equally spaced full access points along US 395 would increase access opportunities to/from US 395 and eliminate the capital and maintenance costs associated with traffic signals.
- The majority of collector streets and local circulation roadways would follow existing property lines, requiring minimal property condemnation.

Disadvantages:

- The frontage road alignments along US 395 may impact existing developments.
- Future development along the Kelli Boulevard corridor may lead to operational problems at the US 395/Kelli Boulevard intersection.
- The extension of Kelli Boulevard across US 395 to Airport Road may be difficult to implement given existing developments located along the projected alignment.
- A lack of signalized intersections along US 395 could lead to increased side-street delay.
- A frontage road would eliminate additional commercial properties along US 395.
- Some collector streets and local circulation roadways in the eastern portion of the study area are located outside of the City of Hermiston UGB.



Alternative #4
ACCESS AND CIRCULATION PLAN (Phase 1)



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

FIGURE 20

Alternative #5

Figure 21 shows the access and circulation Alternative #5. As illustrated in the figure, circulation within the study corridor would be enhanced via a series of local circulation roadways and access to US 395 would be limited to a few strategic intersections. Major roadway modifications and access opportunities include:

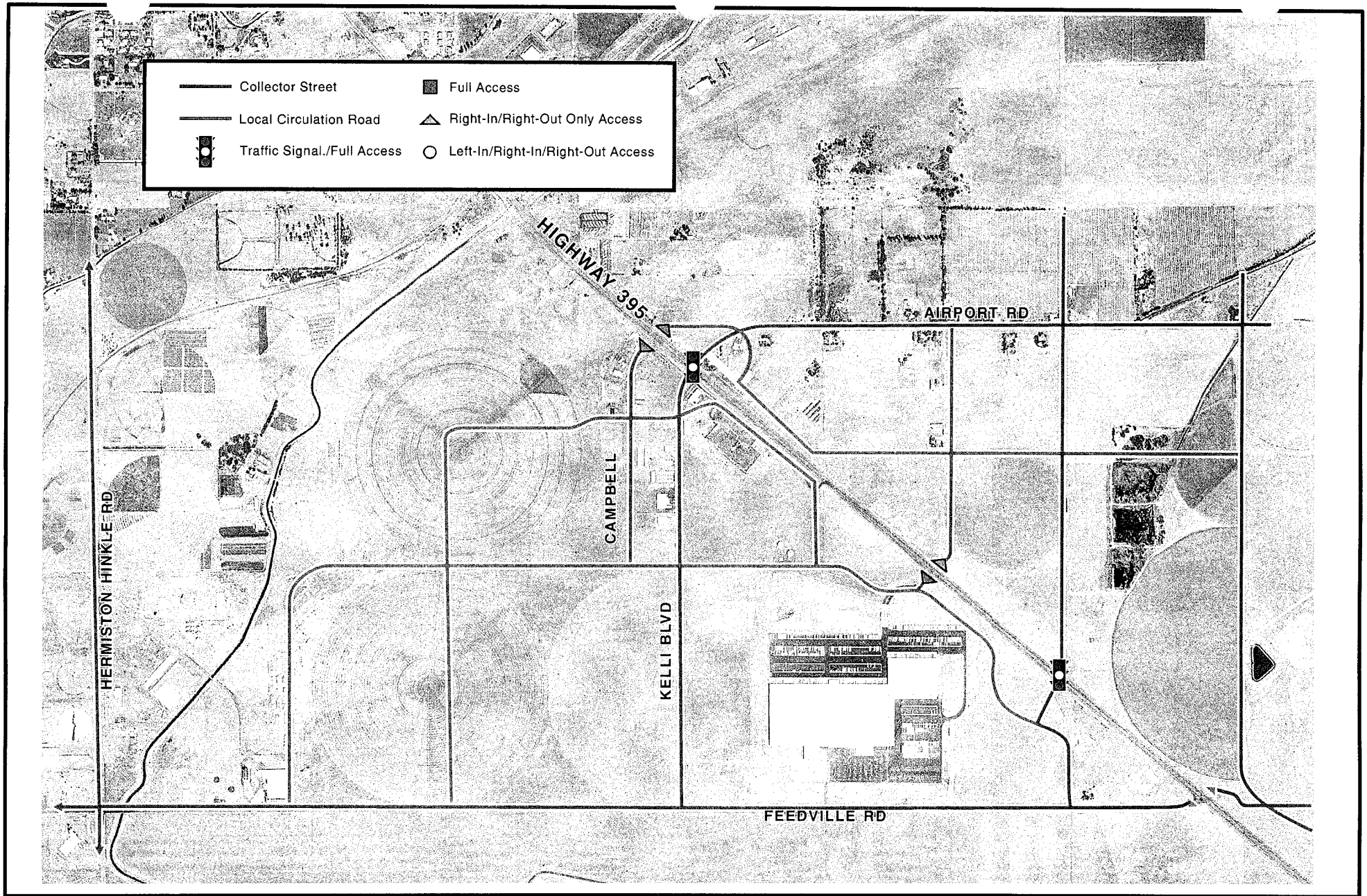
- Full signalized access to US 395 would be provided at Kelli Boulevard and Ott Road.
- Limited access right-in/right-out driveways would be provided at the US 395/Campbell Drive, US 395/Wal-Mart distribution center driveway, and US 395/Feedville Road intersections.
- A series of local circulation roadways and feeder roads would be constructed to provide local access opportunities for developed and undeveloped parcels throughout the study area.
- A short feeder road would be constructed to serve land parcels fronting US 395 between Kelli Boulevard and the Hermiston Foods access to US 395.

Advantages:

- A traffic signal at Ott Road would have better sight distance over a traffic signal at Feedville Road.
- The spacing of collector streets and local circulation roads would allow for the uninterrupted development of large lots.
- The majority of collector streets and local circulation roadways would follow existing property lines, requiring minimal property condemnation.
- The signalization of US 395/Ott Road intersection would occur entirely within the City of Hermiston UGB.

Disadvantages:

- Direct truck access between the Wal-Mart Distribution Center and US 395 would be limited to right-in/right-out access. Truck movements limited by this access would be forced to utilize one of the signalized access points at Ott Road or Kelli Boulevard.
- The right-in/right-out access at Campbell Street would create a circuitous route for vehicles heading northbound on US 395.
- A signal would make more sense at Feedville Road where existing traffic volumes are higher than at Ott Road where traffic volumes are low.
- Right-of-way will need to be obtained for the local circulation roadway around the northeast corner of the Wal-Mart Distribution Center.
- Some collector streets and local circulation roadways in the eastern portion of the study area are located outside of the City of Hermiston UGB.



Alternative #5
ACCESS AND CIRCULATION PLAN (Phase 1)



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

FIGURE
21



Alternative #6

Figure 22 shows the access and circulation Alternative #6. As illustrated in the figure, only two full access opportunities would be provided along US 395. To support this limited access option, an expanded series of local circulation roadways have been provided. Major roadway modifications and access opportunities include:

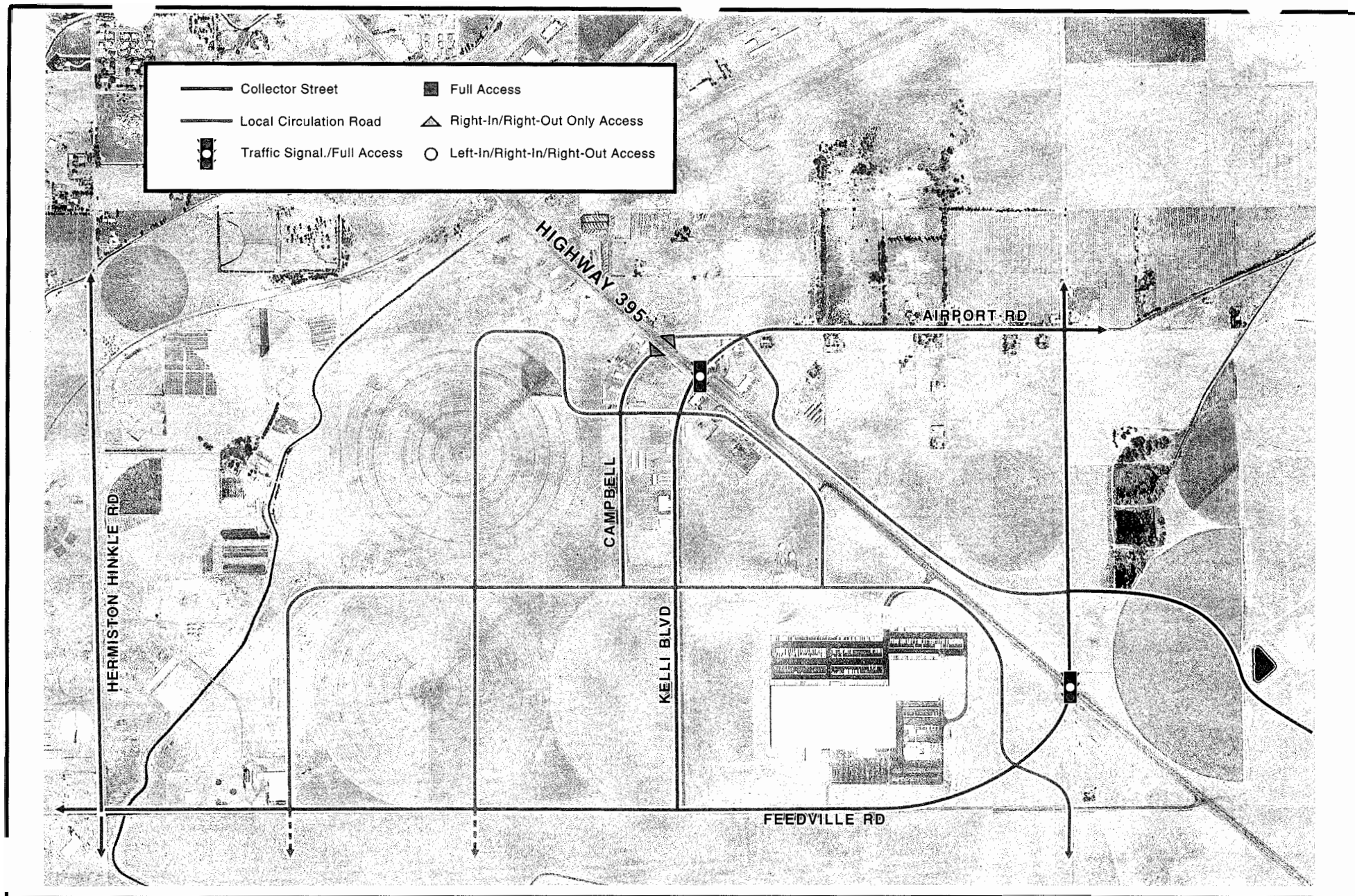
- Feedville Road would be realigned so that it intersects with US 395 at the existing US 395/Ott Road intersection. This new intersection would then be signalized.
- Kelli Boulevard would be signalized at US 395 and extended north to Airport Road.
- The US 395/Campbell Drive/Airport Road intersection would be limited to right-in/right-out access.
- The existing US 395/Wal-Mart distribution center driveway would be closed, requiring Wal-Mart truck and employee traffic to utilize either Kelli Boulevard or Feedville Road for access to US 395.
- A series of local circulation roadways and feeder roads would be constructed to provide local access opportunities for developed and undeveloped parcels throughout the study area.

Advantages:

- Access to US 395 would be limited to two signalized access points at Ott Road and Kelli Boulevard with a limited access at Campbell Road/Airport Road. This minimum access scenario would help promote side-street access safety to US 395 while maintaining the efficient flow of vehicles on US 395.
- The signalization of US 395/Ott Road intersection and realignment of Feedville Road would occur entirely within the City of Hermiston UGB.
- The local circulation roadway network west of Campbell Road could potentially lead to higher density development patterns.

Disadvantages:

- A frontage road would eliminate additional commercial frontage to properties.
- The extension of Kelli Boulevard across US 395 to Airport Road may be difficult to implement given existing developments located along the projected alignment.
- Right-of-way will need to be obtained for the local circulation roadway around the northeast corner of the Wal-Mart Distribution Center.
- Existing businesses such as the Wal-Mart Distribution Center and Hermiston Foods would not have any form of direct access to US 395.
- The large curvature of Feedville Road as it approaches US 395 from the east which can create sight-distance constraints.



Alternative #6
ACCESS AND CIRCULATION PLAN (Phase 1)

Alternative #7

Figure 23 shows the access and circulation Alternative #7. As illustrated in the figure, full signalized access to US 395 would be limited to Campbell Drive and Feedville Road. Two limited access driveways would be located in-between, along with a series of local circulation roadways. Major roadway modifications and access opportunities include:

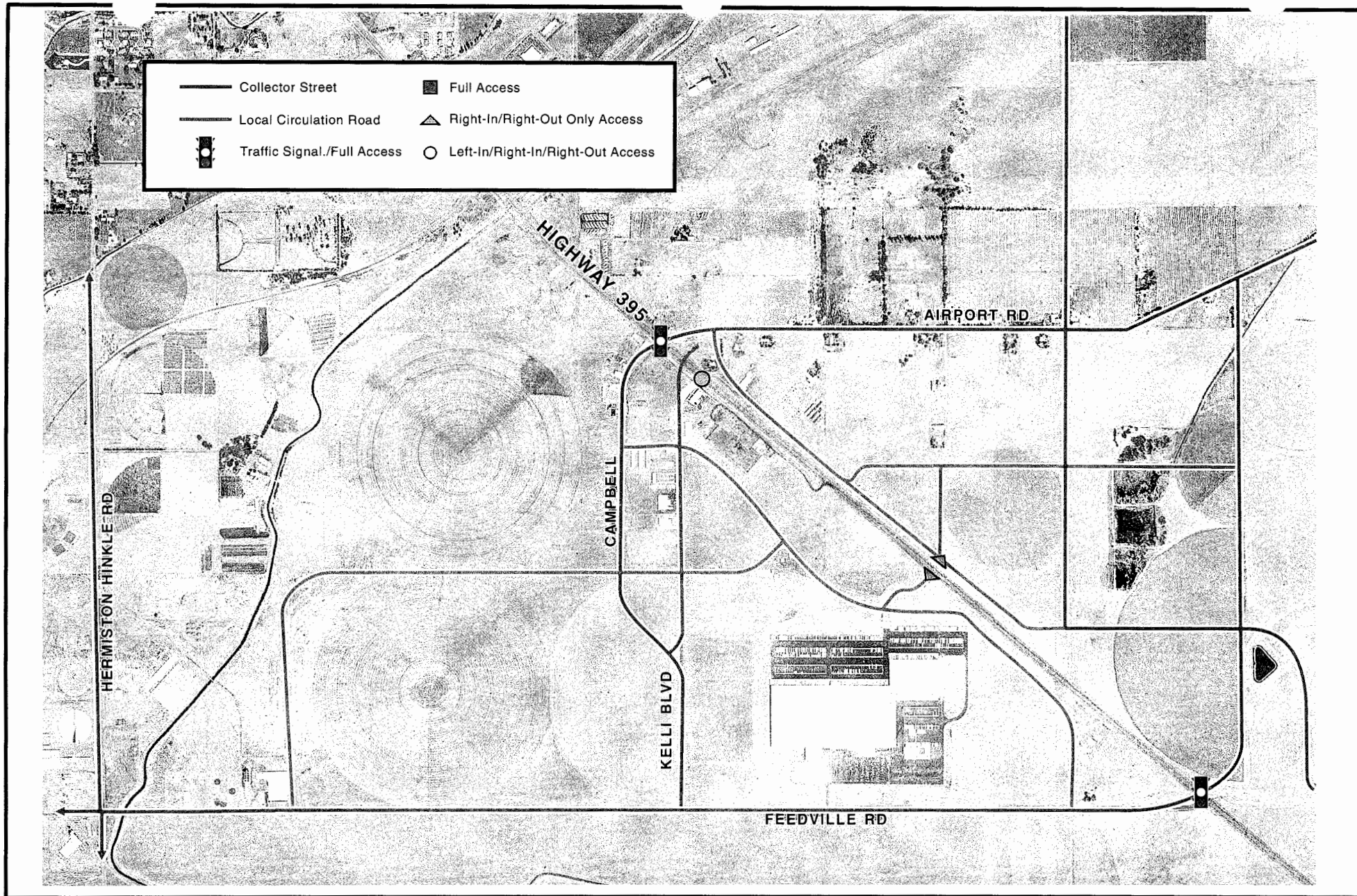
- Campbell Road would be extended to the south so that it aligns to Kelli Boulevard and becomes a connecting roadway to Feedville Road.
- The US 395/Campbell Road/Airport Road and US 395/Feedville Road intersections would be signalized.
- The US 395/Kelli Boulevard would be limited to right-in/right-out/left-in access.
- The US 395/Wal-Mart distribution center driveway would be limited to right-in/right-out access only.
- Ott Road would no longer intersect US 395 directly. Instead, Ott Road north of US 395, would be realigned to the east connecting to an eventual northerly extension of Feedville Road.
- A series of local circulation roadways and feeder roads would be constructed to provide local access opportunities for developed and undeveloped parcels throughout the study area.

Advantages:

- The number of access points to US 395 would be limited between Feedville Road and Airport Road/Campbell Road.
- The extension of Campbell Road to Kelli Boulevard would provide a direct connection between a signalized US 395/Campbell Road intersection to Feedville Road.
- The majority of collector streets and local circulation roadways would follow existing property lines, requiring minimal property condemnation.

Disadvantages:

- The frontage road on the north side of US 395 will likely impact existing businesses between Kelli Boulevard and Airport Road.
- It may be difficult to obtain right-of-way for the local circulation roadway around the northeast corner of the Wal-Mart Distribution Center without going through a condemnation process.
- The backage road on the south side of US 395 may be too far back to encourage smaller retail development.
- Some collector streets and local circulation roadways in the eastern portion of the study area are located outside of the City of Hermiston UGB.



Alternative #7
ACCESS AND CIRCULATION PLAN (Phase 1)



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

FIGURE
23



Bicycle and Pedestrian Elements

In addition to the roadway circulation alternatives, the provision of bicycle and pedestrian facilities is an important component in the long-term vision of the US 395 study area. Accommodation of these modes will be ensured through the roadway design standards. Any off-roadway bicycle/pedestrian facilities or specific US 395 crossing issues will be examined under Phase 2 of the US 395 Corridor Refinement Plan upon the selection of a preferred access alternative.

Preliminary Short-Term Implementation Plan

Due to the timing and funding constraints of the ongoing Port Drive-NW Harding Avenue Statewide Transportation Improvement Plan Median Project, the Opportunity and Constraints Analysis was utilized to develop a preliminary short-term implementation plan for defining the location and design of a raised median of the segment of US 395 between Kelli Boulevard and Feedville Road. Based on the alternatives developed as part of the Phase 1 analysis, it appears that approximately over 2,700 feet of raised median can be installed without limiting access to existing industrial and commercial businesses. Figure 24 illustrates the preliminary short-term implementation plan for installing raised medians along US 395 between Kelli Boulevard and Feedville Road.

As shown in the Figure 24, the preliminary short-term implementation plan calls for four median segments, while allowing full-access movements at the four sets primary private and public roadway approaches south of Kelli Boulevard. In addition, the existing southerly Hermiston Foods and EZ storage site-access driveways could potentially be restricted to left-in/right-in/right-out movements without significant operational impacts to the highway operations. This partial restriction would force vehicles exiting Hermiston Foods and traveling north on US 395 to enter the highway via Kelli Boulevard. In addition, motorists desiring to exit EZ Storage and travel south would be required to go north on Highway 395 and perform a u-turn at Kelli Boulevard.

Raised Median Design Elements

Based on feedback from the City of Hermiston staff and citizens, ODOT has agreed to install a 6-foot wide landscaped median along US 395 in lieu of a concrete "Jersey-type" barrier. Figure 25 provides a cross-section and plan view of the proposed landscaped median. Based on the existing travel speeds and traffic volumes entering access points via left-turn movements along US 395, storage areas and deceleration distances have been calculated for each full-access approach. Table 7 summarizes these calculations and provides guidance regarding the starting and ending points for each median segment.

Table 7
Median Location and Length Calculations

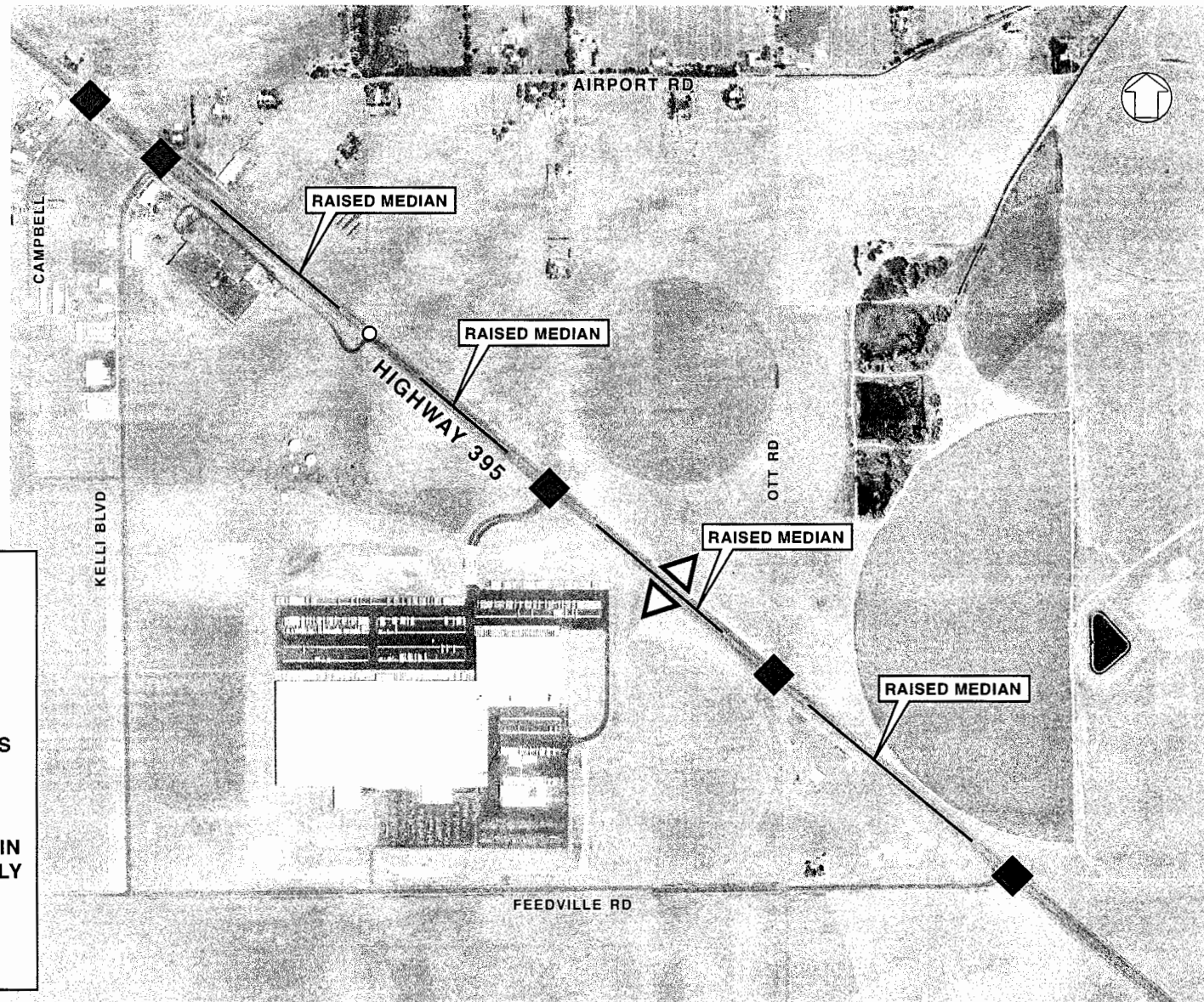
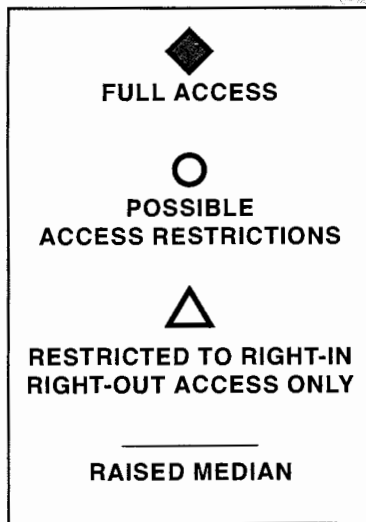
Southbound

Intersection	Intersection Location		Intersection Area	Storage Length (L)	Deceleration Distance	Distance from Centerline		Start of Median		Median	
	Mile Post	Station	Meters	Meters	Meters	Meters	Feet	Station	Mile Post	Feet	Located Between Streets
Airport Road	7.33	38702	20	45	115	170	558	38145	7.22		
Kelli Boulevard	7.45	39336	20	45	115	170	558	38778	7.34	-483	Kelli Boulevard & Airport Road
Hermiston Foods	7.78	41078	20	45	115	170	558	40521	7.67	627	Hermiston Foods & Kelli Blvd
Wal-Mart	8.08	42662	20	45	115	170	558	42105	7.97	469	Wal-Mart & Hermiston Foods
Ott Road	8.43	44510	20	45	115	170	558	43953	8.32	733	Ott Road & Wal-Mart
Feedville Rd	8.82	46570	20	45	115	170	558	46012	8.71	944	Feedville Road and Ott Road

Total Length 2772

Northbound

Intersection	Intersection Location		Intersection Area	Storage Length (L)	Deceleration Distance	Distance from Centerline		Start of Median	
	Mile Post	Station	Meters	Meters	Meters	Meters	Feet	Station	Mile Post
Airport Road	7.33	38702	20	45	115	170	558	39260	7.22
Kelli Boulevard	7.45	39336	20	45	115	170	558	39894	7.34
Hermiston Foods	7.78	41078	20	45	115	170	558	41636	7.67
Wal-Mart	8.08	42662	20	45	115	170	558	43220	7.97
Ott Road	8.43	44510	20	45	115	170	558	45068	8.32
Feedville Rd	8.82	46570	20	45	115	170	558	47127	8.71



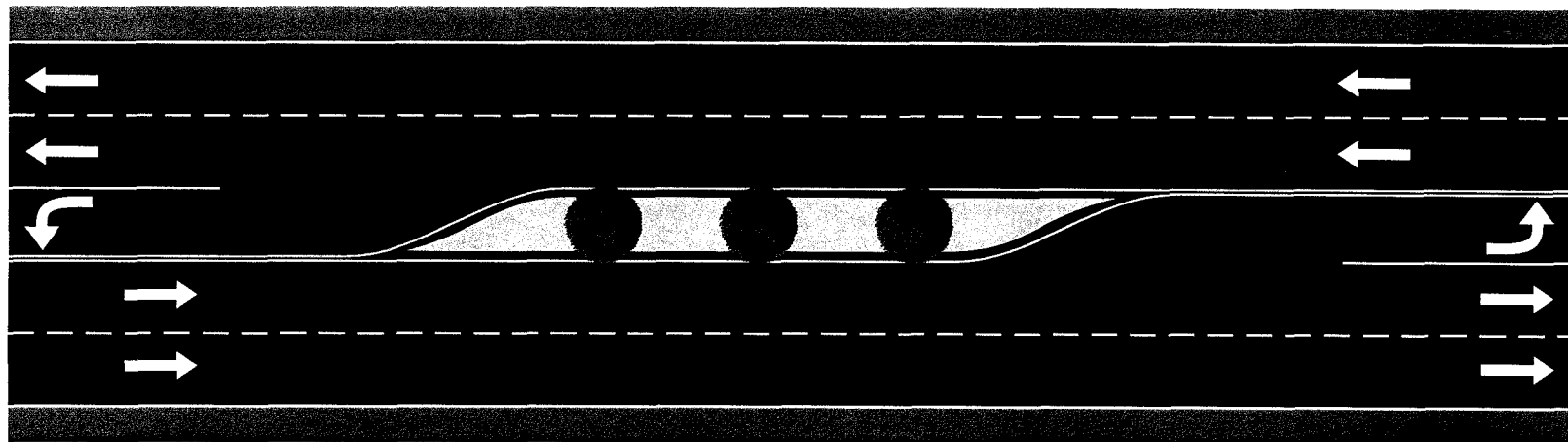
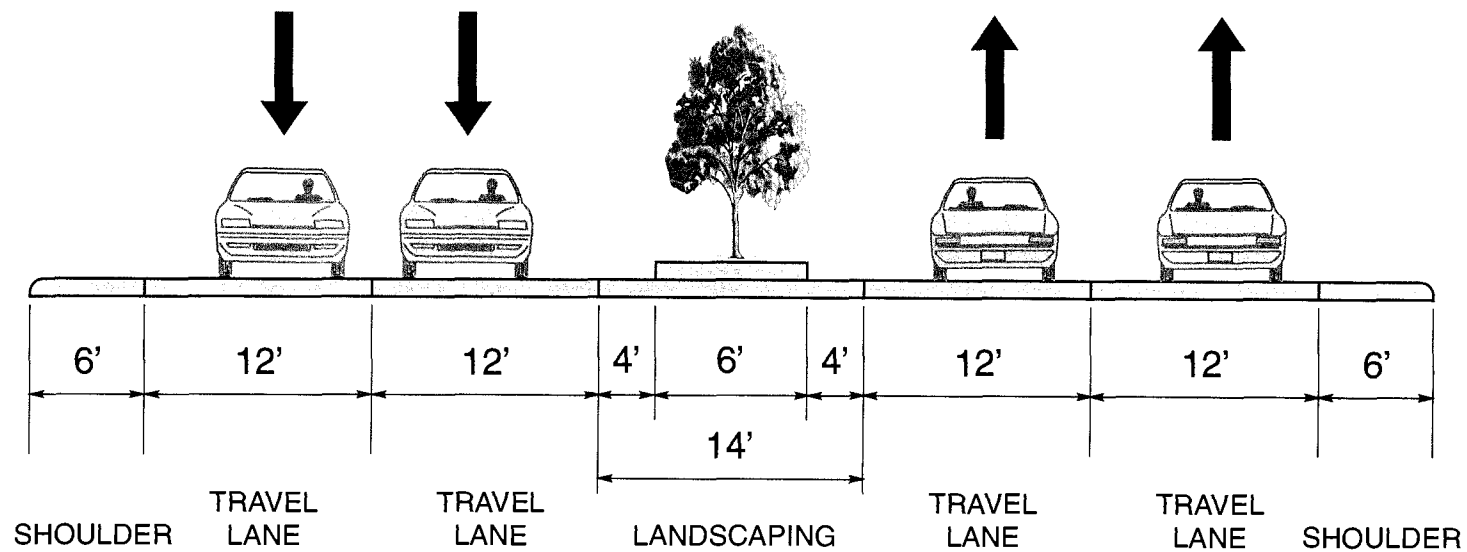
PRELIMINARY SHORT-TERM IMPLEMENTATION PLAN



US 395 Corridor Refinement Plan
 Port Drive to Feedville Road
 SEPTEMBER 2002

FIGURE
24





PROPOSED MEDIAN CONFIGURATIONS



US 395 Corridor Refinement Plan
 Port Drive to Feedville Road

FIGURE
25



REFERENCES

1. Oregon Department of Transportation. *US 395 North Corridor Plan*. 2000.
2. Transportation Research Board. *Highway Capacity Manual*. 2000.
3. Oregon Department of Transportation. *1999 Oregon Highway Plan*. 1999.
4. U.S. Department of Transportation. *The Manual on Uniform Traffic Control Devices – Millennium Edition*. June 2001.
5. Oregon Department of Transportation. *2000 State Highway Crash Rate Tables*. 2001.

Appendix A

Traffic Count Summary Sheets

Mile Post	6.61
Intersection	US 395

Time to Time		Northbound						Southbound						Eastbound						Westbound						SUM
		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT		
		cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	
6:00 AM	7:00 AM	0	0	164	31	6	1	12	0	142	35	0	0	0	0	0	0	0	0	0	0	0	0	0	0	426
7:00 AM	7:15 AM	0	0	41	3	0	0	5	0	38	6	0	0	0	0	0	0	0	0	0	0	0	0	0	0	108
7:15 AM	7:30 AM	0	0	47	6	6	0	1	0	52	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	136
7:30 AM	7:45 AM	0	0	43	9	0	0	10	0	52	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	132
7:45 AM	8:00 AM	0	0	84	9	4	1	15	0	63	11	1	0	0	0	0	0	0	0	0	0	0	0	0	0	206
8:00 AM	8:15 AM	0	0	45	12	7	2	11	0	48	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	146
8:15 AM	8:30 AM	0	0	50	9	2	0	6	0	37	10	0	0	0	0	0	0	0	0	0	0	0	0	0	0	129
8:30 AM	8:45 AM	0	0	54	8	6	0	7	1	39	7	2	1	0	0	0	0	0	0	0	0	0	0	0	0	137
8:45 AM	9:00 AM	0	0	75	14	3	0	6	0	47	11	0	0	0	0	0	0	0	0	0	0	0	0	0	0	171
9:00 AM	10:00 AM	1	0	247	41	19	0	29	0	211	39	2	0	0	0	0	0	0	0	0	0	0	0	0	0	636
10:00 AM	11:00 AM	1	0	293	50	22	0	32	0	152	43	3	0	0	0	0	0	0	0	0	0	0	0	0	0	656
11:00 AM	11:15 AM	0	0	96	18	12	1	9	1	91	14	0	0	1	0	0	0	0	0	0	0	0	0	0	0	267
11:15 AM	11:30 AM	0	0	40	5	5	0	6	0	36	4	1	0	0	0	0	0	0	0	0	0	0	0	0	0	113
11:30 AM	11:45 AM	0	0	66	12	6	0	7	0	52	3	0	0	0	0	0	0	0	0	0	0	0	0	0	0	158
11:45 AM	12:00 PM	0	0	86	7	4	0	15	0	78	19	0	0	1	0	0	0	0	0	0	0	0	0	0	0	231
12:00 PM	12:15 PM	0	0	90	13	17	0	29	0	81	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	280
12:15 PM	12:30 PM	0	0	77	12	7	0	12	0	92	10	1	0	1	0	0	0	0	0	0	0	0	0	0	0	233
12:30 PM	12:45 PM	0	0	86	8	9	0	10	0	58	8	0	0	0	0	0	0	0	0	0	0	0	0	0	0	194
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1:00 PM	2:00 PM	0	0	327	51	34	1	50	0	324	61	3	0	3	1	0	0	0	0	0	0	0	0	0	0	942
2:00 PM	3:00 PM	0	0	330	44	25	0	2	0	352	35	2	0	1	0	0	0	0	0	0	0	0	0	0	0	864
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4:15 PM	4:30 PM	0	0	87	16	14	0	10	0	92	14	0	0	0	0	0	0	0	0	0	0	0	0	0	0	255
4:30 PM	4:45 PM	0	0	109	8	10	0	12	0	78	17	1	0	0	0	0	0	0	0	0	0	0	0	0	0	255
4:45 PM	5:00 PM	0	0	105	8	3	1	12	0	114	12	0	0	0	0	0	0	0	0	0	0	0	0	0	0	271
5:00 PM	5:15 PM	0	0	105	14	11	0	2	0	111	13	0	0	0	0	0	0	0	0	0	0	0	0	0	0	293
5:15 PM	5:30 PM	0	0	88	6	10	0	1	0	83	6	0	0	1	0	0	0	0	0	0	0	0	0	0	0	203
5:30 PM	5:45 PM	0	0	95	7	10	0	1	0	90	9	2	0	0	0	0	0	0	0	0	0	0	0	0	0	226
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		3	0	3609	515	325	10	379	2	3256	508	23	1	10	1	1	0	0	6	0	331	7	0	0	433	8
Truck %		0%		12%		3%		1%		13%		4%		9%		0%		0%		2%		#DIV/0!		2%		

System Peak Hour (7:15 a.m. - 8:15 a.m.)

		(0)	(43)	(0)		
		1	258	37		
		↙	↓	↘		
(0)	0	↘			↘	14 (0)
(0)	0	→	AM Peak		→	0 (0)
(0)	0	↙	PHF= 0.752		↙	35 (2)
		↘	↑	↗		
		0	255	20		
		(0)	(36)	(3)		

System Peak Hour (11:45 a.m. - 12:45 p.m.)

		(0)	(45)	(0)		
		1	354	66		
		↙	↓	↘		
(0)	2	↙			↘	68 (1)
(0)	0	→	Midday Peak		→	0 (0)
(0)	1	↘	PHF= 0.838		↙	30 (0)
		↙	↑	↘		
		0	379	37		
		(0)	(40)	(0)		

System Peak Hour (4:15 p.m. - 5:15 p.m.)

			(0)	(56)	(0)		
			1	451	36		
			↙	↓	↘		
(0)	0	↘				↘	56 (1)
(0)	1	→		PM Peak		→	0 (0)
(0)	0	↙	PHF=	0.916		↙	38 (1)
			↙	↓	↘		
			0	452	39		
			(0)	(46)	(1)		

= Passenger Cars and Trucks
(#) = Trucks Only

Mile Post 6.94
Intersection US 395

Time to Time		Northbound						Southbound						Eastbound						Westbound						SUM
		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT		
		cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	
6:00 AM	7:00 AM			150	41	0	0	6	0	165	18									1	0			1	0	382
7:00 AM	7:15 AM			50	11	0	0	1	0	52	5									0	0			1	0	120
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11:00 AM	11:15 AM			78	18	1	0	2	0	62	16									0	0			0	0	177
11:15 AM	11:30 AM			61	13	0	0	0	0	60	12									0	0			1	0	147
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4:45 PM	5:00 PM			93	8	0	0	1	0	86	8									0	0			1	0	197
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System Peak Hour (7:15 a.m. - 8:15 a.m.)

System Peak Resolution (FWHM) = 0.85 (unitless)

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(0)	0	↘			↙	15 (11)
(0)	0	→	AM Peak		←	0 (0)
(0)	0	↘	PHF= 0.842		↙	0 (0)
		↙	↑	↘		
		0	238	0		
		(0)	(28)	(0)		

System Peak Hour (11:45 a.m. - 12:45 p.m.)

System Peak Resolution (min) 12.15 (min)

		(0)	(35)	(1)		
		0	283	9		
		↙	↓	↘		
(0)	0	↘			↙	17 (0)
(0)	0	→	Midday Peak		←	0 (0)
(0)	0	↘	PHF= 0.879		↙	2 (0)
		↙	↑	↘		
		0	341	2		
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System Peak Hour (4:15 p.m. - 5:15 p.m.)

System: CACR-1 (100 pm, 0.05 pm)

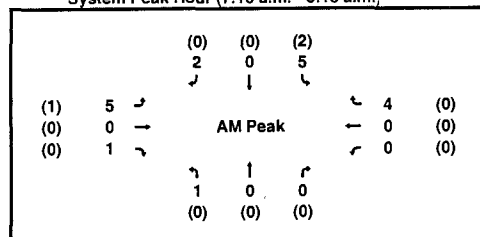
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		0	413	5		
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(0)	0	↗			↖	8 (0)
(0)	0	→	PM Peak		←	0 (0)
(0)	0	↘	PHF= 0.934		↖	2 (0)
			↓			
		0	458	3		
		(0)	(33)	(0)		

= Passenger Cars and Trucks
(#) = Trucks Only

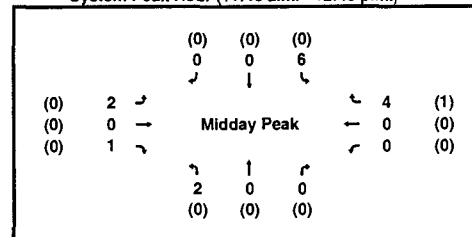
Mile Post 7.1
 Intersection US 395 ODOT Maintenance

		Northbound						Southbound						Eastbound						Westbound						SUM	
		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT			
Time	to	Time	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	
6:00 AM		7:00 AM	1	0			1	0	1	0			0	0	0	0			1	0	0	0			0	0	4
7:00 AM		7:15 AM	0	0			0	0	1	0			0	0	0	0			0	0	0	0			0	0	1
7:15 AM		7:30 AM	0	0			0	0	0	0			0	0	0	0			0	0	0	0			0	0	0
7:30 AM		7:45 AM	0	0			0	0	1	0			0	0	0	0			0	0	0	0			1	0	2
7:45 AM		8:00 AM	0	0			0	0	1	0			2	0	3	1			0	0	0	0			2	0	9
8:00 AM		8:15 AM	1	0			0	0	1	2			0	0	1	0			1	0	0	0			1	0	7
8:15 AM		8:30 AM	0	0			0	1	1	0			0	0	0	0			1	0	0	0			2	0	5
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8:45 AM		9:00 AM	0	1			0	0	1	0			2	1	0	0			0	0	0	0			2	0	7
9:00 AM		10:00 AM	0	0			0	0	1	1			1	1	1	0			0	0	0	0			2	2	9
10:00 AM		11:00 AM	0	0			0	0	6	0			1	0	2	1			1	2	0	0			6	0	19
11:00 AM		11:15 AM	0	0			0	0	1	1			0	0	0	0			0	1	0	0			1	1	5
11:15 AM		11:30 AM	1	0			0	0	1	0			1	0	0	1			0	1	0	0			0	1	6
11:30 AM		11:45 AM	0	0			1	0	2	2			0	0	0	0			1	0	0	0			3	0	9
11:45 AM		12:00 PM																									0
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12:30 PM		12:45 PM	2	0			0	0	1	0			0	0	1	0			0	0	0	0			0	1	5
12:45 PM		1:00 PM	0	0			0	0	0	0			0	0	0	0			0	0	0	0			4	0	4
1:00 PM		2:00 PM	1	1			0	0	4	1			0	0	0	0			0	0	1	0			6	0	14
2:00 PM		3:00 PM	0	2			0	1	10	0			0	0	0	0			0	0	3	1			7	0	24
3:00 PM		4:00 PM	1	0			0	0	10	0			1	0	2	0			2	0	2	0			6	0	24
4:00 PM		4:15 PM	0	0			0	0	3	0			0	0	0	0			0	0	0	0			6	0	9
4:15 PM		4:30 PM	0	0			0	0	0	0			1	0	1	0			2	0	0	0			2	0	6
4:30 PM		4:45 PM	0	0			1	0	3	0			0	0	1	0			0	0	1	0			3	0	9
4:45 PM		5:00 PM	0	0			0	0	2	1			0	0	1	0			0	0	0	0			2	0	6
5:00 PM		5:15 PM	0	0			0	0	2	0			0	0	0	0			0	0	0	0			2	0	4
5:15 PM		5:30 PM	0	0			0	0	1	0			1	0	2	0			0	0	1	0			5	0	10
5:30 PM		5:45 PM	0	0			0	0	2	0			0	0	1	0			0	0	0	0			0	0	3
5:45 PM		6:00 PM	0	0			0	0	3	1			0	0	0	0			0	0	0	1			3	0	8
			7	4	0	0	5	2	66	9	0	0	10	2	17	3	0	0	10	4	8	2	0	0	0	70	5
Truck %			36%		#DIV/0!		29%		12%		#DIV/0!		17%		15%		#DIV/0!		29%		20%		#DIV/0!		7%		

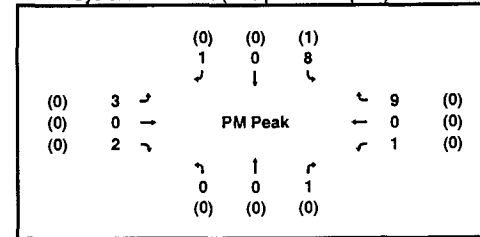
System Peak Hour (7:15 a.m. - 8:15 a.m.)



System Peak Hour (11:45 a.m. - 12:45 p.m.)



System Peak Hour (4:15 p.m. - 5:15 p.m.)



= Passenger Cars and Trucks
 (#) = Trucks Only

Bellinger Produce (north driveway) / RV Park

Truck %	#DIV/0!	#DIV/0!	18%	2%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	11%	#DIV/0!	13%
---------	---------	---------	-----	----	---------	---------	---------	---------	---------	-----	---------	-----

System Peak Hour (7:15 a.m. - 8:15 a.m.)

(0) 0 5 (0)
 (0) 0 0 (0)
 (0) 0 0 (0)

AM Peak

0 1 1
 (0) (0) (0)

System Peak Hour (11:45 a.m. - 12:45 p.m.)

(0)	0	↗		↖	8	(0)
(0)	0	→	Midday Peak	←	0	(0)
(0)	0	↘		↙	4	(0)
			↖	↑	↗	
			0	0	3	
			(0)	(0)	(1)	

System Peak Hour (4:15 p.m. - 5:15 p.m.)

(0) 0 ↗ 5
(0) 0 → PM Peak ← 0
(0) 0 ↘ 3

↖ ↑ ↗
0 0 1
(0) (0) (0)

= Passenger Cars and Trucks

(#) = Trucks Only

Bellinger Produce (south driveway)

Truck %	#DIV/0!	#DIV/0!	11%	11%	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	#DIV/0!	2%	#DIV/0!	0%
---------	---------	---------	-----	-----	---------	---------	---------	---------	---------	----	---------	----

System Peak Hour (7:15 a.m. - 8:15 a.m.)

Diagram illustrating the AM Peak structure and its relationship to the (0) and (2) peaks. The diagram shows a central 'AM Peak' with arrows pointing to it from the (0) and (2) peaks. The (0) peak is labeled with (0) and (0) above it, and (0) and (0) below it. The (2) peak is labeled with (0) and (2) above it, and (0) and (2) below it. The AM Peak is labeled with (0) and (0) above it, and (0) and (2) below it.

System Peak Hour (11:45 a.m. - 12:45 p.m.)

(0) 0 ↗ (0) 0 ↘ (0) 2
 (0) 0 → Midday Peak ← 0
 (0) 0 ↙ (0) 2
 (0) 0 ↗ (0) 0 ↘ (0) 2

System Peak Hour (4:15 p.m. - 5:15 p.m.)

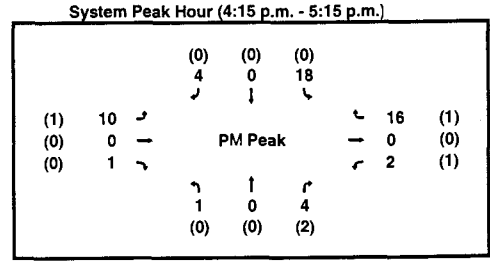
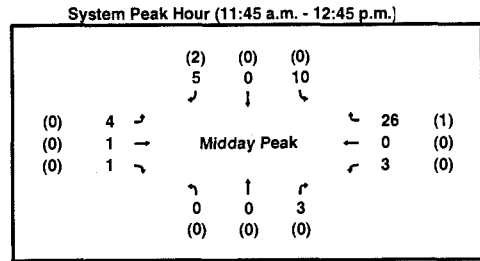
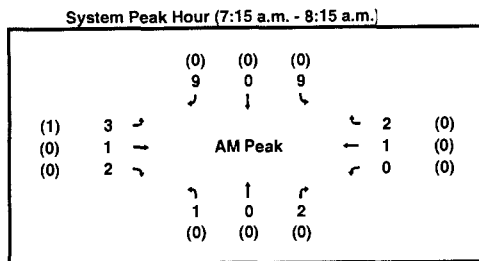
Diagram illustrating the PM Peak structure and its associated values:

		(0)	(0)	(0)		
		0	0	3		
		↙	↓	↘		
(0)	0	↖			↗	4
(0)	0	→	PM Peak		←	0
(0)	0	↘			↗	12
		↙	↓	↘		
		0	0	6		
		(0)	(0)	(0)		

= Passenger Cars and Trucks
(#) = Trucks Only

Mile Post 7.33
 Intersection US 395 Airport Road / Campbell

Time	to	Time	Northbound						Southbound						Eastbound						Westbound						SUM	
			LT		THRU		RT		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT			
			cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks		
6:00 AM		7:00 AM	0	1			2	1	1	0			3	0	1	0	0	0	0	0	3	0	1	0	3	1	17	
7:00 AM		7:15 AM	0	0			1	0	3	0			2	0	0	1	0	0	0	0	3	0	0	0	0	0	10	
7:15 AM		7:30 AM	0	0			0	0	2	0			2	0	0	1	1	0	0	0	0	0	0	0	0	0	6	
7:30 AM		7:45 AM	0	0			0	0	2	0			2	0	0	0	0	0	0	0	0	0	0	0	1	0	5	
7:45 AM		8:00 AM	0	0			1	0	3	0			2	0	1	0	0	0	1	0	0	0	1	0	0	0	9	
8:00 AM		8:15 AM	1	0			1	0	2	0			3	0	1	0	0	0	1	0	0	0	0	0	1	0	10	
8:15 AM		8:30 AM	0	0			2	0	6	0			2	1	2	0	0	0	0	1	1	0	0	0	8	0	23	
8:30 AM		8:45 AM	0	0			2	0	3	0			1	0	3	1	0	1	1	0	1	0	0	0	1	0	14	
8:45 AM		9:00 AM	0	0			1	0	3	0			3	1	2	0	0	0	0	0	1	0	0	0	1	0	12	
9:00 AM		10:00 AM	3	1			2	1	11	0			9	1	13	0	1	0	1	2	1	3	0	0	14	3	66	
10:00 AM		11:00 AM	6	0			2	1	10	0			9	1	9	1	0	0	1	0	3	0	0	0	9	1	53	
11:00 AM		11:15 AM	6	0			1	1	5	0			2	1	7	0	0	0	2	1	1	0	0	0	7	0	34	
11:15 AM		11:30 AM	1	1			1	0	7	0			1	0	4	0	0	1	0	0	1	0	0	0	7	0	24	
11:30 AM		11:45 AM	1	0			2	0	2	1			1	0	3	0	0	0	1	0	1	0	1	0	4	3	20	
11:45 AM		12:00 PM	0	0			1	0	1	0			1	0	1	0	0	0	0	0	1	0	0	0	8	1	14	
12:00 PM		12:15 PM	0	0			1	0	1	0			0	1	3	0	0	0	0	0	2	0	0	0	11	0	19	
12:15 PM		12:30 PM	0	0			1	0	5	0			0	0	0	0	1	0	0	0	0	0	0	0	2	0	9	
12:30 PM		12:45 PM	0	0			0	0	3	0			2	1	0	0	0	0	1	0	0	0	0	0	4	0	11	
12:45 PM		1:00 PM	0	0			0	1	5	0			3	0	0	0	0	0	0	0	0	0	0	0	0	1	10	
1:00 PM		2:00 PM	1	0			9	1	18	1			13	0	11	0	0	0	2	0	1	1	1	0	12	0	71	
2:00 PM		3:00 PM	2	0			1	0	13	0			6	1	8	1	0	0	2	0	4	1	0	0	9	0	48	
3:00 PM		4:00 PM	9	0			3	1	17	1			6	1	10	0	0	0	4	0	4	0	0	0	10	1	67	
4:00 PM		4:15 PM	10	0			1	0	7	0			3	0	11	1	0	0	4	0	2	0	0	0	7	0	46	
4:15 PM		4:30 PM	0	0			1	0	5	0			0	0	3	0	0	0	1	0	0	0	0	0	1	0	11	
4:30 PM		4:45 PM	1	0			0	2	6	0			0	0	2	0	0	0	0	0	0	0	0	0	9	0	20	
4:45 PM		5:00 PM	0	0			1	0	5	0			1	0	2	0	0	0	0	0	1	0	0	0	2	0	12	
5:00 PM		5:15 PM	0	0			0	0	2	0			3	0	2	1	0	0	0	0	0	1	0	0	3	1	13	
5:15 PM		5:30 PM	0	1			1	5	0	0			1	3	3	1	0	0	2	0	5	0	0	0	7	0	29	
5:30 PM		5:45 PM	0	0			0	0	0	0			0	0	1	0	0	0	0	0	0	0	0	0	1	0	2	
5:45 PM		6:00 PM	0	0			0	0	5	0			1	0	0	0	0	0	1	0	2	0	0	0	1	0	10	
			41	4			0	0	38	14	153	3	0	0	82	12	103	8	3	2	25	4	38	6	4	0	143	12
Truck %			9%				27%		2%				13%		7%		40%		14%		14%		0%		8%			
			#DIV/0!						#DIV/0!																			



= Passenger Cars and Trucks
 (#) = Trucks Only

Mile Post	7.45	
Intersection	US 395	Kelli Blvd

Time to Time			Northbound						Southbound						Eastbound						Westbound						SUM	
			LT		THRU		RT		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT			
			cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks		
6:00 AM		7:00 AM	4	0	130	39	1	3	12	0	106	22	48	4	19	2	0	0	3	0	2	1	1	0	10	2	409	
7:00 AM		7:15 AM	2	0	38	9	1	0	1	0	37	8	13	0	3	0	0	0	0	0	1	2	0	0	1	0	116	
7:15 AM		7:30 AM	1	0	43	8	1	0	0	0	39	11	11	3	3	1	0	0	2	1	4	0	0	0	1	0	129	
7:30 AM		7:45 AM	0	0	42	7	1	0	1	0	37	12	9	1	5	0	0	0	1	0	0	0	0	0	2	0	118	
7:45 AM		8:00 AM	1	0	27	9	1	0	0	0	46	10	16	0	4	0	0	0	0	0	1	0	0	0	5	0	120	
8:00 AM		8:15 AM	0	0	53	11	1	0	2	0	21	17	9	1	12	0	0	0	1	1	0	0	0	0	3	0	132	
8:15 AM		8:30 AM	1	0	45	3	0	0	1	0	32	7	4	0	6	2	0	0	1	1	2	0	0	0	1	0	106	
8:30 AM		8:45 AM	1	0	57	8	2	0	1	0	43	16	4	3	5	1	0	0	0	0	1	1	0	0	0	0	143	
8:45 AM		9:00 AM	0	0	55	9	0	0	1	0	44	6	6	0	2	2	0	0	1	0	0	0	0	0	3	0	129	
9:00 AM		10:00 AM	2	0	163	40	1	0	8	1	118	26	24	5	11	4	1	0	4	1	2	0	0	0	5	0	416	
10:00 AM		11:00 AM	0	0	207	49	0	2	4	1	213	44	21	5	36	3	0	0	3	3	0	2	2	0	8	2	605	
11:00 AM		11:15 AM	0	0	58	17	1	1	3	0	49	12	7	1	12	0	0	2	0	0	1	1	0	0	4	1	170	
11:15 AM		11:30 AM	0	0	51	14	1	0	2	0	49	11	1	1	7	0	0	0	0	0	0	0	0	0	1	1	0	139
11:30 AM		11:45 AM	2	1	49	13	1	0	2	0	50	14	11	0	6	0	0	0	0	0	1	0	0	0	1	0	151	
11:45 AM		12:00 PM	0	0	63	13	0	0	1	0	68	8	9	0	9	0	2	0	0	0	0	0	0	0	4	0	177	
12:00 PM		12:15 PM	1	0	52	9	0	0	1	0	61	11	4	1	18	0	0	0	0	0	0	0	0	0	3	0	161	
12:15 PM		12:30 PM	1	0	65	3	0	0	3	0	52	12	13	1	8	2	1	0	0	0	0	0	0	0	3	0	164	
12:30 PM		12:45 PM	0	0	61	11	1	0	3	0	46	6	10	0	13	1	0	0	1	0	1	0	1	0	2	0	157	
12:45 PM		1:00 PM	0	0	57	13	4	0	0	0	57	11	13	1	8	0	0	0	0	0	0	0	0	0	0	0	164	
1:00 PM		2:00 PM	0	1	216	43	2	2	6	0	171	48	48	3	33	2	0	0	0	1	0	1	0	0	19	1	597	
2:00 PM		3:00 PM	0	1	259	32	3	0	7	0	251	51	41	2	43	8	1	0	1	0	2	0	1	0	12	2	717	
3:00 PM		4:00 PM	3	0	278	47	2	1	9	0	253	54	80	8	105	9	0	0	5	2	3	0	0	0	5	2	866	
4:00 PM		4:15 PM	0	0	62	11	0	1	2	0	59	18	11	1	29	0	0	0	1	0	0	0	0	0	0	0	195	
4:15 PM		4:30 PM	0	0	57	16	1	0	0	0	77	11	8	0	18	0	0	0	0	1	0	0	0	0	0	0	189	
4:30 PM		4:45 PM	1	2	59	12	0	0	3	0	61	7	5	1	18	0	0	1	1	0	0	0	1	0	0	0	172	
4:45 PM		5:00 PM	2	0	58	5	1	0	5	0	70	13	11	0	16	1	1	0	0	0	0	0	0	0	0	1	182	
5:00 PM		5:15 PM	0	0	67	6	1	0	2	0	86	12	11	1	25	0	0	0	1	0	1	0	0	0	2	0	215	
5:15 PM		5:30 PM	1	0	63	12	2	0	3	0	86	9	8	0	20	0	0	0	1	0	1	0	0	0	6	0	212	
5:30 PM		5:45 PM	0	0	63	6	3	1	6	0	82	7	9	0	11	0	0	0	1	0	0	0	0	0	4	1	194	
5:45 PM		6:00 PM	0	0	77	13	0	0	4	1	60	11	21	0	11	0	0	0	1	1	0	0	0	0	6	0	206	
			23	5	2573	488	32	11	93	3	2424	505	486	43	516	38	6	3	30	12	23	7	6	1	111	12		
Truck %			18%		16%		26%		3%		17%		8%		7%		33%		29%		23%		14%		10%			

System Peak Hour (7:15 a.m. - 8:15 a.m.)

System Peak List (WTS Data - 0.95 min)

		(5)	(50)	(0)		
		50	193	3		
		↙	↓	↘		
(1)	25	↗			↖	11 (0)
(0)	0	→	AM Peak		←	0 (0)
(2)	6	↘	PHF = 0.945		↗	5 (0)
		↙	↑	↘		
		2	200	4		
		(0)	(35)	(0)		

System Peak Hour (11:45 a.m. - 12:45 p.m.)

			(2)	(37)	(0)	
			38	264	8	
			↙	↓	↘	
(3)	51	↗				↖ 12 (0)
(0)	3	→	Midday Peak			← 1 (0)
(0)	1	↘	PHF=	0.931		↖ 1 (0)
			↗	↑	↘	
			2	277	1	
			(0)	(36)	(0)	

System Peak Hour (4:15 p.m. - 5:15 p.m.)

System Peak Area (100 ppm) (100 ppm)

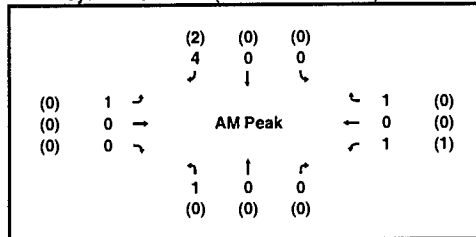
		(2)	(43)	(0)		
		37	337	10		
		↙	↓	↘		
(1)	78	↗			↖	3 (1)
(1)	2	→	PM Peak		←	1 (0)
(1)	3	↘	PHF= 0.881		↗	1 (0)
			↑			
		5	278	3		
		(2)	(39)	(0)		

= Passenger Cars and Trucks
(#) = Trucks Only

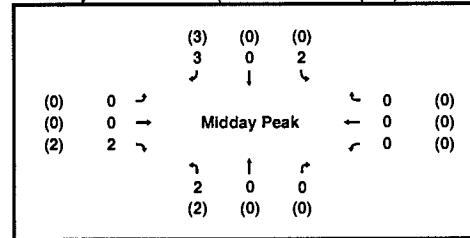
Mile Post 7.78/7.77
Intersection US 395 Hermiston Foods / EZ Storage

Time to Time			Northbound						Southbound						Eastbound						Westbound						SUM
			LT		THRU		RT		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT		
			cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	
6:00 AM		7:00 AM	0	0			2	0	0	0			1	0	1	0	0	0	0	0	0	0	0	0	1	0	5
7:00 AM		7:15 AM	0	0			0	0	1	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	1
7:15 AM		7:30 AM	0	0			0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
7:30 AM		7:45 AM	0	0			0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:45 AM		8:00 AM	1	0			0	0	0	0			2	1	0	0	0	0	0	0	0	0	0	0	0	0	4
8:00 AM		8:15 AM	0	0			0	0	0	0			0	1	1	0	0	0	0	0	0	1	0	0	0	0	3
8:15 AM		8:30 AM	0	0			0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM		8:45 AM	0	0			0	0	1	0			1	2	0	1	0	0	1	0	0	0	0	0	0	0	6
8:45 AM		9:00 AM	0	0			0	0	0	0			0	0	0	1	0	0	0	0	0	0	0	0	1	0	2
9:00 AM		10:00 AM	0	1			0	0	2	0			1	0	1	0	0	0	1	0	0	0	0	0	1	0	7
10:00 AM		11:00 AM	1	0			0	0	0	0			1	1	0	1	0	0	0	1	0	1	0	0	1	0	7
11:00 AM		11:15 AM	0	2			0	0	0	0			0	0	0	0	0	0	1	1	0	0	0	0	1	0	5
11:15 AM		11:30 AM	0	0			0	0	0	1			0	0	0	1	0	0	0	0	0	0	0	0	0	0	2
11:30 AM		11:45 AM	0	1			0	0	0	0			0	1	0	0	0	0	0	1	0	0	0	0	1	0	4
11:45 AM		12:00 PM	0	0			0	0	2	0			0	1	0	0	0	0	0	0	0	0	0	0	0	0	3
12:00 PM		12:15 PM	0	1			0	0	0	0			0	1	0	0	0	0	0	0	0	0	0	0	0	0	2
12:15 PM		12:30 PM	0	0			0	0	0	0			0	1	0	0	0	0	0	1	0	0	0	0	0	0	2
12:30 PM		12:45 PM	0	1			0	0	0	0			0	0	0	0	0	0	0	1	0	0	0	0	0	0	2
12:45 PM		1:00 PM	0	0			0	0	0	0			0	1	0	0	0	0	0	0	0	0	0	0	0	0	1
1:00 PM		2:00 PM	5	0			0	0	0	0			0	1	1	0	0	0	3	5	0	0	0	0	0	0	15
2:00 PM		3:00 PM	1	0			0	1	0	0			2	1	1	1	0	0	1	1	0	0	0	0	0	0	9
3:00 PM		4:00 PM	4	1			2	1	3	0			0	1	2	1	0	0	0	2	2	0	0	0	4	0	23
4:00 PM		4:15 PM	0	0			0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	2	0	2
4:15 PM		4:30 PM	0	0			0	0	2	0			0	0	0	0	0	0	0	0	0	0	0	0	1	0	3
4:30 PM		4:45 PM	0	0			0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	1	0	1
4:45 PM		5:00 PM	0	0			0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:00 PM		5:15 PM	0	0			0	2	0	0			0	1	0	0	0	0	2	0	0	0	0	0	0	0	5
5:15 PM		5:30 PM	0	0			0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
5:30 PM		5:45 PM	0	0			0	0	0	0			1	1	0	0	0	0	0	0	0	0	0	0	1	1	4
5:45 PM		6:00 PM	1	0			0	0	0	0			0	1	1	0	0	0	1	0	0	0	0	0	0	0	4
			13	7	0	0	4	4	11	1	0	0	9	16	8	6	0	1	9	13	2	2	0	0	16	1	
Truck %			35%		#DIV/0!		50%		8%		#DIV/0!		64%		43%		100%		59%		50%		#DIV/0!		6%		

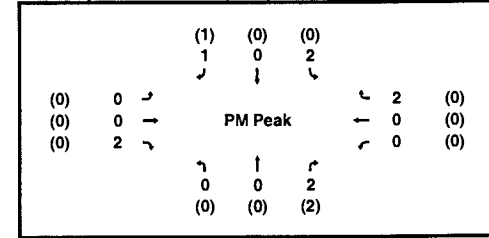
System Peak Hour (7:15 a.m. - 8:15 a.m.)



System Peak Hour (11:45 a.m. - 12:45 p.m.)



System Peak Hour (4:15 p.m. - 5:15 p.m.)

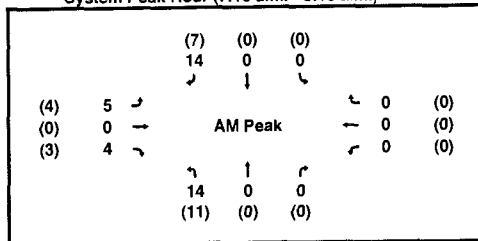


= Passenger Cars and Trucks
(#) = Trucks Only

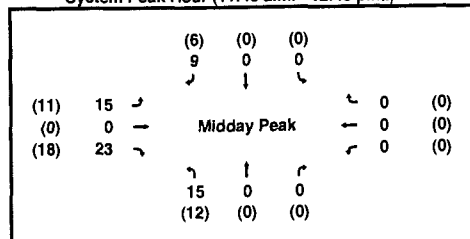
Mile Post 8.08
 Intersection US 395 Wal Mart Distribution Center Entrance

Time to Time		Northbound						Southbound						Eastbound						Westbound						SUM
		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT		
		cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	
6:00 AM	7:00 AM	1	6							0	0	3	5	0	2			2	4							23
7:00 AM	7:15 AM	0	0							0	0	2	3	1	1			0	0							7
7:15 AM	7:30 AM	0	3							0	0	3	1	0	0			0	1							8
7:30 AM	7:45 AM	2	3							0	0	1	2	1	0			1	0							10
7:45 AM	8:00 AM	1	3							0	0	3	2	0	3			0	1							13
8:00 AM	8:15 AM	0	2							0	0	0	2	0	1			0	1							6
8:15 AM	8:30 AM	0	7							0	0	0	0	0	3			0	3							13
8:30 AM	8:45 AM	1	0							0	0	0	3	0	1			0	3							8
8:45 AM	9:00 AM	0	3							0	0	2	3	0	4			0	1							13
9:00 AM	10:00 AM	2	7							0	0	7	5	3	7			3	7							41
10:00 AM	11:00 AM	2	15							0	0	7	6	4	8			5	13							60
11:00 AM	11:15 AM	1	1							0	0	2	4	1	2			1	1							13
11:15 AM	11:30 AM	0	1							0	0	1	7	1	1			0	3							14
11:30 AM	11:45 AM	0	1							0	0	3	1	1	1			1	4							12
11:45 AM	12:00 PM	1	2							0	0	0	2	2	1			1	4							13
12:00 PM	12:15 PM	0	3							0	0	3	2	2	5			2	9							26
12:15 PM	12:30 PM	2	5							0	0	0	1	0	2			2	3							15
12:30 PM	12:45 PM	0	2							0	0	0	1	0	3			0	2							8
12:45 PM	1:00 PM	1	3							0	0	1	3	1	2			1	6							18
1:00 PM	2:00 PM	0	6							0	0	1	12	3	7			0	14							43
2:00 PM	3:00 PM	0	8							0	0	1	9	1	9			0	10							38
3:00 PM	4:00 PM	0	18							0	0	2	7	6	9			1	6							49
4:00 PM	4:15 PM	0	2							0	1	0	1	2	0			2	0							8
4:15 PM	4:30 PM	0	1							0	0	0	3	3	0			0	3							10
4:30 PM	4:45 PM	1	2							0	0	0	2	2	1			0	2							10
4:45 PM	5:00 PM	1	7							0	0	1	2	1	1			0	1							14
5:00 PM	5:15 PM	0	1							0	0	1	2	1	2			0	3							10
5:15 PM	5:30 PM	1	2							0	0	0	1	1	0			0	1							6
5:30 PM	5:45 PM	0	3							0	0	0	3	0	2			0	1							9
5:45 PM	6:00 PM	0	2							0	0	0	1	0	2			1	3							9
Truck %		17	119	0	0	0	0	0	0	0	0	1	44	96	37	80	0	0	23	110	0	0	0	0	0	0
		88%		#DIV/0!	#DIV/0!	#DIV/0!		100%		69%		68%		#DIV/0!		83%		#DIV/0!		#DIV/0!		#DIV/0!		#DIV/0!		

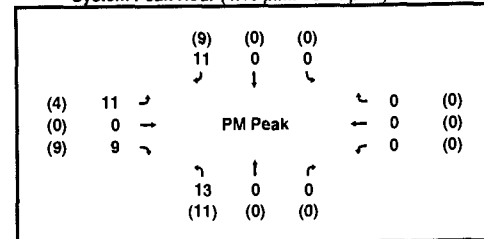
System Peak Hour (7:15 a.m. - 8:15 a.m.)



System Peak Hour (11:45 a.m. - 12:45 p.m.)



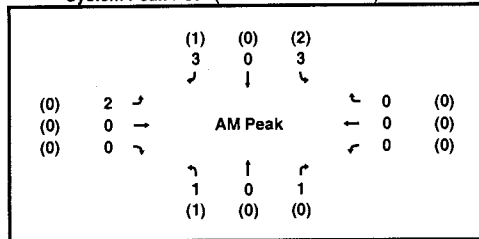
System Peak Hour (4:15 p.m. - 5:15 p.m.)



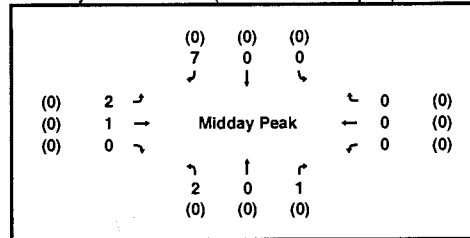
Mile Post 8.43
Intersection US 395 Ott Road

Time to Time		Northbound						Southbound						Eastbound						Westbound						SUM		
		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT				
		cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks			
6:00 AM	7:00 AM	1	0					1	0	0	0			11	0	0	1	1	0	1	0	0	1	1	0	0	0	18
7:00 AM	7:15 AM	0	0					0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
7:15 AM	7:30 AM	0	0					0	0	1	0			1	0	1	0	0	0	0	0	0	0	0	0	0	0	3
7:30 AM	7:45 AM	0	0					0	0	0	0			0	0	1	0	0	0	0	0	0	0	0	0	0	0	1
7:45 AM	8:00 AM	0	1					1	0	0	1			0	1	0	0	0	0	0	0	0	0	0	0	0	0	4
8:00 AM	8:15 AM	0	0					0	0	0	1			1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
8:15 AM	8:30 AM	0	0					0	0	0	0			0	0	0	0	0	0	0	0	0	0	0	0	0	0	0
8:30 AM	8:45 AM	0	0					0	0	0	0			0	0	0	0	0	0	0	1	0	0	0	0	0	0	1
8:45 AM	9:00 AM	0	0					0	0	0	0			2	0	2	2	0	0	0	0	1	0	0	0	0	0	7
9:00 AM	10:00 AM	1	0					0	0	0	2			6	0	2	0	0	0	1	0	1	0	1	0	0	0	14
10:00 AM	11:00 AM	0	0					2	0	0	1			4	2	3	1	0	0	0	0	1	1	0	0	0	0	15
11:00 AM	11:15 AM	0	0					0	0	0	0			0	0	2	0	0	0	1	0	0	0	0	0	0	1	4
11:15 AM	11:30 AM	0	0					1	0	0	0			1	0	0	0	0	0	1	0	0	0	0	0	0	0	3
11:30 AM	11:45 AM	0	0					0	0	0	0			0	1	0	0	1	0	0	1	0	0	0	0	0	0	3
11:45 AM	12:00 PM	0	0					1	0	0	0			1	0	0	0	0	0	0	0	0	0	0	0	0	0	2
12:00 PM	12:15 PM	2	0					0	0	0	0			2	0	0	0	1	0	0	0	0	0	0	0	0	0	5
12:15 PM	12:30 PM	0	0					0	0	0	0			3	0	1	0	0	0	0	0	0	0	0	0	0	0	4
12:30 PM	12:45 PM	0	0					0	0	0	0			1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
12:45 PM	1:00 PM	0	0					0	0	0	0			1	0	1	0	0	0	0	0	0	0	0	0	0	0	2
1:00 PM	2:00 PM	0	0					2	0	0	0			2	1	3	0	0	0	0	0	0	0	1	0	0	0	9
2:00 PM	3:00 PM	0	0					0	0	0	0			7	1	13	0	1	0	1	0	2	0	1	0	0	0	26
3:00 PM	4:00 PM	0	0					0	0	0	0			5	0	9	1	1	0	0	0	0	2	1	0	0	0	19
4:00 PM	4:15 PM	0	0					0	0	0	0			2	0	0	0	0	0	0	0	0	0	0	0	0	0	2
4:15 PM	4:30 PM	0	0					0	0	0	0			2	0	1	0	1	0	0	0	1	0	0	0	0	0	5
4:30 PM	4:45 PM	0	0					1	0	0	0			3	1	0	0	0	0	0	0	0	0	0	0	0	0	5
4:45 PM	5:00 PM	0	0					0	0	0	0			0	0	0	0	0	0	0	0	0	1	0	0	0	0	1
5:00 PM	5:15 PM	0	0					0	0	0	0			1	0	2	0	0	0	0	0	0	1	0	0	0	0	4
5:15 PM	5:30 PM	0	0					0	0	0	0			1	0	0	0	0	0	0	0	0	0	0	0	0	0	1
5:30 PM	5:45 PM	1	0					0	0	0	0			0	0	2	0	0	0	1	0	1	0	0	0	0	0	5
5:45 PM	6:00 PM	0	0					0	0	0	0			1	0	0	0	0	1	1	0	0	0	0	0	0	0	3
		5	1	0	0	9	0	1	5	0	0	58	7	44	5	6	1	7	0	8	3	8	1	0	1			
Truck %		17%		#DIV/0!		0%		83%		#DIV/0!		11%		10%		14%		0%		27%		11%		100%				

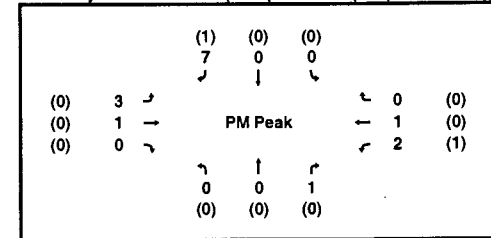
System Peak Hour (7:15 a.m. - 8:15 a.m.)



System Peak Hour (11:45 a.m. - 12:45 p.m.)



System Peak Hour (4:15 p.m. - 5:15 p.m.)



= Passenger Cars and Trucks
(#) = Trucks Only

Mile Post	8.82
Intersection	US 395

Time to Time			Northbound						Southbound						Eastbound						Westbound						SUM	
			LT		THRU		RT		LT		THRU		RT		LT		THRU		RT		LT		THRU		RT			
			cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks	cars	trucks		
6:00 AM		7:00 AM	34	1	123	31	0	0	13	1	84	22	6	2	2	3	0	0	7	2	0	0	7	0	6	1	345	
7:00 AM		7:15 AM	4	0	23	9	0	0	1	0	19	10	0	2	4	0	1	0	4	0	0	0	5	0	3	0	85	
7:15 AM		7:30 AM	4	0	33	5	0	0	2	0	37	10	2	1	1	1	0	0	1	0	0	0	0	2	3	0	102	
7:30 AM		7:45 AM	5	0	35	3	0	0	1	0	32	6	3	0	4	0	1	1	7	0	0	0	0	0	2	1	101	
7:45 AM		8:00 AM	3	3	49	2	0	0	1	1	34	5	2	2	2	3	1	0	6	0	0	0	3	2	4	1	124	
8:00 AM		8:15 AM	0	0	53	5	0	0	0	0	18	12	0	1	1	4	0	1	3	1	0	0	2	2	4	1	108	
8:15 AM		8:30 AM	3	0	34	7	0	0	1	0	29	9	1	0	1	0	3	0	6	0	1	0	1	0	2	0	98	
8:30 AM		8:45 AM	3	2	48	5	0	0	2	1	33	14	0	3	1	2	1	3	1	1	0	0	0	4	0	125		
8:45 AM		9:00 AM	4	0	63	6	0	0	0	1	44	5	1	0	0	1	0	1	0	0	0	0	3	1	2	1	133	
9:00 AM		10:00 AM	10	5	185	37	0	1	10	1	134	31	4	5	2	4	4	3	4	4	0	0	8	0	11	1	464	
10:00 AM		11:00 AM	9	2	164	21	0	0	6	1	178	38	9	5	8	4	4	1	14	2	1	1	2	1	12	4	487	
11:00 AM		11:15 AM	2	1	55	14	0	0	1	0	52	9	4	2	0	0	1	3	7	1	0	0	1	0	2	0	155	
11:15 AM		11:30 AM	3	0	42	8	0	0	1	0	34	10	0	2	0	2	0	2	2	0	0	0	2	2	1	1	112	
11:30 AM		11:45 AM	5	0	43	8	0	0	1	0	39	8	3	0	2	3	0	0	0	0	2	0	2	0	4	1	123	
11:45 AM		12:00 PM	2	1	62	9	0	0	4	2	59	8	2	0	0	0	1	3	0	0	0	0	2	0	3	2	161	
12:00 PM		12:15 PM	2	1	46	4	0	0	1	2	50	14	2	0	0	1	2	0	1	8	0	0	0	1	0	5	0	140
12:15 PM		12:30 PM	4	0	50	3	0	0	1	2	43	6	0	0	0	2	0	1	4	0	0	0	1	0	0	0	123	
12:30 PM		12:45 PM	2	0	60	10	0	0	4	2	58	7	2	0	1	4	2	0	4	0	0	0	1	0	1	0	158	
12:45 PM		1:00 PM	2	0	52	8	0	0	1	0	50	15	0	0	1	2	1	0	2	0	0	0	1	0	5	1	141	
1:00 PM		2:00 PM	8	5	221	40	4	1	14	2	206	50	4	2	10	1	0	4	15	0	1	0	4	4	5	5	606	
2:00 PM		3:00 PM	10	4	239	21	3	0	13	1	203	49	5	3	11	1	7	1	13	3	0	0	6	1	12	2	608	
3:00 PM		4:00 PM	34	1	223	41	0	0	11	0	196	42	9	3	18	0	13	7	46	2	0	2	14	2	18	1	683	
4:00 PM		4:15 PM	1	0	49	8	0	0	6	0	41	10	1	1	3	0	3	1	14	1	0	0	2	0	3	0	144	
4:15 PM		4:30 PM	2	1	41	12	0	0	2	1	54	5	1	0	3	0	1	1	7	1	0	0	2	1	4	1	140	
4:30 PM		4:45 PM	6	0	57	13	0	0	9	0	55	6	1	0	0	1	1	0	8	0	0	0	1	0	1	0	159	
4:45 PM		5:00 PM	5	0	53	7	0	0	1	0	51	10	1	0	5	0	2	1	8	0	1	0	3	0	2	0	150	
5:00 PM		5:15 PM	3	0	63	10	0	0	4	0	74	12	1	2	3	0	0	0	2	0	0	0	1	1	3	1	180	
5:15 PM		5:30 PM	3	0	53	8	0	0	2	1	57	9	1	1	2	2	0	1	1	0	0	0	0	1	3	0	145	
5:30 PM		5:45 PM	3	0	62	9	1	0	2	0	63	8	0	0	6	1	1	1	7	0	0	0	0	0	3	1	168	
5:45 PM		6:00 PM	2	0	56	8	0	0	5	0	52	11	2	1	2	0	1	1	5	0	0	0	2	1	5	2	156	
			178	27	2337	372	8	2	120	19	2079	451	67	38	94	41	53	34	211	18	7	3	77	21	139	28		
Truck %			13%		14%		20%		14%		18%		36%		30%		39%		8%		30%		21%		17%			

System Peak Hour (7:15 a.m. - 8:15 a.m.)

			(4)	(33)	(1)		
			11	154	5		
			↙	↓	↘		
(8)	16	↘				↘	16 (3)
(2)	4	—		AM Peak		—	11 (6)
(1)	16	↙	PHF=	0.877		↙	0 (0)
			↙	↓	↘		
			15	185	0		
			(3)	(15)	(0)		

System Peak Hour (11:45 a.m. - 12:45 p.m.)

			(0)	(35)	(8)		
			6	245	18		
			↙	↓	↘		
(8)	10	↘				↖	17 (2)
(3)	6	→	Midday Peak			←	5 (0)
(0)	19	↙	PHF=	0.904		↗	0 (0)
			↙	↑	↗		
			12	244	0		
			(2)	(26)	(0)		

System Peak Hour (4:15 p.m. - 5:15 p.m.)

	(2)	(33)	(1)		
	6	267	17		
	↙	↓	↘		
(1) 12	↗			↖	12 (2)
(2) 6	→	PM Peak		←	9 (2)
(1) 26	↘	PHF= 0.874		↙	1 (0)
	↖	↑	↗		
	17	256	0		
	(1)	(42)	(0)		

= Passenger Cars and Trucks
(#) = Trucks Only

Appendix B

Description of Level of Service Methods and Criteria

Appendix B

Level of Service Concept

Level of service (LOS) is a concept developed by traffic engineers to gauge the overall quality of the travel experience through an intersection or roadway segment as it is perceived by the traveler. Six categories are used to denote the various levels of service, which range from A to F.¹

Signalized Intersections

At signalized intersections, level of service is defined by a single performance measure: average control delay per vehicle. Control delay is defined to include initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay. Table B1 provides a qualitative description of each LOS category as it applies to signalized intersections, and Table B2 identifies the average control delay threshold point used as the boundary for each LOS category. LOS thresholds for the specific reviewing jurisdiction(s) are described in the body of the report.

Table B1
Level of Service Definitions (Signalized Intersections)

Level of Service	Average Delay per Vehicle
A	Very low average control delay, less than 10 seconds per vehicle. This occurs when progression is extremely favorable, and most vehicles arrive during the green phase. Most vehicles do not stop at all. Short cycle lengths may also contribute to low delay.
B	Average control delay is greater than 10 seconds per vehicle and less than or equal to 20 seconds per vehicle. This generally occurs with good progression and/or short cycle lengths. More vehicles stop than for a level of service A, causing higher levels of average delay.
C	Average control delay is greater than 20 seconds per vehicle and less than or equal to 35 seconds per vehicle. These higher delays may result from fair progression and/or longer cycle lengths. Individual cycle failures may begin to appear at this level. The number of vehicles stopping is significant at this level, although many still pass through the intersection without stopping.
D	Average control delay is greater than 35 seconds per vehicle and less than or equal to 55 seconds per vehicle. The influence of congestion becomes more noticeable. Longer delays may result from some combination of unfavorable progression, long cycle length, or high volume/capacity ratios. Many vehicles stop, and the proportion of vehicles not stopping declines. Individual cycle failures are noticeable.
E	Average control delay is greater than 55 seconds per vehicle and less than or equal to 80 seconds per vehicle. This is usually considered to be the limit of acceptable delay. These high delay values generally (but not always) indicate poor progression, long cycle lengths, and high volume/capacity ratios. Individual cycle failures are frequent occurrences.
F	Average control delay is in excess of 80 seconds per vehicle. This is considered to be unacceptable to most drivers. This condition often occurs with oversaturation. It may also occur at high volume/capacity ratios below 1.0 with many individual cycle failures. Poor progression and long cycle lengths may also contribute to such high delay values, even when the volume/capacity ratio is significantly below 1.0.

¹ Most of the material in this appendix is adapted from the Transportation Research Board, *Highway Capacity Manual*, (2000).

Table B2
Level of Service Criteria for Signalized Intersections

Level of Service	Average Control Delay per Vehicle (Seconds)
A	≤ 10
B	> 10 and ≤ 20
C	> 20 and ≤ 35
D	> 35 and ≤ 55
E	> 55 and ≤ 80
F	> 80

Unsignalized Intersections

Unsignalized intersections include two-way stop-controlled (TWSC) and all-way stop-controlled (AWSC) intersections. The 2000 Highway Capacity Manual provides models for estimating average control delay at both TWSC and AWSC intersections. Table B3 provides a qualitative description of each LOS category as it applies to unsignalized intersections, and Table B4 identifies the average control delay threshold point used as the boundary for each LOS category. LOS thresholds for the specific reviewing jurisdiction(s) are described in the body of the report.

Table B3
Level of Service Criteria for Unsignalized Intersections

Level of Service	Average Delay per Vehicle to Minor Street
A	- Nearly all drivers find freedom of operation with very little time spent waiting for an acceptable gap. - Very seldom is there more than one vehicle in queue.
B	- Some drivers begin to consider the average control delay an inconvenience, but acceptable gaps are still very easy to find. - Occasionally there is more than one vehicle in queue.
C	- Average control delay becomes noticeable to most drivers, even though acceptable gaps are found on a regular basis. - It is not uncommon for an arriving driver to find a standing queue of at least one additional vehicle.
D	Average control delay is long enough to be an irritation to most drivers. Average control delay is long because acceptable gaps are hard to find, because there is a standing queue of vehicles already waiting when the driver arrives, or both.
E	- Drivers find the length of the average control delay approaching intolerable levels. - Average control delay is long because acceptable gaps are hard to find, because there is a standing queue of vehicles already waiting when the driver arrives, or both. - There may or may not be substantial excess capacity remaining at the intersection when this condition is encountered.
F	- Most drivers encountering this condition consider the length of the average control delay to be too long. - Average control delay is long because acceptable gaps are hard to find, because there is a standing queue of vehicles already waiting when the driver arrives, or both. - There may or may not be substantial excess capacity remaining at the intersection when this condition is encountered.

Table B4
Level of Service Criteria for Unsignalized Intersections

Level of Service	Average Control Delay per Vehicle (Seconds)
A	≤10
B	>10 and ≤15
C	>15 and ≤25
D	>25 and ≤35
E	>35 and ≤50
F	>50

It should be noted that the level of service criteria for unsignalized intersections are somewhat different than the criteria used for signalized intersections. The primary reason for this difference is that drivers expect different levels of performance from different kinds of transportation facilities. The expectation is that a signalized intersection is designed to carry higher traffic volumes than an unsignalized intersection. Additionally, there are a number of driver behavior considerations that combine to make delays at signalized intersections less onerous than at unsignalized intersections. For example, drivers at signalized intersections are able to relax during the red interval, while drivers on the minor street approaches to TWSC intersections must remain attentive to the task of identifying acceptable gaps and vehicle conflicts. Also, there is often much more variability in the amount of delay experienced by individual drivers at unsignalized intersections than signalized intersections. For these reasons, the control delay threshold for any given level of service has been set to be less for an unsignalized intersection than for a signalized intersection. **While overall intersection level of service is calculated for AWSC intersections, level of service is only calculated for the minor approaches and the major street left turn movements at TWSC intersections.** No delay is assumed to the major street through movements. For TWSC intersections, the overall intersection level of service remains undefined: level-of-service is only calculated for each minor street lane.

In the performance evaluation of unsignalized intersections, it is important to consider other measures of effectiveness (MOE's) in addition to delay, such as v/c ratios for individual movements, average queue lengths, and 95th-percentile queue lengths. By focusing on a single MOE for the worst movement only, such as delay for the minor-street left turn, users may make inappropriate traffic control decisions.

Appendix C

2002 Existing Conditions Operations Worksheets

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday AM Peak Hour

Scenario Report

Scenario: AM
Command: AM
Volume: AM
Geometry: AM
Impact Fee: AM
Trip Generation: AM
Trip Distribution: AM
Paths: AM
Routes: AM
Configuration: AM

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday AM Peak Hour

Turning Movement Report

Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
#1 US 395 / Feedville Road													
Base	15	185	1	5	155	10	15	5	20	1	10	15	437
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	15	185	1	5	155	10	15	5	20	1	10	15	437
#2 US 395 / Ott Road													
Base	1	215	1	2	170	5	2	1	1	2	1	1	402
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	215	1	2	170	5	2	1	1	2	1	1	402
#3 US 395 / Wal-Mart Distribution Center Driveway													
Base	15	200	0	0	170	15	5	0	5	0	0	0	410
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	15	200	0	0	170	15	5	0	5	0	0	0	410
#4 US 395 / Hermiston Foods / EZ-Storage Driveways													
Base	1	205	1	1	185	5	2	1	1	1	1	1	405
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	205	1	1	185	5	2	1	1	1	1	1	405
#5 US 395 / Kelli Boulevard													
Base	2	200	5	5	180	50	25	1	5	5	1	10	489
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	2	200	5	5	180	50	25	1	5	5	1	10	489
#6 US 395 / Campbell Drive / Airport Road													
Base	1	235	2	10	235	10	5	1	2	1	1	2	505
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	235	2	10	235	10	5	1	2	1	1	2	505
#7 US 395 / South Belinger Farms Driveway													
Base	0	240	2	1	255	0	0	0	0	2	0	1	501
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	240	2	1	255	0	0	0	0	2	0	1	501
#8 US 395 / North Belinger Farms Driveway													
Base	0	240	1	5	255	0	0	0	0	1	0	5	507
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	240	1	5	255	0	0	0	0	1	0	5	507
#9 US 395 / ODOT Maintenance Shed Driveway													
Base	1	245	1	5	260	2	5	1	1	1	1	5	528
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	245	1	5	260	2	5	1	1	1	1	5	528

Kittelson & Associates, Inc. - Project #5504
 US 395 Corridor Refinement Plan
 2002 Existing Traffic Conditions, Weekday AM Peak Hour

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

 Intersection #1 US 395 / Feedville Road

Average Delay (sec/veh): 11.2 Worst Case 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:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	1 0 2 0 1	1 0 2 0 1	0 0 1 0 0	0 0 1 0 0

Volume Module:	>> Count Date:	30 Jul 2002 <<	7:15-8:15
Base Vol:	15 185	1 5 155	10 15 5 20
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:	15 185	1 5 155	10 15 5 20
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:	0.88 0.88 0.88	0.88 0.88 0.88	0.88 0.88 0.88 0.88 0.88 0.88
PHF Volume:	17 210	1 6 176	11 17 6 23
Reduct Vol:	0 0 0	0 0 0	0 0 0 0
Final Vol.:	17 210	1 6 176	11 17 6 23

Critical Gap Module:	Critical Gp:	4.3 xxxx xxxxx	4.6 xxxx xxxxx	8.1 7.1 7.5	8.2 7.2 7.6
FollowUpTim:	2.3 xxxx xxxxx	2.4 xxxx xxxxx	3.8 4.3 3.6	3.8 4.3 3.6	

Capacity Module:	Cnflct Vol:	188 xxxx xxxxx	211 xxxx xxxxx	332 433 88	347 443 105
Potent Cap.:	1334 xxxx xxxxx	1216 xxxx xxxxx	534 458 872	512 444 838	
Move Cap.:	1334 xxxx xxxxx	1216 xxxx xxxxx	506 450 872	488 437 838	

Level Of Service Module:	Stopped Del:	7.7 xxxx xxxxx	8.0 xxxx xxxxx	xxxxx xxxxx	xxxxx xxxxx	xxxxx xxxxx
LOS by Move:	A *	A *	A *	A *	A *	A *
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxxx	xxxx xxxx xxxxx	xxxx 628 xxxxx	xxxx 607 xxxxx	xxxx 607 xxxxx	xxxx 607 xxxxx
Shrd StpDel:	xxxxx xxxxx	xxxxx xxxxx	xxxxx xxxxx	11.2 xxxxx	xxxxx 11.2 xxxxx	xxxxx 11.2 xxxxx
Shared LOS:	*	*	*	B	*	B
ApproachDel:	xxxxxx	xxxxxx	11.2	11.2		
ApproachLOS:	*	*	B	B		

Kittelson & Associates, Inc. - Project #5504
 US 395 Corridor Refinement Plan
 2002 Existing Traffic Conditions, Weekday AM Peak Hour

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

 Intersection #1 US 395 / Feedville Road

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R

HevVeh:	9%	23%	29%	33%
Grade:	0%	0%	0%	0%
Peds/Hour:	0	0	0	0
Pedestrian Walk Speed:	4.00 feet/sec	4.00 feet/sec	4.00 feet/sec	4.00 feet/sec
LaneWidth:	12 feet	12 feet	12 feet	12 feet
Time Period:	0.25 hour	0.25 hour	0.25 hour	0.25 hour

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday AM Peak Hour

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

Intersection #3 US 395 / Wal-Mart Distribution Center Driveway

Average Delay (sec/veh): 11.4 Worst Case 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: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 2 0 0 0 0 2 0 1 1 0 0 0 1 0 0 0 0 0

Volume Module: >> Count Date: 6 Aug 2002 << 7:15-8:15
Base Vol: 15 200 0 0 170 15 5 0 5 0 0 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: 15 200 0 0 170 15 5 0 5 0 0 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: 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88
PHF Volume: 17 227 0 0 193 17 6 0 6 0 0 0
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol.: 17 227 0 0 193 17 6 0 6 0 0 0

Critical Gap Module:
Critical Gp: 4.3 xxxx xxxxx xxxxx xxxx xxxxx 8.3 xxxx 8.4 xxxxx xxxx xxxxx
FollowUpTim: 2.3 xxxx xxxxx xxxxx xxxx xxxxx 4.3 xxxx 4.1 xxxxx xxxx xxxxx

Capacity Module:
Conflict Vol: 210 xxxx xxxxx xxxxx xxxx xxxxx 341 xxxx 97 xxxx xxxx xxxxx
Potent Cap.: 1308 xxxx xxxxx xxxxx xxxx xxxxx 465 xxxx 744 xxxx xxxx xxxxx
Move Cap.: 1308 xxxx xxxxx xxxxx xxxx xxxxx 461 xxxx 744 xxxx xxxx xxxxx

Level Of Service Module:
Stopped Del: 7.8 xxxx xxxxx xxxxx xxxx xxxxx 12.9 xxxx 9.9 xxxxx xxxx xxxxx
LOS by Move: A * * * * * B * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxxx xxxx xxxxx xxxx xxxx xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx
Shared LOS: * * * * * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx 11.4 xxxxxx
ApproachLOS: * * * * *

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday AM Peak Hour

Level Of Service Detailed Computation Report
2000 HCM Unsignalized Method

Base Volume Alternative

Intersection #3 US 395 / Wal-Mart Distribution Center Driveway

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

HevVeh: 9% 23% 77% 0%
Grade: 0% 0% 0% 0%
Peds/Hour: 0 0 0 0
Pedestrian Walk Speed: 4.00 feet/sec
LaneWidth: 12 feet 12 feet 12 feet 12 feet
Time Period: 0.25 hour

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday AM Peak Hour

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

Intersection #5 US 395 / Kelli Boulevard

Average Delay (sec/veh): 11.4 Worst Case 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: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 1 0 0 0 0 1 0 0

Volume Module: >> Count Date: 30 Jul 2002 << 7:15-8:15
Base Vol: 2 200 5 5 180 50 25 1 5 5 1 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: 2 200 5 5 180 50 25 1 5 5 1 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: 2 211 5 5 189 53 26 1 5 5 1 11
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol.: 2 211 5 5 189 53 26 1 5 5 1 11

Critical Gap Module:
Critical Gp: 4.4 xxxxx xxxxx 4.5 xxxxx xxxxx 7.7 6.7 7.1 7.5 6.5 6.9
FollowUpTim: 2.4 xxxxx xxxxx 2.4 xxxxx xxxxx 3.6 4.1 3.4 3.5 4.0 3.3

Capacity Module:
Conflict Vol: 242 xxxxx xxxxx 216 xxxxx xxxxx 336 446 121 323 470 108
Potent Cap.: 1219 xxxxx xxxxx 1217 xxxxx xxxxx 576 490 886 611 495 932
Move Cap.: 1219 xxxxx xxxxx 1217 xxxxx xxxxx 566 487 886 604 492 932

Level Of Service Module:
Stopped Del: 8.0 xxxxx xxxxx 8.0 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: A * * A * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 598 xxxxx xxxxx 760 xxxxx
Shrd StpDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 11.4 xxxxx xxxxx 9.8 xxxxx
Shared LOS: * * * * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx 11.4 9.8
ApproachLOS: * * B A

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US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday AM Peak Hour

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

Intersection #5 US 395 / Kelli Boulevard

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

HevVeh: 17% 22% 9% 0%

Grade: 0% 0% 0% 0%

Peds/Hour: 0 0 0 0

Pedestrian Walk Speed: 4.00 feet/sec

LaneWidth: 12 feet 12 feet 12 feet 12 feet

Time Period: 0.25 hour

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US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday AM Peak Hour

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

Intersection #7 US 395 / South Belinger Farms Driveway

Average Delay (sec/veh): 10.4 Worst Case 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:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	0 0 1 0 0

Volume Module: >> Count Date: 8 Aug 2002 << 7:15-8:15

Base Vol: 0 240 2 1 255 0 0 0 0 2 0 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: 0 240 2 1 255 0 0 0 0 2 0 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: 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95 0.95

PHF Volume: 0 253 2 1 268 0 0 0 0 2 0 1

Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0

Final Vol.: 0 253 2 1 268 0 0 0 0 2 0 1

Critical Gap Module:

Critical Gp:xxxxx xxxx xxxxx 4.5 xxxx xxxxx xxxxx xxxx xxxxx 6.8 xxxx 6.9

FollowUpTim:xxxxx xxxx xxxxx 2.4 xxxx xxxxx xxxxx xxxx xxxxx 3.5 xxxx 3.3

Capacity Module:

Cnflct Vol: xxxx xxxx xxxxx 255 xxxx xxxxx xxxxx xxxx xxxxx 390 xxxx 127

Potent Cap.: xxxx xxxx xxxxx 1174 xxxx xxxxx xxxxx xxxx xxxxx 592 xxxx 905

Move Cap.: xxxx xxxx xxxxx 1174 xxxx xxxxx xxxxx xxxx xxxxx 591 xxxx 905

Level Of Service Module:

Stopped Del:xxxxx xxxx xxxxx 8.1 xxxx xxxxx xxxxx 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 xxxx xxxxx xxxxx xxxx xxxxx xxxxx 669 xxxxx

Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx 10.4 xxxxx

Shared LOS: * * * * * * * * * * * * * * *

ApproachDel: xxxxxx xxxxxx xxxxxx 10.4

ApproachLOS: * * * B

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday AM Peak Hour

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

Intersection #7 US 395 / South Belinger Farms Driveway

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
HevVeh:	17%	22%	0%	0%
Grade:	0%	0%	0%	0%
Peds/Hour:	0	0	0	0
Pedestrian Walk Speed:	4.00 feet/sec			
LaneWidth:	12 feet	12 feet	12 feet	12 feet
Time Period:	0.25 hour			

HevVeh: 17% 22% 0% 0%

Grade: 0% 0% 0% 0%

Peds/Hour: 0 0 0 0

Pedestrian Walk Speed: 4.00 feet/sec

LaneWidth: 12 feet 12 feet 12 feet 12 feet

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Time Period: 0.25 hour

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday AM Peak Hour

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

Intersection #9 US 395 / ODOT Maintenance Shed Driveway

Average Delay (sec/veh): 12.3 Worst Case 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: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 1 0 0 0 0 1 0 0

Volume Module: >> Count Date: 8 Aug 2002 << 7:15-8:15
Base Vol: 1 245 1 5 260 2 5 1 1 1 1 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: 1 245 1 5 260 2 5 1 1 1 1 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: 1 258 1 5 274 2 5 1 1 1 1 5
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol.: 1 258 1 5 274 2 5 1 1 1 1 5

Critical Gap Module:
Critical Gp: 4.4 xxxxx xxxxx 4.5 xxxxx xxxxx 7.8 6.8 7.2 7.5 6.5 6.9
FollowUpTim: 2.4 xxxxx xxxxx 2.4 xxxxx xxxxx 3.7 4.2 3.5 3.5 4.0 3.3

Capacity Module:
Conflict Vol: 276 xxxxx xxxxx 259 xxxxx xxxxx 417 546 138 408 547 129
Potent Cap.: 1182 xxxxx xxxxx 1169 xxxxx xxxxx 488 415 843 532 447 903
Move Cap.: 1182 xxxxx xxxxx 1169 xxxxx xxxxx 482 412 843 528 445 903

Level Of Service Module:
Stopped Del: 8.0 xxxxx xxxxx 8.1 xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: A * * A * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 501 xxxxx xxxxx 723 xxxxx
Shrd StpDel: xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 12.3 xxxxx xxxxx 10.0 xxxxx
Shared LOS: * * * * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx 12.3 10.0
ApproachLOS: * * B B

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday AM Peak Hour

Level Of Service Detailed Computation Report
2000 HCM Unsignalized Method

Base Volume Alternative

Intersection #9 US 395 / ODOT Maintenance Shed Driveway

Approach: North Bound South Bound East Bound West Bound

Movement: L - T - R L - T - R L - T - R L - T - R

HevVeh: 17% 22% 16% 0%
Grade: 0% 0% 0% 0%
Peds/Hour: 0 0 0 0
Pedestrian Walk Speed: 4.00 feet/sec
LaneWidth: 12 feet 12 feet 12 feet 12 feet
Time Period: 0.25 hour

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday AM Peak Hour

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

Intersection #11 US 395 / Port Drive

Average Delay (sec/veh): 13.3 Worst Case 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:	Uncontrolled			Uncontrolled			Stop Sign			Stop Sign		
Rights:	Include			Include			Include			Include		
Lanes:	0	0	2	0	1		1	0	2	0	0	
	0	0	2	0	1		0	0	0	0	0	
Volume Module: >> Count Date: 6 Aug 2002 << 7:15-8:15												
Base Vol:	0	250	20	35	235	0	0	0	0	35	0	15
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	250	20	35	235	0	0	0	0	35	0	15
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:	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75	0.75
PHF Volume:	0	333	27	47	313	0	0	0	0	47	0	20
Reduct Vol:	0	0	0	0	0	0	0	0	0	0	0	0
Final Vol.:	0	333	27	47	313	0	0	0	0	47	0	20

Critical Gap Module:

Critical Gp:xxxxx xxxx xxxxx	4.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	6.9	xxxx	7.0
FollowUpTim:xxxxx xxxx xxxxx	2.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	3.5	xxxx	3.3

Capacity Module:

Cnflict Vol: xxxx xxxx xxxxx	360	xxxx	xxxxx	xxxx	xxxx	xxxxx	583	xxxx	167
Potent Cap.: xxxx xxxx xxxxx	1107	xxxx	xxxxx	xxxx	xxxx	xxxxx	438	xxxx	842
Move Cap.: xxxx xxxx xxxxx	1107	xxxx	xxxxx	xxxx	xxxx	xxxxx	424	xxxx	842

Level Of Service Module:

Stopped Del:xxxxx xxxx xxxxx	8.4	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx
LOS by Move: * * *	A	*	*	*	*	*	*	*	*
Movement: LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx	xxxx	xxxx	xxxxx	xxxx	xxxx	xxxxx	xxxx	498	xxxxx
Shrd StpDel:xxxxx xxxx xxxxx	xxxxx	xxxx	xxxxx	xxxxx	xxxx	xxxxx	xxxxx	13.3	xxxxx
Shared LOS: * * *	*	*	*	*	*	*	*	B	*
ApproachDel: xxxxxx	xxxxxx			xxxxxx				13.3	
ApproachLOS: *	*			*				B	

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Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday AM Peak Hour

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

Intersection #11 US 395 / Port Drive

Approach:	North Bound			South Bound			East Bound			West Bound		
Movement:	L	T	R	L	T	R	L	T	R	L	T	R
HevVeh:	14%			15%			0%			4%		
Grade:	0%			0%			0%			0%		
Peds/Hour:	0			0			0			0		
Pedestrian Walk Speed:	4.00 feet/sec											
LaneWidth:	12 feet			12 feet			12 feet			12 feet		
Time Period:	0.25 hour											

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Kittelson & Associates, Inc. - Project #5504													
US 395 Corridor Refinement Plan													
2002 Existing Traffic Conditions, Weekday Mid-day Peak Hour													
Volume	Northbound			Southbound			Eastbound			Westbound			Total
Type	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Volume
#10 US 395 / Airport Way													
Base	0	375	2	10	335	0	0	0	0	2	0	15	739
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	375	2	10	335	0	0	0	0	2	0	15	739
#11 US 395 / Port Drive													
Base	0	355	35	65	315	0	0	0	0	30	0	70	870
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	355	35	65	315	0	0	0	0	30	0	70	870

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Kittelson & Associates, Inc. - Project #5504

US 395 Corridor Refinement Plan

2002 Existing Traffic Conditions, Weekday Mid-day Peak Hour

Impact Analysis Report

Level Of Service

Intersection		Base			Future		Change	
		Del/	V/		Del/	V/	in	
		LOS	Veh	C	LOS	Veh	C	
# 1 US 395 / Feedville Road	B	12.2	0.000		B	12.2	0.000	+ 0.000 V/C
# 2 US 395 / Ott Road	B	12.0	0.000		B	12.0	0.000	+ 0.000 V/C
# 3 US 395 / Wal-Mart Distribution	B	12.5	0.000		B	12.5	0.000	+ 0.000 V/C
# 4 US 395 / Hermiston Foods / EZ-	B	12.4	0.000		B	12.4	0.000	+ 0.000 V/C
# 5 US 395 / Kelli Boulevard	B	14.3	0.000		B	14.3	0.000	+ 0.000 V/C
# 6 US 395 / Campbell Drive / Airp	B	13.4	0.000		B	13.4	0.000	+ 0.000 V/C
# 7 US 395 / South Belinger Farms	B	10.4	0.000		B	10.4	0.000	+ 0.000 V/C
# 8 US 395 / North Belinger Farms	B	10.8	0.000		B	10.8	0.000	+ 0.000 V/C
# 9 US 395 / ODOT Maintenance Shed	B	13.3	0.000		B	13.3	0.000	+ 0.000 V/C
# 10 US 395 / Airport Way	B	10.2	0.000		B	10.2	0.000	+ 0.000 V/C
# 11 US 395 / Port Drive	B	13.3	0.000		B	13.3	0.000	+ 0.000 V/C

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Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday Mid-day Peak Hour

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

Intersection #2 US 395 / Ott Road

Average Delay (sec/veh): 12.0 Worst Case 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: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 2 0 1 0 0 1! 0 0 0 0 1! 0 0
Volume Module: >> Count Date: 6 Aug 2002 << 11:45-12:45
Base Vol: 2 270 1 270 5 2 1 1 1 1 1 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: 2 270 1 270 5 2 1 1 1 1 1 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: 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90 0.90
PHF Volume: 2 300 1 300 6 2 1 1 1 1 1 1
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol.: 2 300 1 300 6 2 1 1 1 1 1 1
Critical Gap Module:
Critical Gp: 4.3 xxxx xxxxx 4.4 xxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: 2.3 xxxx xxxxx 2.4 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3
Capacity Module:
Conflict Vol: 306 xxxx xxxxx 301 xxxx xxxxx 457 608 150 458 613 151
Potent Cap.: 1189 xxxx xxxxx 1161 xxxx xxxxx 491 413 876 491 410 875
Move Cap.: 1189 xxxx xxxxx 1161 xxxx xxxxx 489 412 876 488 409 875
Level Of Service Module:
Stopped Del: 8.0 xxxx xxxxx 8.1 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: A * * A * * * * * * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx 522 xxxxx xxxx 533 xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx 12.0 xxxxx xxxxx 11.8 xxxxx
Shared LOS: * * * * * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx 12.0 11.8
ApproachLOS: * * B B

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday Mid-day Peak Hour

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

Intersection #2 US 395 / Ott Road

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
HevVeh: 11% 16% 0% 0%
Grade: 0% 0% 0% 0%
Peds/Hour: 0 0 0 0
Pedestrian Walk Speed: 4.00 feet/sec
LaneWidth: 12 feet 12 feet 12 feet 12 feet
Time Period: 0.25 hour

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday Mid-day Peak Hour

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

Intersection #4 US 395 / Hermiston Foods / EZ-Storage Driveways

Average Delay (sec/veh): 12.4 Worst Case 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:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	1 0 1 1 0	1 0 1 1 0	0 0 1 1 0 0	0 0 1 1 0 0

Volume Module:	>> Count Date:	1 Aug 2002 << 1:	45-12:45
Base Vol:	2 275	1 2 260	5 1 1 2 1 1 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:	2 275	1 2 260	5 1 1 2 1 1 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:	0.93 0.93 0.93	0.93 0.93 0.93	0.93 0.93 0.93 0.93 0.93 0.93
PHF Volume:	2 296	1 2 280	5 1 1 2 1 1 1
Reduct Vol:	0 0 0	0 0 0	0 0 0 0 0 0 0
Final Vol.:	2 296	1 2 280	5 1 1 2 1 1 1

Critical Gap Module:	Critical Gp:	4.3 xxxx xxxxx	4.4 xxxx xxxxx	8.5 7.5 7.9	7.5 6.5 6.9
FollowUpTim:	2.3 xxxx xxxxx	2.4 xxxx xxxxx	4.0 4.5 3.8	3.5 4.0 3.3	

Capacity Module:	Cnflict Vol:	285 xxxx xxxxx	297 xxxx xxxxx	439 588 142	445 590 148
Potent Cap.:	1211 xxxx xxxxx	1166 xxxx xxxxx	403 332 746	501 423 878	
Move Cap.:	1211 xxxx xxxxx	1166 xxxx xxxxx	401 331 746	497 421 878	

Level Of Service Module:	Stopped Del:	8.0 xxxx xxxxx	8.1 xxxx xxxxx	xxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move:	A * *	A * *	* * *	* * *
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxxx	xxxx xxxx xxxxx	xxxx 488 xxxxx	xxxx 543 xxxxx
Shrd StpDel:	xxxxxx xxxxx xxxxx	xxxxxx xxxxx xxxxx	12.4 xxxxx xxxxx	11.7 xxxxx
Shared LOS:	* * *	* * *	* * *	* * *
ApproachDel:	xxxxxx	xxxxxx	12.4	11.7
ApproachLOS:	*	*	B	B

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday Mid-day Peak Hour

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

Intersection #4 US 395 / Hermiston Foods / EZ-Storage Driveways

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
HevVeh:	11%	16%	50%	0%
Grade:	0%	0%	0%	0%
Peds/Hour:	0	0	0	0
Pedestrian Walk Speed:	4.00 feet/sec			
Lanewidth:	12 feet	12 feet	12 feet	12 feet
Time Period:	0.25 hour			

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday Mid-day Peak Hour

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

Intersection #6 US 395 / Campbell Drive / Airport Road

Average Delay (sec/veh): 13.4 Worst Case 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: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 1 0 0 0 0 1 0 0

Volume Module: >> Count Date: 1 Aug 2002 << 11:45-12:45
Base Vol: 1 330 5 10 310 5 5 1 1 5 1 25
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: 1 330 5 10 310 5 5 1 1 5 1 25
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: 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93 0.93
PHF Volume: 1 355 5 11 333 5 5 1 1 5 1 27
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol.: 1 355 5 11 333 5 5 1 1 5 1 27

Critical Gap Module:
Critical Gp: 4.4 xxxx xxxxx 4.4 xxxx xxxxx 7.5 6.5 6.9 7.6 6.6 7.0
FollowUpTim: 2.3 xxxx xxxxx 2.3 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3

Capacity Module:
Conflict Vol: 339 xxxx xxxxx 360 xxxx xxxxx 538 720 169 548 720 180
Potent Cap.: 1142 xxxx xxxxx 1120 xxxx xxxxx 431 356 851 417 350 829
Move Cap.: 1142 xxxx xxxxx 1120 xxxx xxxxx 413 353 851 412 347 829

Level Of Service Module:
Stopped Del: 8.2 xxxx xxxxx 8.2 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: A * * A * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx 434 xxxxx xxxxx 686 xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx 13.4 xxxxx xxxxx 10.5 xxxxx
Shared LOS: * * * * * * * * * * * * * *
ApproachDel: xxxxxx xxxxxx 13.4 10.5
ApproachLOS: * * B B

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday Mid-day Peak Hour

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

Intersection #6 US 395 / Campbell Drive / Airport Road

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

HevVeh: 13% 13% 0% 3%
Grade: 0% 0% 0% 0%
Peds/Hour: 0 0 0 0
Pedestrian Walk Speed: 4.00 feet/sec
LaneWidth: 12 feet 12 feet 12 feet 12 feet
Time Period: 0.25 hour

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Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday Mid-day Peak Hour

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

Intersection #8 US 395 / North Belinger Farms Driveway

Average Delay (sec/veh): 10.8 Worst Case 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:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	0 0 1! 0 0
Volume Module:	>> Count Date: 8 Aug 2002 << 11:45-12:45			
Base Vol:	0 360 5	10 320 0	0 0 0	5 0 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:	0 360 5	10 320 0	0 0 0	5 0 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:	0.93 0.93 0.93	0.93 0.93 0.93	0.93 0.93 0.93	0.93 0.93 0.93
PHF Volume:	0 387 5	11 344 0	0 0 0	5 0 11
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Final Vol.:	0 387 5	11 344 0	0 0 0	5 0 11
Critical Gap Module:				
Critical Gp:xxxxx xxxx xxxxx	4.4 xxxx xxxxx xxxxx xxxx xxxxx	6.8 xxxx 6.9		
FollowUpTim:xxxxx xxxx xxxxx	2.3 xxxx xxxxx xxxxx xxxx xxxxx	3.5 xxxx 3.3		
Capacity Module:				
Cnflct Vol: xxxx xxxx xxxxx	392 xxxx xxxxx xxxx xxxx xxxxx	583 xxxx 196		
Potent Cap.: xxxx xxxx xxxxx	1088 xxxx xxxxx xxxx xxxx xxxxx	448 xxxx 818		
Move Cap.: xxxx xxxx xxxxx	1088 xxxx xxxxx xxxx xxxx xxxxx	444 xxxx 818		
Level Of Service Module:				
Stopped Del:xxxxx xxxx xxxxx	8.3 xxxx xxxxx xxxxx 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 xxxx xxxxx xxxx xxxx xxxxx	xxxx 639 xxxxx		
Shrd StpDel:xxxxx xxxx xxxxx	xxxxx xxxx xxxxx xxxxx xxxx xxxxx	10.8 xxxxx		
Shared LOS:	* * *	* * *	* * *	* * *
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	10.8
ApproachLOS:	*	*	*	B

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Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday Mid-day Peak Hour

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

Intersection #8 US 395 / North Belinger Farms Driveway

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
HevVeh:	13%	13%	0%	0%
Grade:	0%	0%	0%	0%
Peds/Hour:	0	0	0	0
Pedestrian Walk Speed:	4.00 feet/sec			
LaneWidth:	12 feet	12 feet	12 feet	12 feet
Time Period:	0.25 hour			

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday Mid-day Peak Hour

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

Intersection #10 US 395 / Airport Way

Average Delay (sec/veh): 10.2 Worst Case 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: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 0 0 2 0 1 1 0 2 0 0 0 0 0 0 0 0 0 0 1 0 0
Volume Module: >> Count Date: 30 Jul 2002 << 11:45-12:45
Base Vol: 0 375 2 10 335 0 0 0 0 2 0 15
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: 0 375 2 10 335 0 0 0 0 2 0 15
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: 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88
PHF Volume: 0 426 2 11 381 0 0 0 0 2 0 17
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol.: 0 426 2 11 381 0 0 0 0 2 0 17
Critical Gap Module:
Critical Gp:xxxxx xxxx xxxxx 4.3 xxxx xxxxx xxxxx xxxx xxxxx 6.8 xxxx 6.9
FollowUpTim:xxxxx xxxx xxxxx 2.3 xxxx xxxxx xxxxx xxxx xxxxx 3.5 xxxx 3.3
Capacity Module:
Conflict Vol: xxxx xxxx xxxxx 428 xxxx xxxxx xxxx xxxx xxxxx 639 xxxx 213
Potent Cap.: xxxx xxxx xxxxx 1059 xxxx xxxxx xxxx xxxx xxxxx 413 xxxx 798
Move Cap.: xxxx xxxx xxxxx 1059 xxxx xxxxx xxxx xxxx xxxxx 410 xxxx 798
Level Of Service Module:
Stopped Del:xxxxx xxxx xxxxx 8.4 xxxx xxxxx xxxxx 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 xxxx xxxxx xxxx xxxx xxxxx xxxx 718 xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx xxxx xxxxx xxxxx 10.2 xxxxx
Shared LOS: *
ApproachDel: xxxxxx xxxxxx xxxxxx 10.2
ApproachLOS: * * * * B

Kittelson & Associates, Inc. - Project #5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday Mid-day Peak Hour

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

Intersection #10 US 395 / Airport Way

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
HevVeh: 14% 12% 0% 0%
Grade: 0% 0% 0% 0%
Peds/Hour: 0 0 0 0
Pedestrian Walk Speed: 4.00 feet/sec
LaneWidth: 12 feet 12 feet 12 feet 12 feet
Time Period: 0.25 hour

Kittelson & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

Scenario Report

Scenario: PM
Command: PM
Volume: PM
Geometry: PM
Impact Fee: PM
Trip Generation: PM
Trip Distribution: PM
Paths: PM
Routes: PM
Configuration: PM

Kittelson & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

Turning Movement Report

Volume Type	Northbound			Southbound			Eastbound			Westbound			Total Volume
	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	Left	Thru	Right	
#1 US 395 / Feedville Road													
Base	15	270	1	15	315	5	10	5	25	1	10	10	682
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	15	270	1	15	315	5	10	5	25	1	10	10	682
#2 US 395 / Ott Road													
Base	1	290	1	1	335	5	5	1	1	2	1	1	644
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	290	1	1	335	5	5	1	1	2	1	1	644
#3 US 395 / Wal-Mart Distribution Center Driveway													
Base	15	280	0	0	330	10	10	0	10	0	0	0	655
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	15	280	0	0	330	10	10	0	10	0	0	0	655
#4 US 395 / Hermiston Foods / EZ-Storage Driveways													
Base	1	290	2	2	340	1	1	1	2	1	1	2	644
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	290	2	2	340	1	1	1	2	1	1	2	644
#5 US 395 / Kelli Boulevard													
Base	5	280	5	10	335	35	80	2	5	1	1	5	764
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	5	280	5	10	335	35	80	2	5	1	1	5	764
#6 US 395 / Campbell Drive / Airport Road													
Base	1	360	5	20	380	5	10	1	1	2	1	15	801
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	360	5	20	380	5	10	1	1	2	1	15	801
#7 US 395 / South Belinger Farms Driveway													
Base	0	380	5	5	395	0	0	0	0	10	0	5	800
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	380	5	5	395	0	0	0	0	10	0	5	800
#8 US 395 / North Belinger Farms Driveway													
Base	0	385	1	15	395	0	0	0	0	5	0	5	806
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	0	385	1	15	395	0	0	0	0	5	0	5	806
#9 US 395 / ODOT Maintenance Shed Driveway													
Base	1	390	1	10	410	1	5	1	2	1	1	10	833
Added	0	0	0	0	0	0	0	0	0	0	0	0	0
Total	1	390	1	10	410	1	5	1	2	1	1	10	833

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Kittelson & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

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

Intersection #1 US 395 / Feedville Road

Average Delay (sec/veh): 13.8 Worst Case 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:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	1 0 2 0 1	1 0 2 0 1	0 0 1! 0 0	0 0 1! 0 0

Volume Module: >> Count Date: 30 Jul 2002 << 4:15-5:15

Base Vol:	15 270 1	15 315 5	10 5 25	1 10 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:	15 270 1	15 315 5	10 5 25	1 10 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:	0.87 0.87 0.87	0.87 0.87 0.87	0.87 0.87 0.87	0.87 0.87 0.87
PHF Volume:	17 310 1	17 362 6	11 6 29	1 11 11
Reduct Vol:	0 0 0	0 0 0	0 0 0	0 0 0
Final Vol.:	17 310 1	17 362 6	11 6 29	1 11 11

Critical Gap Module:

Critical Gp:	4.4 xxxx xxxxx	4.3 xxxx xxxxx	7.7 6.7 7.1	7.9 6.9 7.3
FollowUpTim:	2.4 xxxx xxxxx	2.3 xxxx xxxxx	3.6 4.1 3.4	3.7 4.2 3.5

Capacity Module:

Cnflct Vol:	368 xxxx xxxxx	311 xxxx xxxxx	592 743 181	563 747 155
Potent Cap.:	1093 xxxx xxxxx	1176 xxxx xxxxx	376 329 809	376 310 815
Move Cap.:	1093 xxxx xxxxx	1176 xxxx xxxxx	351 319 809	350 301 815

Level Of Service Module:

Stopped Del:	8.3 xxxx xxxxx	8.1 xxxx xxxxx	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx
LOS by Move:	A * *	A * *	* * *	* * *
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxxx	xxxx xxxx xxxxx	xxxx 533 xxxxx	xxxx 434 xxxxx
Shrd StpDel:	xxxxx xxxx xxxxx	xxxxx xxxx xxxxx	xxxxx 12.4 xxxxx	xxxxx 13.8 xxxxx
Shared LOS:	* * *	* * *	* B *	* B *
ApproachDel:	xxxxxx	xxxxxx	12.4	13.8
ApproachLOS:	*	*	B	B

PM Mon Oct 7, 2002 14:16:18 Page 5-1

Kittelson & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

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

Intersection #1 US 395 / Feedville Road

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
HevVeh:	16%	12%	9%	18%
Grade:	0%	0%	0%	0%
Peds/Hour:	0	0	0	0
Pedestrian Walk Speed:	4.00 feet/sec			
LaneWidth:	12 feet	12 feet	12 feet	12 feet
Time Period:	0.25 hour			

Kittelson & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

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

Intersection #3 US 395 / Wal-Mart Distribution Center Driveway

Average Delay (sec/veh): 13.6 Worst Case 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:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	1 0 2 0 0	0 0 2 0 1	1 0 0 0 1	0 0 0 0 0

Volume Module:	>> Count Date:	6 Aug 2002 << 4:	15-5:15
Base Vol:	15 280	0 0 330	10 0 0 0
Growth Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
Initial Bse:	15 280	0 0 330	10 0 0 0
User Adj:	1.00 1.00 1.00	1.00 1.00 1.00	1.00 1.00 1.00
PHF Adj:	0.87 0.87 0.87	0.87 0.87 0.87	0.87 0.87 0.87
PHF Volume:	17 322	0 0 379	11 0 0 0
Reduct Vol:	0 0 0	0 0 0	0 0 0 0
Final Vol.:	17 322	0 0 379	11 0 0 0

Critical Gap Module:	Critical Gp:	4.4 xxxx xxxxx xxxxx xxxx xxxxx	8.1 xxxx	8.2 xxxxx xxxx xxxxx
FollowUpTim:	2.4 xxxx xxxxx xxxxx xxxx xxxxx	4.2 xxxx	4.0 xxxxx xxxx xxxxx	

Capacity Module:	Cnflct Vol:	391 xxxx xxxxx xxxxx xxxx xxxxx	575 xxxx	190 xxxx xxxx xxxxx
Potent Cap.:	1070 xxxx xxxxx xxxxx xxxx xxxxx	326 xxxx	655 xxxx xxxx xxxxx	
Move Cap.:	1070 xxxx xxxxx xxxxx xxxx xxxxx	322 xxxx	655 xxxx xxxx xxxxx	

Level Of Service Module:	Stopped Del:	8.4 xxxx xxxxx xxxxx xxxx xxxxx	16.6 xxxx	10.6 xxxxx xxxx xxxxx
LOS by Move:	A * * * * *	C * * * * *	B * * * * *	
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx xxxx xxxxx xxxxx xxxx xxxxx	xxxx xxxx xxxxx	xxxx xxxx xxxxx	xxxx xxxx xxxxx
Shrd StpDel:	xxxx xxxx xxxxx xxxxx xxxx xxxxx	xxxx xxxx xxxxx	xxxx xxxx xxxxx	xxxx xxxx xxxxx
Shared LOS:	* * * * *	* * * * *	* * * * *	* * * * *
ApproachDel:	xxxxxx	xxxxxx	13.6	xxxxxx
ApproachLOS:	*	*	B	*

Kittelson & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

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

Intersection #3 US 395 / Wal-Mart Distribution Center Driveway

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
HevVeh:	16%	12%	65%	0%
Grade:	0%	0%	0%	0%
Peds/Hour:	0	0	0	0
Pedestrian Walk Speed:	4.00 feet/sec			
LaneWidth:	12 feet	12 feet	12 feet	12 feet
Time Period:	0.25 hour			

Kittelston & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

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

Intersection #5 US 395 / Kelli Boulevard

Average Delay (sec/veh): 17.5 Worst Case 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: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 1! 0 0 0 0 1! 0 0

Volume Module: >> Count Date: 30 Jul 2002 << 4:15-5:15
Base Vol: 5 280 5 10 335 35 80 2 5 1 1 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: 5 280 5 10 335 35 80 2 5 1 1 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: 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88
PHF Volume: 6 318 6 11 381 40 91 2 6 1 1 6
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol.: 6 318 6 11 381 40 91 2 6 1 1 6

Critical Gap Module:
Critical Gp: 4.4 xxxx xxxxx 4.3 xxxx xxxxx 7.6 6.6 7.0 7.9 6.9 7.3
FollowUpTim: 2.3 xxxx xxxxx 2.3 xxxx xxxxx 3.5 4.0 3.3 3.7 4.2 3.5

Capacity Module:
Conflict Vol: 420 xxxx xxxxx 324 xxxx xxxxx 594 759 210 547 776 162
Potent Cap.: 1054 xxxx xxxxx 1164 xxxx xxxxx 384 331 789 383 295 801
Move Cap.: 1054 xxxx xxxxx 1164 xxxx xxxxx 376 326 789 374 290 801

Level Of Service Module:
Stopped Del: 8.4 xxxx xxxxx 8.1 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: A * * A * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxxx 386 xxxxx xxxxx 566 xxxxx
Shrd StpDel:xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx 17.5 xxxxx xxxxx 11.5 xxxxx
Shared LOS: * * * * * * * C * * B *
ApproachDel: xxxxxx xxxxxx 17.5 11.5
ApproachLOS: * * C B

Kittelston & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

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

Intersection #5 US 395 / Kelli Boulevard

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R

HevVeh: 14% 12% 4% 20%
Grade: 0% 0% 0% 0%
Peds/Hour: 0 0 0 0
Pedestrian Walk Speed: 4.00 feet/sec
LaneWidth: 12 feet 12 feet 12 feet 12 feet
Time Period: 0.25 hour

Kittelson & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

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

Intersection #7 US 395 / South Belinger Farms Driveway

Average Delay (sec/veh): 12.9 Worst Case 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:	Uncontrolled	Uncontrolled	Stop Sign	Stop Sign
Rights:	Include	Include	Include	Include
Lanes:	0 0 1 1 0	1 0 2 0 0	0 0 0 0 0	0 0 1 1 0

Volume Module:	>> Count Date:	8 Aug 2002 << 4:	15-5:15
Base Vol:	0 380 5	5 395 0	0 0 0 10 0 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:	0 380 5	5 395 0	0 0 0 10 0 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:	0.88 0.88 0.88	0.88 0.88 0.88	0.88 0.88 0.88 0.88 0.88 0.88
PHF Volume:	0 432 6	6 449 0	0 0 0 11 0 6
Reduct Vol:	0 0 0	0 0 0	0 0 0 0 0 0
Final Vol.:	0 432 6	6 449 0	0 0 0 11 0 6

Critical Gap Module:	Critical Gp:	xxxx xxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
FollowUpTim:	xxxx xxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Capacity Module:	Cnflct Vol:	xxxx xxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Potent Cap.:	xxxx xxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Move Cap.:	xxxx xxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx

Level Of Service Module:	Stopped Del:	xxxx xxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
LOS by Move:	* * *	A	*	*	*	*	*	*	*	*	*
Movement:	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT	LT - LTR - RT
Shared Cap.:	xxxx xxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shrd StpDel:	xxxx xxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx	xxxx
Shared LOS:	* * *	*	*	*	*	*	*	*	*	*	*
ApproachDel:	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx	xxxxxx
ApproachLOS:	*	*	*	*	*	*	*	*	*	*	*

Kittelson & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

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

Intersection #7 US 395 / South Belinger Farms Driveway

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R
HevVeh:	14%	12%	0%	0%
Grade:	0%	0%	0%	0%
Peds/Hour:	0	0	0	0
Pedestrian Walk Speed:	4.00 feet/sec	4.00 feet/sec	4.00 feet/sec	4.00 feet/sec
LaneWidth:	12 feet	12 feet	12 feet	12 feet
Time Period:	0.25 hour	0.25 hour	0.25 hour	0.25 hour

Kittelson & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

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

Intersection #9 US 395 / ODOT Maintenance Shed Driveway

Average Delay (sec/veh): 15.3 Worst Case 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: Uncontrolled Uncontrolled Stop Sign Stop Sign
Rights: Include Include Include Include
Lanes: 1 0 1 1 0 1 0 1 1 0 0 0 1! 0 0 0 0 1! 0 0

Volume Module: >> Count Date: 8 Aug 2002 << 4:15-5:15
Base Vol: 1 390 1 10 410 1 5 1 2 1 1 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: 1 390 1 10 410 1 5 1 2 1 1 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: 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88 0.88
PHF Volume: 1 443 1 11 466 1 6 1 2 1 1 11
Reduct Vol: 0 0 0 0 0 0 0 0 0 0 0 0
Final Vol.: 1 443 1 11 466 1 6 1 2 1 1 11

Critical Gap Module:
Critical Gp: 4.4 xxxx xxxxx 4.3 xxxx xxxxx 7.5 6.5 6.9 7.5 6.5 6.9
FollowUpTim: 2.3 xxxx xxxxx 2.3 xxxx xxxxx 3.5 4.0 3.3 3.5 4.0 3.3

Capacity Module:
Conflict Vol: 467 xxxx xxxxx 444 xxxx xxxxx 714 936 234 702 936 222
Potent Cap.: 1011 xxxx xxxxx 1044 xxxx xxxxx 323 267 775 329 267 788
Move Cap.: 1011 xxxx xxxxx 1044 xxxx xxxxx 314 264 775 324 264 788

Level Of Service Module:
Stopped Del: 8.6 xxxx xxxxx 8.5 xxxx xxxxx xxxxx xxxxx xxxxx xxxxx xxxxx
LOS by Move: A * * A * * * * * * * * * *
Movement: LT - LTR - RT LT - LTR - RT LT - LTR - RT LT - LTR - RT
Shared Cap.: xxxx xxxx xxxxx xxxx xxxx xxxxx xxxx 359 xxxxx xxxx 613 xxxxx
Shrd StpDel:xxxxx xxxx xxxxx xxxx xxxx xxxxx xxxxx 15.3 xxxxx xxxxx 11.0 xxxxx
Shared LOS: * * * * * * * C * * B *
ApproachDel: xxxxxx xxxxxx 15.3 11.0
ApproachLOS: * * C B

Kittelson & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

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

Intersection #9 US 395 / ODOT Maintenance Shed Driveway

Approach: North Bound South Bound East Bound West Bound
Movement: L - T - R L - T - R L - T - R L - T - R
HevVeh: 14% 12% 0% 0%
Grade: 0% 0% 0% 0%
Peds/Hour: 0 0 0 0
Pedestrian Walk Speed: 4.00 feet/sec
LaneWidth: 12 feet 12 feet 12 feet 12 feet
Time Period: 0.25 hour

Kittelson & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

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

Intersection #11 US 395 / Port Drive

Average Delay (sec/veh): 13.3 Worst Case 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: Rights:	Uncontrolled Include	Uncontrolled Include	Stop Sign Include	Stop Sign Include

Lanes: 0 0 2 0 1 1 0 2 0 0 0 0 0 0 0 0 1! 0 0

Volume Module: >> Count Date: 6 Aug 2002 << 4:15-5:15

[illegible]

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 Rec:	0	330	40	35	385	0	0	0	0	40	0	55

[illegible][illegible]

PHF Volume:	0	402	43	38	418	0	0	0	0	43	0	60
-------------	---	-----	----	----	-----	---	---	---	---	----	---	----

[illegible]

Final Vol.: 0 402 43 38 418 0 0 0 0 43 0 60

Critical Gap Module:

Critical Gp:xxxxx xxxx xxxxx 4.3 xxxx xxxxx xxxxx xxxx xxxxx 6.8 xxxx 6.9

```
FollowUpTim:xxxxx xxxx xxxxx 2.3 xxxx xxxxx xxxxx xxxx xxxxx 3.5 xxxx 3.3
```

Capacity Module:

Cnflct Vol: xxxx xxxx xxxxx 446 xxxx xxxxx xxxx xxxx xxxxx 688 xxxx 201

Potent Cap.:	xxxx	xxxx	xxxxx	1050	xxxx	xxxxx	xxxx	xxxx	xxxxx	380	xxxx	806
Mass Cap.	xxxx	xxxx	xxxxx	1050	xxxx	xxxxx	xxxx	xxxx	xxxxx	370	xxxx	806

```

Move Cap.:  xxxx xxxx xxxxx  1050 xxxx xxxxx  xxxx xxxx xxxxx  370 xxxx  806
-----

```

Level Of Service Module:

```
Stopped Del:xxxxx  xxxx  xxxxx  8.6  xxxx  xxxxx  xxxxx  xxxx  xxxxx  xxxxx  xxxxx  xxxxx
          *      *      *      *      *      *      *      *      *      *      *
```

LOS by Move: * * * A * * * * * * * *

Movements: LT LTR RT LT LTR RT LT LTR RT LT LTR RT

Movement:	LT - LTR - RT	LT - LTR - RI	LT - LTR - RI	LT - LTR - RI
Shared Cap :	xxxx xxxx xxxxxx	xxxx xxxx xxxxxx	xxxx xxxx xxxxxx	xxxx 539 xxxxxx

```

Shared Cap.: xxxx xxxx xxxxxx  xxxx  xxxx  xxxxxx  xxxx  xxxx  xxxxxx  xxxx  337 xxxxxx
Shrd StpDel:xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx xxxxxx xxxxx xxxxxx xxxxxx 13.3 xxxxxx

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Shared LOS:      *      *      *      *      *      *      *      *      *      *      B      *

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ApproachDel:	xxxxxx	xxxxxx	xxxxxx	13.3
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ApproachLOS: * * * B

Kittelson & Associates, Inc. - Project 5504
US 395 Corridor Refinement Plan
2002 Existing Traffic Conditions, Weekday PM Peak Hour

Level of Service Detailed Computation Report
2000 HCM Unsignalized Method
Base Volume Alternative

Intersection #11 US 395 / Port Drive

Approach:	North Bound	South Bound	East Bound	West Bound
Movement:	L - T - R	L - T - R	L - T - R	L - T - R

HevVeh: 9% 11% 0% 2%

Grade:	0%	0%	0%	0%
--------	----	----	----	----

Peds/Hour: 0 0 0 0

Pedestrian Walk Speed: 4.00 feet/sec
Lane Width: 13 feet 13 feet 13 feet 13 feet

Lane Width: 12 feet 12 feet 12 feet 12 feet
Time Period: 0.25 hour

Time Period: 0.25 hour

Appendix D

City of Hermiston Land Use
Code for Selected Zoning
Districts

COMMERCIAL ZONES**§ 157.040 CENTRAL COMMERCIAL ZONE
C-1.**

(A) *Uses permitted outright.* In a C-1, only the following uses and their accessory uses are permitted outright:

- (1) Automobile, boat or trailer sales show room;
- (2) Bakery;
- (3) Bank, loan company or similar financial institution;
- (4) Barber shop;
- (5) Beauty shop;
- (6) Bicycle shop;
- (7) Blueprinting, photostating or other reproduction;
- (8) Book or stationery store or newsstand;
- (9) Bookbinding;
- (10) Building supply with no outside storage;
- (11) Bus station;
- (12) Business machines, retail and service;
- (13) Catering establishment;
- (14) Church;
- (15) Clinic;
- (16) Clothes, cleaning or laundry agency;
- (17) Clothing store or tailor shop;
- (18) Club, lodge, union or fraternal organization;
- (19) Cocktail lounge or tavern;
- (20) Confectionery store, including soda fountain;
- (21) Curtain or drapery store;
- (22) Dancing school, music studio or instructional classes;
- (23) Delicatessen;
- (24) Drug store, pharmacy;
- (25) Dry cleaning, or pressing, except those using highly volatile or combustible materials or using high pressure steam tanks or boilers;
- (26) Dry goods, millinery or dress shop;
- (27) Electrical supply store;
- (28) Feed and seed store;
- (29) Floor covering sales and service;
- (30) Florist shop;
- (31) Food store;
- (32) Frozen food lockers, retail only;
- (33) Furniture store;
- (34) Garden store;
- (35) Gift, hobby or art shop;
- (36) Grocery store, includes convenience store, mini-market;
- (37) Hardware store;
- (38) Health studio, physical therapist, reducing salon;
- (39) Hotel;
- (40) Jewelry store, including repairing;

(12) Private utilities including electric power substations, telephone exchanges, television, radio or microwave transmission facilities;

(13) Public utilities including wells, water storage tanks and sanitary sewer pump stations; and

(14) Schools: Preschool, primary, elementary, junior or senior high, college.

(C) *Setback requirements.* Except as provided in § 157.140, in a C-1 zone no yard or vision clearance area shall be required except as follows:

(1) The front yard shall be a minimum of 20 feet measured from the foundation where abutting a residential zone;

(2) The side yard shall be minimum of 20 feet measured from the foundation where abutting a residential zone;

(3) The rear yard shall be a minimum of 25 feet measured from the foundation where abutting a residential zone; and

(4) All properties facing E. Main street from 3rd street to 7th street shall have a two-foot building setback from their front property line.

(D) *Height of buildings.* In a C-1 zone within 150 feet of a residential zone, no building shall exceed 35 feet in height.

(E) *Restrictions on use.* In a C-1 zone, the following conditions and restrictions shall apply:

(1) All business, service, repair, processing, storage or merchandise display shall be conducted wholly within an enclosed building, except for off-street parking and loading, drive-in windows, island service for motor vehicles and display of merchandise along the outside wall of the building not extending more than three feet from the wall, unless conducted as part of a special event and authorized by the City Council;

(2) All items produced or wares and

merchandise handled shall be sold at retail on the premises except in the case of § 157.040 (A);

(3) Where there are existing residential dwellings, they and their accessory uses may be maintained, expanded or reconstructed in conformance with the development standards of the R-3 zone; and

(4) Residential uses shall not be allowed on the ground floor of commercial buildings in the C-1 zone.

(Ord. 1840, passed 2-28-94) Penalty, see § 157.999

§ 157.041 OUTLYING COMMERCIAL ZONE C-2.

(A) *Uses permitted outright.* In a C-2 zone, only the following uses and their accessory uses are permitted outright:

(1) A use permitted outright in a C-1 zone;

(2) Amusement enterprise, including pool hall, bowling, dancing hall, skating rink, when enclosed in a building;

(3) Auditorium, exhibition hall or other public assembly room;

(4) Automobile, boat or trailer sales, rental, service and repair;

(5) Automobile service station;

(6) Automobile laundry;

(7) Day care home or nursery;

(8) Mortuary, undertaking or funeral parlor;

(9) Motel;

(10) Recreational vehicle park subject to requirements of § 157.147;

(11) Taxidermy shop; and

INDUSTRIAL ZONES**§ 157.055 LIGHT INDUSTRIAL ZONE M-1.**

(A) *Uses permitted outright.* In a M-1 zone, only the following uses and their accessory uses are permitted outright:

- (1) Cabinet, carpenter or woodworking shop;
- (2) Compounding, packaging or storage of cosmetics, drugs, perfumes, pharmaceuticals, soap or toiletries, but not including processes involving refining or rendering of fats and oils;
- (3) Dwelling for caretaker or night watchman on the property;
- (4) Freight depot;
- (5) Ice or cold storage plant;
- (6) Kennel;
- (7) Laboratory for research or testing, but not including the testing of combustion engines;
- (8) Laundry, dry cleaning or dyeing establishment;
- (9) Lumber yard, building supply outlet;
- (10) Machinery or equipment sales, services or storage;
- (11) Manufacture, repair or storage of articles from the following previously prepared materials: bone, cellophane, cloth, cork, feathers, felts, fiber, fur, glass, hair, horn, leather, paper, plastic, precious or semi-precious stone or metal, shell, textiles, wax, wire or yarn;
- (12) Manufacture, repair or storage of ceramic products, musical instruments, novelties, rubber or metal stamps, toys, optical goods, engineering, scientific or precision instrument, medical or dental supplies or equipment, electronic

supplies or equipment, industrial or business machines, aircraft parts and equipment, luggage, photographic equipment or small pleasure boats;

- (13) Mini-storage;
- (14) Motor vehicle body shop, tire shop or similar repair service;
- (15) Plumbing, heating, electrical or paint contractor's sales, repairs or storage;
- (16) Private utilities including electric power substations, telephone exchanges, television, radio or microwave transmission facilities;
- (17) Processing, packaging or storage of food or beverages, but not including processes involving distillation, fermentation, slaughtering or rendering of fats and oils;
- (18) Public utilities including wells, water storage tanks and sanitary sewer pump stations;
- (19) Railroad tracks and related facilities;
- (20) Utility lines, station or substation;
- (21) Veterinary care facility;
- (22) Welding, sheet metal or machine shop;
- (23) Wholesale distribution or outlet, including trucking, warehousing and storage.

(B) *Conditional uses permitted.* In a M-1 zone, the following uses and their accessory uses are permitted when authorized in accordance with the requirements of §§ 157.205 through 157.210 of this chapter:

- (1) Temporary dwelling unit;
- (2) Fuel oil distribution; and
- (3) Planned unit development.

(C) *Limitations on use.* In a M-1 zone, the following conditions and limitations shall apply:

(E) *Setback requirements.* Yard requirements for a M-1 zone shall apply in a M-2 zone.

(F) *Height of buildings.* Height of building requirements for a M-1 zone shall apply in a M-2 zone. (Ord. 1840, passed 2-28-94) Penalty, see § 157.999

AIRPORT ZONE (A)

§ 157.070 PERMITTED USES.

In an A zone, the following uses and their accessory uses are allowed outright:

(A) A use permitted outright in a C-1 zone; and

(B) A use permitted outright in a M-1 zone. (Ord. 1840, passed 2-28-94)

§ 157.071 CONDITIONAL PERMITTED USES.

In an A zone, the following uses and their accessory uses are permitted when authorized in accordance with the requirements of §§ 157.205 through 157.210 of this chapter:

(A) A use permitted conditionally in a C-2 zone; and

(B) A use permitted conditionally in a M-1 zone. (Ord. 1840, passed 2-28-94)

§ 156.072 OTHER REQUIREMENTS AND CONDITIONS.

(A) *Other requirements.* All requirements for limitation on use, signs, minimum lot size and setbacks and maximum height in an A zone shall conform to those in a M-1 zone, contained in divisions (C) through (F) of § 157.055.

(B) *Additional conditions.* All uses in an A zone shall conform to conditions imposed in Chapter 151 of

this code adopted as part of the Hermiston Airport Master Plan, which governs development around the Hermiston Airport, so as to minimize interference with the operations of the airport and reduce hazards to the public health, welfare and safety. (Ord. 1840, passed 2-28-94)

Cross-reference:

Airport Hazard Zoning, see Chapter 151

OPEN SPACE ZONE (OS)

§ 157.085 PERMITTED USES.

In an OS zone, the following uses and their accessory uses are permitted:

(A) Agriculture;

(B) Agricultural extension or experimentation station, including all buildings, sheds, greenhouses and other accessory structures necessary to facilitate operations; and

(C) Public park and public recreation facility. (Ord. 1840, passed 2-28-94)

§ 157.086 CONDITIONAL PERMITTED USES.

In an OS zone, the following uses and their accessory uses may be permitted subject to the provisions governing conditional uses:

(A) Boat landing and launch facility; and

(B) Open land recreation facility requiring the use of any structure with greater than 2,000 square feet of floor area. (Ord. 1840, passed 2-28-94)

§ 157.087 SPECIAL APPROVAL REQUIRED.

In addition to the building permit requirements of the city, no building permitted in the OS zone located within the 100-year floodplain shall be erected,

Section 3

Technical
Memorandum #2



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

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TECHNICAL MEMORANDUM #2

**US 395 Corridor Refinement Plan
Short-Term Circulation and Access Implementation Plan
(Kelli Boulevard - Feedville Road)**

Date: October 25, 2002

Project #: 5504.1

To: Project Planning Team

From: Marc Butorac, P.E., P.T.O.E.
Matt Hughart, AICP

cc: Ed Brookshier, City of Hermiston

This memorandum is the second of three transportation-related technical memorandums for the US 395 (Port Drive to Feedville Road) Corridor Refinement Plan. This technical memorandum is a follow up to Technical Memorandum #1 and consists of the following information:

- Documentation of the preferred Phase 1 Access and Circulation Plan between Airport Road and Feedville Road;
- Roadway design standards; and
- Finalization of the Short-Term Implementation Plan for the *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec. median* project.

Project Background

The US 395 (Port Drive to Feedville Road) Corridor Refinement Plan has been funded jointly by the City of Hermiston and the Oregon Department of Transportation to address the overall management direction established by the *US 395 North Corridor Plan* (Reference 1) and the short- and long-term access and circulation issues raised as part of the ongoing US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec. median project. The *US 395 North Corridor Plan* was adopted by the Oregon Transportation Commission in July 2000. As part of this plan, the construction of a raised median on the South Segment (Port Drive to Rosalynn Drive) of US 395 was recommended to enhance travel safety. Thus, the *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec. median* project was placed on the STIP and funded for 2002-2003.

While the *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec.* median project meets the objective of the *US 395 North Corridor Plan*, the City of Hermiston and Umatilla County transportation system plans have not been expanded to address the local access and circulation needs within the City of Hermiston's Urban Growth Boundary south of Port Drive. As a result, this area does not have an established or planned street network capable of supporting a highly access-controlled corridor. Based on this concern and the aesthetics of the raised median on US 395, the City of Hermiston requested that a refinement study be completed prior to the implementation of the median project. The overall goal of the refinement study is to develop a long-term circulation and corridor preservation strategy that will allow economic development based on quality development principles within the City of Hermiston Urban Growth Boundary, while maintaining the integrity and safety of the US 395 corridor.

To accomplish the overall goal of the refinement plan and meet the construction schedule of the median project, the plan was divided into two phases with the following objectives:

Phase 1 Objectives

- Identify the median design elements and openings on US 395 between Kelli Boulevard and Feedville Road.
- Determine the necessary short-term geometric and operational improvements to facilitate truck turning movements on/off US 395 and potential U-turn movements created by access restrictions.
- Provide a long-term implementation plan for local roads and access points along US 395 between Kelli Boulevard and Feedville Road.

Phase 2 Objectives

- Identify short- and long-term access locations and traffic control improvements on US 395 between Port Drive and Feedville Road.
- Provide a long-term implementation plan for collector and local circulation roadways within the study area.
- Provide the necessary amendments to the Functional Classification and Traffic Signal Plan, Pedestrian Facility Plan, Bicycle Facility Plan, Street System Improvement Plan elements of the Hermiston Transportation System Plan (TSP).

Technical Memorandum #1 consisted of the initial public involvement process and planning level technical analysis necessary to begin to develop a plan to meet the Phase 1 objectives. Technical Memorandum #2 is a follow up report that provides final documentation of the Phase 1 objectives and sets the stage for implementation of Phase 2 of the US 395 Corridor Refinement Plan.

PREFERRED PHASE 1 ACCESS AND CIRCULATION PLAN

Technical Memorandum #1 presented seven access and circulation plan alternatives for the Phase 1 study area. Through a series of meetings with members of the Planning Project Team, citizen Stakeholders, and the Hermiston City Council, comments were collected on each alternative. From these exercises, refinement began on a preferred access and circulation alternative.

Investigation into the various advantages/disadvantages of the seven alternatives ultimately led to the emergence of an underlying consensus amongst the various commenting agencies, citizens, and the project team staff. This consensus centered on the need to provide a series of access and circulating roadways that would adequately serve the potential for future commercial and industrial build-out of the study area. Common access and circulation themes included:

- A backage road system along the northeast side of US 395 to serve future commercial development.
- A series of properly spaced signalized access opportunities along US 395 that would adequately serve near-term and long-term future development, while still meeting the needs of existing land uses.
- A future study area roadway network that limits the impacts to existing land uses, while still providing sufficient circulation patterns.
- Future roadway alignments that eliminate unusual roadway geometries, particularly at their intersection with US 395.

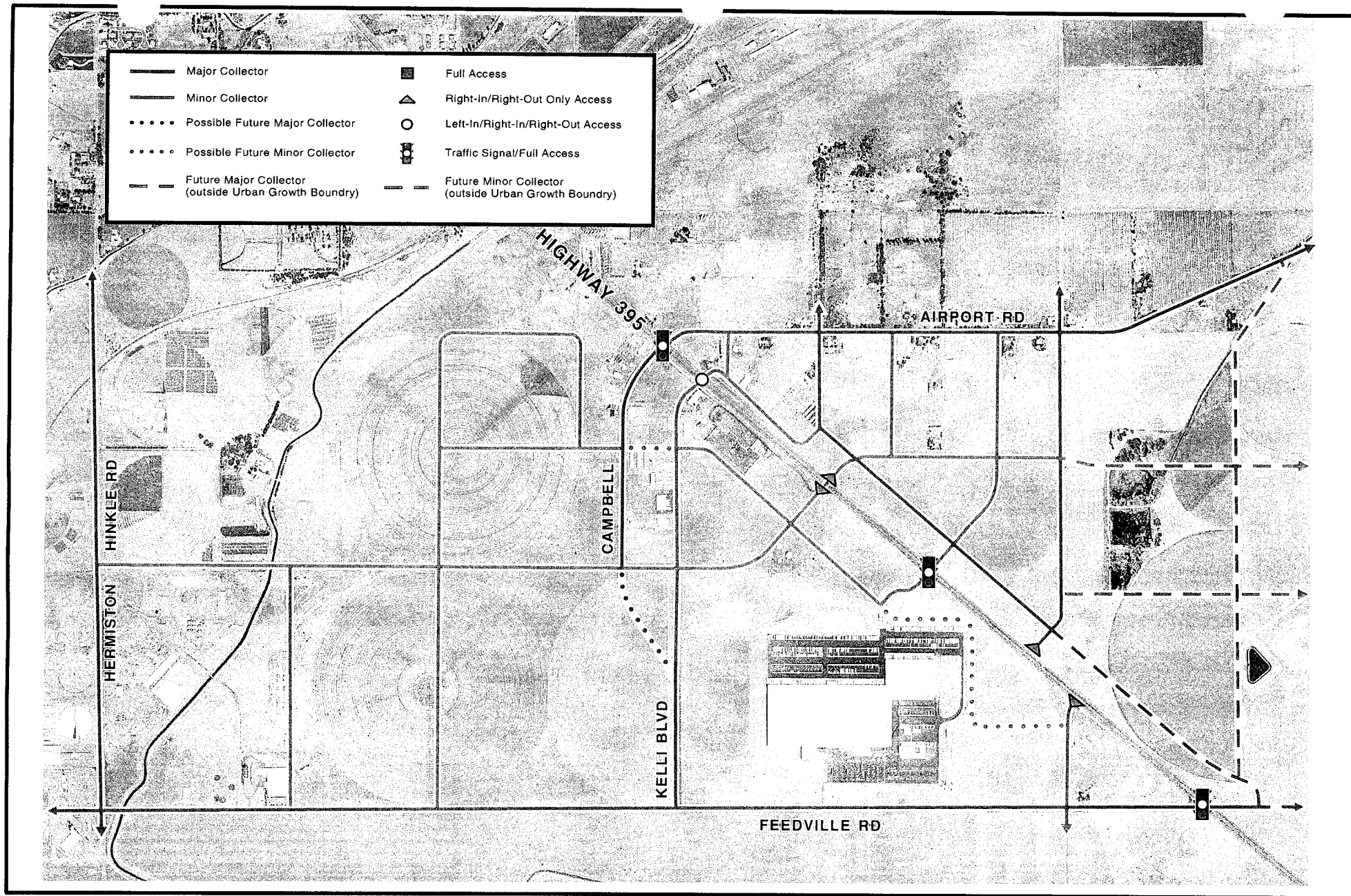
Based on these common themes, the planning project staff developed three access and circulation refinement plans, each containing small variations to the circulating roadway network. These refinement plans are illustrated as Figures 2-1 to 2-3. A description of each refinement plan is provided below.

Preliminary Preferred Access and Circulation Option A

Option A illustrates a potential roadway network that would support buildout of the Phase 1 study area via an interconnected network of major and minor collectors. Supporting this roadway network are a series of three signalized access opportunities to US 395 at the Campbell Drive/Airport Road, Wal-Mart Distribution Center driveway, and Feedville Road intersections. In addition to these signalized intersections are a series of limited access opportunities at Ott Road, Kelli Boulevard, and a future minor collector connection across US 395 in the vicinity of the existing Hermiston Foods driveway. For the most part, roadway alignments follow existing property lines in order to minimize disruption to existing land parcels. In order to encourage roadway connectivity, possible collector roadways are illustrated around the Wal-Mart Distribution Center, between Campbell Drive and Kelli Boulevard, and as an extension of Campbell Drive to Kelli Boulevard.

Preliminary Preferred Access and Circulation Option B

Option B is similar to Option A, with the exception that it encourages better roadway alignment and intersection geometries amongst the circulating roadways. In particular, this option provides for an extension of the northeast US 395 backage road to a future extension of Kelli Boulevard. This backage road extension would eliminate the need for the short section of frontage road as illustrated in Option A. As a result, it would create a longer Kelli Boulevard approach to US 395 for vehicle queues and it would provide a more consistent circulation pattern on that side of US 395.



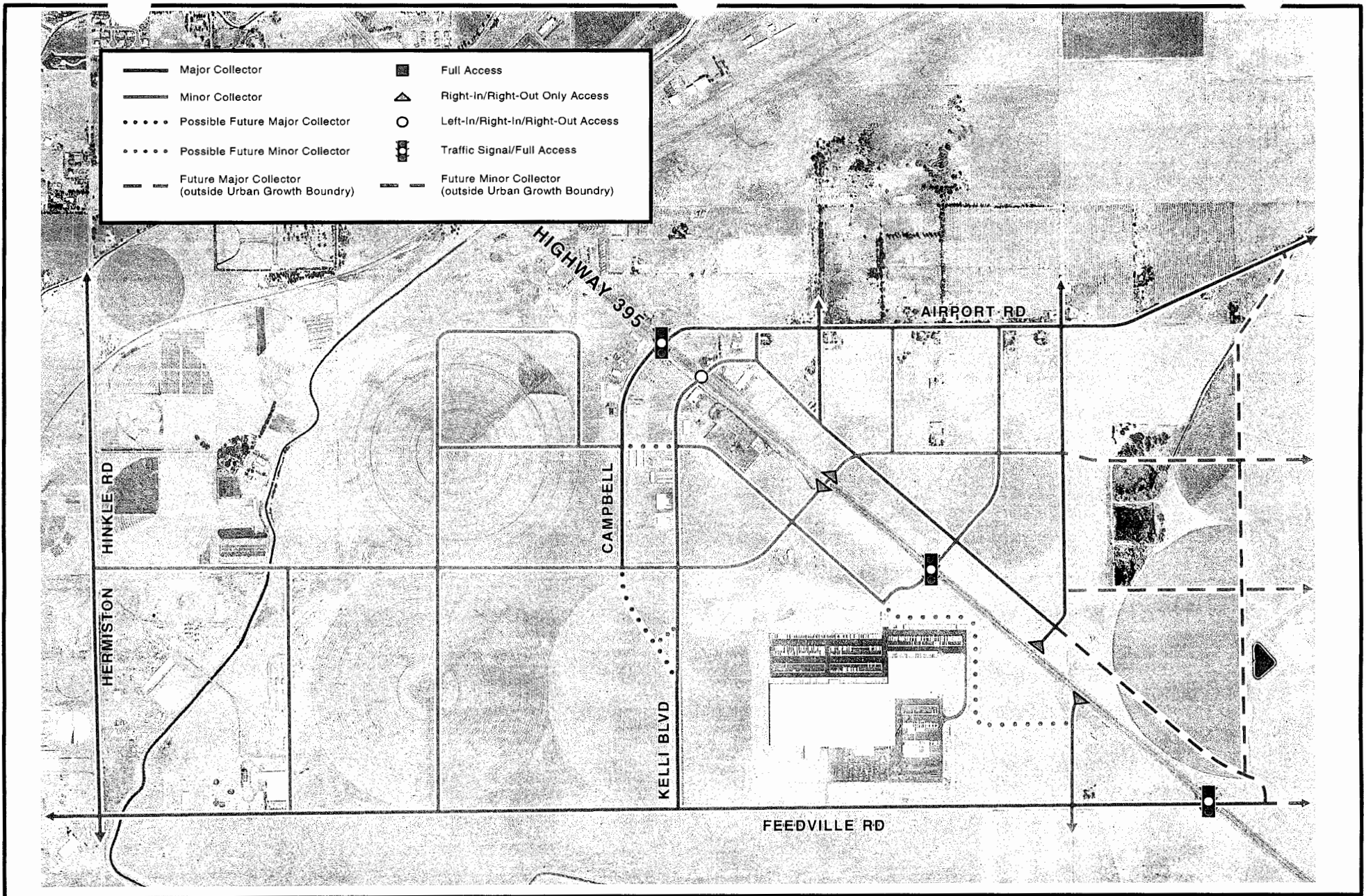
**PRELIMINARY PREFERRED OPTION A
ACCESS AND CIRCULATION PLAN (Phase 1)**



US395 Corridor Refinement Plan
Port Drive to Feedville Road

**FIGURE
2-1**



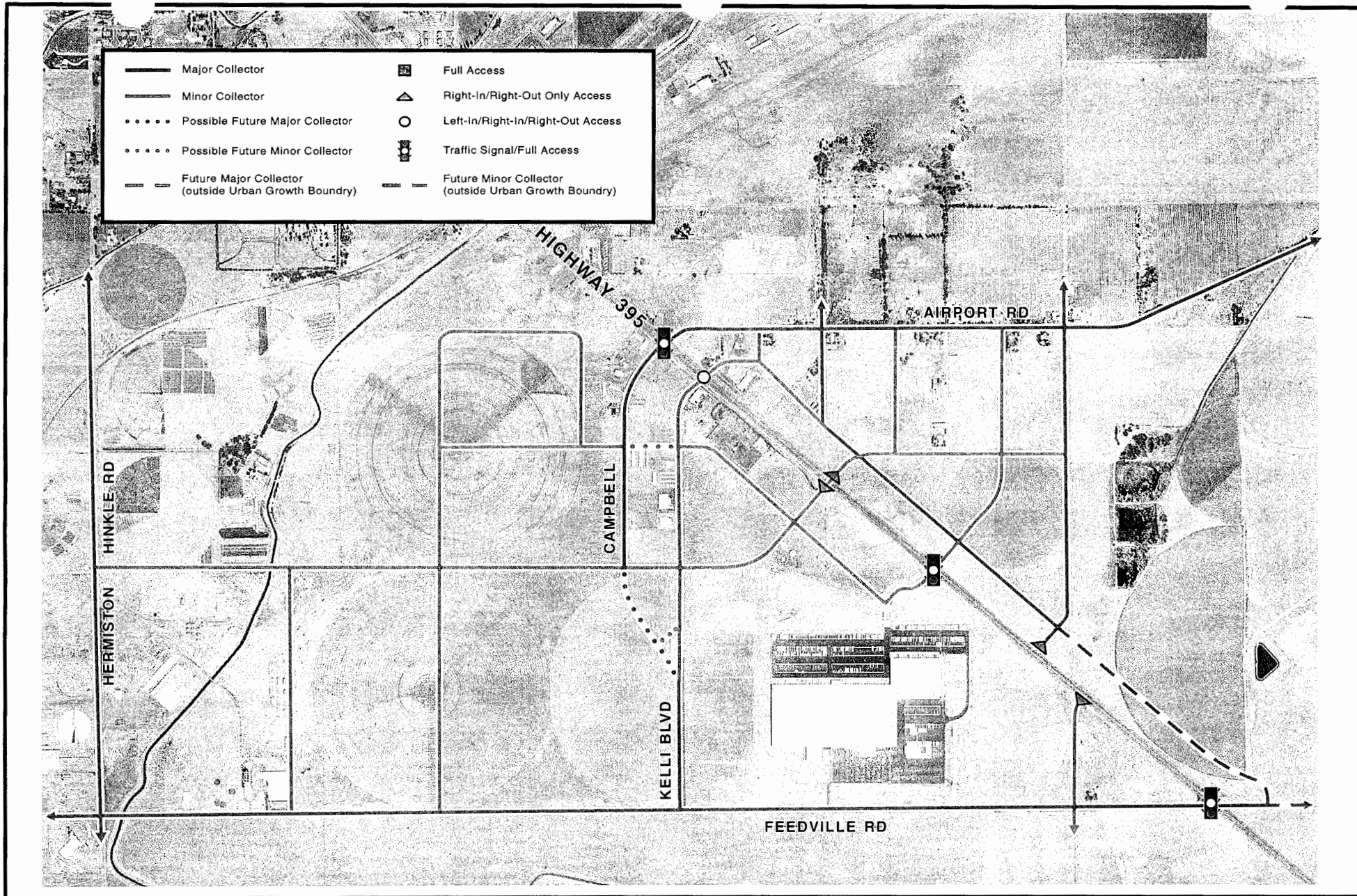


**PRELIMINARY PREFERRED OPTION B
ACCESS AND CIRCULATION PLAN (Phase 1)**



US 395 Corridor Refinement Plan
Port Drive to Feedville Road





PRELIMINARY PREFERRED OPTION C
ACCESS AND CIRCULATION PLAN (Phase 1)



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

FIGURE
2-3



The second modification shown in Option B is a possible future minor collector extension off of Kelli Boulevard to the possible future southerly extension of Campbell Drive. This modification would enhance the intersection geometry between Kelli Boulevard and the extension of Campbell Drive.

Preliminary Preferred Access and Circulation Option C

Due to right-of-way and roadway alignment concerns, Option C eliminates the possible future minor collector around the Wal-Mart Distribution Center facility. In addition, the possible future major collector roadway alignments located outside of the Hermiston Urban Growth Boundary have been removed.

Preferred Access and Circulation Plan

Based on comments received from the Planning Project Team, the City of Hermiston City Council, and project staff, Option C was determined to best fit the access and circulation needs of the Phase 1 study area.

ROADWAY DESIGN STANDARDS

As illustrated in Figures 2-1 through 2-3, future roadway alignments within the Phase 1 study area include the provision of major and minor street collector facilities. To ensure that these roadways are consistent with other major and minor collector facilities within the City of Hermiston, specific street design standards have been developed as part of the City of Hermiston Transportation System Plan. The specific design standards applicable to the planned Phase 1 study area roadways are reproduced in Appendix A. A review of the Urban Collector design standards indicates that the cross section widths and design elements are sufficient to meet the Phase 1 design needs.

SHORT-TERM MEDIAN IMPLEMENTATION PLAN

Based on the seven design alternatives developed as part of Technical Memorandum #1, a preliminary short-term median implementation plan was developed for defining the location and design of the *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec.* median project. This preliminary work, which was summarized in Figure 24 of Technical Memorandum #1, concluded that a median could be installed along US 395 with full access median breaks at the Campbell Drive/Airport Road, Kelli Boulevard, Hermiston Foods/EZ-Storage driveways, Wal-Mart Distribution Center driveway, Ott Road, and Feedville Road intersections. From this data, the Oregon Department of Transportation (ODOT) began work on the median design plans between Kelli Boulevard and Rosalynn Drive.

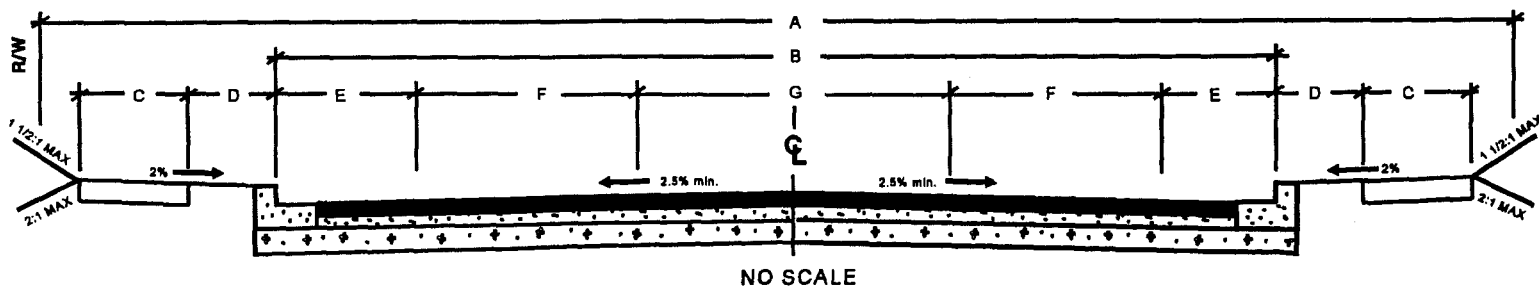
At the October 14, 2002 Planning Project Team (PPT) meeting, draft copies of the design plans were distributed to members of the PPT. Through the course of this meeting, the PPT noted several design related issues that may require further investigation and/or refinements before the median design plans are finalized. These issues were summarized in a memorandum back to ODOT on October 23, 2002. A copy of this memorandum has been included in Appendix B.

On October 28, 2002, the PPT met with the ODOT design team to discuss the potential refinements to the US 395 median project. As a result of these discussions, the ODOT design team refined the median design such that it more closely reflects Option #3 of the October 23, 2002 memorandum. At the time this document was completed, ODOT was still refining the specific design elements of the median.

Appendix A

Urban Collector Cross Sections

Table 2
Urban Collector Cross Sections



DESIGN SPEED = 35 M.P.H.

Road Classification	Criteria	Right-of-Way (Feet)	Paved Width (Feet)	# of Lanes	Side-walk (Feet)	Planting Strip (Feet)	Parking Lane (Feet)	Bike Lane (Feet)	Travel Lane(s) (Feet)	Center Turn Lane	Travel Lane(s) (Feet)	Bike Lane (Feet)	Parking Lane (Feet)	Planting Strip (Feet)	Side-walk (Feet)
		A	B		C	D	E		F	G	F		E	D	C
Major Collector	With Parking	68-80	58	3	6	0-5	7	5	11	12	11	5	7	0-5	6
	Without Parking	54-66	44	3	6	0-5*	0	5	11	12	11	5	0	0-5*	6
Minor Collector	With Bike Lanes	56-66	46	2	5	0-5*	7	5	11	0	11	5	7	0-5*	5
	Without Bike Lanes	48-58	38	2	5	0-5*	8	0	11	0	11	0	8	0-5*	5

* Planting strip preferred

Appendix B

PPT Memorandum on ODOT
Advance Copy Median Design

**KITTELSON & ASSOCIATES, INC.****TRANSPORTATION PLANNING/TRAFFIC ENGINEERING**

610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8166

MEMORANDUM

Date: October 23, 2002**Project #:** 5504**To:** Tracy M. Harris – ODOT**cc:** Doug Wright – ODOT
Pat Napolitano – City of Hermiston
Project Planning Team – US 395 Corridor Refinement Plan**From:** Marc Butorac, P.E., P.T.O.E. and Matt Hughart, AICP**Project:** US 395 Corridor Refinement Plan**Subject:** Median Design Comments

Over the past two months, Kittelson & Associates, Inc. has been working with the City of Hermiston and ODOT to prepare a corridor refinement plan for US 395 between Port Drive and Feedville Road. Phase 1 of the refinement plan included the development of a short-term implementation plan for defining the location and design of a raised median along US 395 between Kelli Boulevard and Feedville Road. The draft median location and design analysis was prepared and written up in Technical Memorandum #1, the first in a series of memorandums for this project. You should have received a copy of this technical memorandum from Doug Wright.

On October 14, 2002, we met with Doug Wright and the rest of the Planning Project Team (PPT). The purpose of this meeting was to discuss the finalization of Technical Memorandum #1 and review the Advance Copy *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec.* paving and roadside development plans. Through the course of this meeting, the PPT noted several design related issues that may require further investigation and/or refinements before the median design plans are finalized. The purpose of this memorandum is to summarize these issues.

MEDIAN STORAGE AND TRANSITION DESIGN

An examination of the Advance Plan set indicates that all median breaks have been designed with a storage length (L) and declaration distance (S) of approximately 210 meters to 230 meters at each intersecting side street. The PPT team noted that this leads to some short median sections, particularly between the Kelli Blvd – Hermiston Foods/EZ Storage section.

According to the ODOT Roadway Design Standards, the minimum acceptable storage length (L) for a 90 (km/hr) facility is 45 meters with a required deceleration distance (S) of 115 meters. As part of the US 395 Corridor Refinement Plan, intersection turning movement counts were conducted at each of the major intersections along US 395 during the weekday morning, midday, and evening peak hours. Based on these traffic volumes, a queuing analysis was conducted for the left-turn movement at each of the intersections. From this analysis, it was determined that the minimum acceptable storage length and deceleration distance was more than sufficient to accommodate the existing vehicle/truck queues. Based on this analysis, the PPT felt that the storage and deceleration lengths shown in the Advance Plan set were overly conservative.

Given these findings, the PPT would like ODOT to reconsider the storage and acceleration lengths for each median break. As part of Technical Memorandum #1, a draft set of median design lengths was prepared based on the minimum ODOT design parameters. For your reference, we have reproduced this table from Technical Memorandum #1 (shown as Table 1 in this memo). It should be noted that the table has been revised to reflect the metric stationing developed within the Advance Copy plans. Table 2 has also been created in order to more clearly summarize the resulting median lengths

WAL-MART DISTRIBUTION CENTER MEDIAN BREAK

An examination of the design plans indicates that the median break at the Wal-Mart Distribution Center driveway does not currently accommodate a median refuge for vehicles and trucks to perform a two-stage gap acceptance maneuver. Currently, trucks exiting the distribution center and turning left onto US 395 northbound are utilizing the center left-turn lane as a staging ground for accelerating onto US 395. Given the high speeds along US 395, the PPT team felt that providing a median break sufficient in length to accommodate a WB-35m truck would be necessary in the short-term to continue to serve exiting Wal-Mart trucks. Based on this desire, it is recommended that the median break be sufficient enough to accommodate a WB-35m truck (approximately 35 meters) plus a short transition distance for acceleration purposes.

MEDIAN DESIGN WIDTH

The final issue discussed by the PPT members was the design of the median itself. After examining the Advance Plans, a discussion ensued as to how the median design could be modified to create longer median sections and enhance access management and landscaping opportunities within the refinement study corridor (Feedville Road to Kelli Boulevard). Three different options were discussed which have been illustrated in the accompanying figure. A brief description of each option is provided below.

Option #1

Option #1 is essentially the same design treatment as that illustrated in the Advance Copy plans, however the median design includes an extension to match the left-turn taper. This taper would lengthen the median, provide additional landscaping area, and encourage more effective access management along the corridor.

Table 1
Median Location and Length Calculations (Reproduced and Modified from Table 7 in Tech Memo #1)

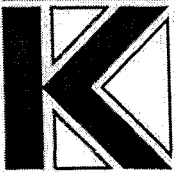
Southbound Left-Turns									
Intersection	Intersection Location		Intersection Area	Storage Length (L)	Deceleration Distance (S)¹	Distance from Centerline		Start of Median	
	Mile Post	Station	Meters	Meters	Meters	Meters	Feet	Station	Mile Post
EZ Storage	7.77	12+722	20	45	115	170.00	557.74	12+552	7.66
Wal-Mart	8.08	13+220	55 ²			55.00	180.45	13+165	8.05
Ott Road	8.43	13+783	20	45	115	170.00	557.74	13+613	8.32
Feedville Rd	8.82	14+410	20	45	115	170.00	557.74	14+240	8.71
Northbound Left-Turns									
Kelli Boulevard	7.45	12+207	20	45	115	170.00	557.74	12+377	7.56
Hermiston Foods	7.79	12+754	20	45	115	170.00	557.74	12+924	7.90
Wal-Mart	8.08	13+220	20	45	115	170.00	557.74	13+390	8.19
Ott Road	8.43	13+783	20	45	115	170.00	557.74	13+953	8.54

¹ Assumed Design Speed of 90 km/hr

² Reflects intersection area plus two-stage gap acceptance storage for a WB-35m truck

Table 2
Median Design Summary

Located Between	Start of Median	End of Median	Length	
			Meters	Feet
EZ Storage & Kelli Boulevard	STA 12+377	STA 12+552	175	574
Walmart & Hermiston Foods	STA 12+924	STA 13+165	241	793
Ott Road & Walmart	STA 13+390	STA 13+613	223	733
Feedville Road & Ott Road	STA 13+953	STA 14+240	287	944



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DATE

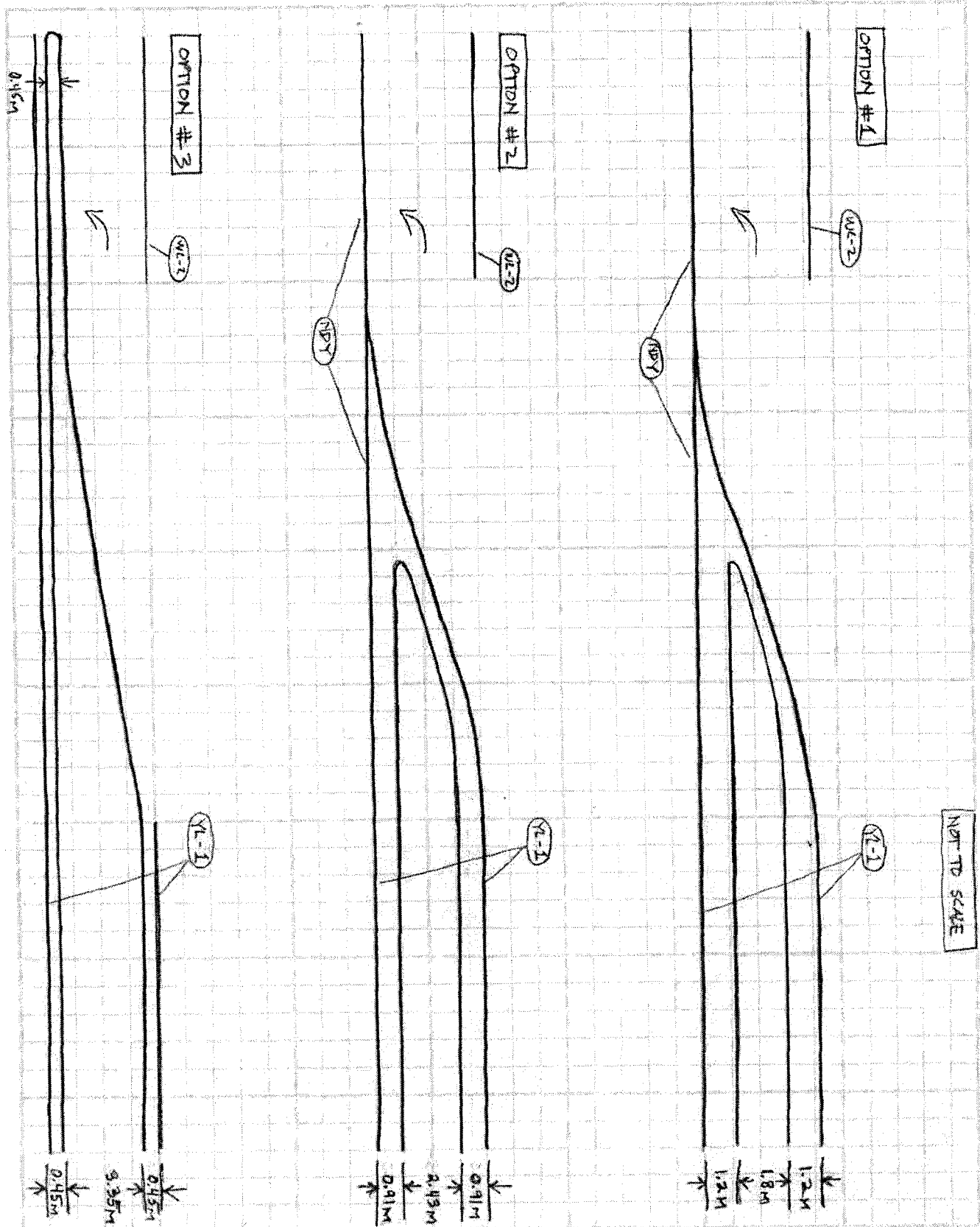
PROJECT # 5504

PROJECT NAME US 395 CORRIDOR REFINEMENT PLAN

BY JXH

SHEET # 1 OF 1

SUBJECT MEDIAN DESIGN OPTIONS



Option #2

Option #2 is similar to Option #1 with the exception of a wider median design. The wider median section is created by reducing the shy distance from 1.2 meters to 0.91 meters, leaving a 2.4 meter median section.

Option #3

In response to a desire for complete access control along the US 395 study corridor, Option #3 was developed. Option #3 calls for a median design that would provide a raised median and curbed lane delineation between each individual curb cut. To accomplish this design, the median shy distance would be reduced to 0.45 meters creating a median width of approximately 3.35 meters at its widest point. Along the left-turn storage lane, the median would consist of a 0.45 meter raised curb.

Based on the information provided within this memorandum, the PPT would like to discuss the feasibility of implementing these changes/modifications into the final design plans for the *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec. paving and roadside development plans*. If you have any questions or concerns regarding this information, please contact us at (503) 228-5230.

Section 4

Future Volume
Forecasts
Memorandum

**KITTELSON & ASSOCIATES, INC.****TRANSPORTATION PLANNING/TRAFFIC ENGINEERING**

610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8169

MEMORANDUM

Date: December 3, 2002**Project #:** 5504**To:** Teresa Penninger
Harlan Nale
Dorothy Upton
Tom Kuhlman**From:** Marc Butorac, P.E. and Matt Hughart, AICP**Project:** US 395 Corridor Refinement Plan**Subject:** Future Year 2025 Forecast Traffic Volumes

On October 31, 2002 we participated in a conference call to discuss the future year 2025 forecast traffic volumes to be used as part of the US 395 Corridor Refinement Plan. At issue were the three future traffic volume forecasts outlined in the October 7, 2002 memorandum and the land use/density assumptions used to derive those forecasts. Based on the discussions, it was apparent that the project team and reviewing agencies needed a better understanding of how certain buildout assumptions would impact the circulation, access patterns, and ultimate capacity within the US 395 study corridor.

To gain this insight, it was agreed that Kittelson & Associates, Inc. would perform a sensitivity analysis that would focus on different build-out level intensities for the vacant/underdeveloped parcels within the US 395 study corridor. These build-out level intensities were derived from the previous trip generation work contained within the October 7, 2002 memorandum. As previously discussed, the memorandum contained three trip generation methodologies that assumed 100 percent commercial/warehouse buildout of all vacant or underdeveloped parcels within the study area based on different variations of exiting land use and employment patterns. As a result of these three methodologies, it was determined that on average, 3,200 (weekday a.m.) and 4,000 (weekday p.m.) vehicle trips could be generated during the critical peak periods. Assuming 3,200 - 4,000 vehicle trips during the weekday a.m./p.m. peak hour as a middle ground, the sensitivity analysis looked at a less conservative 1,600 (weekday a.m.) and 2,000 (weekday p.m.) peak hour trip generation rate and an ultra conservative 4,800 (weekday a.m.) and 6,000 (weekday p.m.) peak hour trip generation rate.

Using these three trip generation thresholds, weekday p.m. peak hour vehicle trips were proportionately assigned to each vacant/underdeveloped parcel within the study area. The

impacts of these three thresholds in terms of roadway circulation, access, and capacity to the US 395 study corridor are provided below.

Threshold Analysis

In order to complete the threshold analysis, an assumption was made regarding the future circulation and access opportunities within the identified study corridor. Throughout the course of the project, the Project Planning Team (PPT) has been developing a circulation and access plan. The development of this plan occurred through numerous (PPT) meetings, citizen stakeholder meetings, and input provided by various City of Hermiston and ODOT officials. The culmination of this effort has led to the creation of a preferred circulation and access plan. An illustration of this plan is included for your reference at the end of this document.

As shown in the illustration, traffic signals are located at the following intersections:

- US 395 / Port Drive – Signalization of this intersection is consistent with the current Hermiston TSP and the US 395 North Corridor Plan
- US 395 / Airport Way – This intersection has been identified as a potential signalized intersection to serve as an access portal for the future redevelopment of the vacant/underdeveloped land in the western study area.
- US 395 / Campbell Drive / Airport Road – Through the planning process, both Campbell Drive and Airport Road have been identified as future major collectors.
- US 395 / Existing Wal-Mart Distribution Center Driveway – This intersection is currently a three legged intersection with the minor side street serving the Wal-Mart Distribution Center. A series of minor collectors have been developed that will tie into this driveway location on both sides of US 395 making it a desirable location for a signalized access.
- US 395 / Feedville Road – Although outside of the Hermiston Urban Growth Boundary, the Feedville Road intersection has been identified as a potential signalized intersection.

The remainder of the access points have been identified as limited access intersections to meet the goals of the *US 395: Kelli Blvd. (Hermiston) – Rosalyn Dr. (Stanfield) Sec. median* project. These intersections include:

- US 395 / future extension of Able Drive – left-in/right-in/right-out
- US 395 / Kelli Boulevard – left-in/right-in/right-out
- US 395 / Existing Hermiston Foods Driveway – right-in/right-out
- US 395 / Ott Road – right-in/right-out

This preferred circulation and access plan was subsequently used as the base roadway and access network for the three threshold analyses. The results of these three analyses are described in the following paragraphs and tables.

1,600 - 2,000 Vehicle Threshold

As previously mentioned, the 1,600-2,000-vehicle threshold represents the least conservative assumption regarding the future build-out potential of the study area. Using the preferred circulation and access plan as a guide, the proportionate share of weekday a.m. and p.m. peak hour vehicle trips associated with each vacant/underdeveloped parcel were subsequently assigned to the network. The capacity results of this analysis at each US 395 access portal are summarized in Table 1. As shown in the table, the 1,600-2,000 vehicle threshold will require improvements to each intersection as illustrated in the column labeled "Mitigated Lane Configurations for 1,600 – 2,000 Vehicle Threshold." With these intersection improvements, all of the signalized and unsignalized study intersections are forecast to operate below the 0.70 maximum volume-to-capacity ratio of a Statewide Highway such as US 395.

3,200 - 4,000 Vehicle Threshold

The 3,200 - 4,000-vehicle threshold analysis represents the trip generation rates developed as part of the October 7, 2002 future traffic volumes memorandum. Using the preferred circulation and access plan as a guide, the proportionate share of weekday a.m. and p.m. peak hour vehicle trips associated with each vacant/underdeveloped parcel were subsequently assigned to the network. The capacity results of this analysis at each US 395 access portal are summarized in Table 2. As shown in the table, all of the signalized and unsignalized study intersections are forecast to continue to operate below the 0.70 maximum volume-to-capacity ratio for a Statewide Highway under the mitigated lane configurations from the 1,600-2,000 vehicle threshold. However, at the US 395/Campbell Drive/Airport Road intersection, dual left-turn lanes will need to be constructed on the minor side street approaches to mitigate the impacts of the 3,200-4,000 vehicle threshold.

4,800 - 6,000 Vehicle Threshold

The 4,800 - 6,000-vehicle threshold analysis represents the most conservative land use and density assumptions for the vacant and underdeveloped parcels located within the study area. It should be noted that these density levels are not consistent with the City of Hermiston's vision for the study area. Using the preferred circulation and access plan as a guide, the proportionate share of weekday a.m. and p.m. peak hour vehicle trips associated with each vacant/underdeveloped parcel were subsequently assigned to the network. The capacity results of this analysis at each US 395 access portal are summarized in Table 3. As shown in the table, all of the unsignalized study intersections are forecast to continue to operate with available capacity under the mitigated lane configurations from the 1,600-2,000 vehicle threshold. However, all of the signalized intersections will require improvements, which are illustrated in the column labeled "Mitigated Lane Configurations for 4,800 – 6,000 Vehicle Threshold." It should be noted that even with these improvements, each of the signalized intersections are forecast to operate with volume-to-capacity ratios greater than the 0.70 threshold for a Statewide Highway.

Table 1
1,600 - 2,000 Vehicle Threshold Analysis Summary

Intersection	Existing Lane Configurations			Future Traffic Control Device	Mitigated Lane Configurations for 1,600 - 2,000 Vehicle Threshold			Resulting V/C Ratio
US 395 / Port Drive		↓ ↓ ↓		Traffic Signal		↓ ↓ ↓		AM - 0.29 PM - 0.44
			↗		↗		↗	
		↑ ↑ ↗				↗ ↑ ↑ ↗		
US 395 / Airport Way		↓ ↓ ↓		Traffic Signal		↓ ↓ ↓		AM - 0.27 PM - 0.37
			↗		↗		↗	
		↑ ↑ ↗				↗ ↑ ↑ ↗		
US 395 / Able Way		↓ ↓		Unsignalized Left-in/Right-in/Right-out		↓ ↓ ↓		AM - 0.01 PM - 0.04
					↗		↗	
		↑ ↑				↗ ↑ ↑ ↗		
US 395 / Campbell Drive / Airport Way		↓ ↓ ↓		Traffic Signal		↓ ↓ ↓		AM - 0.36 PM - 0.53
	↗		↗		↗		↗	
		↗ ↑ ↑ ↗				↗ ↑ ↑ ↗		
US 395 / Kelli Blvd		↓ ↓ ↓		Unsignalized Left-in/Right-in/Right-out		↓ ↓ ↓		AM - 0.02 PM - 0.08
	↗		↗		↗		↗	
		↗ ↑ ↑				↗ ↑ ↑		
US 395 / New Access Connection		↓ ↓		Unsignalized Right-in/Right-out		↓ ↓		AM - 0.01 PM - 0.02
					↗		↗	
		↑ ↑				↑ ↑		
US 395 / Wal-Mart Distribution Center		↓ ↓ ↓		Traffic Signal		↓ ↓ ↓		AM - 0.26 PM - 0.43
	↗				↗		↗	
		↗ ↑ ↑				↗ ↑ ↑ ↗		
US 395 / Ott Road		↓ ↓ ↓		Unsignalized Right-in/Right-out		↓ ↓ ↓		AM - 0.01 PM - 0.03
	↗		↗		↗		↗	
		↗ ↑ ↑ ↗				↑ ↑ ↗		
US 395 / Feedville Road		↓ ↓ ↓		Traffic Signal		↓ ↓ ↓		AM - 0.26 PM - 0.43
	↗		↗		↗		↗	
		↗ ↑ ↑ ↗				↗ ↑ ↑ ↗		

Table 2
3,200 - 4,000 Vehicle Threshold Analysis Summary

Intersection	Future Traffic Control Device	Assumed Future Base Lane Configurations ¹			Mitigated Lane Configurations for 3,200 - 4,000 Vehicle Threshold			Resulting V/C Ratio
US 395 / Port Drive	Traffic Signal		↓ ↓ ↓					AM - 0.43 PM - 0.64
		↘		↗				
			↑ ↑ ↑					
US 395 / Airport Way	Traffic Signal		↓ ↓ ↓					AM - 0.42 PM - 0.53
		↘		↗				
			↑ ↑ ↑					
US 395 / Able Way	Unsignalized Left-in/Right-in/Right-out		↓ ↓ ↓					AM - 0.01 PM - 0.14
		↘		↗				
			↑ ↑ ↑					
US 395 / Campbell Drive / Airport Way	Traffic Signal		↓ ↓ ↓			↓ ↓ ↓		AM - 0.45 PM - 0.65
		↘		↗	↘		↗	
			↑ ↑ ↑			↑ ↑ ↑		
US 395 / Kelli Blvd	Unsignalized Left-in/Right-in/Right-out		↓ ↓					AM - 0.03 PM - 0.20
		↘		↗				
			↑ ↑					
US 395 / New Access Connection	Unsignalized Right-in/Right-out		↓ ↓					AM - 0.04 PM - 0.06
		↘		↗				
			↑ ↑					
US 395 / Wal-Mart Distribution Center	Traffic Signal		↓ ↓ ↓					AM - 0.41 PM - 0.62
		↘		↗				
			↑ ↑ ↑					
US 395 / Ott Road	Unsignalized Right-in/Right-out		↓ ↓					AM - 0.02 PM - 0.06
		↘		↗				
			↑ ↑					
US 395 / Feedville Road	Traffic Signal		↓ ↓ ↓					AM - 0.40 PM - 0.65
		↘		↗				
			↑ ↑ ↑					

¹ Derived from the 1,600 - 2,000 Vehicle Threshold Analysis

Table 3
4,800 - 6,000 Vehicle Threshold Analysis Summary

Intersection	Future Traffic Control Device	Assumed Future Base Lane Configurations ¹			Mitigated Lane Configurations for 4,800 - 6,000 Vehicle Threshold			Resulting V/C Ratio
US 395 / Port Drive	Traffic Signal		↘↓↗			↘↓↗		AM - 0.57 PM - 0.83
		↘		↗	↘		↗	
			↘↑↑↗			↘↑↑↗		
US 395 / Airport Way	Traffic Signal		↘↓↗					AM - 0.56 PM - 0.68
		↘		↗				
			↘↑↑↗					
US 395 / Able Way	Unsignalized Left-in/Right-in/Right-out		↘↓↗					AM - 0.05 PM - 0.27
		↘		↗				
			↘↑↑↗					
US 395 / Campbell Drive / Airport Way	Traffic Signal		↘↓↗			↘↓↗		AM - 0.55 PM - 0.83
		↘		↗	↘		↗	
			↘↑↑↗			↘↑↑↗		
US 395 / Kelli Blvd	Unsignalized Left-in/Right-in/Right-out		↘↓↗					AM - 0.05 PM - 0.37
		↘		↗				
			↘↑↑↗					
US 395 / New Access Connection	Unsignalized Right-in/Right-out		↘↓					AM - 0.07 PM - 0.12
		↘		↗				
			↑↑					
US 395 / Wal-Mart Distribution Center	Traffic Signal		↘↓↗			↘↓↗		AM - 0.59 PM - 0.76
		↘		↗	↘		↗	
			↘↑↑↗			↘↑↑↗		
US 395 / Ott Road	Unsignalized Right-in/Right-out		↘↓					AM - 0.04 PM - 0.11
		↘		↗				
			↑↑					
US 395 / Feedville Road	Traffic Signal		↘↓↗			↘↓↗		AM - 0.50 PM - 0.76
		↘		↗	↘		↗	
			↘↑↑↗			↘↑↑↗		

¹ Derived from the 1,600 - 2,000 Vehicle Threshold Analysis

Summary of the Threshold Analysis Results

As shown in Tables 1-3, each of the intersections along US 395 are forecast to have capacity through the year 2025 with the assumed mitigation improvements. However, under the 4,800 – 6,000 vehicle threshold analysis, all of the signalized intersections will likely experience intersection operations that exceed ODOT's current volume-to-capacity standard for a Statewide Highway during the critical peak periods.

Future Volume Forecast Recommendation

On November 25, 2002, the results summarized in Tables 1-3 were presented to members of the PPT. Based on this presentation and the prior analysis presented in the October 7, 2002 letter, the PPT was in agreement that the 3,200 - 4,000 vehicle weekday a.m./p.m. peak hour threshold analysis represented the most reasonable future volume forecast for the US 395 study corridor. This conclusion was based on several specific factors including the following:

- While it is possible, the City of Hermiston does not think it is reasonable to expect the study area to build out at the maximum allowable density rate.
- Future warehousing and commercial development will likely develop at similar coverage rates to those establishments that exist today (a mixture of high and low density commercial and warehousing). These average coverage rates are conservatively reflected in the 3,200 - 4,000-vehicle threshold analysis.
- Based on the average daily traffic forecasts prepared as part of the *US 395 North Corridor Plan*, through traffic on US 395 is anticipated to grow by 3 to 4 percent per year through the year 2018 without a significant level of growth in the study area. Assuming full build out of the study area under the 4,800 - 6,000-vehicle threshold analysis, the US 395 study corridor would experience a 15 percent annual increase in average daily traffic. This growth rate was deemed unreasonable given existing growth patterns throughout the City of Hermiston.

Although the City of Hermiston and the PPT team members feel that the 3,200 – 4,000 vehicle threshold analysis represents a more reasonable future volume forecast for the study area, this planning study recognizes that there is a potential for development to occur at the rates reflected in the 4,800 to 6,000 vehicle threshold analysis. Over the years as additional development begins to occur within the study area, both the City of Hermiston and ODOT will have the opportunity to examine and shape the study area's growth patterns through the development review process¹. This information will provide a more substantial base for a future refinement of the TSP. Until this occurs, this memorandum has clearly demonstrated that the access and circulation plan can reasonably accommodate varying levels of future development within the US 395 study corridor.

¹ The City of Hermiston's development policy is listed in the Hermiston Land Use Code under Section 157.160.

Section 5

Technical
Memorandum #3



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TECHNICAL MEMORANDUM #3

**US 395 Corridor Refinement Plan
Circulation and Access Opportunities Constraints Analysis
(Port Drive - Feedville Road)**

Date: November 8, 2002

Project #: 5504.2

To: Project Planning Team

From: Marc Butorac, P.E., P.T.O.E.
Matt Hughart, AICP

cc: Ed Brookshier, City of Hermiston

On October 28, 2002, Phase 2 of the US 395 Corridor Refinement Plan began with a Planning Project Team (PPT) meeting and a public Stakeholder meeting. The objective of these meetings was to introduce the project team members and interested citizen stakeholders to Phase 2 of the long-term circulation and corridor preservation strategy for US 395. The planning level objective of Phase 2 is to complete the access and circulation strategy within the study corridor between Port Drive and Kelli Boulevard, while working within the context of the preferred circulation and access plan already identified for the remainder of the study corridor under Phase 1.

With this objective in mind, members of the planning project team and interested citizen stakeholders participated in a planning level exercise where they were asked to identify a preferred set of access and circulation opportunities for the study corridor. Using this input, three sets of access and circulation alternatives were developed. The intent of this technical memorandum is to document the circulation, access opportunities, and constraints of the three alternatives and present the preliminary preferred circulation and access plan.

CIRCULATION AND ACCESS OPPORTUNITIES AND CONSTRAINTS ANALYSIS

The primary purpose of the opportunities and constraints analysis is to identify possible long-term circulation and highway access plans that will allow economic development based on quality development principles within the City of Hermiston Urban Growth Boundary and Umatilla County Exception Areas, while maintaining the integrity and safety of the US 395 corridor.

Access and Circulation Plan Development Approach

Based on the existing transportation network, property configurations and zoning, and the future forecasted highway and development related traffic demands within the corridor, alternative access and circulation plans were developed to address long-term highway accessibility, mobility, and safety. In addition, the following goals and objectives were established by the project planning team to serve as the guiding principles in the development of each plan.

Goal 1: Business Community

- Enhance the integrity and vitality of the local business community.

Goal 2: Access Efficiency

- Maintain safe and efficient access to adjacent properties and public streets along the corridor

Goal 3: Aesthetics and Landscaping

- Enhance the environment, attractiveness, and appeal of the area through landscaping and other aesthetic improvements.

Goal 4: Geometry

- Minimize negative impacts to businesses through proper and efficient geometric design.

Goal 5: Pedestrian and Bicycle Environment

- Provide for an interconnected system of pedestrian and bicycle facilities to serve short-distance and recreational trips.

Goal 6: Vehicular Travel

- Maintain a safe and efficient travel way for local and regional travel along the corridor.

Goal 7: Capacity

- Provide a transportation system that has sufficient capacity to serve user needs.

Goal 8: Safety

- Ensure a transportation corridor that maintains adequate levels of safety for all users.

The remainder of this memorandum summarizes the alternative access and circulation plans for Phase 2. As previously mentioned, these alternatives were developed based on feedback provided by members of the Project Planning Team and interested citizen stakeholders during an internal planning workshop and open house.

Alternative #1

Figure 3-1 shows the Alternative #1 access and circulation plan. As illustrated in this figure, the transportation infrastructure is intended to enhance access and circulation opportunities for the undeveloped or underdeveloped portions of the Phase 2 study area while remaining cognizant of man-made barriers such as the airport, railroad line, and irrigation canal. Major roadway modifications and access opportunities include:

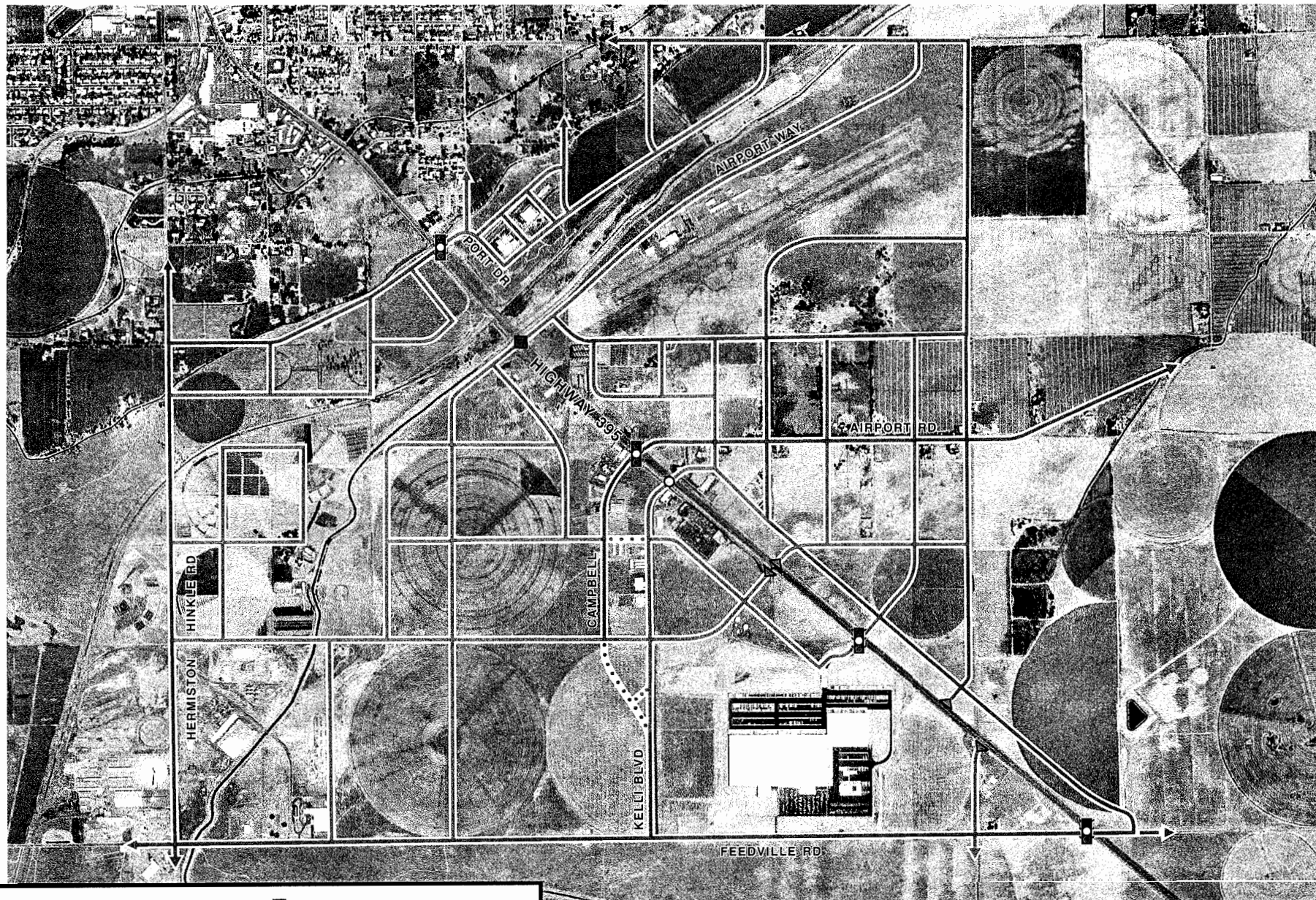
- The planned extension of Gettman Road between Hermiston-Hinkle Road and US 395 has been incorporated in this plan.
- Port Drive and the future extension of Gettman Road would be aligned and signalized.
- A circulation pattern would be established to enhance the future development potential in and around the planned extension of Gettman Road.
- Circulation roads would be added to complete a circulation pattern in and around the outlying commercial/light industrial area off of Port Drive.
- The US 395/Airport Way intersection would be a full-access.
- A series of collector roadways and local streets would be aligned to serve the potential for future commercial development south of the airport.
- A series of local circulation roadways would be aligned to serve future industrial and warehouse type development between US 395 and Hermiston-Hinkle Road.

Advantages:

- Signalization of the US 395/Port Drive/Gettman Road extension intersection is consistent with the current Hermiston TSP and would compliment the preferred access plan from Phase 1 creating a series of equally spaced signalized access points along US 395.
- Future roadway alignments would serve all quadrants of the study area while reducing the need for creating additional railroad and irrigation canal crossings.
- A limited access intersection at the US 395/Airport Way intersection would reduce the need for another traffic signal along the US 395 corridor.

Disadvantages:

- Treating the railroad line and irrigation canal as roadway barriers reduces the desire for local street connectivity between the Phase 1 and Phase 2 study areas.
- The US 395/Campbell Road signalized intersection would be a heavily utilized intersection for northbound left-turn access onto US 395.
- The US 395/Airport Way intersection has the potential to become a desirable access portal to the vacant/underdeveloped lands in the western part of the study area. Increased development of these lands may require additional access control such as a traffic signal.
- The minor collector roadway that connects into Airport Way will run through the runway protection zone of the Hermiston Municipal Airport.



- | | |
|--|--|
| Major Collector | Full Access |
| Minor Collector | Right-In/Right-Out Only Access |
| Possible Future Major Collector | Left-In/Right-In/Right-Out Access |
| Possible Future Minor Collector | Traffic Signal/Full Access |
| Future Major Collector (outside Urban Growth Boundary) | Future Minor Collector (outside Urban Growth Boundary) |

ALTERNATIVE #1 ACCESS AND CIRCULATION PLAN (Phase 2)



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

**FIGURE
3-1**



Alternative #2

Figure 3-2 shows the Alternative #2 access and circulation plan. As illustrated in the figure, the access opportunities to US 395 are similar to Alternative #1, however the study area circulation roadways reflect increased local street connectivity. Major roadway modifications and access opportunities include:

- The planned extension of Gettman Road between Hermiston-Hinkle Road and US 395 has been incorporated in this plan.
- Port Drive and the future extension of Gettman Road would be aligned and signalized.
- A series of local circulation roads would be provided to enhance the future development potential in and around the planned extension of Gettman Road.
- The sharp curve along Port Drive has been eliminated and additional circulation roads were added to complete a travel pattern in and around the outlying commercial/light industrial area off of Port Drive.
- The US 395/Airport Way intersection would be limited to right-in/right-out access. A second right-in/right-out access would be provided in the vicinity of Bellinger Farms.
- A series of collector roadways and local streets would be aligned to serve the potential for future commercial development south of the airport.
- A series of collector roadways would be aligned to serve future industrial and warehouse type development between US 395 and Hermiston-Hinkle Road. Two additional connections have been included across the irrigation canal to enhance connectivity within the study area.

Advantages:

- Signalization of the US 395/Port Drive/Gettman Road extension intersection is consistent with the current Hermiston TSP and would compliment the preferred access plan from Phase 1 creating a series of equally spaced signalized access points along US 395.
- Additional east/west crossings of the irrigation canal enhance circulation between Hermiston-Hinkle Road and US 395.
- A limited access intersection at the US 395/Airport Way intersection would reduce the need for another traffic signal along the US 395 corridor.
- A large majority of collector and local circulation roadways follow existing property lines, requiring less property condemnation.
- Eliminating the sharp bend along Port Drive would provide better intersection geometry.

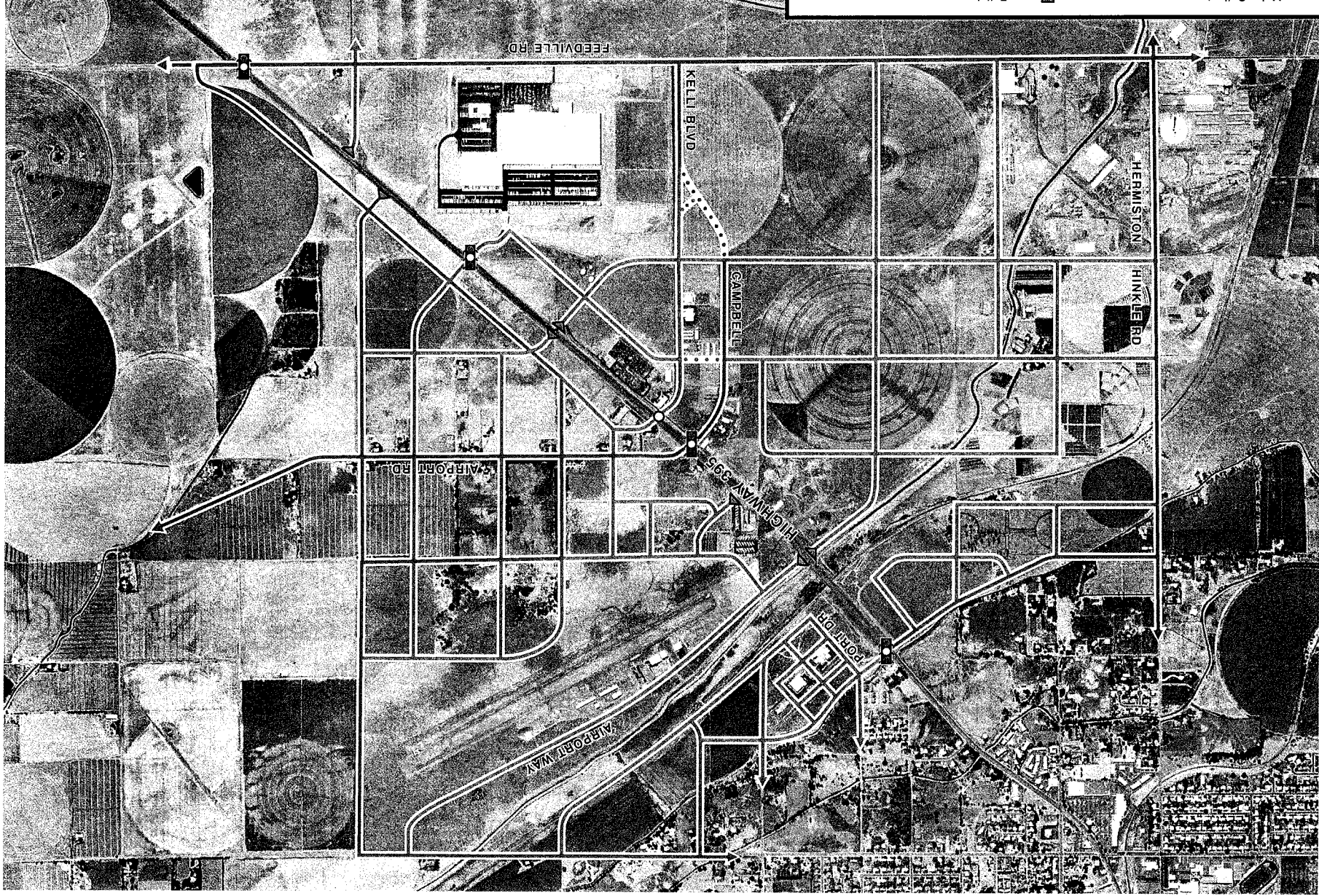
Disadvantages:

- The US 395/Campbell Road signalized intersection would be a heavily utilized intersection for northbound left-turn access onto US 395. Depending upon the level of future development, the intersection may need to be widened to accommodate dual left-turns on the minor side-street approaches.
- Additional crossing of the feed canal would require additional bridge structures.



**ALTERNATIVE #2
ACCESS AND CIRCULATION PLAN (Phase 2)**

- | | |
|-------|--|
| — | Major Collector |
| — | Minor Collector |
| | Possible Future Major Collector |
| | Possible Future Minor Collector |
| — | Future Major Collector (outside Urban Growth Boundary) |
| — | Future Minor Collector (outside Urban Growth Boundary) |
| ◻ | Full Access |
| ◻ | Right-In/Right-Out Only Access |
| ○ | Left-In/Right-In/Right-Out Access |
| ◻ | Traffic Signal/Full Access |



Alternative #3

Figure 3-3 shows the Alternative #3 access and circulation plan. As illustrated in the figure, the access opportunities to US 395 are similar to Alternative #2, however circulation is improved south of the airport and the additional irrigation canal crossings have been eliminated. Major roadway modifications and access opportunities include:

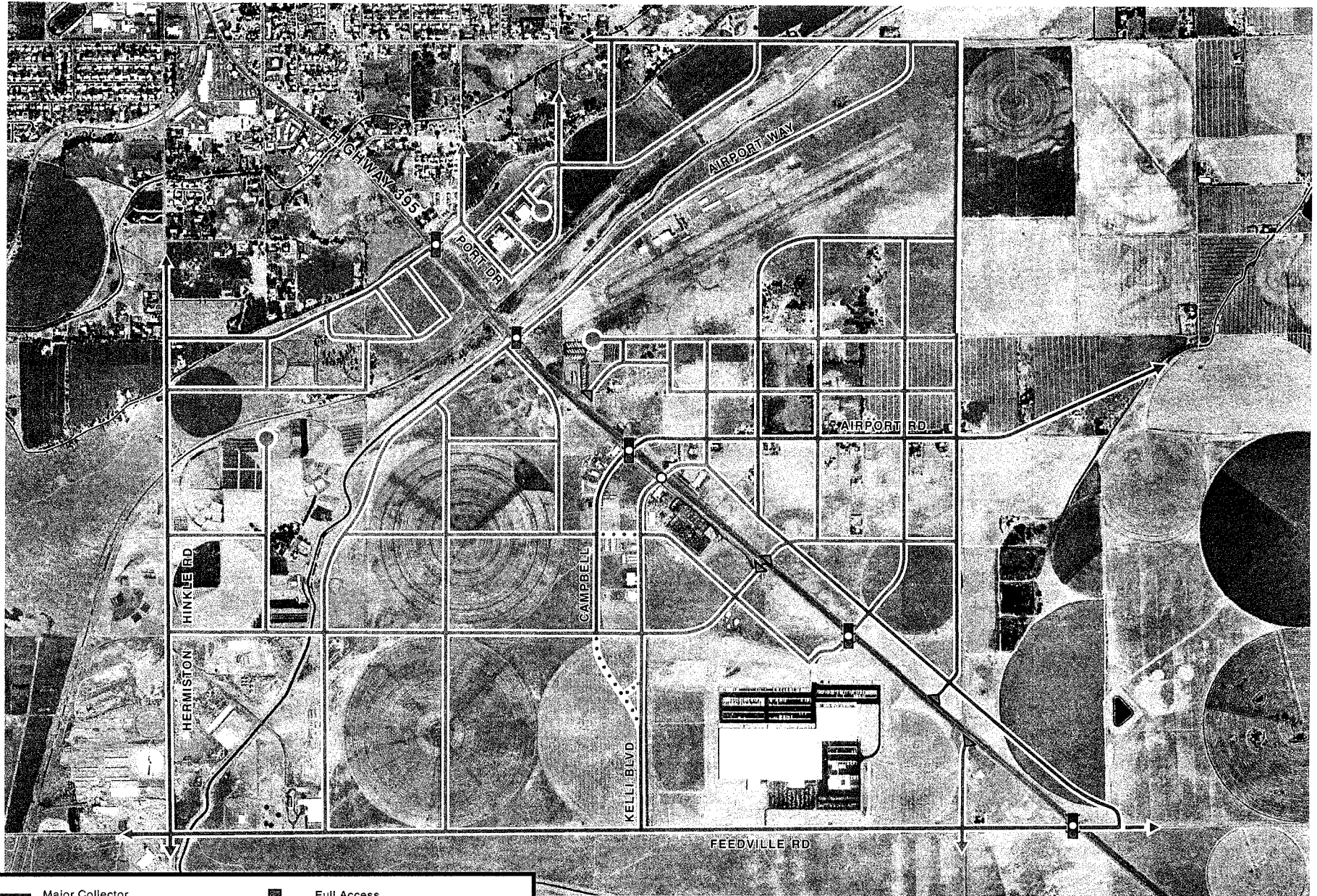
- The planned extension of Gettman Road between Hermiston-Hinkle Road and US 395 has been incorporated in this plan.
- Port Drive and the future extension of Gettman Road would be aligned and signalized.
- A series of circulation roads would be provided to enhance the future development potential in and around the planned extension of Gettman Road.
- Additional roads were added to complete a circulation pattern in and around the outlying commercial/light industrial area off of Port Drive.
- The US 395/Airport Way intersection would be limited to left-in/right-in/right-out access. A second right-in/right-out access would be provided in the vicinity of Bellinger Farms.
- Additional collector roadways and local streets would be provided to serve the potential for future small lot commercial development south of the airport.
- A series of local circulation roadways would be aligned to serve future industrial and warehouse type development between US 395 and Hermiston-Hinkle Road.

Advantages:

- Signalization of the US 395/Port Drive/Gettman Road extension intersection is consistent with the current Hermiston TSP and would compliment the preferred access plan from Phase 1 creating a series of equally spaced signalized access points along US 395.
- A limited access intersection at the US 395/Airport Way intersection would reduce the need for another traffic signal along the US 395 corridor.
- Additional local circulation roadways south of the airport increase development opportunities.

Disadvantages:

- Treating the railroad line and irrigation canal as roadway barriers reduces the desire for roadway connectivity between the Phase 1 and Phase 2 study areas.
- The US 395/Airport Way intersection has the potential to become a desirable access portal to the vacant/underdeveloped lands in the western part of the study area. Increased development of these lands may require additional access control such as a traffic signal.
- The US 395/Campbell Road signalized intersection would be a heavily utilized intersection for northbound left-turn access onto US 395. Depending upon the level of future development, the intersection may need to be widened to accommodate dual left-turns on the minor side-street approaches.



- | | |
|--|--|
| — Major Collector | ■ Full Access |
| — Minor Collector | ▲ Right-In/Right-Out Only Access |
| Possible Future Major Collector | ○ Left-In/Right-In/Right-Out Access |
| Possible Future Minor Collector | ⬢ Traffic Signal/Full Access |
| --- Future Major Collector (outside Urban Growth Boundary) | --- Future Minor Collector (outside Urban Growth Boundary) |

ALTERNATIVE #3 **ACCESS AND CIRCULATION PLAN (Phase 2)**



US 395 Corridor Refinement Plan
 Port Drive to Feedville Road

FIGURE
3-3



Preliminary Preferred Access and Circulation Plan

Based on the listed advantages/disadvantages, the project goals and objectives, and discussion amongst the project team members, the PPT recommended that a combination of access and circulation improvements from the three alternatives be incorporated into a draft preliminary preferred access and circulation plan. These access and circulation improvements are summarized in Tables 1 and 2.

Table 1
Preliminary Preferred US 395 Access Improvements

	Project Description
1	Signalize the US 395 / Campbell Drive / Airport Road intersection. Reserve right-of-way for the potential for dual left-turn lanes on the Campbell Drive and Airport Road approaches to US 395.
2	Signalize the US 395 / Wal-Mart Distribution Center access driveway. Reserve right-of-way for the potential for dual left-turn lanes on the east and west approaches to US 395.
3	Realign the north and south approaches to Ott Road such that they intersect US 395 at a complete 90-degree angle. Limit these future approaches to right-in/right-out access.
4	Re-construct a limited access right-in/right-out driveway to US 395 near the current Hermiston Foods driveway.
5	Re-construct a limited access intersection (left-in/right-in/right-out) at the US 395/Kelli Boulevard intersection.
6	Develop a limited access intersection at US 395 to be served by a future extension of Able Drive.
7	Signalize the US 395/Airport Way intersection.
8	Signalize the US 395/Feedville Road intersection.

Table 2
Preliminary Preferred Circulation Improvements

	Project Description
9	Extend SE 4 th Street along the western boundary of the Hermiston Cemetery to a new east/west minor collector facility that would run parallel to the Gettman Road extension.
10	Upon the potential redevelopment of the Hermiston Agriculture Experiment Station, provide a new minor collector roadway along the SE 4 th Street alignment. Upgrade and extend Experiment Station Road to this 4 th Street alignment.
11	Complete a series of minor collector roadways upon redevelopment of the vacant land north of the irrigation canal, east of Port Drive, and south of Highland Avenue.
12	Develop a major collector roadway to facilitate north/south travel within the northeast quadrant of the US 395 Refinement Plan study area.
13	Develop a series of minor collector roadways to facilitate circulation south of the Hermiston Airport. A connection should not be provided across the Hermiston Municipal Airport's runway protection zone.
14	Develop a series of minor collector roadways to facilitate circulation within the northeast quadrant of the US 395 Refinement Plan study area.
15	Develop a major collector backage road that runs parallel to US 395 between an extension of Kelli Boulevard and Ott Road.
16	Extend Kelli Boulevard east of US 395 to connect into a minor collector roadway network.
17	Develop a minor collector backage road that runs parallel to US 395 between Kelli Boulevard and the Wal-Mart Distribution Center truck access road.

	Project Description
18	Develop a minor collector roadway to facilitate east/west travel between Hermiston-Hinkle Road and US 395.
19	Upon redevelopment of adjacent land parcels, develop a minor collector connection between Campbell Drive and Kelli Boulevard.
20	Extend Campbell Drive at major collector standards south and east to Kelli Boulevard (1 st Phase). Realign a portion of Kelli Boulevard so that it intersects the extension of Campbell Drive (2 nd Phase).
21	Develop a continuous minor collector roadway to facilitate north/south travel between US 395 and Feedville Road.
22	Develop a series of minor collector roadways to ensure circulation and connectivity upon redevelopment of the large agriculture plots of the western study area.

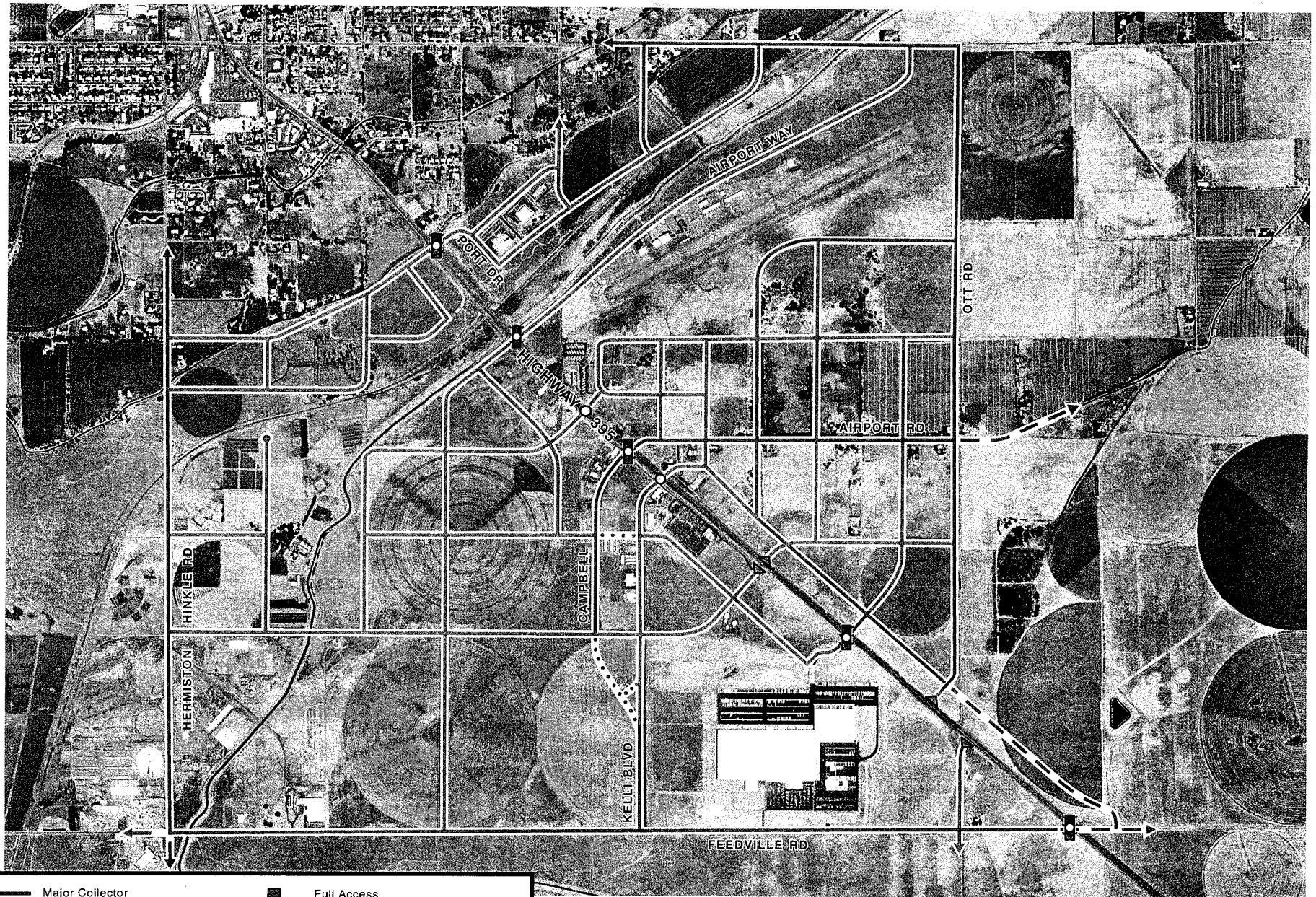
Preliminary Preferred Bicycle and Pedestrian Improvements

In addition to the roadway circulation and access improvements, City of Hermiston staff and the PPT team members developed a set of preferred bicycle and pedestrian improvements to establish a multi-modal transportation network for the study area.

Table 3
Preliminary Preferred Bicycle and Pedestrian Improvements

	Project Description
23	As per the cross-section standards for Major and Minor Collectors, the development of all new roadways within the study area should be designed to include sidewalks.
24	Redevelopment of all property adjacent to existing collector roadways should include sidewalk improvements.
25	Develop a multi-use recreational path along the west side of US 395. This path will require a bridge crossing over the feed canal and rail line.
26	As per the City cross-section standards, the development of all new Major Collectors should include on-street bicycle lanes.
27	Additional on-street bicycle lanes should be provided along Kelli Boulevard and the future roadway improvement summarized in Tables 2's project #18.

This preliminary preferred access and circulation projects are graphically illustrated in Figure 3-4. The preferred pedestrian and bicycle projects are shown in Figure 3-5 and 3-6 respectively.



- | | |
|--|--|
| — Major Collector | ■ Full Access |
| — Minor Collector | ▲ Right-In/Right-Out Only Access |
| Possible Future Major Collector | ○ Left-In/Right-In/Right-Out Access |
| Possible Future Minor Collector | ⬢ Traffic Signal/Full Access |
| --- Future Major Collector (outside Urban Growth Boundary) | --- Future Minor Collector (outside Urban Growth Boundary) |

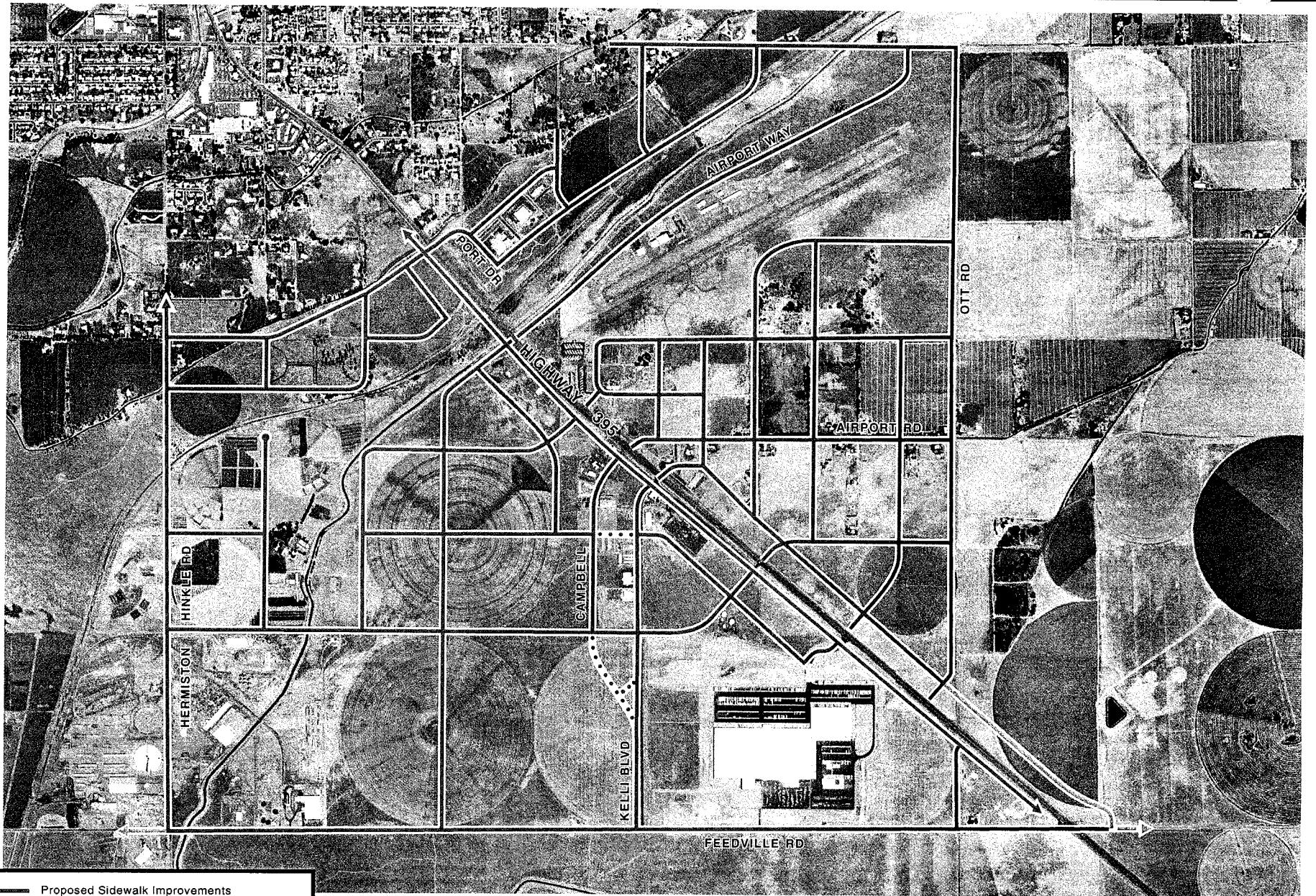
PRELIMINARY PREFERRED ACCESS AND CIRCULATION PLAN (Phase 2)



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

**FIGURE
3-4**





- Proposed Sidewalk Improvements
- Proposed Off-Street Pathway Improvements

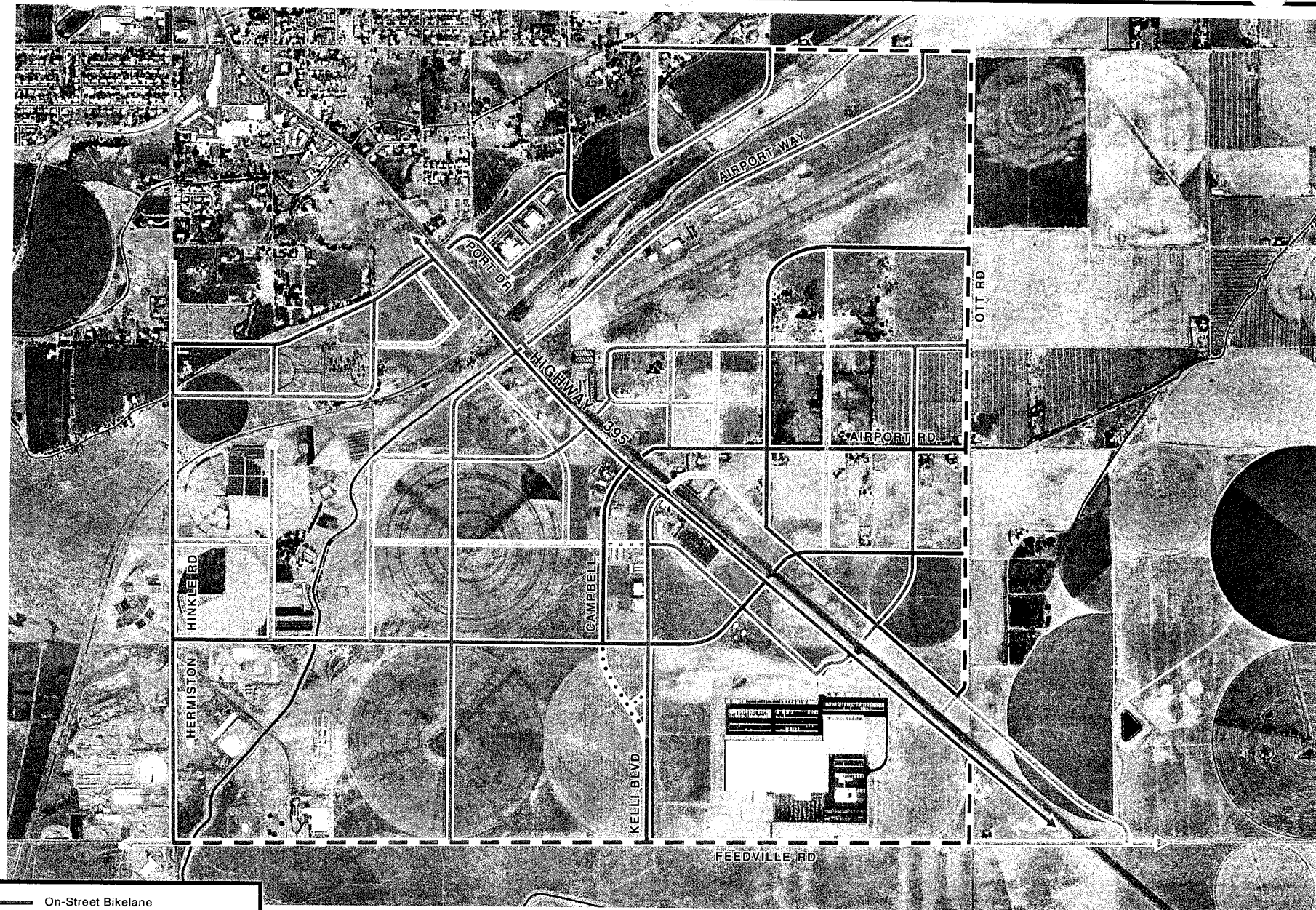
PRELIMINARY PREFERRED PEDESTRIAN FACILITY PLAN (Phase 2)



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

**FIGURE
3-5**





- On-Street Bikeline
- Shoulder Bikeways
- On-Street Bike Route
- Off-Street Pathway

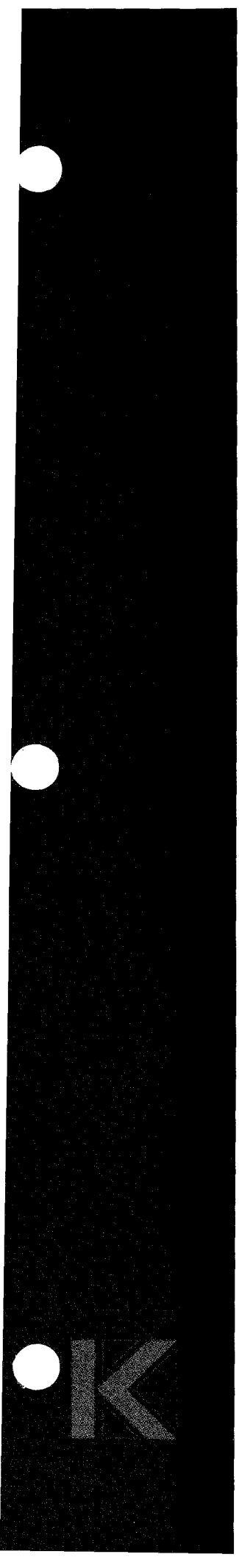
PRELIMINARY PREFERRED BICYCLE FACILITY PLAN (Phase 2)



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

FIGURE
3-6





Section 6

Public Involvement
and Coordination
Process
Memorandum

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610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8169

MEMORANDUM

Date: December 19, 2002**Project #:** 5504**To:** Ed Brookshier – City of Hermiston
Teresa Penninger – ODOT, Region 5**From:** Marc Butorac, P.E., P.T.O.E.
Matt Hughart, AICP**Project:** US 395 Corridor Refinement Plan**Subject:** Planning Project Team and Public Involvement Process

This memorandum provides a summary overview of the project coordination and public involvement process that was conducted as part of the US 395 (Port Drive to Feedville Road) Corridor Refinement Plan and Transportation System Plan update process.

To ensure that adequate public participation and project coordination occurred throughout the development of the US 395 Corridor Refinement Plan, a series of Planning Project Team and Stakeholder meetings were held over the course of the project. These meeting dates and objectives are summarized in the Table 1 below.

Table 1
Stakeholder Meeting Summary

Event	Date	Purpose/Objectives
PPT Meeting #1	August 14, 2002	The primary purpose of PPT Meeting #1 was to introduce the PPT team and review the project scope, develop project objectives, set deliverable dates, and develop the remaining project schedule.
Stakeholder Workshop #1	August 14, 2002	The purpose of Stakeholder Meeting #1 was to introduce Phase 1 of the corridor refinement plan to interested citizen stakeholders. Those in attendance were asked to participate in a design charrette that focused on access and circulation alternatives between Kelli Boulevard and Feedville Road.
PPT Meeting #2	September 11, 2002	PPT Meeting #2 focused on reviewing the draft findings of Technical Memorandum #1 and the seven access and circulation alternatives developed as part of the Stakeholder Workshop #1 design charrette.
Stakeholder Workshop #2	September 11, 2002	The purpose of Stakeholder Workshop #2 was to present the draft findings of Technical Memorandum #1 to interested citizen stakeholders. As part of the presentation, citizens were asked to review, rank, and recommend modifications to the seven access and circulation alternatives. In addition to Stakeholder Workshop #2, the public comment period was lengthened as the City of Hermiston published the seven alternatives on its website and ran an article in the City newspaper.

Event	Date	Purpose/Objectives
PPT Meeting #3	October 14, 2002	This PPT meeting was held to give the PPT members an opportunity to comment on ODOT's advance copy plans for the <i>US 395: Kelli Blvd. (Hermiston) - Rosalynn Dr. (Stanfield) Sec.</i> median design. In addition, the PPT was asked to comment on two different Preliminary Preferred Access and Circulation plans for Phase 1.
City Council Work Session	October 14, 2002	Given the significance of the <i>US 395: Kelli Blvd. (Hermiston) - Rosalynn Dr. (Stanfield) Sec.</i> median project, a special City Council work session was held to review the two Preliminary Preferred Access and Circulation plans for Phase 1.
PPT Meeting #4	October 28, 2002	At the conclusion of PPT Meeting #3, the PPT members had some significant concerns regarding the design of the <i>US 395: Kelli Blvd. (Hermiston) - Rosalynn Dr. (Stanfield) Sec.</i> median project. PPT Meeting #4 was held to help address these concerns and recommend alternate design solutions. A final Preferred Access and Circulation Plan was presented to the PPT. The PPT was asked to participate in an access and circulation charette for Phase 2 of the corridor refinement plan.
Stakeholder Workshop #3	October 28, 2002	The purpose of Stakeholder Meeting #3 was to present the Preferred Access and Circulation Plan (Phase 1) to interested citizen stakeholders and introduce Phase 2 of the corridor refinement plan. Those in attendance were asked to participate in a design charette that focused on access and circulation alternatives between Port Drive and Feedville Road.
PPT Meeting #5	November 25, 2002	PPT Meeting #5 focused on reviewing the draft findings of Technical Memorandum #3 and the three access and circulation alternatives developed as part of the Stakeholder Workshop #3 design charette.
PPT Meeting #6	January 6, 2003	
Stakeholder Workshop #4	January 6, 2003	

PPT – Planning Project Team

Supporting Documents

Attachment A: PPT Meeting #1 Agenda and Meeting Minutes.

Attachment B: Stakeholder Workshop #1 Newsletter, Presentation Materials, and Attendees.

Attachment C: PPT Meeting #2 Agenda, Attendees, and Meeting Minutes.

Attachment D: Stakeholder Workshop #2 Newsletter, Presentation Materials, and Attendees.

Attachment E: PPT Meeting #3 Agenda, Presentation Materials, Attendees, and Meeting Minutes.

Attachment F: City Council Work Session Presentation Materials.

Attachment G: PPT Meeting #4 Agenda, ODOT Letter, Attendees, and Meeting Minutes.

Attachment H: Stakeholder Workshop #3 Newsletter, Presentation Materials, and Attendees.

Attachment I: PPT Meeting #5 Agenda, Meeting Minutes, and Attendees.

Attachment J: PPT Meeting #6 and Stakeholder Presentation #4 Agenda, Presentation Materials, and Meeting Minutes.

Attachment "A"

PPT Meeting #1



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

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US 395 (Port Drive to Feedville Road) Corridor Refinement Plan

Planning Project Team Meeting #1

City of Hermiston, City Hall
August 14, 2002 - 3 to 5 p.m.

Agenda:

- 3:00 – 3:05 p.m. Introductions
- 3:05 – 3:15 p.m. Project Overview (KAI)
 - Project Scope
 - Objectives
 - Deliverables
 - Schedule
- 3:15 – 3:25 p.m. Data Needs
 - Traffic Count Data (ODOT)
 - Crash Data (ODOT)
 - Approach Road Permit Data (ODOT)
 - Tax Lot Map Information (City)
 - Zoning Maps (City)
- 3:25 – 3:50 p.m. Stakeholder Meeting #1 Overview
 - Newsletter (KAI)
 - Stakeholder Names (City)
 - Meeting Location
 - Meeting Agenda
 - Presentation Critique
- 3:50 – 4:15 p.m. Project Planning Team Design Charette
- 4:15 – 4:25 p.m. Other Project Related Issues
- 4:25 – 4:40 p.m. Meeting Wrap-up
 - Overview of Generated Action Items
 - Deliverable Dates for Action Items
 - Next Meeting



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Meeting Minutes

**Hermiston, Oregon
Project Planning Team Meeting #1
August 14, 2002 City Hall, 3:00 p.m.**

Date: September 10, 2002

Project #: 5504.0

To: Project Planning Team

From: Marc Butorac, P.E., P.T.O.E.

Project: US 395 Corridor Refinement Plan (Port Drive to Feedville Road)

1. Marc Butorac opened the meeting, allowed the attendees to introduce themselves, and then presented the project background.
2. The following attendees were present at the meeting:
 - a. Marc Butorac, Kittelson & Associates, Inc.
 - b. Joe Bessman, Kittelson & Associates, Inc.
 - c. Doug Wright, ODOT
 - d. Tom Kuhlman, ODOT
 - e. George Ruby, ODOT
 - f. Teresa Penninger, ODOT
 - g. Ron Sivey, City of Hermiston
 - h. Ivan Anderholm, City of Hermiston
 - i. Pat Napolitano, City of Hermiston
 - j. Clint Spencer, City of Hermiston
3. The meeting began with a question regarding the distinction between county and city limits. Apparently, along the southern edge of the study limits the county has jurisdiction. This affects one house in particular located at the corner of Highway 395/Ott Road. It was suggested that the street in question might be given over to the city upon completion of the project. Clint and Teresa will look into this issue and report back to the group.
4. It was agreed that sending Umatilla County (Dennis Olson) a copy of the report would be appropriate.
5. Marc Butorac provided an overview of the stakeholder presentation. A black and white copy of the presentation is attached.

6. Tom Kuhlman provided the tube count data collected by ODOT and indicated that the results were inaccurate due to the malfunction of tubes. Only weekend data was collected. Marc asked that Monday through Friday data be recounted.
7. Crash data was brought up by Marc. Tom had obtained this data, and indicated that there were 17-recorded accidents within the study area between 1996 and 2000. Tom will call the sheriff's office to confirm that these recorded accidents represent all the information available at this time.
8. The tax lot map came up, and Clint indicated that the city has a copy of the complete AutoCAD tax lot map that was prepared during an earlier project. He will look into providing Marc with a copy of the electronic file.
9. Marc then discussed the upcoming community stakeholder's meeting
 - a. Three hundred people were notified of the meeting with fliers, and an ad was run in the local newspaper.
 - b. The meeting is at 6:00 Wednesday, August 14th, 2002, at the local community center.

Comments regarding the meeting:

 - i. Doug will give a five-minute overview of the Port Lane to NW Harding Avenue STIP Median Project.
 - ii. Access points for undeveloped sites should be shown in a different color
 - iii. Revise the breakdown of turning-movement counts.
 - iv. Discuss future conditions
 - v. A Question arose regarding addressing off-system circulation.
 - vi. Comments regarding increased percentage of trucks in the future were discussed.
 - vii. The width of the proposed median was brought up; difference in width along highway 395.
 - viii. Type of vegetation to go into the median was mentioned; decided that it should be a type that can be watered for a year then left to survive on its own.
 - ix. U-turn potential of various roads was mentioned, especially Ott Road.
 - x. Multi-use path for bicyclists/peds should be provided for in plan.
 - xi. Possible short-term access strategy that will be changed in the long-term.
 - xii. 1320' between access points must be provided for by highway access spacing requirements
 - xiii. 870' for minimum deviation in urban growth boundary.
10. Marc Butorac adjourned the meeting to prepare for the stakeholder's meeting at the community center.

The meeting minutes presented in this summary represent the essence of this meeting to the best of our understanding. If you feel these notes are incomplete or inaccurate, please note the corrections to Clint Spencer (City of Hermiston) within 48 hours of receipt.

Attachment “B”

Stakeholder Workshop #1

Sponsored by:



US 395 Corridor Refinement Plan

Port Drive to Feedville Road

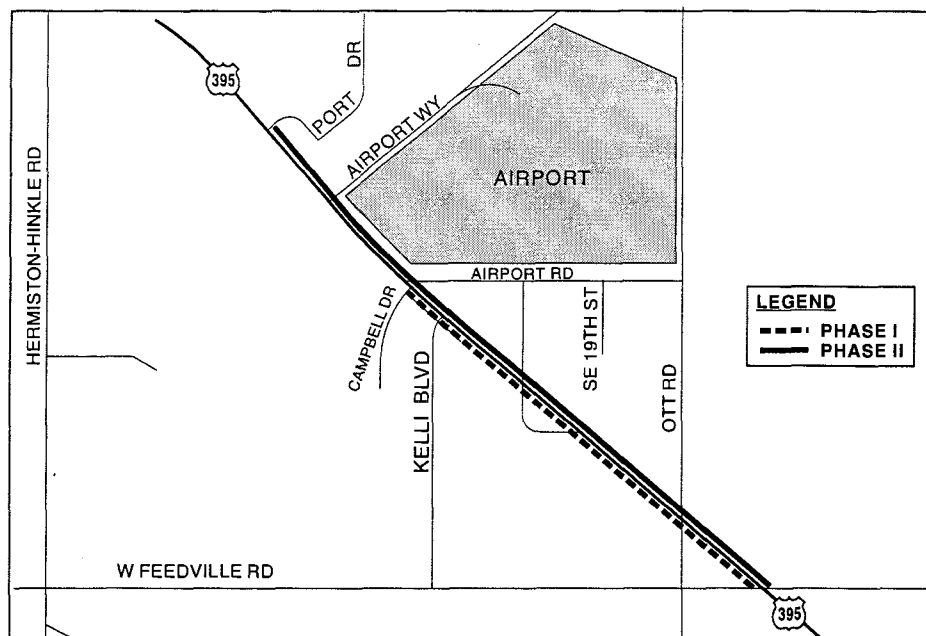
August 2002, Issue 1

What Is The US 395 Corridor Refinement Plan?

The Oregon Department of Transportation (ODOT) and the City of Hermiston are co-sponsoring a corridor study of US 395 between Port Drive and Feedville Road. This study, known as the US 395 Corridor Refinement Plan, is intended to serve as a long-term circulation and corridor preservation strategy. It will promote economic development based on quality development principles, while maintaining the integrity and safety of the US 395 corridor. The circulation plan will focus on developing a roadway network and highway access plan to serve the area bounded to the north by Port Drive, to the south by Feedville Road, to the west by Hermiston-Hinkle Road, and to the east by Ott Road.

The study will culminate in a short-term implementation plan that allows for the final design and construction of the Port Lane-NW Harding Avenue STIP Median Project between Kelli Boulevard and Feedville Road. The plan will also provide an update to the Functional Classification and Traffic Signal Plan, Pedestrian Facility Plan, Bicycle Facility Plan, and Street System Improvement Plan elements of the City of Hermiston Transportation System Plan (TSP).

Kittelson & Associates, Inc., a transportation planning/traffic engineering firm, has been hired by the City of Hermiston and ODOT to lead this six-month study.



Study Area Map

MEETINGS! . . . You're Invited!

Please join the project team for a series of stakeholder meetings. You can learn about the study and help us identify the existing transportation issues and problems you face within the study area.

The first meeting is:

DATE: August 14, 2002
TIME: 6:00 - 8:00 pm
PLACE: Hermiston Community Center
415 Highway 395 South

Subsequent Public Meetings will be held in September, October, and November of 2002

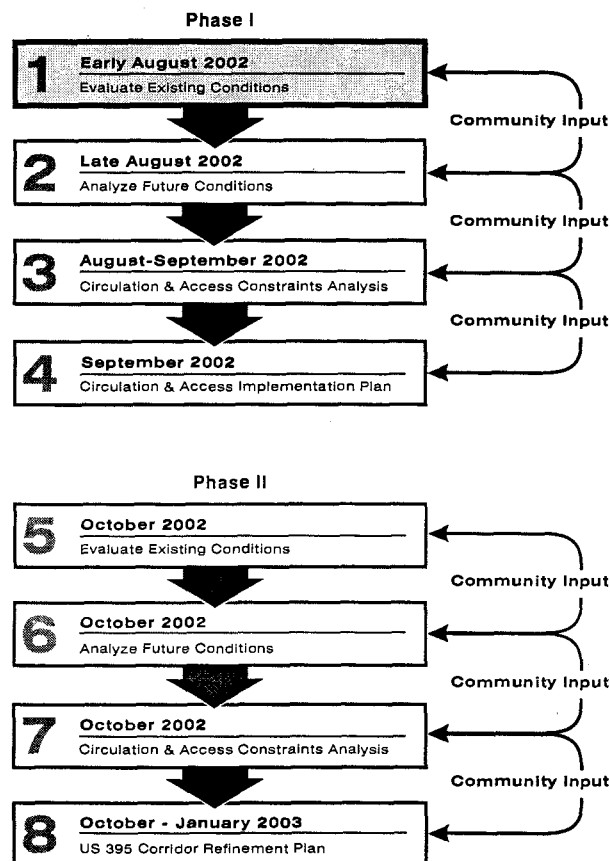
What is the Study Process?

There are several important steps in this corridor study process that will be divided into two distinct phases. The first phase will investigate the short-term Statewide Transportation Improvement Program (STIP) highway improvement project between Kelli Boulevard and Feedville Road. The second phase will investigate the long-term highway access and local circulation within the entire corridor study area between Port Road and Feedville Road. We are now in Phase I, Step 1, "Evaluate Existing Conditions," as shown in the flow chart below.

During the next two months, the project team will be gathering technical data about the existing and future transportation system (Step #2 "Analyze Future Conditions"). Project team members will also meet with citizens at the upcoming Stakeholder Meetings (see notice on reverse) to get your input about existing/future corridor issues and concerns, and about the community's long-term goals and vision for this specific segment of the US 395 Corridor. This information will provide the foundation for Steps #3, #4 ("Circulation and Access Constraints Analysis", "Circulation and Access Implementation Plan"). Following the completion of Phase I in late September, the Oregon Department of Transportation (ODOT) will complete their construction plans for installing the raised landscaped median with access breaks between Kelli Boulevard and Feedville Road.

The Phase II process will follow the same process as Phase I including "Evaluate Existing Conditions", "Analyze Future Conditions", "Circulation and Access Constraints Analysis", and the "US 395 Corridor Refinement Plan".

As shown in the Phase I & 2 flow charts, community input will be crucial to a successful corridor and refinement plan.



Who Will Be Involved in The Study?

The US 395 Corridor Refinement Planning Project Team will work closely with representatives from the City of Hermiston planning and engineering departments, the Oregon Department of Transportation, and the various Stakeholders located within the study area. All three of these groups will review and comment on the various alternatives developed and other pertinent study information.

Call or Write for More Information:

Clint Spencer, CSpencer@hermiston.or.us
Pat Napolitano, PNapolitano@hermiston.or.us
City Hall ■ 180 NE 2nd Street ■ Hermiston, OR 97838
Phone (541) 567-5521

How Can I Participate in The Study?

Your input and participation will be critical to the success of this corridor study. You regularly travel through the study area and have first-hand knowledge that you can share with the project team. There are a number of ways for you to contribute and get involved. These include:

- ☐ Attend the Stakeholder Meetings.
- ☐ Get on the mailing list and receive newsletters and meeting notices.
- ☐ Watch the newspaper for information.
- ☐ Attend project team presentations to the City Council.
- ☐ Write, email, or phone the project team.

Can't Make it to the First Public Meeting?

The project team needs your help in identifying key transportation issues within the study area. Please fill out this response form and mail it to the project team.

1. Do you (check one): ☐ live ☐ work ☐ own property ☐ own a business along the route?

If so, where specifically? _____

2. What do you feel are the most significant transportation problems within the study area? 3. What improvements would you like to see along the corridor?

A. Vehicular Issues _____

B. Pedestrian/Bicycle Issues _____

C. Landscaping/Aesthetic Issues _____

Please list your name and address so we can mail future newsletters and meeting notices to you.

NAME _____

ADDRESS _____

CITY _____

STATE _____

ZIP _____

*Return to Clint Spencer or Pat Napolitano
City Hall, 180 NE 2nd Street, Hermiston, OR 97838*





US 395 Corridor Refinement Plan

Port Drive to Feedville Road

STAKEHOLDER WORKSHOP #1

August 14, 2002

Please Sign In:

NAME	ADDRESS	CITY	STATE	ZIP
Wayne & Janice Eppens	34629 Stage Gulch Road	STANFIELD	OR.	97875
Ellen Eckenburger	31895 Feedville Rd	Stanfield		97875
Teresa Penninger	3012 Island Ave	LA GRANDE	OR	97850
DOUG WRIGHT	3012 ISLAND AVE	LA GRANDE	OR	97850
SUSAN DAGGETT	Box 879	Umatilla		97882
Jay Mason	2000 E Airport	Hermiston		97838
DWAYNE WHITE	1020 SE 9TH	HERMISTON		97838
SHABLA	1845 S. Hwy 395	HERMISTON		97838
Jaceline Myers	16 Albra Dr.	Hermiston		97838
Larry Hanson	2110 S. Hwy 395	"		"
RAY THOMAS	2410 SE KELCI BLVD	HERMISTON		97838
Bob Severnson	945 W. Ridgeway	Hermiston		97838
Louis Hanson	2110 S. Hwy 395	HERMISTON		97838
Chris Hankley	80788 Cooney Ln	"		97838
Paul Eay	POB 171	Hermiston		97838
Joe Hodge	1105 S. 1st #B-12	Hermiston		97838

US Highway 395 Corridor Refinement Plan (Port Drive to Feedville Rd.)

Stakeholder Meeting #1
August 14, 2002



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

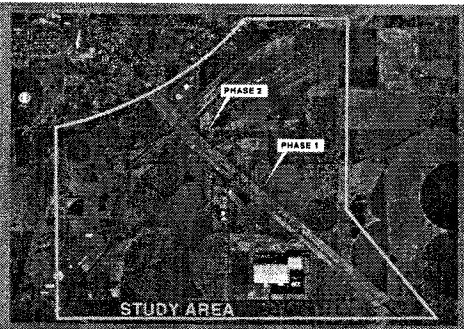
Meeting Overview

- Project Study Area (Phase 1 and 2)
- Project Background
- Project Goals and Objectives
- Project Schedule
- Design Charette
- Summary of Design Charette Findings
- Next Steps



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Study Area



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Background

- Port Lane-NW Harding Avenue STIP Median Project (ODOT)
- Existing Conditions
 - Access Locations
 - Daily and Peak Traffic Volumes
 - Crash Data
- Future Considerations
- Proposed Median Configuration
- Phase 1 Objectives
- Phase 2 Objectives
- TSP Amendments



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Operational and Safety Facts

- US 395 carries approximately 7,888 vehicles between 6 a.m. and 6 p.m. (13% trucks)
- 820 vehicles enter/exit US 395 within the study area between 6 a.m. and 6 p.m. (56% trucks)
- 17 reported crashes have occurred within the study area over the past 5 years



US 395 Corridor Refinement Plan
Put Drive to Feed the Road

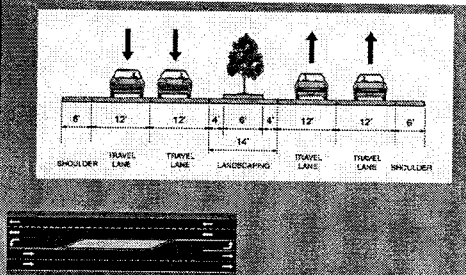
Future Considerations

- Continued Increase in US 395 Traffic Volumes
- Degradation of Accessibility to Adjacent Land Use Due to Increased Traffic
- Provision of Certainty for Existing and Future Development
- Provision of Frontage/Backage Roads to Facilitate Circulation to Full-Access/Signalized Intersections



US 395 Corridor Refinement Plan
Put Drive to Feed the Road

Proposed Median Configuration



US 395 Corridor Refinement Plan
Put Drive to Feed the Road

Phase 1 Objectives

- Identification of Median Openings on US 395 between Kelli Boulevard and Feedville Road
- Determination of Short-Term Geometric and Operational Improvements to Facilitate Truck Turning Movements on/off US 395 and Potential U-turns
- Long-Term Implementation Plan for Local Roads and Access Points along US 395



US 395 Corridor Refinement Plan
Put Drive to Feed the Road

Phase 2 Objectives

- Identification of Short- and Long-term Access Locations and Traffic Control Improvements on US 395 Between Port Drive and Feedville Road
- Long-term Implementation Plan for Collector and Local Streets within the Study Area
- Amendments to the Functional Classification and Traffic Signal Plan, Pedestrian Facility Plan, Bicycle Facility Plan, Street System Improvement Plan Elements of the Hemiston TSP



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Goals

- Goal 1: Business Community
 - Enhance the integrity and vitality of the local business community
 - Objectives
- Goal 2: Access Efficiency
 - Maintain safe and efficient access to adjacent properties and public streets along the corridor
 - Objectives
- Goal 3: Aesthetics and Landscaping
 - Enhance the environment, attractiveness, and appeal of the area through landscaping and other aesthetic improvements
 - Objectives



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Goals

- Goal 4: Geometry
 - Minimize negative impacts to businesses through proper and efficient geometric design
 - Objectives
- Goal 5: Pedestrian and Bicycle Environment
 - Provide for an interconnected system of pedestrian and bicycle facilities to serve short-distance and recreational trips
 - Objectives
- Goal 6: Vehicular Travel
 - Maintain a safe and efficient travel way for local and regional travel along the corridor
 - Objectives



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Goals

- Goal 7: Capacity
 - Provide a transportation system that has sufficient capacity to serve user needs
 - Objectives
- Goal 8: Safety
 - Ensure a transportation corridor that maintains adequate levels of safety for all users
 - Objectives



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Schedule

TASK	JUL	AUG	SEP	OCT	NOV	DEC	JAN
1. Project Acknowledgment							
2. Public Involvement							
3. Existing Conditions Analysis							
4. Future Conditions Analysis							
5. Circulation and Access Opportunities and Constraints Analysis							
6. Short-Term Circulation and Access Recommendations							
7. Project Administration							
8. Public Involvement							
9. Circulation and Access Opportunities and Constraints Analysis							
10. US 395 Short-Term to Feasible Road Recommendation Plan							

100% = Submittal Meeting
 75% = Project Planning Team Meeting
 50% = Technical Memorandum
 25% = Draft
 10% = Refinement Plan
 5% = Joint Planning Commission/City Council Workshop



US 395 Corridor Refinement Plan
Port Drive to Teedville Road

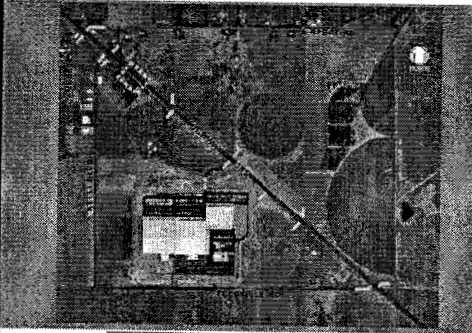
Design Charette

- Identification of Potential Future Development Plans
- Identification of Long-term Circulation Roadways and Highway Access Points
- Determination of Full Access Signalized Intersection Locations
- Identification of Future Pedestrian and Bicycle Connections



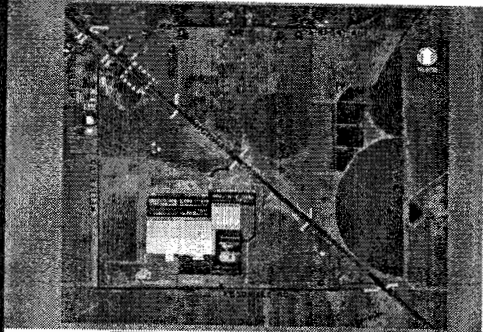
US 395 Corridor Refinement Plan
Port Drive to Teedville Road

Existing Access Locations



US 395 Corridor Refinement Plan
Port Drive to Teedville Road

Existing Access Locations



US 395 Corridor Refinement Plan
Port Drive to Teedville Road

Next Steps

- Preparation of Technical Memo #1
 - August 26th
- Stakeholder Meeting #2
 - September 4th
- Preparation of Technical Memo #2
 - September 16th
- Finalization of STIP Construction Plans
 - October 8th
- Initialization of Phase 2
 - October 14th



US 395 Corridor Refinement Plan
Port Drive to Leadville Road

Attachment "C"

PPT Meeting #2



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

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US 395 (Port Drive to Feedville Road) Corridor Refinement Plan

Planning Project Team Meeting #2

City of Hermiston, City Hall
September 11, 2002 - 3 to 5 p.m.

Agenda:

- | | |
|------------------|---|
| 3:00 – 3:15 p.m. | Administrative Session (KAI) <ul style="list-style-type: none">- Sign-in Sheet- Review Meeting Agenda- Review Previous Meeting Minutes and Action Items- Review Schedule |
| 3:15 – 3:25 p.m. | Review of Technical Memorandum #1 <ul style="list-style-type: none">- Existing Conditions Summary- Future Conditions Summary- Circulation and Access Opportunities & Constraints Analysis |
| 3:25 – 3:50 p.m. | Stakeholder Meeting #2 Overview <ul style="list-style-type: none">- Meeting Announcement- Meeting Location- Meeting Agenda- Presentation Critique |
| 3:50 – 4:15 p.m. | Project Planning Team Refinement Charette |
| 4:15 – 4:25 p.m. | Preliminary Short-Term Implementation Plan <ul style="list-style-type: none">- Median Locations & Design- Technical Data |
| 4:25 – 4:40 p.m. | Meeting Wrap-up <ul style="list-style-type: none">- Overview of Generated Action Items- Deliverable Dates for Action Items- Next Meeting |

2/11/02 PLANNING PROJECT MEETING #2

SIGN IN SHEET

DOUG WRIGHT	ODOT LA GRANDE	541-963-1362
TERESA PENNINGER	ODOT - LA GRANDE	541-963-1344
PATRICK KNIGHT	ODOT - La Grande	541 963- 1345
CLINT SPENCER	HERMISTON	541 567-5521
George L. Ruby	ODOT Dist. 12	(541) 276-1241
IVAN ANDERHOLM	HERMISTON	541 567-5521
MATT HUGHART	KITTELSON & ASSOCIATES	503 228-5230
MARK BUTORAC	✓	✓



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8169

Meeting Minutes

SUBJECT: US 395 Corridor Refinement Plan
Planning Project Team Meeting #2

MEETING DATE: September 11, 2002, 3:00 PM, City of Hermiston Council Chambers

ATTENDEES: City of Hermiston
Clint Spencer
Ivan Anderholm
Kittelison & Associates, Inc.
Marc Butorac
Matt Hughart
ODOT
Teresa Penninger
Doug Wright
Patrick Knight
George L. Ruby

DISTRIBUTION: Meeting Attendees
Ed Brookshier, City of Hermiston
Pat Napolitano, City of Hermiston
Tom Kuhlman, ODOT

-
- 1.0 Introductions** – Marc Butorac, Kittelson & Associates, Inc.
Introductions were made, the sign-in sheet was passed around, and copies of the previous meeting minutes were distributed.
- 2.0 Review of Previous Meeting Minutes** – Marc Butorac, Kittelson & Associates, Inc.
The Planning Project Team was asked to review the meeting minutes from the August 14, 2002 meeting.
- 2.1** Marc Butorac mentioned that the previous Stakeholder Meeting went well. Teresa Penninger asked how many City Council members were in attendance. Marc thought there were at least two members. Teresa thought an effort should be made to invite someone from Umatilla County to the next meeting.
- 3.0 Review of Tech Memo #1** – Marc Butorac, Kittelson & Associates, Inc.
- 3.1 General Overview**
- 3.1.1** Tech Memo #1 is a working draft that will be viewed only by the Planning Project Team for now.
- 3.1.2** The Planning Project Team's formal comments on this draft are requested by no later than September 20th.

3.2 Existing Conditions Review

- 3.2.1** The tax lot information and mapping data are not in exact alignment as shown in Figure 3. It would be advantageous if the mapping could be refined further. Kittelson staff will work with City staff to see if a more accurate map could be obtained.
- 3.2.2** Figure 5 illustrates the known public and private access locations along US 395.
 - 3.2.2.1** George Ruby noted that P, Q, and R are legal reservations of access. P and an unmarked access located between P and M are currently being indentured and will shift more to the north.
 - 3.2.2.2** Marc Butorac stated that a third column will be added to Figure 5 showing the current legal status of each access location.
 - 3.2.2.3** Teresa Penninger noted that the US 395 North Corridor Plan already documented each of the reservations of access.
 - 3.2.2.4** Marc stated that the consultant team will consult the US 395 North Corridor Plan and work with George Ruby to refine Figure 5.
- 3.2.3** Traffic Data Findings
 - 3.2.3.1** Marc Butorac noted that the hourly profiles shown in Figures 10, 11, and 12 are unique in the sense that they don't have a distinctive a.m. and midday peak. Instead, traffic volumes climb steadily and ultimately peak around 3:30 to 4:00 p.m.
 - 3.2.3.2** George Ruby noted that the volumes in each direction are equal.
 - 3.2.3.3** Marc noted that there are approximately 6,300 vehicles entering and exiting the corridor over the course of a 12-hour period (approximate daily business hours).
 - 3.2.3.4** Average travel speeds are around 57 mph while 85th percentile speeds are higher.
 - 3.2.3.5** Right-turn deceleration lanes on US 395 (where provided) are substandard.
 - 3.2.3.6** Trucks leaving the Wal-Mart driveway are presently performing two-stage gap acceptance maneuvers on US 395. Marc mentioned that this should be taken into consideration when planning for a median.
- 3.2.4** Marc Butorac asked the Planning Project Team if they would like to see any additional data.
 - 3.2.4.1** George Ruby asked if there was any consideration given to bicycle and pedestrian movements and the airport. Marc Butorac responded that there are no real bike/ped generators on the corridor today but that it will be something to think about in Phase 2.

3.3 Future Conditions Analysis Review

- 3.3.1** Background traffic growth on US 395 was found to be on the order of approximately 2% per year.
- 3.3.2** Development of all vacant lands within the study area boundary could result in approximately 7,000 – 8,000 weekday p.m. peak hour trips. Marc mentioned that this seems unrealistic. The Planning Project Team was asked if they had any ideas on how to further refine this forecast to better reflect realistic development patterns.
 - 3.3.2.1** George Ruby mentioned that due to large number of industrial businesses, normal weekday p.m. peak hour trip patterns are not present – more workers are on shifts instead of the traditional 8-5 business hours.
 - 3.3.2.2** Clint Spencer thought the area would see similar development patterns to what is out there today...industrial on the west side of US 395 and commercial on the east side. Non-local businesses will likely constitute the bulk of future business expansion.

- 3.3.3 Marc Butorac mentioned that the consultant team will work to further refine the vacant lands forecast and present them back to the Planning Project Team for their review and further refinement.

3.4 Alternatives Analysis Review

- 3.4.1 Marc Butorac mentioned that different elements of the Alternatives could be interchanged.

- 3.4.1.1 Review of Alternative #1

- 3.4.1.1.1 George Ruby asked why we would want to restrict left-turns at some of the driveways. Marc responded that this is a long-term look at the highway and that someday the traffic volumes on US 395 could be high enough that left-turns would become more difficult or unsafe, especially for large trucks.

- 3.4.1.2 Review of Alternative #2 – no comments from the Planning Project Team

- 3.4.1.3 Review of Alternative #3 - no comments from the Planning Project Team

- 3.4.1.4 Review of Alternative #4 - no comments from the Planning Project Team

- 3.4.1.5 Review of Alternative #5 - no comments from the Planning Project Team

- 3.4.1.6 Review of Alternative #6 - no comments from the Planning Project Team

- 3.4.1.7 Review of Alternative #7 - no comments from the Planning Project Team

- 3.4.2 Marc Butorac presented a preliminary short-term median implementation plan. No comments from the Planning Project Team.

- 3.4.3 Marc Butorac presented a conceptual illustration of the proposed median design.

- 3.4.3.1 Ivan Anderholm mentioned that the City desires a high canopy tree for the median along with low-lying ground cover.

- 3.4.3.2 Doug Wright mentioned that OTAK has been hired to design the landscape and irrigation elements of the median. Carrie Langford (503) 699-4586 is the project manager.

- 3.4.4 Marc Butorac asked if the Planning Project Team noticed any fatal flaws in any of the alternatives.

- 3.4.4.1 George Ruby mentioned that the District would like to see the Hermiston Foods access remain a full access driveway.

4 Stakeholder Meeting Presentation Critique

- 4.1 The Planning Project Team was given a brief overview of the upcoming Stakeholder Meeting presentation. There were no comments from the Planning Project Team.

5 Meeting Wrap Up

- 5.1.1 Marc Butorac asked if the upcoming project schedule could be revised to reflect the current state of the project's progress.

- 5.1.1.1 Doug Wright thought it wasn't necessary to meet before October 8, 2002.

- 5.1.2 Marc Butorac proposed the following revised schedule:

- 5.1.2.1 Receive Planning Project Team comments by September 20th.

- 5.1.2.2 Delivery of final Tech Memo #1 on September 27th.

- 5.1.2.3 October 7th would be the next Planning Project Team meeting. At the request of several Planning Project Team members, this meeting will be held in the morning at 10:00 a.m. at the City of Hermiston Council Chambers.

5.1.2.4 Stakeholder Meeting #3 is scheduled for October 21, 2002.

5.1.2.4.1 Wrap up of Phase 1

5.1.2.4.2 Kick off of Phase 2

END OF MEETING MINUTES

Attachment “D”

Stakeholder Workshop #2



US 395 Corridor Refinement Plan

Port Drive to Feedville Road

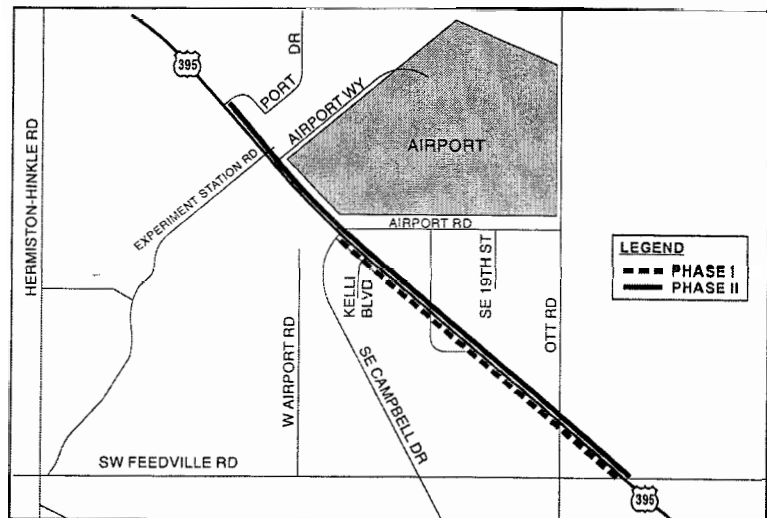
September 2002
ISSUE # 2

STAKEHOLDER WORKSHOP AGENDA

The second Stakeholder Workshop for the US 395 Corridor Refinement Plan will focus on the presentation and discussion of the existing and future transportation conditions of the corridor. In addition, access and circulation alternatives for the study corridor developed by the planning project team will be presented for discussion.

Similar to the first Stakeholder Workshop held on August 14th, there will be opportunity to comment on and discuss the project's progress to date, including:

- Project goals developed by the planning project team.
- Summary of the existing and future years 2005/2025 transportation conditions.
- Access and circulation alternatives.



MEETING TIME AND LOCATION

DATE: September 11, 2002
TIME: 6:00 - 8:00 PM
PLACE: City of Hermiston Council Chambers
180 NE 2nd Street
Hermiston, Oregon 97838

Call or Write for More Information

Clint Spencer: CSpencer@hermiston.or.us
Pat Napolitano: PNapolitano@hermiston.or.us
Phone: (541) 567-5521

YOU ARE INVITED

To attend the second Stakeholder Workshop for the US 395 Corridor Refinement Plan.

Please plan on attending this informative workshop on the future of
transportation development in the US Highway 395 Corridor.

Your input is key to the success of this project.

September 11, 2002

6:00 - 8:00 PM

City of Hermiston Council Chambers

180 NE 2nd Street

Hermiston, Oregon 97838



City Hall 180 NE 2nd Street
Hermiston, OR 97838



US 395 Corridor Refinement Plan

Port Drive to Feedville Road

STAKEHOLDER WORKSHOP #2

September 11, 2002

Please Sign In:

NAME	ADDRESS	CITY	STATE	ZIP
Larry Hanson	2110 S. Hwy 395	Herm	OR	97838
Tom Able	1845 S. Hwy 395	Herm.	OR	97838
Ray Thomas	2410 SE Kelli Blvd	Herm	OR	97838
Joe Hodge	1440 SE Feedville	Herm	OR	97838
Lois Pilsbury	33927 Riverview	Herm	OR	97838

US Highway 395 Corridor Refinement Plan (Port Drive to Feedville Road)

Stakeholder Meeting #2
September 11, 2002



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

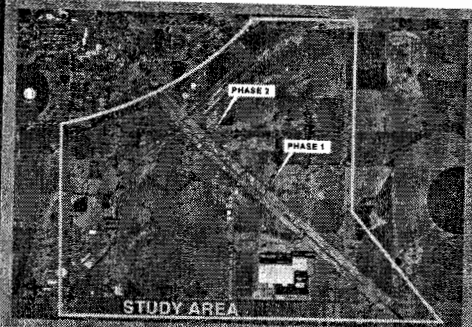
Meeting Overview

- Project Background
- Existing Conditions Overview
- Future Conditions Overview
- Long-Term Highway Access & Local Circulation Plan Alternatives
- Refinement Charette
- Summary of Refinement Charette
- Next Steps



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Background



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Phase 1 Objectives

- Identification of Median Openings on US 395 between Kelli Boulevard and Feedville Road
- Determination of Short-Term Geometric and Operational Improvements to Facilitate Truck Turning Movements on/off US 395 and Potential U-turn
- Long-Term Implementation Plan for Local Roads and Access Points along US 395



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Phase 2 Objectives

- Identification of Short- and Long-term Median Opening of Traffic Control Improvements on US 395 Between Port Drive and Feedville Road
- Long-term Implementation Plan for Collector and Local Streets within the Study Area
- Amendments to the Functional Classification and Traffic Signal Plan, Pedestrian Facility Plan, Bicycle Facility Plan, Street System Improvement Plan Elements of the Hermiston TSP



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Schedule

TASK	JUL	AUG	SEP	OCT	NOV	DEC	JAN
1. Project Administration							
2. Public Involvement							
3. Planning Conditions Analysis							
4. Public Consultation Analysis							
5. Operational and Access Opportunities and Constraints Analysis							
6. Short-Term Operational and Access Improvements							
7. Project Administration							
8. Public Involvement							
9. Operational and Access Opportunities and Constraints Analysis							
10. US 395 Port Drive to Feedville Road Refinement Plan							

Stakeholder Meeting
 Project Planning Team Meeting
 Technical Memorandum
 Draft
 Refinement Plan
 Joint Planning Commission City Council Workshop



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Existing Conditions Summary

- US 395 carries approximately 9,600 vehicles per day (20% trucks)
- 6,300 vehicles (960 trucks) enter/exit US 395 within the study area between 6 a.m. and 6 p.m.
- 17 crashes have occurred within the study area over the past 5 years
- Average Travel Speed is 57 mph (85th percentile speed is 64 mph)



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Future Conditions Summary

- US 395 is Forecasted to carry approximately 15,000 vehicles per day (20% trucks)
- 4,000 vehicles per day are forecasted to access US 395 within the study area (20% trucks)



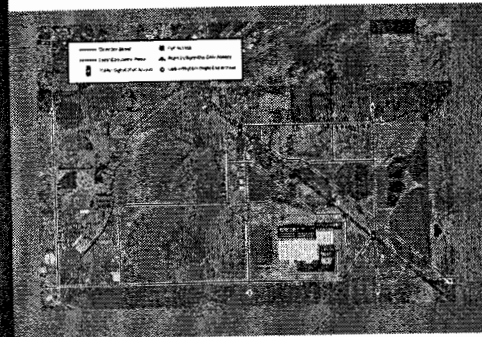
US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Future Considerations

- Continued Increase in US 395 Traffic Volumes
- Degradation of Accessibility to Adjacent Land Uses Due to Increased Traffic
- Provision of Frontage/Backage Roads to Facilitate Circulation to Full-Access/Signalized Intersections
- Provision of Certainty for Existing and Future Development

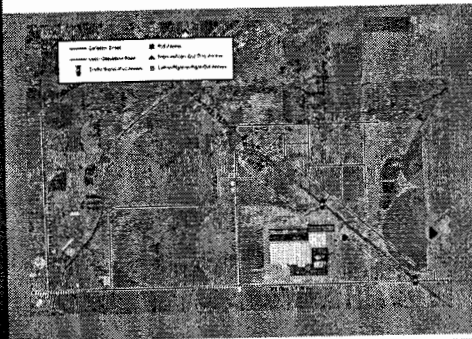
US 395 Corridor Refinement Plan
Port Drive to Freshville Road

Access and Circulation Alternative #1



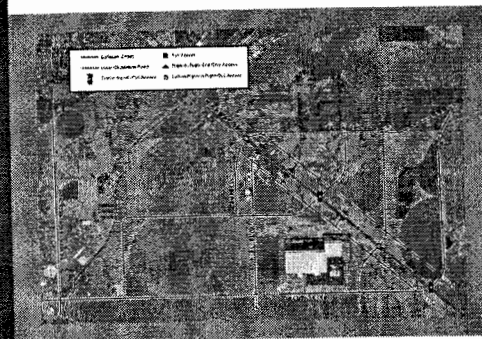
US 395 Corridor Refinement Plan
Port Drive to Freshville Road

Access and Circulation Alternative #2

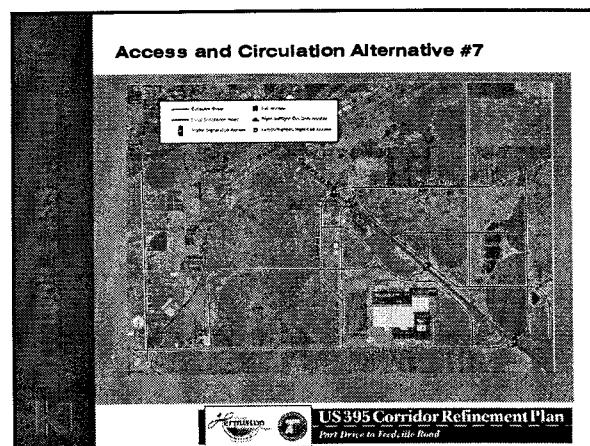
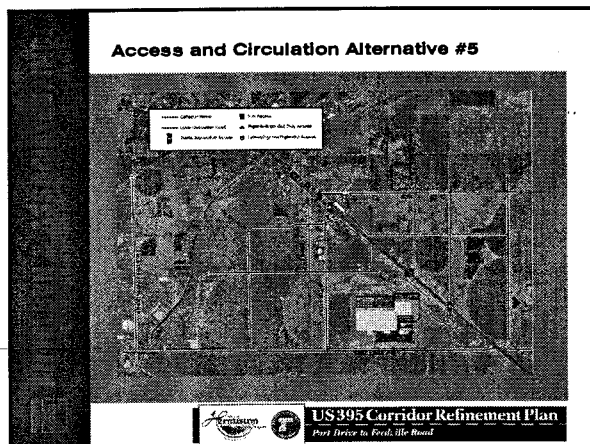
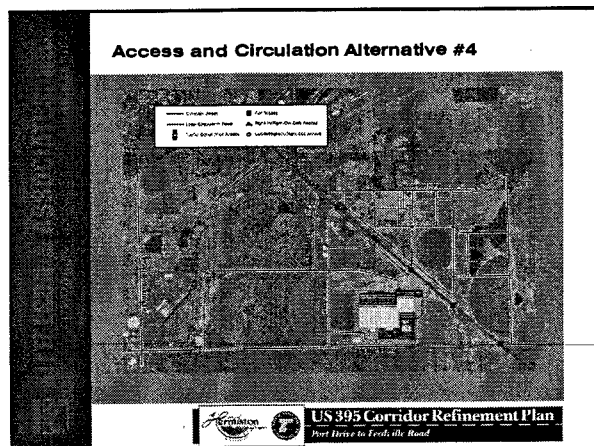


US 395 Corridor Refinement Plan
Port Drive to Freshville Road

Access and Circulation Alternative #3



US 395 Corridor Refinement Plan
Port Drive to Freshville Road



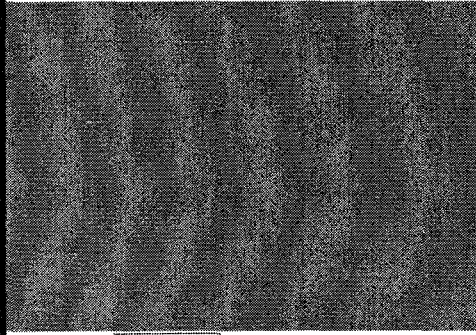
Refinement Charette

- Determine Possible Fatal Flaws of Each Long-Term Highway Access and Circulation Plan Alternative
- Identify Further Refinements to Each Alternative
- Rank Each Alternative



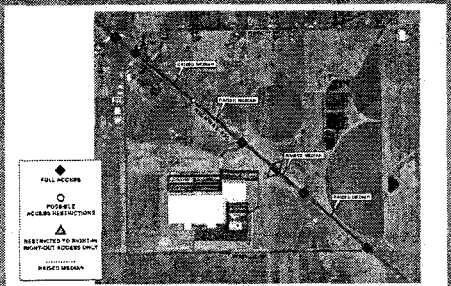
US 395 Corridor Refinement Plan
Part Drive to Feed the Road

Summarize Refinement Charette Findings



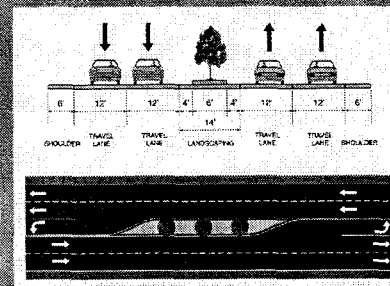
US 395 Corridor Refinement Plan
Part Drive to Feed the Road

Preliminary Short-Term Implementation Plan



US 395 Corridor Refinement Plan
Part Drive to Feed the Road

Proposed Median Configuration



US 395 Corridor Refinement Plan
Part Drive to Feed the Road

Next Steps

- Preparation of Technical Memo #2
 - September 27th
- Finalization of STIP Construction Plans
 - October 8th
- Initialization of Phase 2
 - October 14th
- Stakeholder Meeting #3 (Phase 2)
 - October 21st



US 395 Corridor Refinement Plan
Just Drive to Feels like Road

Attachment "E"

PPT Meeting #3



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8169

US 395 (Port Drive to Feedville Road) Corridor Refinement Plan

Planning Project Team Meeting #3

City of Hermiston, City Hall
October 14, 2002 – 3:00 to 4:30 p.m.

Agenda:

- 3:00 – 3:10 p.m. Administrative Session (KAI)
- Sign-in Sheet
 - Review Meeting Agenda
 - Review Previous Meeting Minutes and Action Items
- 3:10 – 3:20 p.m. Finalize Technical Memorandum #1
- Final Comments
- 3:20 – 3:40 p.m. Review Preliminary Design Plans (Doug Wright)
- Median Elements
 - Landscape Elements
- 3:40 – 4:00 p.m. Overview of Technical Memorandum #2 Draft
- Final Short-Term Implementation Plan
 - Preferred Circulation Alternative
 - Roadway Design Standards
- 4:00 – 4:15 p.m. Phase 2 Overview
- Schedule Review
 - Action Items
 - Data Needs
- 4:15 – 4:30 p.m. Meeting Wrap-up
- Review Generated Action Items
 - Set Deliverable Dates for Action Items
 - Next Meeting

Optional...

- 5:15 – 7:00 p.m. City of Hermiston City Council Work Session

10/14/02 US 395 PLANNING PROJECT TEAM MEETING #3

SIGN IN SHEET

CLINT SPENCER	CITY OF HERMISTON
PATRICK KNIGHT	ODOT
George Ruby	ODOT DIST. 12 - Pendleton
TERESA PENNINGER	ODOT REGION 5 - LA GRANDE
DOUG WRIBBIT	ODOT REGION 5 LA GRANDE
TOM Kuhlman	ODOT REGION 5 TRAFFIC
MARC BUCORAC	Kittelson & Associates, Inc.
MATT HUGHART	KITTelson



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8169

Meeting Minutes

SUBJECT: US 395 Corridor Refinement Plan
Planning Project Team Meeting #3

MEETING DATE: October 14, 2002, 3:00 PM, City of Hermiston Council Chambers

ATTENDEES: City of Hermiston
Clint Spencer
Ivan Anderholm
Pat Napolitano
Kittelison & Associates, Inc.
Marc Butorac
Matt Hughart
ODOT
Teresa Penninger
Doug Wright
Patrick Knight
George L. Ruby
Tom Kuhlman

DISTRIBUTION: Meeting Attendees
Ed Brookshier, City of Hermiston

1.0 Introductions – Marc Butorac, Kittelson & Associates, Inc.

2.0 Review of Previous Meeting Minutes – Marc Butorac, Kittelson & Associates, Inc.

2.1 The Planning Project Team was asked to review the meeting minutes from the September 11, 2002 meeting. There were no comments.

3.0 Review of the Revised Tech Memo #1 – Marc Butorac, Kittelson & Associates, Inc.

3.1 General Overview

- 3.1.1** Revisions were made to Figure 5 showing all of the public, private, and reservations of access along the study corridor.
- 3.1.2** The advantages/disadvantages were added to the seven alternatives based on comments provided by members of the PPT, the City of Hermiston staff, and the Stakeholders.
- 3.1.3** Clint Spencer stated that based on the low Stakeholder turnout, the City posted all of the alternatives on the City website and ran an article in the Hermiston newspaper to try and obtain more feedback. There were no further responses despite these efforts.
- 3.1.4** George Ruby asked if Penny Avenue between Campbell Drive and Kelli Blvd exists today.
 - 3.1.4.1** Clint Spencer responded that there is right-of-way for this alignment.
- 3.1.5** George Ruby asked if the 4,000 weekday p.m. peak hour trip estimate was correct.

- 3.1.5.1 Marc Butorac responded that this figure reflects an assumed build-out of the study area based on current development patterns.
- 3.1.6 Teresa Penninger mentioned that she had TPAU review the memo and has a set of comments from Harlan Nale.
 - 3.1.6.1 Marc Butorac responded that Kittelson would review TPAU's comments and incorporate them into Tech Memo #1 if necessary.
- 3.1.7 Patrick Knight asked about the multi-use path and why it wasn't covered in greater detail within Tech Memo #1.
 - 3.1.7.1 Marc Butorac responded that ped/bike elements are an important element of the corridor refinement plan, but that they would be covered in greater detail within Phase 2 of the project.

4.0 Review of the Preliminary Design Plans – Doug Wright – ODOT

4.1 General Overview

- 4.1.1 Doug Wright stated that these are preliminary copies of the design plans. OTAK is finishing up the landscape specifications this week. Doug estimated that the whole set of plans would be finished by the end of the week.
- 4.1.2 The official name of the median project is "US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec." The name change reflects a downsizing of the project from the original scope.
 - 4.1.2.1 Marc Butorac mentioned that the new name would be incorporated into Tech Memo #1.
- 4.1.3 Doug Wright called everyone's attention to Sheet #2. ODOT would like to extend the landscaping to the portion of the median illustrated on the bottom section. To do this, they will be asking the City of Hermiston to extend the irrigation line.
- 4.1.4 Pat Napolitano requested that ODOT add stationing and labeling to the plans.
- 4.1.5 Marc Butorac asked where the storage distances were obtained as shown on the plans. They did not match up with the storage distances as detailed in the draft version of Tech Memo #1.
 - 4.1.5.1 Doug Wright thought that the designers were being conservative in their storage estimates.
 - 4.1.5.2 Marc Butorac asked if Tracy Harris had received a copy of Tech Memo #1 from members of the PPT. It was determined that Tracy had not received a copy of Tech Memo #1, hence the discrepancies in the storage lengths.
 - 4.1.5.3 Marc Butorac stated that we would get a copy of Tech Memo #1 to Tracy and that Kittelson would work to refine the storage lengths.
- 4.1.6 Marc Butorac mentioned that the median design at the Wal-Mart Distribution Center driveway did not accommodate a northbound acceleration lane.
 - 4.1.6.1 Tom Kuhlman replied that Oregon law prohibits the use of center turn lanes as acceleration lanes.

- 4.1.7 The project team had a long discussion regarding various elements of the median design. Kittelson would provide comments on these design issues to Doug Wright, Pat Napolitano, and Tracy Harris.
- 4.1.8 Doug Wright mentioned that the median project has approximately \$80,000 for ped/bicycle elements.
 - 4.1.8.1 The project team asked if any left-over median design money could be transferred to the ped/bike fund to possibly extend to multi-use recreation path in Stanfield up to Feedville Road.
 - 4.1.8.2 Doug Wright would check into this possibility, but stressed that there might not be enough time to perform the design work given that the final design plans are due in December.

5.0 Tech Memo #2 Overview – Marc Butorac, Kittelson & Associates, Inc.

5.1 General Overview

- 5.1.1 Marc Butorac mentioned that Kittelson staff took all of the initial PPT, Stakeholder, and City of Hermiston comments on the seven Phase 1 transportation alternatives and developed a DRAFT Preferred Circulation and Access Plan. Comments were solicited from members of the PPT.
- 5.1.2 Tom Kuhlman mentioned that the preferred plan looks good. He thought that a signal at Ott Road might make sense.
- 5.1.3 Pat Napolitano mentioned that all land south of Feedville Road might be owned by Union Pacific and that we should not assume that this land would be available for future roadway extensions.
- 5.1.4 Marc Butorac requested that all members of the PPT take a few days to examine the DRAFT preferred circulation plan and provide comments back to Kittelson staff by the October 21, 2002.

6.0 Remaining Project Schedule – Marc Butorac, Kittelson & Associates, Inc.

6.1 Schedule Overview – Copies of a proposed project schedule were passed out to members of the PPT.

- 6.1.1 Marc Butorac mentioned that the next PPT meeting and Stakeholder meeting would be held on October 28th. Marc thought it would be a good idea if we could bet Tracy Harris at the PPT meeting.
 - 6.1.1.1 Doug Wright mentioned that he would look into this possibility.
- 6.1.2 Clint Spencer asked if Stakeholder Meeting #4 was really necessary.
 - 6.1.2.1 Marc Butorac thought it would be a good idea if we held off making this decision until after Stakeholder Meeting #3 on the 28th.

7.0 Meeting Wrap Up – Marc Butorac, Kittelson & Associates, Inc.

7.1 Action Items

- 7.1.1 Kittelson to incorporate TPAU's comments into Tech Memo #1 and redistribute to the PPT for final comments.

- 7.1.2 Kittelson to work with Tracy Harris regarding the median storage lengths and design widths.
- 7.1.3 Doug Wright to check on the possibility of transferring some of the left-over median design funds to the ped/bike section of the median project.
- 7.1.4 PPT members to provide comments to Kittelson staff on the DRAFT Preferred Circulation and Access Plan by October 21, 2002.

END OF MEETING MINUTES

Attachment "F"

City Council Work Session

US Highway 395 Corridor Refinement Plan (Port Drive to Feedville Road)

City Council Work Session
October 14, 2002



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

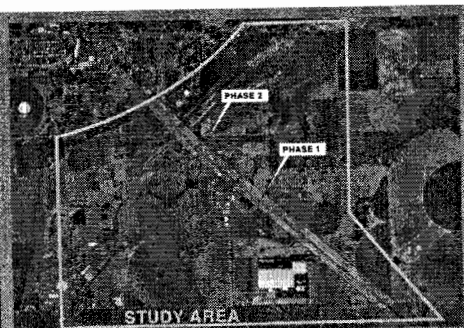
Meeting Overview

- Project Background
- Existing Conditions Overview
- Future Conditions Overview
- Long-Term Highway Access & Local Circulation Plan Alternatives
- Next Steps



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Background



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Phase 1 Objectives

- Identification of Median Openings on US 395 between Kelli Boulevard and Feedville Road
- Determination of Short-Term Geometric and Operational Improvements to Facilitate Truck Turning Movements on/off US 395 and Potential U-turn
- Long-Term Implementation Plan for Local Roads and Access Points along US 395



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

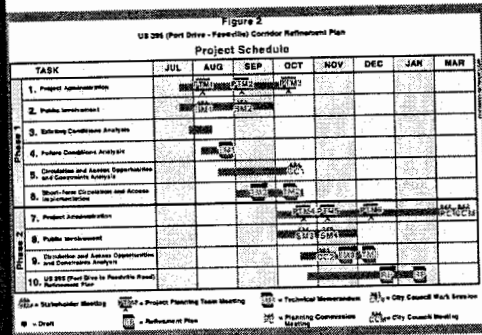
Phase 2 Objectives

- Identification of Short- and Long-term Median Opening of Traffic Control Improvements on US 395 Between Port Drive and Feedville Road
- Long-term Implementation Plan for Collector and Local Streets within the Study Area
- Amendments to the Functional Classification and Traffic Signal Plan, Pedestrian Facility Plan, Bicycle Facility Plan, Street System Improvement Plan, Elements of the Hermiston TSP



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Schedule



Existing Conditions Summary

- US 395 carries approximately 9,600 vehicles per day (20% trucks)
- 6,300 vehicles (960 trucks) enter/exit US 395 within the study area between 6 a.m. and 6 p.m.
- 17 crashes have occurred within the study area over the past 5 years
- Average Travel Speed is 57 mph (85th percentile speed is 64 mph)



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Future Conditions Summary

- Background traffic along US 395 is anticipated to grow at a rate of 2.0 percent per year through the year 2025.
- Upon an assumed build out of the US 395 study area, an additional 4,000 vehicles are anticipated to be generated during the weekday p.m. peak hour (20% trucks).



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

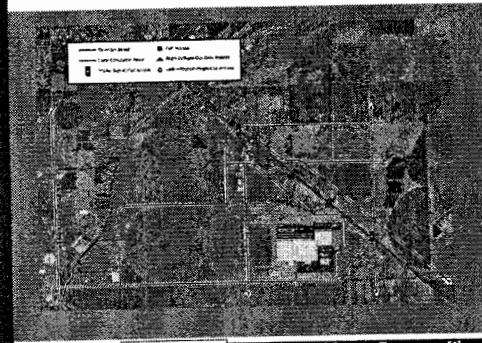
Future Considerations

- Continued Increase in US 395 Traffic Volumes
- Degradation of Accessibility to Adjacent Land Uses Due to Increased Traffic
- Provision of Frontage/Backage Roads to Facilitate Circulation to Full-Access/Signalized Intersections
- Provision of Certainty for Existing and Future Development



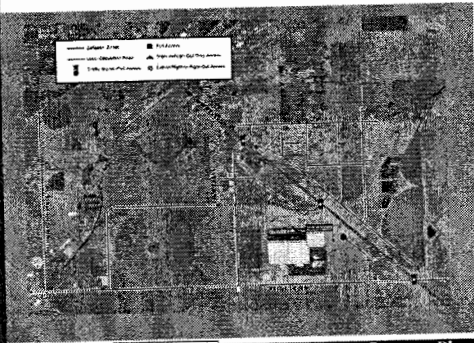
US 395 Corridor Refinement Plan
Port Drive to Foothills Road

Access and Circulation Alternative #1



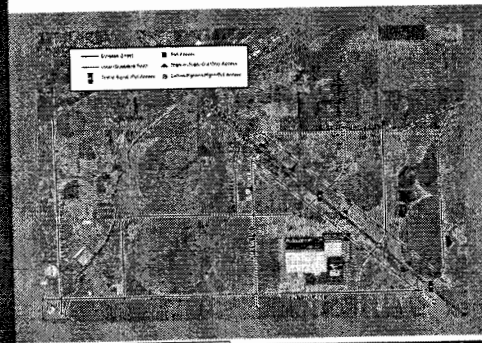
US 395 Corridor Refinement Plan
Port Drive to Foothills Road

Access and Circulation Alternative #2



US 395 Corridor Refinement Plan
Port Drive to Foothills Road

Access and Circulation Alternative #3



US 395 Corridor Refinement Plan
Port Drive to Foothills Road

Legend:

- Tall Trees
- Map's Contingency City Boundary
- Tall Trees of All Types
- Tall Trees of All Types



US 395 Corridor Refinement Plan

[illegible]

US 395 Corridor Refinement Plan

Legend:

- Green: Green Area
- Blue: Water
- Yellow: Yellow Area
- Red: Red Area
- Black: Black Area
- White: White Area
- Grey: Grey Area
- Light Blue: Light Blue Area
- Dark Blue: Dark Blue Area
- Light Green: Light Green Area
- Dark Green: Dark Green Area
- Light Yellow: Light Yellow Area
- Dark Yellow: Dark Yellow Area
- Light Grey: Light Grey Area
- Dark Grey: Dark Grey Area
- Light Brown: Light Brown Area
- Dark Brown: Dark Brown Area
- Light Purple: Light Purple Area
- Dark Purple: Dark Purple Area
- Light Pink: Light Pink Area
- Dark Pink: Dark Pink Area
- Light Orange: Light Orange Area
- Dark Orange: Dark Orange Area
- Light Red: Light Red Area
- Dark Red: Dark Red Area
- Light Blue-Grey: Light Blue-Grey Area
- Dark Blue-Grey: Dark Blue-Grey Area
- Light Green-Grey: Light Green-Grey Area
- Dark Green-Grey: Dark Green-Grey Area
- Light Yellow-Grey: Light Yellow-Grey Area
- Dark Yellow-Grey: Dark Yellow-Grey Area
- Light Grey-Grey: Light Grey-Grey Area
- Dark Grey-Grey: Dark Grey-Grey Area
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- Dark Brown-Grey: Dark Brown-Grey Area
- Light Purple-Grey: Light Purple-Grey Area
- Dark Purple-Grey: Dark Purple-Grey Area
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- Dark Orange-Grey: Dark Orange-Grey Area
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- Light Orange-Grey-Grey: Light Orange-Grey-Grey Area
- Dark Orange-Grey-Grey: Dark Orange-Grey-Grey Area
- Light Red-Grey-Grey: Light Red-Grey-Grey Area
- Dark Red-Grey-Grey: Dark Red-Grey-Grey Area

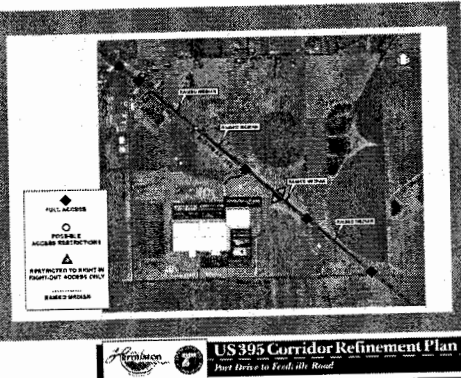


US 395 Corridor Refinement Plan

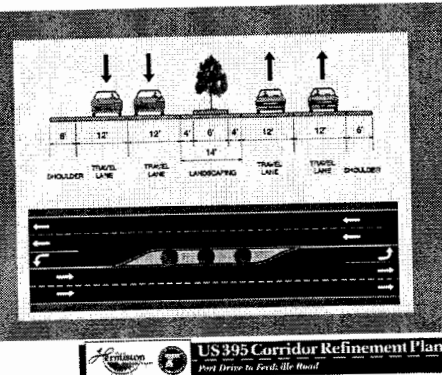


US 395 Corridor Refinement Plan

Preliminary Short-Term Implementation Plan

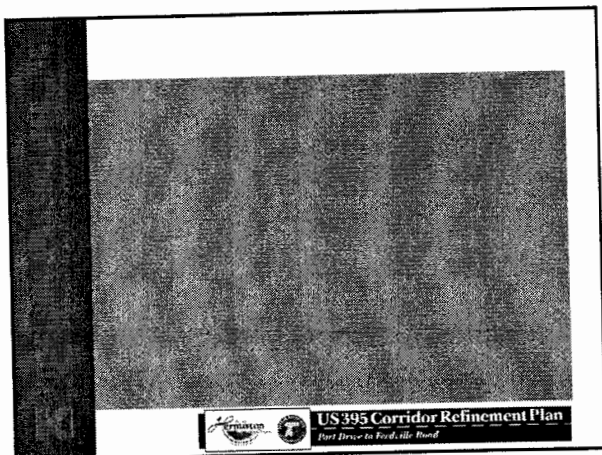


Proposed Median Configuration



Next Steps

- Finalize the Preferred Access and Circulation Plan for Phase 1
- Complete documentation of the Short-Term Circulation and Access Implementation Plan
- Begin Phase 2 of the Corridor Refinement Plan between Port Drive and Feedville Road.



Attachment "G"

PPT Meeting #4

Sponsored by:



US 395 Corridor Refinement Plan

Port Drive to Feedville Road

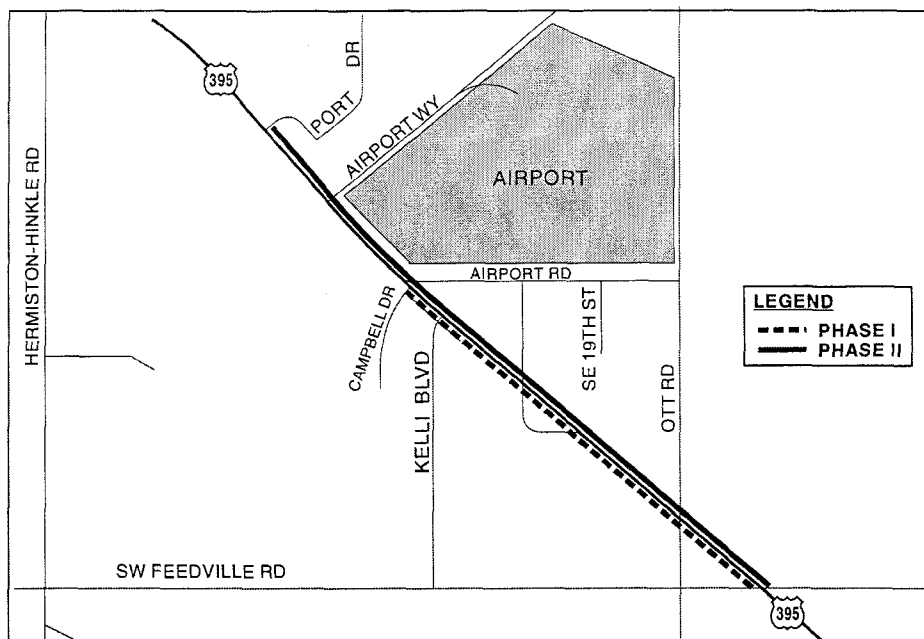
August 2002, Issue 1

What Is The US 395 Corridor Refinement Plan?

The Oregon Department of Transportation (ODOT) and the City of Hermiston are co-sponsoring a corridor study of US 395 between Port Drive and Feedville Road. This study, known as the US 395 Corridor Refinement Plan, is intended to serve as a long-term circulation and corridor preservation strategy. It will promote economic development based on quality development principles, while maintaining the integrity and safety of the US 395 corridor. The circulation plan will focus on developing a roadway network and highway access plan to serve the area bounded to the north by Port Drive, to the south by Feedville Road, to the west by Hermiston-Hinkle Road, and to the east by Ott Road.

The study will culminate in a short-term implementation plan that allows for the final design and construction of the US 395: Kelli Blvd. (Hermiston) -- Rosalynn Dr. (Stanfield) median project. The plan will also provide an update to the Functional Classification and Traffic Signal Plan, Pedestrian Facility Plan, Bicycle Facility Plan, and Street System Improvement Plan elements of the City of Hermiston Transportation System Plan (TSP).

Kittelson & Associates, Inc., a transportation planning/traffic engineering firm, has been hired by the City of Hermiston and ODOT to lead this six-month study.



Study Area Map

MEETINGS! . . . You're Invited!

Please join the project team for a series of stakeholder meetings. You can learn about the study and help us identify the existing transportation issues and problems you face within the study area.

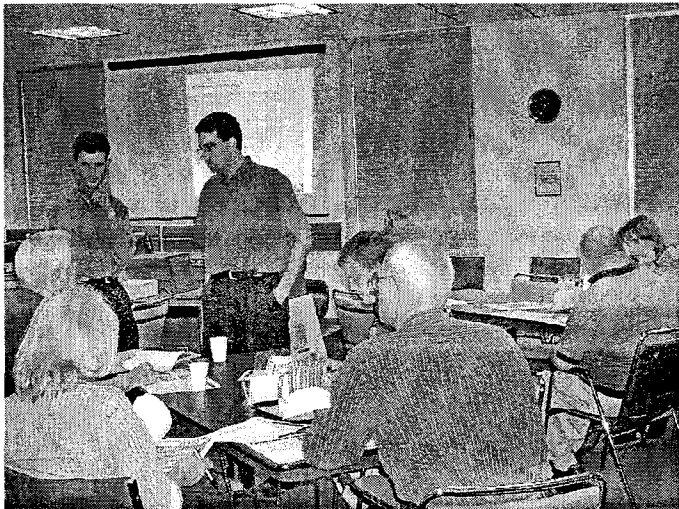
The third meeting is:

DATE: October 28, 2002
TIME: 5:30 - 7:30 pm
PLACE: Hermiston Community Center
415 Highway 395 South

What is the Study Process?

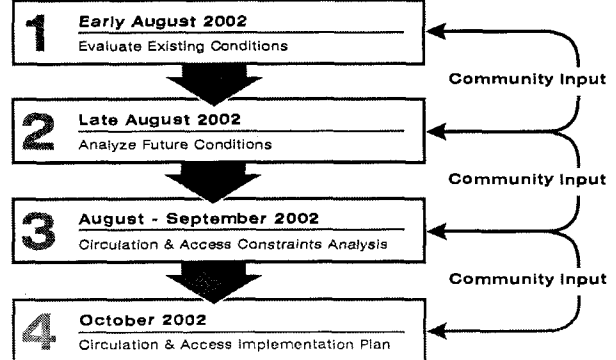
There are several important steps in this corridor study process that will be divided into two distinct phases. The first phase, which is nearing completion, investigated the short-term Statewide Transportation Improvement Program (STIP) highway improvement project between Kelli Boulevard and Feedville Road. The second phase will investigate the long-term highway access and local circulation within the entire corridor study area between Port Drive and Feedville Road. We are now in Phase II, Step 5, "Circulation and Access Constraints Analysis," as shown in the flow chart below.

As shown in the Phase 2 flow chart, community input will be crucial to a successful corridor and refinement plan.

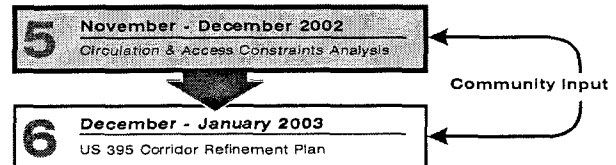


Marc Butorac of Kittelson & Associates, Inc. and Clint Spencer of the City of Hermiston discuss roadway alignment alternatives with interested citizens at the September 11, 2002 Stakeholder Meeting.

Phase I: Kelli Boulevard to Feedville Road



Phase II: Port Drive to Feedville Road



Who Will Be Involved in The Study?

The US 395 Corridor Refinement Planning Project Team will work closely with representatives from the City of Hermiston planning and engineering departments, the Oregon Department of Transportation, and the various Stakeholders located within the study area. All three of these groups will review and comment on the various alternatives developed and other pertinent study information.

Call or Write for More Information:

Clint Spencer, CSpencer@hermiston.or.us
 Pat Napolitano, PNapolitano@hermiston.or.us
 City Hall ■ 180 NE 2nd Street ■ Hermiston, OR 97838
 Phone (541) 567-5521

How Can I Participate in The Study?

Your input and participation will be critical to the success of this corridor study. You regularly travel through the study area and have first-hand knowledge that you can share with the project team. There are a number of ways for you to contribute and get involved. These include:

- ☐ Attend the Stakeholder Meetings.
- ☐ Get on the mailing list and receive newsletters and meeting notices.
- ☐ Watch the newspaper for information.
- ☐ Attend project team presentations to the City Council.
- ☐ Write, email, or phone the project team.

Can't Make it to the Third Public Meeting?

The project team needs your help in identifying key transportation issues within the study area. Please fill out this response form and mail it to the project team.

1. Do you (check one): ☐ live ☐ work ☐ own property ☐ own a business along the route?

If so, where specifically? _____

2. What do you feel are the most significant transportation problems within the study area? 3. What improvements would you like to see along the corridor?

A. Vehicular Issues _____

B. Pedestrian/Bicycle Issues _____

C. Landscaping/Aesthetic Issues _____

Please list your name and address so we can mail future newsletters and meeting notices to you.

NAME _____

ADDRESS _____ CITY _____ STATE _____ ZIP _____

*Return to Clint Spencer or Pat Napolitano
City Hall, 180 NE 2nd Street, Hermiston, OR 97838*



YOU ARE INVITED

To attend the third Stakeholder Workshop for the US 395 Corridor Refinement Plan.

Please plan on attending this informative workshop on the future of
transportation development in the US Highway 395 Corridor.

Your input is key to the success of this project.

October 28, 2002

5:30 - 7:30 PM

Hermiston Community Center

415 Highway 395 South

Hermiston, Oregon 97838



City Hall 180 NE 2nd Street
Hermiston, OR 97838



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US 395 (Port Drive to Feedville Road) Corridor Refinement Plan

Planning Project Team Meeting #4

City of Hermiston, City Hall
October 28, 2002 – 3:00 to 4:30 p.m.

Agenda:

- | | |
|------------------|--|
| 3:00 – 3:05 p.m. | Administrative Session (KAI) <ul style="list-style-type: none">- Sign-in Sheet- Review Meeting Agenda- Review Previous Meeting Minutes and Action Items |
| 3:05 – 3:15 p.m. | Preferred Access and Circulation Plan (KAI) <ul style="list-style-type: none">- Review of Hermiston City Council Comments- Final Phase 1 Plan |
| 3:15 – 3:45 p.m. | Review Preliminary Design Plan Comments (KAI) <ul style="list-style-type: none">- Median Design Memo to ODOT- Multi-use recreation path cost issues (City and ODOT) |
| 3:45 – 4:00 p.m. | Stakeholder Meeting #3 Overview <ul style="list-style-type: none">- Newsletter (KAI)- Meeting Location and Agenda- Presentation Critique |
| 4:00 – 4:20 p.m. | Project Planning Team Design Charette |
| 4:20 – 4:30 p.m. | Meeting Wrap-up <ul style="list-style-type: none">- Review Generated Action Items- Set Deliverable Dates for Action Items- Next Meeting |

PLANNING PROJECT TEAM MEETING #4 10/28/62

SIGN IN SHEET:

George Ruby

DOUG WRIGHT

PATRICK KNIGHT

Tracy Harris

IVAN ANDERHOLM

CLINT SPENCER

Tom Kuhlman

MARC BUTORAC

ANTHONY NAPOLITANO

Teresa Penninger

MATT HUGHART

ODOT Dist. 12 Pendleton

ODOT Region 5 LA GRANDE

ODOT REGION 5 PLANNING LA GRANDE

ODOT Roadway Salem

CITY OF HERMISTON

CITY OF HERMISTON

ODOT - R-5 Traffic

KITTELSON & ASSOCIATE

CITY of Herm

ODOT Region 5 La Grande

KITTELSON & ASSOCIATES



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Meeting Minutes

SUBJECT: US 395 Corridor Refinement Plan
Planning Project Team Meeting #4

MEETING DATE: October 28, 2002, 3:00 PM, City of Hermiston Council Chambers

ATTENDEES: City of Hermiston
Clint Spencer
Ivan Anderholm
Pat Napolitano
Kittelison & Associates, Inc.
Marc Butorac
Matt Hughart
ODOT
Teresa Penninger
Doug Wright
Patrick Knight
George L. Ruby
Tom Kuhlman
Tracy Harris

DISTRIBUTION: Meeting Attendees
Ed Brookshier, City of Hermiston

1.0 Introductions – Marc Butorac, Kittelison & Associates, Inc.

2.0 Review of Agenda and Previous Meeting Minutes – Marc Butorac, Kittelison & Associates, Inc.

2.1 The Planning Project Team was asked to review the meeting minutes from the September 11, 2002 meeting. There were no comments.

2.2 Marc Butorac noted that Teresa Penninger wanted to add an agenda item related to the forecasting elements of Tech Memo #1.

3.0 Review of the Preferred Access and Circulation Plan – Marc Butorac, Kittelison & Associates, Inc.

3.1 General Overview

3.1.1 Marc Butorac noted that following the October 14, 2002 PPT meeting, the consultant team held a special work session with the Hermiston City Council members to present the two preferred circulation and access refinement plans (shown as Options A and B in the PPT meeting). This work session went well and the Council members were in favor of Option B.

3.1.2 Following the City Council work session and after receiving additional comments from members of the PPT, the Phase 1 Circulation and Access Plan was refined further. This refinement plan was presented to members of the PPT for comment.

3.1.2.1 Tom Kuhlman mentioned that he spoke with Harlan Nale at TPAU and they thought a signal at Feedville Road was not necessary.

3.1.2.1.1 Mar Butorac noted that a signal would likely not be needed at Feedville Road in the near future. Instead a signal at Feedville would likely be more appropriate under a 2025 full build-out scenario.

4.0 US 395 Median Design Plans – Marc Butorac and Tracy Harris (ODOT).

4.1 General Overview

4.1.1 Tracy Harris from the ODOT Roadway Section was in attendance to discuss the Advance Copy design plans for the US 395 median project between Kelli Blvd and Rosalynn Drive.

4.1.2 Marc Butorac noted that we were here today to discuss the design elements of the median project (storage lengths, median width, deceleration distance, etc.)

4.1.3 Tom Kuhlman mentioned that the goal of the US 395 median project was to control access. After reviewing the Advance Copy plans and the resulting short median sections, it didn't appear as if that goal was being achieved to its fullest extent.

4.1.4 Marc Butorac mentioned that Kittelson had put together a memorandum that summarized the design concerns raised as part of the last PPT meeting. Everybody should have been e-mailed a copy of this memorandum along with the today's meeting agenda.

4.1.4.1 Three different design options were presented in the memorandum. Option #1 showed how the median could be designed so that the median would "nose" down through the transition distance. Option #2 showed how the shy distance could be narrowed so that the median could be widened, which in turn would allow for a long median transition. Option #3 showed how the median could be designed to include a raised extruded curb along the storage distance, providing complete access control.

4.1.4.2 After receiving the memorandum, Tracy Harris talked to his boss about the design modifications. Due to the fact that US 395 is on the NHS Highway System and the high travel speeds along the corridor, ODOT does not fully support reducing the shy distance or deceleration lengths.

4.1.4.3 Marc Butorac noted that the design could go through an exception process. Tracy Harris thought the exception process might be difficult for the shy distance issue, however it might be easier for the left-turn storage lengths.

4.1.4.4 George Ruby suggested that the median could be widened if the highway shoulders were wide enough to accommodate a portion of the travel lanes. ODOT would need to investigate shoulder width and roadway paving structure before this could occur.

4.1.5 Tom Kuhlman agreed to begin investigation into the possibility of reducing the left-turn storage lengths in the median design.

4.1.6 Marc Butorac noted that ODOT will have to move forward on the median design issues internally.

4.1.7 Ivan Anderholm noted that the City was happy with the landscaping elements of the median design.

5.0 Tech Memo #2 Overview – Marc Butorac, Kittelson & Associates, Inc.

5.1 General Overview

- 5.1.1** Marc Butorac mentioned that a draft version of Tech Memo #2 was complete, however it had not been distributed to the PPT team due to unresolved issues with the median design. The draft version will be sent to the PPT, just note that the median design elements are still unresolved.
- 5.1.2** Matt Hughart noted that Tech Memo #2 is an extension of Tech Memo #1 and is not intended to be a stand-alone document. Until ODOT resolves the median design elements, Tech Memo #2 will remain in a draft state.

6.0 Stakeholder Meeting #3 – Marc Butorac, Kittelson & Associates, Inc.

6.1 Overview

- 6.1.1** Marc Butorac mentioned that the third Stakeholder Meeting was tonight at 5:30 at the City of Hermiston Community Center.
 - 6.1.1.1** Clint Spencer noted that the City had been getting some phone calls regarding the meeting and the median length.
- 6.1.2** Matt Hughart gave a brief overview of the PowerPoint presentation prepared for tonight's Stakeholder meeting.
 - 6.1.2.1** Several revisions to the presentation were made based on comments from the PPT team.

7.0 Multi-Use Recreation Path – Marc Butorac, Kittelson & Associates, Inc.

7.1 Overview

- 7.1.1** If an extension of the multi-use recreation path is going to become a reality as part of this project, an application needs to be developed by the City of Hermiston and City of Stanfield for their respective portions of the pathway.
- 7.1.2** George Ruby mentioned that he will send over examples of past applications for the City of Hermiston to use as a guide.
- 7.1.3** Doug Wright will need to check on the deadline for the applications.

8.0 Future Projects Analysis – Teresa Penninger, ODOT

8.1 Overview

- 8.1.1** Teresa mentioned that she spoke with Harlan Nale at TPAU to discuss the future projections analysis in more detail. Based on these discussions, it was determined that the growth rate estimates used in the US 395 Corridor Plan were not consistent with the growth rate projections from TPAU.
- 8.1.2** Tom Kuhlman noted that he thought an additional 8,000 weekday p.m. peak hour trips did not seem too unreasonable if the area were to fully build out.

- 8.1.3 Teresa Penninger mentioned that due to the uncertainty of the build-out assumptions, we may want to consider a trip cap for the area.
- 8.1.4 Marc Butorac made the statement that the area is likely to build out with a mix of active and passive warehousing. This mix will likely balance out the high trip generators and the low trip generators. As a result, 8,000 trips might be too high. The consultant team will work through these issues with Teresa Penninger, Clint Spencer, and TPAU via a conference call.

9.0 Meeting Wrap Up – Marc Butorac, Kittelson & Associates, Inc.

9.1 Task Items

- 9.1.1 Doug Wright, Tom Kuhlman, and Tracy Spencer to investigate median design issues internally.
- 9.1.2 George Ruby to provide application examples to the City of Hermiston for multi-use recreation path.
- 9.1.3 Kittelson & Associates, Inc. to provide a draft copy of Tech Memo #2 to PPT members.
- 9.1.4 Kittelson & Associates, Inc. to set up a conference call with Teresa, Clint, and TPAU to try and resolve future buildout projections.

9.2 Next Meeting

- 9.2.1 The next PPT meeting will be held on November 25 along with another City Council work session. A meeting agenda will be sent out one week prior to this meeting.

END OF MEETING MINUTES



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8165

MEMORANDUM

Date: October 23, 2002

Project #: 5504

To: Tracy M. Harris – ODOT

cc: Doug Wright – ODOT
Pat Napolitano – City of Hermiston
Project Planning Team – US 395 Corridor Refinement Plan

From: Marc Butorac, P.E., P.T.O.E. and Matt Hughart, AICP

Project: US 395 Corridor Refinement Plan

Subject: Median Design Comments

Over the past two months, Kittelson & Associates, Inc. has been working with the City of Hermiston and ODOT to prepare a corridor refinement plan for US 395 between Port Drive and Feedville Road. Phase 1 of the refinement plan included the development of a short-term implementation plan for defining the location and design of a raised median along US 395 between Kelli Boulevard and Feedville Road. The draft median location and design analysis was prepared and written up in Technical Memorandum #1, the first in a series of memorandums for this project. You should have received a copy of this technical memorandum from Doug Wright.

On October 14, 2002, we met with Doug Wright and the rest of the Planning Project Team (PPT). The purpose of this meeting was to discuss the finalization of Technical Memorandum #1 and review the Advance Copy *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec.* paving and roadside development plans. Through the course of this meeting, the PPT noted several design related issues that may require further investigation and/or refinements before the median design plans are finalized. The purpose of this memorandum is to summarize these issues.

MEDIAN STORAGE AND TRANSITION DESIGN

An examination of the Advance Plan set indicates that all median breaks have been designed with a storage length (L) and deceleration distance (S) of approximately 210 meters to 230 meters at each intersecting side street. The PPT team noted that this leads to some short median sections, particularly between the Kelli Blvd – Hermiston Foods/EZ Storage section.

According to the ODOT Roadway Design Standards, the minimum acceptable storage length (L) for a 90 (km/hr) facility is 45 meters with a required deceleration distance (S) of 115 meters. As part of the US 395 Corridor Refinement Plan, intersection turning movement counts were conducted at each of the major intersections along US 395 during the weekday morning, midday, and evening peak hours. Based on these traffic volumes, a queuing analysis was conducted for the left-turn movement at each of the intersections. From this analysis, it was determined that the minimum acceptable storage length and deceleration distance was more than sufficient to accommodate the existing vehicle/truck queues. Based on this analysis, the PPT felt that the storage and deceleration lengths shown in the Advance Plan set were overly conservative.

Given these findings, the PPT would like ODOT to reconsider the storage and acceleration lengths for each median break. As part of Technical Memorandum #1, a draft set of median design lengths was prepared based on the minimum ODOT design parameters. For your reference, we have reproduced this table from Technical Memorandum #1 (shown as Table 1 in this memo). It should be noted that the table has been revised to reflect the metric stationing developed within the Advance Copy plans. Table 2 has also been created in order to more clearly summarize the resulting median lengths

WAL-MART DISTRIBUTION CENTER MEDIAN BREAK

An examination of the design plans indicates that the median break at the Wal-Mart Distribution Center driveway does not currently accommodate a median refuge for vehicles and trucks to perform a two-stage gap acceptance maneuver. Currently, trucks exiting the distribution center and turning left onto US 395 northbound are utilizing the center left-turn lane as a staging ground for accelerating onto US 395. Given the high speeds along US 395, the PPT team felt that providing a median break sufficient in length to accommodate a WB-35m truck would be necessary in the short-term to continue to serve exiting Wal-Mart trucks. Based on this desire, it is recommended that the median break be sufficient enough to accommodate a WB-35m truck (approximately 35 meters) plus a short transition distance for acceleration purposes.

MEDIAN DESIGN WIDTH

The final issue discussed by the PPT members was the design of the median itself. After examining the Advance Plans, a discussion ensued as to how the median design could be modified to create longer median sections and enhance access management and landscaping opportunities within the refinement study corridor (Feedville Road to Kelli Boulevard). Three different options were discussed which have been illustrated in the accompanying figure. A brief description of each option is provided below.

Option #1

Option #1 is essentially the same design treatment as that illustrated in the Advance Copy plans, however the median design includes an extension to match the left-turn taper. This taper would lengthen the median, provide additional landscaping area, and encourage more effective access management along the corridor.

Table 1
Median Location and Length Calculations (Reproduced and Modified from Table 7 in Tech Memo #1)

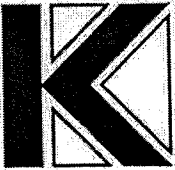
Southbound Left-Turns									
Intersection	Intersection Location		Intersection Area	Storage Length (L)	Deceleration Distance (S)¹	Distance from Centerline		Start of Median	
	Mile Post	Station	Meters	Meters	Meters	Meters	Feet	Station	Mile Post
EZ Storage	7.77	12+722	20	45	115	170.00	557.74	12+552	7.66
Wal-Mart	8.08	13+220	55 ²			55.00	180.45	13+165	8.05
Ott Road	8.43	13+783	20	45	115	170.00	557.74	13+613	8.32
Feedville Rd	8.82	14+410	20	45	115	170.00	557.74	14+240	8.71
Northbound Left-Turns									
Kelli Boulevard	7.45	12+207	20	45	115	170.00	557.74	12+377	7.56
Hermiston Foods	7.79	12+754	20	45	115	170.00	557.74	12+924	7.90
Wal-Mart	8.08	13+220	20	45	115	170.00	557.74	13+390	8.19
Ott Road	8.43	13+783	20	45	115	170.00	557.74	13+953	8.54

1 Assumed Design Speed of 90 km/hr

2 Reflects intersection area plus two-stage gap acceptance storage for a WB-35m truck

Table 2
Median Design Summary

Located Between	Start of Median	End of Median	Length	
			Meters	Feet
EZ Storage & Kelli Boulevard	STA 12+377	STA 12+552	175	574
Walmart & Hermiston Foods	STA 12+924	STA 13+165	241	793
Ott Road & Walmart	STA 13+390	STA 13+613	223	733
Feedville Road & Ott Road	STA 13+953	STA 14+240	287	944



Kittelson & Associates, Inc.
 Transportation Planning/Traffic Engineering
 610 SW Alder, Suite 700 • Portland OR 97205
 Telephone: (503) 228-5230
 Fax: (503) 273-8189
 E-mail: info@kittelson.com
 http://www.kittelson.com/

DATE

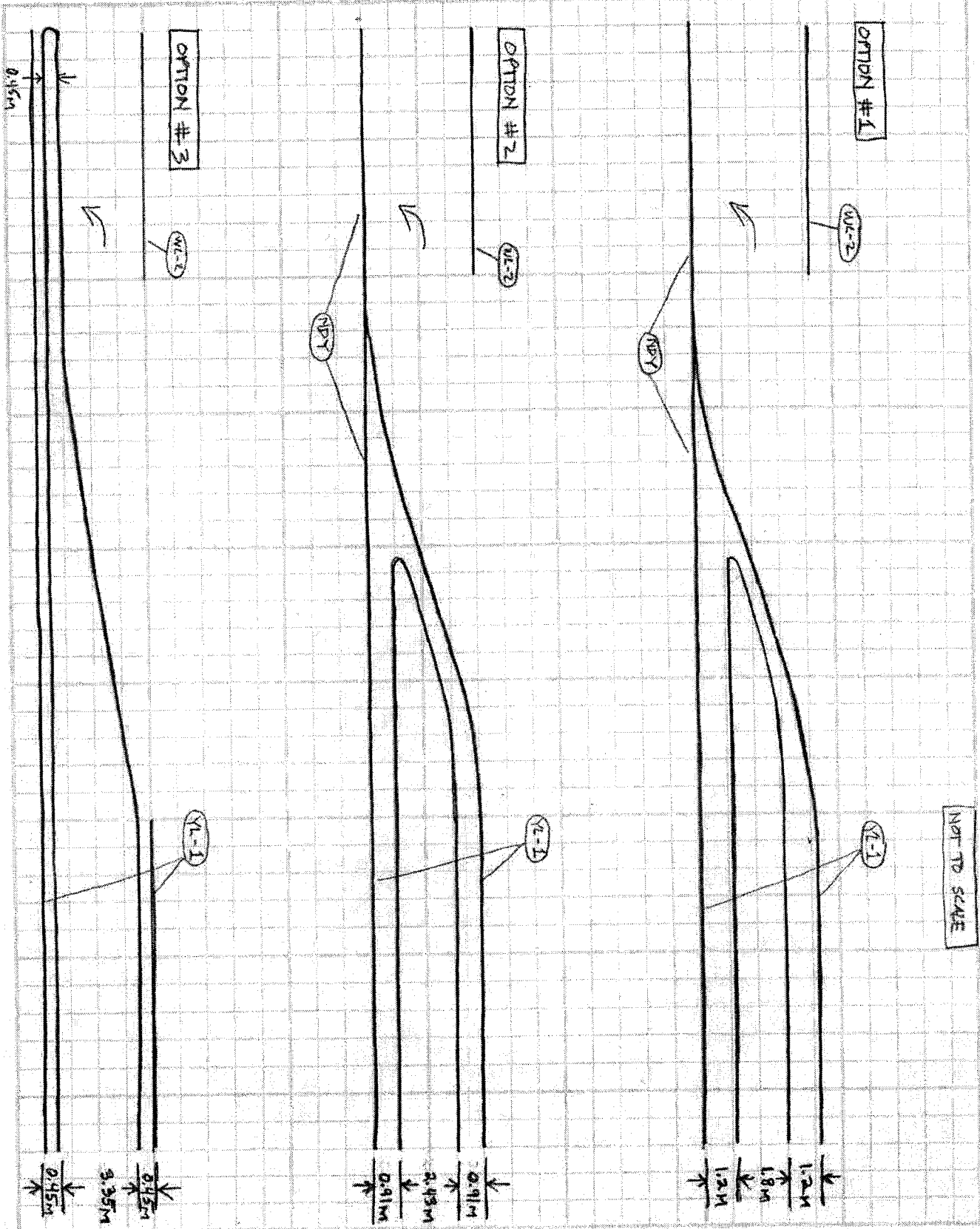
PROJECT # 5304

PROJECT NAME US 395 CORRIDOR REFINEMENT PLAN

SUBJECT MEDIAN DESIGN OPTIONS

BY JXH

SHEET # 1 OF 1



Option #2

Option #2 is similar to Option #1 with the exception of a wider median design. The wider median section is created by reducing the shy distance from 1.2 meters to 0.91 meters, leaving a 2.4 meter median section.

Option #3

In response to a desire for complete access control along the US 395 study corridor, Option #3 was developed. Option #3 calls for a median design that would provide a raised median and curbed lane delineation between each individual curb cut. To accomplish this design, the median shy distance would be reduced to 0.45 meters creating a median width of approximately 3.35 meters at its widest point. Along the left-turn storage lane, the median would consist of a 0.45 meter raised curb.

Based on the information provided within this memorandum, the PPT would like to discuss the feasibility of implementing these changes/modifications into the final design plans for the *US 395: Kelli Blvd. (Hermiston) – Rosalynn Dr. (Stanfield) Sec.* paving and roadside development plans. If you have any questions or concerns regarding this information, please contact us at (503) 228-5230.

Attachment "H"

Stakeholder Workshop #3



US 395 Corridor Refinement Plan

Port Drive to Feedville Road

STAKEHOLDER WORKSHOP #3

October 28, 2002

Please Sign In:

NAME	ADDRESS	CITY	STATE	ZIP
Ran Thomas	2410 SE KOLL BLVD	HERMISTON	OR	97838
Vicki Noalin	1707 S. 1 st St	Hermiston		97838
Jay Moser	2000 E Airport Rd	Hermiston		97838
TON ABLE	18455 Hwy 395	HERMISTON		
Terese Penninger	000T 3012 ISLAND AVE	LA GRANDE		97850
PATRICK KNIGHT	000T 3012 ISLAND AVE	LA GRANDE	OR	97855
MARC BUTORAC	60 SW Alder, Ste. 700	Portland, OR		97205
Nancy J. Able	1845 S. Hwy 395	Hermiston		

US Highway 395 Corridor Refinement Plan (Port Drive to Feedville Rd.)

Stakeholder Meeting #3
October 28, 2002



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

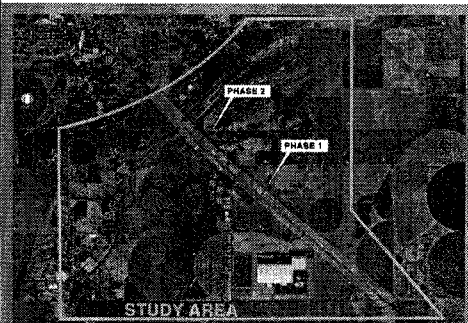
Meeting Overview

- Project Study Area (Phase 1 and 2)
- Project Background
- Project Goals and Objectives
- Project Schedule
- Design Charette
- Summary of Design Charette Findings
- Next Steps



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Study Area



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Background

- Kelli Blvd – Rosalynn Drive STIP Median Project (ODOT)
- Existing Conditions
 - Access Locations
 - Daily and Peak Traffic Volumes
 - Crash Data
- Future Considerations
- Proposed Median Configuration
- Phase 1 Objectives
- Phase 2 Objectives
- TSP Amendments



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Operational and Safety Facts

- US 395 carries approximately 9,600 vehicles per day (20% trucks)
- 6,300 vehicles (960 trucks) enter/exit US 395 within the study area between 6 a.m. and 6 p.m.
- 17 crashes have occurred within the study area over the past 5 years
- Average Travel Speed is 57 mph (85th percentile speed is 64 mph)



US 395 Corridor Refinement Plan
Part Drive to Feed the Road

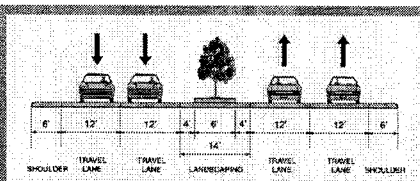
Future Considerations

- Continued Increase in US 395 Traffic Volumes.
- Degradation of Accessibility to Adjacent Land Use Due to Increased Traffic.
- Provision of Certainty for Existing and Future Development.
- Provision of Frontage/Backage Roads to Facilitate Circulation to Full-Access/Signalized Intersections.



US 395 Corridor Refinement Plan
Part Drive to Feed the Road

Proposed Median Configuration



US 395 Corridor Refinement Plan
Part Drive to Feed the Road

Project Goals

- **Goal 1: Business Community**
 - Enhance the integrity and vitality of the local business community.
 - Objectives
- **Goal 2: Access Efficiency**
 - Maintain safe and efficient access to adjacent properties and public streets along the corridor.
 - Objectives
- **Goal 3: Aesthetics and Landscaping**
 - Enhance the environment, attractiveness, and appeal of the area through landscaping and other aesthetic improvements.
 - Objectives



US 395 Corridor Refinement Plan
Part Drive to Feed the Road

Project Goals

- **Goal 4: Geometry**
 - Minimize negative impacts to businesses through proper and efficient geometric design.
 - Objectives
- **Goal 5: Pedestrian and Bicycle Environment**
 - Provide for an interconnected system of pedestrian and bicycle facilities to serve short-distance and recreational trips.
 - Objectives
- **Goal 6: Vehicular Travel**
 - Maintain a safe and efficient travel way for local and regional travel along the corridor.
 - Objectives



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Goals

- **Goal 7: Capacity**
 - Provide a transportation system that has sufficient capacity to serve user needs.
 - Objectives
- **Goal 8: Safety**
 - Ensure a transportation corridor that maintains adequate levels of safety for all users.
 - Objectives



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

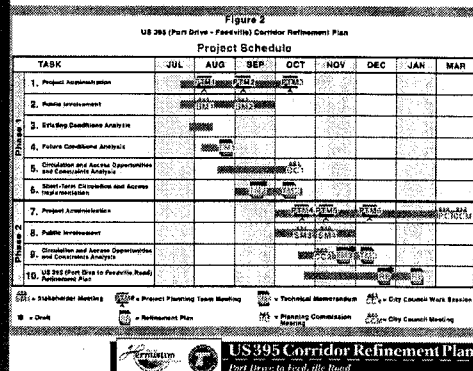
Phase 2 Objectives

- Identification of Short- and Long-term Access Locations and Traffic Control Improvements on US 395 Between Port Drive and Feedville Road.
- Long-term Implementation Plan for Collector and Local Streets within the Study Area.
- Amendments to the Functional Classification and Traffic Signal Plan, Pedestrian Facility Plan, Bicycle Facility Plan, Street System Improvement Plan Elements of the Hermiston TSP.



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Schedule



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

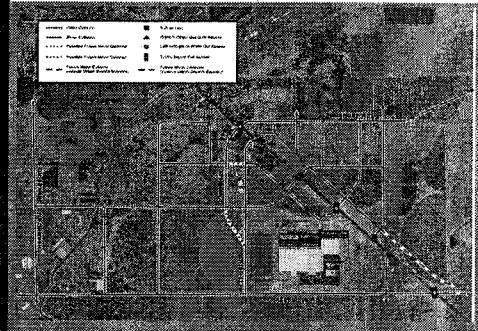
Design Charette

- Identification of Potential Future Development Plans
- Identification of Long-term Circulation Roadways and Highway Access Points
- Determination of Full Access Signalized Intersection Locations
- Identification of Future Pedestrian and Bicycle Connections



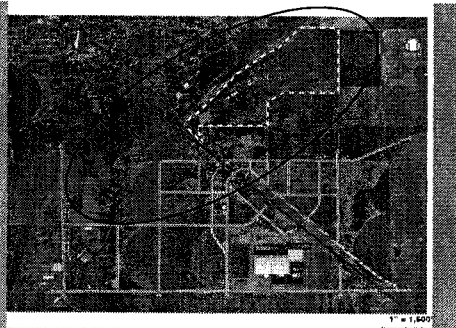
US 395 Corridor Refinement Plan
Part Drive to Lead the Road

Preferred Phase 1 Circulation and Access Plan



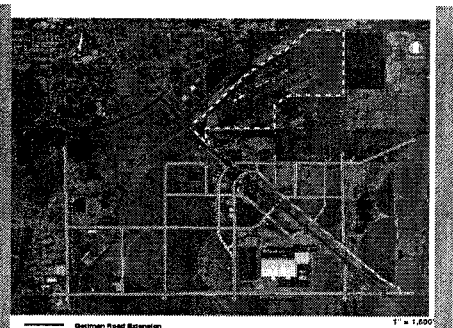
US 395 Corridor Refinement Plan
Part Drive to Lead the Road

Phase 2 Study Area



US 395 Corridor Refinement Plan
Part Drive to Lead the Road

Charette Exercise



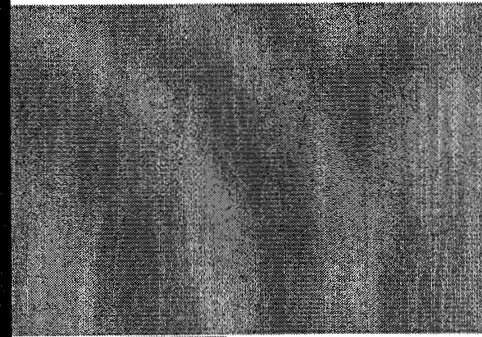
US 395 Corridor Refinement Plan
Part Drive to Lead the Road

Next Steps

- Preparation of Draft Technical Memo #3
November 18th
- Hermiston City Council Work Session
November 25th
- Draft Corridor Refinement Plan
December 16th
- Final Corridor Refinement Plan
January 2003
- Planning Commission & City Council
Approval
March 2003

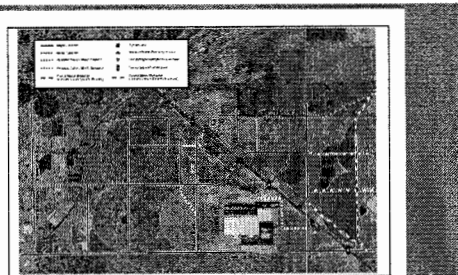


US 395 Corridor Refinement Plan
Don't Drive to Find the Road



US 395 Corridor Refinement Plan
Don't Drive to Find the Road

Refined Phase 1 - Option 1-A

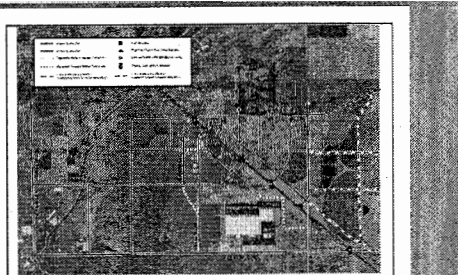


PRELIMINARY PREPARED
ACCESS AND CIRCULATION PLAN (Phase 1)
US 395 Corridor Refinement Plan



US 395 Corridor Refinement Plan
Don't Drive to Find the Road

Refined Phase 1 - Option 1-B



PRELIMINARY PREPARED
ACCESS AND CIRCULATION PLAN (Phase 1)
US 395 Corridor Refinement Plan



US 395 Corridor Refinement Plan
Don't Drive to Find the Road

Attachment "I"

PPT Meeting #5



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8169

US 395 (Port Drive to Feedville Road) Corridor Refinement Plan

Planning Project Team Meeting #5

City of Hermiston, City Hall
November 25, 2002 – 3:00 to 4:30 p.m.

Agenda:

- | | |
|------------------|---|
| 3:00 – 3:05 p.m. | Administrative Session (KAI) <ul style="list-style-type: none">- Sign-in Sheet- Review Meeting Agenda- Review Previous Meeting Minutes and Action Items |
| 3:05 – 3:15 p.m. | Update on Median Design Plans (ODOT) <ul style="list-style-type: none">- Median Design Characteristics- Design and Construction Schedule Update- Finalization of Tech Memo #2 (KAI) |
| 3:15 – 3:25 p.m. | Stakeholder Meeting #3 Summary and Outcome (KAI) <ul style="list-style-type: none">- Attendance- Critical Issues |
| 3:25 – 4:15 p.m. | Phase 2 Circulation, Access Opportunities, and Constraints (KAI) <ul style="list-style-type: none">- Alternatives #1, #2, & #3 Review<ul style="list-style-type: none">- Access Opportunities- Circulation Opportunities- Bicycle and Pedestrian Elements / Discussion- Threshold Analysis |
| 4:15 – 4:20 p.m. | Review Remaining Project Schedule |
| 4:20 – 4:30 p.m. | Meeting Wrap-up <ul style="list-style-type: none">- Review Generated Action Items- Set Deliverable Dates for Action Items- Next Meeting |

PPT MEETING #5 SIGN IN SHEET

TOM Kuhlman	0205	REGION 5 TRAFFIC	541-823-0964
PATRICK KNIGHT	000T	Region 5 PLANNING	" 963-1345
Teresa Penninger	000T	Region 5 Planning	(541) 963-1344
IVAN ANDERHOLM	C.O.H.		541 567-5521
CLINT SPENCER	C.O.H.		541 567-5521
PAT NAPOLITANO	COM		11
MARC BUTORAC	KAI		503 228-5230
MATT HUGHART	KAI		503 228-5230



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8169

Meeting Minutes

SUBJECT: US 395 Corridor Refinement Plan
Planning Project Team Meeting #5

MEETING DATE: November 25, 2002, 3:00 PM, City of Hermiston Council Chambers

ATTENDEES: City of Hermiston
Clint Spencer
Ivan Anderholm
Pat Napolitano
Kittelison & Associates, Inc.
Marc Butorac
Matt Hughart
ODOT
Teresa Penninger
Patrick Knight
George L. Ruby
Tom Kuhlman

DISTRIBUTION: Meeting Attendees
Doug Wright, ODOT
Ed Brookshier, City of Hermiston

1.0 Introductions – Marc Butorac, Kittelison & Associates, Inc.

2.0 Review of Agenda and Previous Meeting Minutes – Marc Butorac, Kittelison & Associates, Inc.

2.1 The Planning Project Team was asked to review the meeting minutes from the October 28, 2002 meeting. There were no comments.

2.2 Tom Kuhlman made a motion to add an agenda item to related to potential improvements to Feedville Road. Marc Butorac subsequently added the agenda item following item number two: Update on the Median Design Plans.

3.0 Update on Median Design Plans – Teresa Penninger & Tom Kuhlman, ODOT

3.1 Overview

3.1.1 Tom Kuhlman and Teresa Penninger noted that the median design had undergone a significant revision from the October 2002 Advance Copy plan sheets. Most notably, the raised median will be a total of 14' wide with 4' of shy distance on both sides. The widening will also allow for the median to be extended intersection to intersection. To obtain the extra median width, the total roadway width of US 395 will be widened as necessary to retain 8' shoulders. This widening is likely to occur the year following median construction.

3.1.2 Tom Kuhlman noted that ODOT revisited the left-turn storage length issue, however due to concerns about the intensity of future development in the study corridor, it was determined that it was best to retain the maximum left-turn storage lengths and transition distances.

- 3.1.3** Marc Butorac indicated that upon official completion of these design plans, KAI will finalize Tech Memo #2.

4.0 Discussion of Feedville Road Improvements – Tom Kuhlman (ODOT).

4.1 Overview

- 4.1.1** Based on discussions with Harlan Nale at ODOT, Tom Kuhlman noted that ODOT had some concerns about a potential safety issue at US 395/Feedville Road. In particular, it was noted that there is a minor crest vertical curve along US 395 northbound and that this could create a sight distance problem if the intersection were ever to become signalized. How would this issue be addressed in the Hermiston TSP amendment?
- 4.1.1.1** Teresa Penninger noted that this intersection has already been identified as a potential future signalized intersection within the US 395 Corridor Plan.
- 4.1.1.2** Matt Hughart and Clint Spencer noted that this intersection is outside of the Hermiston UGB and subsequently would not be included as a programmed element in the TSP amendment.

5.0 Stakeholder Meeting #3 Overview – Marc Butorac, Kittelson & Associates, Inc.

5.1 Overview

- 5.1.1** Marc Butorac mentioned that Stakeholder Meeting #3 was held on October 28, 2002 at the Hermiston Community Center. Attendance was low...around five or six citizens showed up with comments/questions. Those who did show up provided valuable feedback which was utilized to create the access and circulation alternatives for Phase 2.

6.0 Phase 2 Access, Circulation, and Constraints Analysis – Marc Butorac, Kittelson & Associates, Inc.

6.1 Overview

- 6.1.1** Marc Butorac summarized the Phase 2 portion of the US 395 Corridor Refinement Plan. Based on feedback from the last PPT meeting and input provided during the October 28th Stakeholder Meeting, KAI created three different access and circulation alternatives. These alternatives were distributed via e-mail to members of the PPT team.
- 6.1.1.1** Clint Spencer noted that the City was more in favor of Alternative #1 due to the lack of canal crossings.
- 6.1.1.2** Patrick Knight noted that each of the alternatives (particularly Alt. #1) could be improved by making sure future roadways that are separated by the canal and rail line were still in alignment. This would ensure the potential for future connections if the canal and rail line were to ever relocate or be dismantled.
- 6.1.1.2.1** Matt Hughart responded that this was a good observation and a preferred alternative would reflect idea.
- 6.1.1.3** Teresa Penninger noted that she researched the Hermiston Airport runway protection zones and discovered that they extend to US 395 and beyond Ott Road. It was noted that these runway protection zones could complicate the roadway alignments shown in Alternatives #1 and #2. FAA approval may be necessary if they are to be included in the plan.

- 6.1.1.3.1 Clint Spencer indicated that he would have to talk to Pat Napolitano about this issue as he would have all of the institutional knowledge regarding airport planning.
 - 6.1.1.4 Teresa Penninger also found evidence in the airport plan that would indicate there may be future land reserved for a runway expansion to the southeast of the airport. This would impact the roadway alignment shown in all three alternatives for that rectangular parcel of land located southeast of the runway.
 - 6.1.1.5 George Ruby noted that the alignment shown in Alternative #3 would significantly impact the ODOT maintenance property near the US 395/Airport Way intersection. ODOT would probably be more supportive of a backage road alignment that creates more separation from US 395.
 - 6.1.1.6 Clint Spencer indicated that it is likely that the land occupied by the Agriculture Experiment Station will remain in the long term. Consequently, future roadway alignments should be minimized.
 - 6.1.1.7 Pat Knight thought the major collector roadway south of the airport should actually be a minor collector facility.
 - 6.1.1.8 Matt Hughart brought up an issue regarding the US 395/Airport Way intersection. As shown in the alternatives, this intersection would not be signalized. If the airport runway protection zones are enforced, then signalization of this intersection would likely be necessary to facilitate side-street left-turns.
 - 6.1.1.8.1 Marc Butorac suggested that we keep this intersection as a full access intersection in the near term and include text that it may require further study/signalization if a connection can't be made across the runway protection zone.
- 6.1.2 Marc Butorac indicated that KAI would incorporate all of these comments and develop a DRAFT preferred circulation and access plan.

7.0 Threshold Analysis – Marc Butorac and Matt Hughart, Kittelson & Associates, Inc.

7.1 Overview

- 7.1.1** Matt Hughart summarized an October 31st conference call to staff at TPAU in which the future volume forecasts were discussed. The call concluded with an agreement that KAI would perform a threshold analysis to determine the implications of different variations in future build-out assumptions. Three different thresholds were evaluated (2,000, 4,000, and 6,000 weekday p.m. peak hour trips). From this analysis, it was determined that all of the US 395 portals could accommodate the 2,000 and 4,000 trip figures and still be in compliance with the 0.70 v/c threshold. However, the 6,000 trip analysis concluded that a v/c ratio of 0.70 could not be maintained.
- 7.1.1.1** Tom Kuhlman asked if the analysis included trip assignment to the parallel routes of Ott Road and Hermiston-Hinkle Road.
- 7.1.1.1.1** Matt Hughart responded that the analysis did indeed consider the parallel facilities as alternatives to US 395 to a certain degree.

7.1.2 Patrick Knight suggested that we look at the growth associated with the Tri-Cities region of WA as a model for considering the potential build-out of the study area.

7.1.3 Marc Butorac noted that the PPT team seemed to be in agreement that the 4,000 trip analysis was the most appropriate build-out assumption for the study area.

8.0 Bike/Ped Alternatives– Marc Butorac, Kittelson & Associates, Inc.

8.1 Overview

8.1.1 Marc Butorac mentioned that the existing City of Hermiston standards for major and minor collectors already have provisions for sidewalks and bike lanes. However, the bike lane element is discretionary on minor collectors. The project team was asked to comment on the provisions for bicycle facilities in the study area.

8.1.1.1 Matt Hughart asked about the possibility of bringing the multi-use path up US 395 to Feedville Road where it would then head west to Hermiston-Hinkle Road and north into the heart of the City of Hermiston.

8.1.1.1.1 Teresa Penninger thought this would create out-of-direction travel and that the multi-use path should stay along US 395.

8.1.1.1.2 Ivan Anderhold also thought it would be better to keep the alignment along US 395.

8.1.1.1.3 In order to cross the canal and rail line, it was agreed that a new multi-use path bridge would need to be developed parallel to US 395.

8.1.2 Clint Spencer and Ivan Anderholm agreed to take a more in-depth look at the bike/ped issues and provide KAI with some options.

9.0 Meeting Wrap Up – Marc Butorac, Kittelson & Associates, Inc.

9.1 Schedule/Task Items

9.1.1 Tech Memo's #2 and #3 would be finalized within the next couple of weeks and resubmitted to the PPT.

9.1.2 KAI would submit a draft refinement plan on December 16th that would include the three Tech Memos, a public planning chapter, and the plan amendment section.

9.1.3 Teresa Penninger will check to see if the US 395 Corridor Refinement Plan could be presented at the same time as the final median design plans. To make this happen, it might require that the Jan 6th meeting be pushed back approximately one week.

9.2 Next Meeting

9.2.1 January 6th, 2003 PPT meeting.

END OF MEETING MINUTES

Attachment "J"

PPT Meeting #6 and Stakeholder
Meeting #4



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8169

US 395 (Port Drive to Feedville Road) Corridor Refinement Plan

Planning Project Team Meeting #6

City of Hermiston, City Hall
January 6, 2003 – 3:00 to 4:30 p.m.

Agenda:

- 3:00 – 3:05 p.m. Administrative Session (KAI)
- Sign-in Sheet
 - Review Meeting Agenda
 - Review Previous Meeting Minutes and Action Items
- 3:05 – 4:00 p.m. Review of US 395 Corridor Refinement Plan (KAI)
- Street Classifications and Traffic Signal Plan
 - Pedestrian Facility Plan
 - Bicycle Facility Plan
 - US 395 Corridor Street System Improvements
- 4:00 – 4:10 p.m. Review Stakeholder Meeting Presentation (KAI)
- 4:10 – 4:20 p.m. Discussion of I-84 Interchange Issues (Teresa Penninger & KAI)
- 4:20 – 4:30 p.m. Meeting Wrap-up
- Review Remaining Project Schedule
 - Review Generated Action Items
 - Set Deliverable Dates for Action Items

US 395 PPT MEETING #6 1/6/03 → SIGN IN

MAT HUGHART	KITTELSON & ASSOCIATES	(863) 228-5230
CLINT SPENCER	CITY OF HERM	567-5521
George L. Ruby	ODOT DIST. 12	(541) 276-1241
PATRICK KNIGHT	ODOT REG 5	(541) 963-1345
Teresa Penninger	ODOT Reg 5	(541) 963-1344
PAT NAPOLITANO	C of H	567-5521
MARC BUTORAC	KAI	(541) (503) 228-5230



KITTELSON & ASSOCIATES, INC.

TRANSPORTATION PLANNING/TRAFFIC ENGINEERING

610 SW ALDER, SUITE 700 • PORTLAND, OR 97205 • (503) 228-5230 • FAX (503) 273-8169

Meeting Minutes

SUBJECT: US 395 Corridor Refinement Plan
Planning Project Team Meeting #6

MEETING DATE: January 6, 2003, 3:00 PM, City of Hermiston Council Chambers

ATTENDEES: City of Hermiston
Clint Spencer
Pat Napolitano
Kittelison & Associates, Inc.
Marc Butorac
Matt Hughart
ODOT
Teresa Penninger
Patrick Knight
George L. Ruby

DISTRIBUTION: Meeting Attendees
Ivan Anderholm, City of Hermiston
Doug Wright, ODOT
Ed Brookshire, City of Hermiston

1.0 Introductions – Marc Butorac, Kittelison & Associates, Inc.

2.0 Review of Agenda and Previous Meeting Minutes – Marc Butorac, Kittelison & Associates, Inc.

- 2.1** The Planning Project Team was asked to review the meeting minutes from the November 25, 2002 meeting. There were no comments.
- 2.2** Marc Butorac mentioned that the main purpose of today's meeting is to review the DRAFT version of the US 395 Corridor Refinement Plan that was sent to all members of the PPT during Christmas week.
- 2.3** The fourth and final Stakeholder meeting is planned for 6:00 p.m. tonight at the City of Hermiston Community Center. Clint Spencer noted that the meeting notices were sent out and the meeting was advertised in the newspaper.
- 2.4** Marc Butorac asked if there were any updates that should be included in the agenda.
 - 2.4.1** Teresa Penninger mentioned that the US 395 median plans were likely to be unveiled on January 17, 2003 and will go out to bid in March 2003

3.0 Review of US 395 Corridor Refinement Plan – Marc Butorac, Kittelison & Associates, Inc.

3.1 General Comments

- 3.1.1 Clint Spencer noted that the City would like to ship the completed US 395 Corridor Refinement Plan to DLCD by January 22, 2003.
 - 3.1.1.1 To help the City achieve this date, Marc Butorac noted that Kittelson will try and mail the refined report back to the City by no later than January 17, 2002.
- 3.1.2 Clint Spencer indicated that upon return from DLCD, the plan would go before City of Hermiston Planning Commission on March 12, 2003 and City Council on March 24, 2003. The plan would also likely be adopted by ordinance rather than by resolution.
- 3.1.3 Teresa Penninger noted that she has had some discussions with ODOT staff in Salem about how best to amend the US 395 North Corridor Plan. As of now, it looks like ODOT will not perform a complete revision of the North Corridor Plan. Instead, the US 395 North Corridor Plan will be amended such that it references specific elements of the US 395 (Port Drive to Feedville Road) Corridor Refinement Plan.
- 3.1.4 Matt Hughart noted that there appeared to be a discrepancy in the US 395 North Corridor Plan. Specifically, the plan makes reference to an improvement at Airport Way in the text and an improvement at Airport Road in the Solutions Map. Is this a typo, or are there improvements planned at both US 395 intersections?
 - 3.1.4.1 Teresa Penninger indicated that she would look into this issue.

3.2 Review of Section #1 – Proposed Transportation System Plan Amendments

- 3.2.1 Clint Spencer reviewed the plan and had no concerns or comments.
- 3.2.2 George Ruby reviewed the plan and had no concerns or comments.
- 3.2.3 Patrick Knight reviewed the plan and noticed a few minor wording and grammar mistakes. To help convey these little mistakes, he requested an electronic copy of the report so that he could use the notes and track changes feature.
- 3.2.4 Teresa Penninger reviewed the plan and would like to see some minor improvements and clarifications. These include the following:
 - 3.2.4.1 Page 3 replace the term “recreation path” with “multi-use path”
 - 3.2.4.2 To avoid confusion on the maps, try to replace the US 395 North Corridor Plan call-out box with a different type of linework or shading.
 - 3.2.4.3 In Table 1, #33, replace west with east.
 - 3.2.4.4 Revisit Table 1 and the implementation plan to eliminate any discrepancies.
 - 3.2.4.4.1 Marc Butorac requested that Pat and Clint review the implementation plan again to make sure there are no potential issues from the City’s perspective.
- 3.2.5 Pat Napolitano reviewed the plan and had no comments.

3.3 Review of Section #2 – Technical Memorandum #1

- 3.3.1 Teresa Penninger requested that a description be included in the report that documents the naming convention changes for ODOT’s US 395 median project.
 - 3.3.1.1 Marc Butorac indicated that it would be easier and more cost efficient to add several descriptive paragraphs to the introduction rather than change every technical memorandum. The PPT members agreed.
- 3.3.2 Teresa Penninger requested that the memorandum give more description to the current Hermiston City limits boundary within the study area.
- 3.3.3 Teresa Penninger requested that the TM #1 provide reference to or include the City of Hermiston land use text for each of the zoning districts within the study area.

- 3.3.4 Tereas Penninger asked if the City would be willing to refine the zoning to reflect the statement about commercial uses being more likely to develop along the US 395 frontage.
 - 3.3.4.1 Clint Spencer indicated that it would be unlikely.
 - 3.3.4.2 Matt Hughart noted that the statement is basically a future land use assumption and was added to the memorandum to help describe how the future traffic volume forecasts were developed.
- 3.3.5 George Ruby noted that changing the legend symbols to match the map symbols could enhance Figure 5.

3.4 Review of Section #3 - Technical Memorandum #2

- 3.4.1 Teresa Penninger noted that this memorandum has the same median naming convention problem.
- 3.4.2 Teresa Penninger requested that a reference be added to the each threshold paragraph (page 3 of the December 3, 2002 memorandum) that informs the reader about the mitigated columns in Tables 1, 2, and 3.
- 3.4.3 Teresa Penninger requested that the City of Hermiston Development Code be referenced in the last paragraph on page 7.
 - 3.4.3.1 Clint Spencer noted that the Development Code should be referenced as 157.160.
- 3.4.4 Teresa Penninger asked if the City would be willing to add some text to the December 3, 2002 memorandum that discusses alternate land use options such as in-fill development.
 - 3.4.4.1 Marc Butorac requested that Teresa and Clint work together on this issue and provide Kittelson with any language that is deemed appropriate.

3.5 Review of Section #4 – Technical Memorandum #3

- 3.5.1 George Ruby noticed that page 7 should be reprinted to eliminate the hand-written note.

4.0 Discussion of I-84 Interchange Issue – Teresa Penninger (ODOT).

4.1 Overview

- 4.1.1 Teresa Penninger brought as-builts and the latest turning movement volumes.
 - 4.1.1.1 Marc Butorac asked Teresa how the analysis should be completed. Teresa indicated that a technical memorandum would be sufficient.
 - 4.1.1.2 George Ruby indicated that Tom Kuhlman recently looked at all of the interchanges along I-84 a few years ago and my have additional information to complete the analysis.

5.0 Meeting Wrap-Up – Marc Butorac, Kittelson & Associates, Inc.

- 5.1 Marc Butorac noted that Kittelson would incorporate the suggested changes as well as any that may be gathered at tonight's Stakeholder meeting. Updated and final copies would be mailed to the PPT team and City by no later than January 17, 2003.
- 5.2 Teresa Penninger will continue to coordinate with ODOT to work on the update process for the US 395 North Corridor Plan.

END OF MEETING MINUTES



US 395 Corridor Refinement Plan

Port Drive to Feedville Road

STAKEHOLDER WORKSHOP #4

January 6, 2003

Please Sign In:

NAME	ADDRESS	CITY	ZIP
DAN & SUE SHELLY	17119 SE MANLEY ST	PORTLAND	97236
Roy Stephen, Hermiston Foods LLC	2250 Hwy 395	Hermiston	97838
Jay L. Moore	2000 E Airport Rd	Hermiston	97838
Ellen Dunlop	29616 Noble Rd	Herm.	97838
Sharon Rohde	39007 Rohde Rd	Echu	97826
Joyce Rohde	39007	"	"
George Dress	516 N. OREGON AVE	PASCO WA	99301
Ellen Ellenberger	31895 feedville Rd	Stantfield	97875
Terese Penninger	000T 3012 ISLAND AVE	LA GRANDE	97850
PATRICK KNIGHT	000T 3012 ISLAND AVE	LA GRANDE	97850
Pat Napolitano	C of H		

US Highway 395 Corridor Refinement Plan (Port Drive to Feedville Rd.)

Stakeholder Meeting #4
January 6, 2003



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

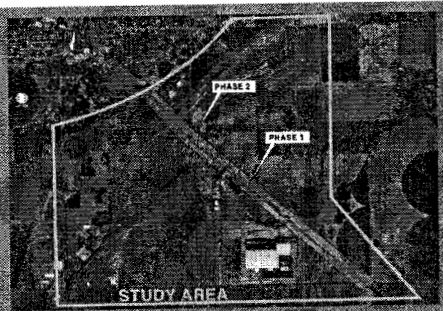
Meeting Overview

- Project Study Area
- Project Background
- Project Goals and Objectives
- Phase 1 Process and Results
- Phase 2 Process and Results
- Refined Circulation Plan
- Proposed TSP Amendments
- Proposed US 395 North Corridor Plan Amendments
- Next Steps



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Study Area



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Background

- Kelli Blvd – Rosalynn Drive STIP Median Project (ODOT)
- Existing Conditions
 - Access Locations
 - Daily and Peak Traffic Volumes
 - Crash Data
- Future Considerations
- Revised Median Configuration
- Phase 1 Objectives
- Phase 2 Objectives
- TSP Amendments



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Operational and Safety Facts

- US 395 carries approximately 9,600 vehicles per day (20% trucks)
- 6,300 vehicles (960 trucks) enter/exit US 395 within the study area between 6 a.m. and 6 p.m.
- 17 crashes have occurred within the study area over the past 5 years
- Average Travel Speed is 57 mph (85th percentile speed is 64 mph)



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Future Considerations

- Continued Increase in US 395 Traffic Volumes
- Degradation of Accessibility to Adjacent Land Use Due to Increased Traffic
- Provision of Certainty for Existing and Future Development
- Provision of Frontage/Backage Roads to Facilitate Circulation to Full-Access/Signalized Intersections



US 395 Corridor Refinement Plan
Port Drive to Feedville Road

Project Goals

- **Goal 1: Business Community**
 - Enhance the integrity and vitality of the local business community.
- **Goal 2: Access Efficiency**
 - Maintain safe and efficient access to adjacent properties and public streets along the corridor.
- **Goal 3: Aesthetics and Landscaping**
 - Enhance the environment, attractiveness, and appeal of the area through landscaping and other aesthetic improvements.
- **Goal 4: Geometry**
 - Minimize negative impacts to businesses through proper and efficient geometric design.

Project Goals

- **Goal 5: Pedestrian and Bicycle Environment**
 - Provide for an interconnected system of pedestrian and bicycle facilities to serve short-distance and recreational trips.
- **Goal 6: Vehicular Travel**
 - Maintain a safe and efficient travel way for local and regional travel along the corridor.
- **Goal 7: Capacity**
 - Provide a transportation system that has sufficient capacity to serve user needs.
- **Goal 8: Safety**
 - Ensure a transportation corridor that maintains adequate levels of safety for all users.

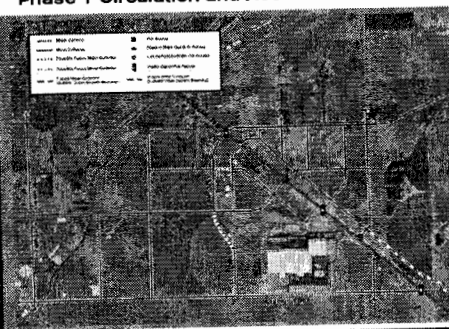
Overall Objectives

- Identification of Short- and Long-term Access Locations and Traffic Control Improvements on US 395 Between Port Drive and Feedville Road.
- Long-term Implementation Plan for Collector and Local Streets within the Study Area.
- Amendments to the Street Classifications and Traffic Signal Plan, Pedestrian Facility Plan, Bicycle Facility Plan, and Street System Improvement Plan elements of the Hermiston TSP.

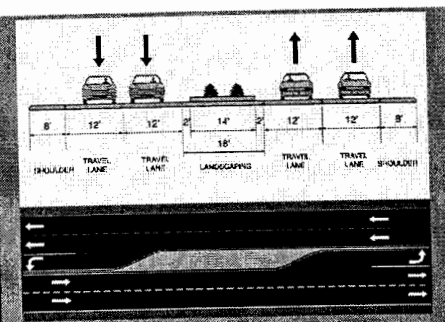
Phase 1 Planning Process (Kelli Blvd. To Feedville Road)

- **Citizen Stakeholder Workshop** was held on August 2002
 - As a result of this workshop, 7 access and circulation alternatives were developed.
- A second **Citizen Stakeholder Workshop** was held in September 2002.
 - Interested citizens were asked to review, rank, and recommend modifications to the 7 access and circulation alternatives.
- From the input provided at the two Stakeholder Meetings, the Project Planning Team developed the Phase 1 Preferred Access and Circulation Plan.

Preferred Phase 1 Circulation and Access Plan



US 395 Median Design Configuration

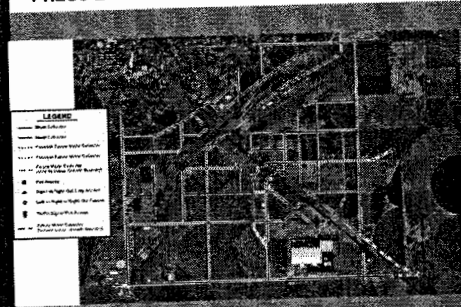


Phase 2 Planning Process (Port Drive to Feedville Road)

- A Citizen Stakeholder Workshop was held in October 2002.
- Based on the workshop participation, the Project Planning Team developed 3 access and circulation alternatives for Phase 2.
- Through subsequent conversations with ODOT and City of Hermiston officials, a preferred Phase 2 circulation and access plan was developed.



Preferred Phase 2 Circulation and Access Plan



Proposed Amendments to the Hermiston Transportation System Plan

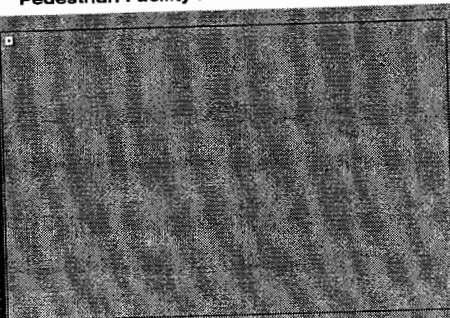
- Street Classifications and Traffic Signal Plan
- Pedestrian Facility Plan
- Bicycle Facility Plan
- Recommended 20-Year Street System Improvement Projects



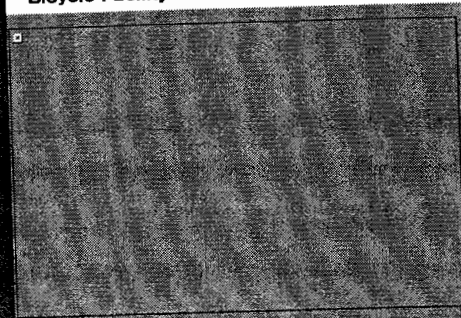
US 395 Corridor Refinement Plan Street Classifications and Traffic Signal Plan



US 395 Corridor Refinement Plan Pedestrian Facility Plan



US 395 Corridor Refinement Plan Bicycle Facility Plan



Proposed Amendments to the US 395 North Corridor Plan

- Traffic signal at US 395/Airport Way.
- Traffic Signal at US 395/Wal-Mart Distribution Center driveway.
- Proposed Off System circulation roadways located within the study corridor.



US 395 Corridor Refinement Plan
Fast Drive to Berkeley Road

Next Steps

- Draft Corridor Refinement Plan
 - January 6th
- Final Corridor Refinement Plan
 - January 20th
- Transportation System Plan Amendments to DLCD
 - February 3rd
- Planning Commission Meeting
 - March 12th
- City Council Hearing
 - March 24th



US 395 Corridor Refinement Plan
Fast Drive to Berkeley Road