Oregon
Theodore R. Kulongoski, Governor

Department of Land Conservation and Development
635 Capitol Street NE, Suite 150
Salem, Oregon 97301-2524
Phone: (503) 373-0050
First Floor/Coastal Fax: (503) 378-6033
Second Floor/Director's Office: (503) 378-5518
Web Address: http://www.oregon.gov/LCD

NOTICE OF ADOPTED AMENDMENT

June 28, 2006

TO: Subscribers to Notice of Adopted Plan
or Land Use Regulation Amendments

FROM: Mara Ulloa, Plan Amendment Program Specialist

SUBJECT: Union County Plan Amendment
DLCD File Number 003-05

The Department of Land Conservation and Development (DLCD) received the attached notice of adoption. Due to the size of amended material submitted, a complete copy has not been attached. A copy of the adopted plan amendment is available for review at the DLCD office in Salem and the local government office.

Appeal Procedures*

DLCD ACKNOWLEDGMENT or DEADLINE TO APPEAL: July 13, 2006

This amendment was submitted to DLCD for review 45 days prior to adoption. Pursuant to ORS 197.830 (2)(b) only persons who participated in the local government proceedings leading to adoption of the amendment are eligible to appeal this decision to the Land Use Board of Appeals (LUBA).

If you wish to appeal, you must file a notice of intent to appeal with the Land Use Board of Appeals (LUBA) no later than 21 days from the date the decision was mailed to you by the local government. If you have questions, check with the local government to determine the appeal deadline. Copies of the notice of intent to appeal must be served upon the local government and others who received written notice of the final decision from the local government. The notice of intent to appeal must be served and filed in the form and manner prescribed by LUBA, (OAR Chapter 661, Division 10). Please call LUBA at 503-373-1265, if you have questions about appeal procedures.

*<u>NOTE:</u> **THE APPEAL DEADLINE IS BASED UPON THE DATE THE DECISION WAS MAILED BY LOCAL GOVERNMENT. A DECISION MAY HAVE BEEN MAILED TO YOU ON A DIFFERENT DATE THAN IT WAS MAILED TO DLCD. AS A RESULT YOUR APPEAL DEADLINE MAY BE EARLIER THAN THE ABOVE DATE SPECIFIED.**

Cc: Doug White, DLCD Community Services Specialist
Jon Jinings, DLCD Regional Representative
Bob Cortright, DLCD Transportation & Growth Management Coordinator
Hanley Jenkins, Union County

<paa> ya/

FORM 2

D L C D NOTICE OF ADOPTION

This form **must be mailed** to DLCD **within 5 working days after the final decision** per ORS 197.610, OAR Chapter 660 - Division 18

(See reverse side for submittal requirements)

DEPT OF

JUN 26 2006

LAND CONSERVATION AND DEVELOPMENT

Jurisdiction: City of La Grande/Union County Local File No.: none (If no number, use none)

Date of Adoption: 6-21-06 (Must be filled in) Date Mailed: 6-21-06 (Date mailed or sent to DLCD)

Date the Notice of Proposed Amendment was mailed to DLCD: ?/2005 (sent by David Evans & Assoc.

___ Comprehensive Plan Text Amendment ___ Comprehensive Plan Map Amendment

___ Land Use Regulation Amendment ___ Zoning Map Amendment

___ New Land Use Regulation ___ Other: TSP Amendment (Please Specify Type of Action)

Summarize the adopted amendment. Do not use technical terms. Do not write "See Attached."

The adopted admendment amends the County's Transportation System Plan to include the US 30: Gekeler Lane to I-84 Circulation & Access Management Plan (US 30 CAMP).

Describe how the adopted amendment differs from the proposed amendment. If it is the same, write "Same." If you did not give notice for the proposed amendment, write "N/A."

A map was made clearer and some solid lines were changed to dotted lines. Table 20: Access Management Actions Summary 18. & 19. were changed to address landowner's concerns.

Plan Map Changed from : NA to NA

Zone Map Changed from: NA to NA

Location: The subject property extends along US 30 from East H Ave. to just north of I-84 ramps. Acres Involved: ____

Specify Density: Previous: NA New: NA

Applicable Statewide Planning Goals: 1, 2, 11, 12 & 14

Was an Exception Adopted? Yes: ____ No: X

DLCD File No.: 003-05 (14493)

Did the Department of Land Conservation and Development receive a notice of Proposed Amendment **FORTY FIVE (45) days prior to the first evidentiary hearing**. Yes: X No: ____

If no, do the Statewide Planning Goals apply. Yes: ___ No: ____

If no, did The Emergency Circumstances Require immediate adoption. Yes: ___ No: ____

Affected State or Federal Agencies, Local Governments or Special Districts: City of La Grande, Union County, UCEDC & ODOT

Local Contact: Hanley Jenkins, II Area Code + Phone Number: (541)963-1014

Address: 1001 4th Street, Suite C

City: La Grande, OR Zip Code+4: 97850

ADOPTION SUBMITTAL REQUIREMENTS

This form **must be mailed** to DLCD **within 5 working days after the final decision**
per ORS 197.610, OAR Chapter 660 - Division 18.

1. Send this Form and **TWO (2) Copies** of the Adopted Amendment to:

ATTENTION: PLAN AMENDMENT SPECIALIST
DEPARTMENT OF LAND CONSERVATION AND DEVELOPMENT
635 CAPITOL STREET NE, SUITE 150
SALEM, OREGON 97301-2540

2. Submit **TWO (2) copies** the adopted material, if copies are bounded please submit **TWO (2) complete copies** of documents and maps.

3. Please Note: Adopted materials must be sent to DLCD not later than **FIVE (5) working days** following the date of the final decision on the amendment.

4. Submittal of of this Notice of Adoption must include the text of the amendment plus adopted findings and supplementary information.

5. The deadline to appeal will be extended if you submit this notice of adoption within five working days of the final decision. Appeals to LUBA may be filed within **TWENTY-ONE (21) days** of the date, the "Notice of Adoption" is sent to DLCD.

6. In addition to sending the "Notice of Adoption" to DLCD, you must notify persons who participated in the local hearing and requested notice of the final decision.

7. **Need More Copies?** You can copy this form on to 8-1/2x11 green paper only ; or call the DLCD Office at (503) 373-0050; or Fax your request to:(503) 378-5518; or Email your request to Larry.French@state.or.us - ATTENTION: PLAN AMENDMENT SPECIALIST.

BE IT REMEMBERED, that at a regular term of the Union County Board of Commissioners, for the County of Union, sitting for the transaction of County business, begun and held at the Joseph Building Annex in the City of La Grande, in said County and State, on Wednesday of said month and the time fixed by law for holding a regular term of said Court, when were present:

The Honorable	**STEVE MCCLURE**	**CHAIRMAN**
	COLLEEN MACLEOD	**COMMISSIONER**
	JOHN LAMOREAU	**COMMISSIONER**

WHEN, on Wednesday, the 21 day of June 2006, among others the following proceedings were had to-wit:

IN THE MATTER OF AMENDING THE COUNTY'S TRANSPORTATION SYSTEM PLAN TO INCLUDE THE US 30: GEKELER LANE TO I-84 CIRCULATION & ACCESS MANAGEMENT PLAN	ORDINANCE 2006-01

WHEREAS, The Union County Transportation System Plan (TSP) identifies existing transportation facilities and provides guidelines for future planned and constructed transportation facilities until the year 2018;

WHEREAS, The Oregon Department of Transportation submitted an application to amend the County's TSP to include the US 30: Gekeler Lane to I-84 Circulation & Access Management Plan (US 30 CAMP) which identifies a long-term circulation and access management plan that preserves the capacity of US 30 while accommodating growth and development in the southern portion of La Grande and adjacent Union County lands;

WHEREAS, the Union County Planning Commission advertised and held public hearings on January 23rd & April 24, 2006 and voted to recommend approval of the application to the Union County Board of Commissioners; and

WHEREAS, the Union County Board of Commissioners advertised and held a de novo public hearing on June 7, 2006 to accept public testimony, deliberate and potentially make a decision.

NOW THEREFORE, BE IT ORDAINED BY THE UNION COUNTY BOARD OF COMMISSIONERS, STATE OF OREGON:

SECTION 1: AMENDMENT

The Union County Transportation System Plan is amended to include the US 30: Gekeler Lane to I-84 Circulation & Access Management Plan (Attachment "A") approved and affixed hereto.

SECTION 2: FINDINGS DOCUMENT

Adopted, approved and affixed hereto are Supporting Findings of Fact (Attachment "B").

PASSED AND ADOPTED this 21 day of June 2006, by a vote of the following members of the Union County Board of Commissioners voting therefore.

Steve McClure, Chairman

Colleen MacLeod, Commissioner

John Lamoreau, Commissioner

Exhibit "B"

Supporting Findings of Fact

1. Union County Zoning, Partition & Subdivision Ordinance (UCZPSO) Section 23.05 3 identifies several criteria which must be satisfied in order to gain Plan Amendment approval.

2. The properties in the study area are in Exclusive Farm Use, Commercial Interchange and Heavy Industrial Plan Classifications.

3. The TSP updates the transportation element of the Union County Land Use Plan and replaces the 1979 Union County Transportation Plan.

4. The TSP is intended to satisfy the Oregon Transportation Planning Rule (TPR) requirements and implement Statewide Planning Goal 12: Transportation.

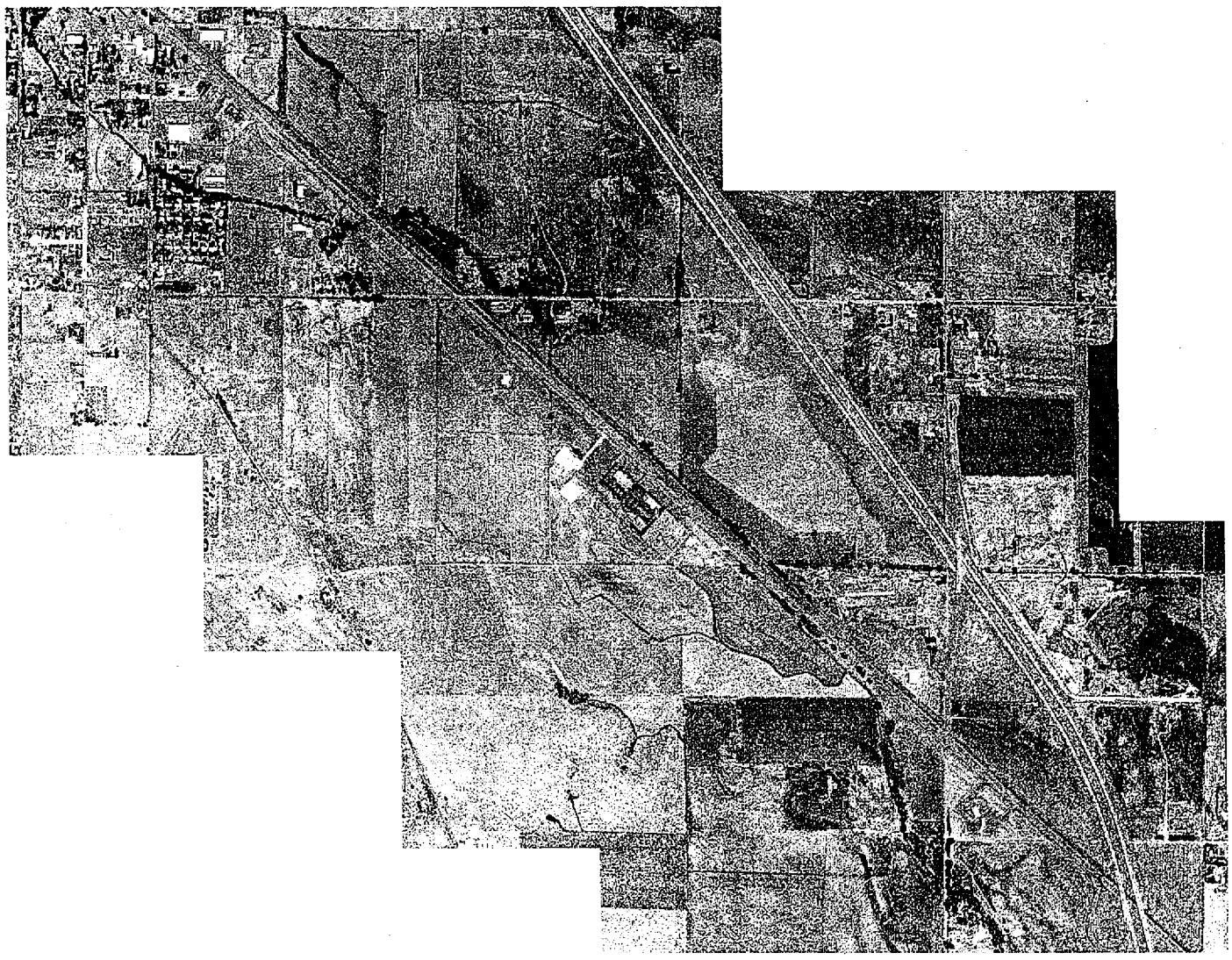
5. The TSP identifies existing transportation facilities and provides guidelines for future planned and constructed transportation facilities until the year 2018.

6. The ODOT initiated Comprehensive Plan/TSP amendments are designed to ensure that the function and circulation of US 30 (or Oregon Hwy. 203) and the surrounding area support future development in accordance with the TSP.

7. The applicant has satisfied UCZPSO Section 23.05 3. Land Use Plan Text Amendment requirements as stated in the materials attached to the January 9, 2006 application.

FINAL DRAFT

US 30: Gekeler Lane to I-84
Circulation and Access Management Plan
City of La Grande and Union County, Oregon



March 29, 2006

FINAL DRAFT

US 30: Gekeler Lane to I-84
Circulation and Access Management Plan
City of La Grande and Union County, Oregon

Prepared for
Oregon Department of Transportation, Region 5
3012 Island Avenue
La Grande, OR 97850

Prepared by
David Evans and Associates, Inc.
Cogan Owens Cogan, LLC

March 29, 2006

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EXECUTIVE SUMMARY

The *US 30: Gekeler Lane to I-84 Circulation and Access Management Plan* (US 30 CAMP) describes existing traffic and land use patterns in the study area; identifies potential safety, access, and traffic congestion issues; and proposes measures to maintain safe and efficient operation of US 30 and connecting roadway network as the surrounding lands develop. The US 30 CAMP is developed in partnership with the City of La Grande, Union County, the Union County Economic Development Corporation (UCEDC), the Oregon Department of Transportation (ODOT), property owners, and other stakeholders in the area.

BACKGROUND AND PURPOSE

The purpose for this US 30 CAMP is to identify a long-term circulation and access management plan that preserves the capacity of US 30 while accommodating growth and development in southern La Grande and the adjacent Union County lands. This study was initiated in response to the planning of the La Grande Business Park south of Gekeler Lane and west of US 30.

The study area for the US 30 CAMP extends along US 30 from East H Avenue to just north of the I-84 ramps. Roadways within the study area include I-84, US 30 (Adams Avenue), Gekeler Lane, McAlister Road, 20th Street, and East H Avenue.

OBJECTIVES

The objectives for the US 30 CAMP included:

- Involving affected property owners in the study area, the City of La Grande, Union County, the UCEDC, ODOT, and other stakeholders, including businesses operating in the Study Area.
- Evaluating local transportation, environmental, and land use conditions.
- Identifying needed transportation improvements within the Study Area and proposing alternatives that conform to current design standards and accommodate the long-term circulation and access management needs of the local transportation system.
- Developing the plan in accordance with the provisions and the policies of the Oregon Highway Plan and other relevant state transportation laws.

PUBLIC PROCESS

Recognizing that the success of land use or transportation efforts depends in part on involving citizens and other affected stakeholders, the Project Management Team (PMT) kept property owners and other stakeholders informed at each stage of the planning effort. They were invited to provide comments as the plan developed. Key stakeholders and participants included the PMT, property owners in the study area, the general public, and other groups.

The PMT is an advisory group consisting of representatives from ODOT, the City of La Grande, Union County, and the UCEDC. They are responsible for guiding the planning work of the

Contractor (Cogan Owens Cogan, LLC (COC) and David Evans and Associates, Inc. (DEA)). A list of the PMT members is included in Appendix A.

The PMT was responsible for providing input regarding the *US 30: Gekeler Lane to I-84 Circulation and Access Management Plan* (US 30 CAMP) development including goals and objectives, the level of public involvement and technical analysis. PMT members reviewed and commented on all work products and recommendations.

Four meetings were held with the PMT in the course of developing the plan.

Business and Property Owners Working Group

All business and property owners within the study area were invited to join the Business and Property Owners Working Group (BWG), which met three times with the Contractor and ODOT representatives to review and comment on the project work products and recommendations.

Other Stakeholder Groups

Other stakeholder groups included the Union County Chamber of Commerce, Union County Tourism, Union County Emergency Services, Public Works, and Sheriff's Departments, La Grande Fire and Police Departments, La Grande School District, the U.S. Forest Service, local environmental, transportation, or land-use advocacy groups, or other organizations identified as the project proceeds.

Representatives of these stakeholder groups were encouraged to attend the public workshops and comment on the US 30 CAMP planning process.

General Public

All property owners, renters or businesses within the study area, those who use the affected roadways, or other individuals who may have been directly or indirectly impacted by the project were also notified via direct mail and via articles in the newspaper. One public workshop was held on May 25, 2005 to provide project background, evaluation findings, and alternatives to address expected system deficiencies. The workshop report is available under separate cover.

Additional public comments will be solicited at four public hearings where the Plan will be considered. This includes presentations before the Union County and La Grande Planning Commissions, which are anticipated to take place in January 2006. The first adoption hearings before the La Grande City Council and Union County Board of Commissioners are anticipated to take place in February 2006.

ALTERNATIVES CONSIDERED

The transportation analysis was based on a future land use and transportation projection assuming full build out of the land within the study area (excluding land zoned for exclusive farm use). The year 2025 was assumed to be the future year condition to provide a twenty-year planning horizon for the study.

The 2025 future build-out analysis indicated that while the operations on US 30 would continue to meet the ODOT mobility standards, many of the side street approaches would have traffic demand that would exceed available capacity. To address this concern, the following baseline intersection improvements were considered as part of all alternatives:

- US 30/Gekeler Lane - signalization and additional lanes (right-turn deceleration and left-turn) on US 30
- US 30/Business Park Access- additional lanes (right-turn deceleration and left-turn) on US 30
- US 30/McAlister Road – signalization, additional lanes on US 30 (southeastbound right-turn deceleration) and McAlister Road (right-turn and left-turn), and possibly reducing the intersection skew

Based on an analysis of the roadway network and function in the study area, 8 transportation options were developed in response to operational, mobility, safety and other issues. The options included:

- Two options that provide additional connections to the business park along with a service road behind the existing development on US 30
- An option that provides another alternate access to the business park by extending the southernmost roadway in the business park westward to connect with Foothill Road
- Two options that eliminate the offset access points on US 30 and improve the safety of vehicles turning left onto Gekeler Lane either side of US 30 by realigning Gekeler Lane east of the railroad tracks
- One option that identifies long-term improvement concepts for creating a frontage road southwest of US 30 that would extend from the business park network to McAlister Road and serve adjacent lands should the City's UGB expand or should development occur along US 30 through other changes in land use
- One option that identifies long-term improvement concepts for creating a frontage road northeast of US 30 that would extend from Gekeler Lane to McAlister Road and serve adjacent lands should the City's UGB expand or should development east of the railroad tracks occur through other changes in land use
- One option that connects Gekeler Lane over I-84 with an overpass (not an interchange) to provide additional connections into the area bound by the railroad tracks to the west and I-84 to the east

A matrix of these options is included in the appendix. They are described in the US 30 CAMP report, Section 6, Transportation Alternatives.

US 30 CAMP RECOMMENDATIONS

The US 30 CAMP is composed of two elements: an access management plan and a roadway improvement plan.

Access Management Plan

One of the goals of the US 30 CAMP is to develop an access management strategy that helps preserve the functionality of US 30, protecting its ability to accommodate traffic volumes safely and efficiently into the future. The safety and efficiency of the highways and connections to the interstate system are vital to the adjacent property owners who need access for their businesses and residences. It has been shown, however, that a proliferation of driveways and minor street intersections near a ramp terminal can drastically increase conflicts. This causes operational problems, decreases the capacity of the intersections, and generally degrades service for all system users.

The strategy and actions in the US 30 CAMP are based on existing land uses for each study area. When a property is developed, redeveloped or a change-of-use occurs, an application for an approach road will be required if access is proposed to the state highway system. At that time, any existing approach road, and any new proposed approach road, will be evaluated. The US 30 CAMP will guide ODOT when completing a change-of-use assessment.

Roadway Improvement Plan

The roadway improvements within the study area were developed to enhance the capacity, access, circulation, and safety of the transportation system while conforming to the provisions and the policies of the Oregon Highway Plan and other relevant state transportation laws. The recommended projects include:

- Provide a traffic signal and additional lanes (southeastbound right-turn deceleration and left-turn) on US 30 at Gekeler Lane when traffic volumes at the intersection meet ODOT's warrants for signalization and supplemental turn lanes.

- Provide additional lanes (southeastbound right-turn deceleration and northwestbound left-turn) on US 30 at the business park access when volumes at the intersection meet ODOT's warrants for supplemental turn lanes.

- Provide a traffic signal, additional lanes on US 30 (southeastbound right-turn deceleration), and provide turn lanes and a more perpendicular connection on McAlister Road (right-turn and left-turn) when traffic volumes at the intersection meet ODOT's warrants for signalization and supplemental turn lanes.

- Provide additional connections to the business park along with a service road behind the existing development on US 30 within 10 years with development of the business park.

- Extend East H Avenue to the east, create a new connection from East H Avenue to US 30 opposite Gekeler Lane where it is realigned west of US 30, and realign Gekeler Lane east of US 30 to connect into the extension from East H Avenue within 20 years with development of the adjacent residential lands.

- Create a frontage road southwest of US 30 that would extend from the extended business park network to McAlister Road to serve lands southwest of US 30 should the City's UGB expand or should development occur along US 30 through other changes in land use in the long term (beyond 20 years).

- Create a frontage road northeast of US 30 that would extend from Gekeler Lane to McAlister Road and serve adjacent lands should the City's UGB expand or should development east of the railroad tracks occur through other changes in land use in the long term (beyond 20 years).

- One option that connects Gekeler Lane over I-84 with an overpass (not an interchange) to provide additional connections into the area bound by the railroad tracks to the west and I-84 to the east in the long term (beyond 20 years).

Agency Coordination

- La Grande, Union County and ODOT, via the Oregon Transportation Commission, will all adopt the final US 30 CAMP.

- ODOT, La Grande and Union County will coordinate to prepare a funding plan for provision of any improvements described in the US 30 CAMP.

IMPLEMENTATION OF THE US 30 CAMP

The remaining steps that are anticipated to occur for implementation of the US 30 CAMP are:

- Union County – The Union County Planning Commission and Board of County Commissioners will hold hearings and consider adoption of the US 30 CAMP in winter/spring 2006.

- La Grande – The La Grande Planning Commission and City Council will hold hearings and consider adoption of the US 30 CAMP in winter/spring 2006.

- Following the actions by La Grande and Union County, the Oregon Transportation Commission (OTC) will be requested to formally amend the Oregon Highway Plan to incorporate the US 30 CAMP.

1. INTRODUCTION

The *US 30: Gekeler Lane to I-84 Circulation and Access Management Plan* (US 30 CAMP) describes existing traffic and land use patterns in the study area; identifies potential safety, access, and traffic congestion issues; and proposes measures to maintain safe and efficient operation of US 30 and connecting roadway network as the surrounding lands develop. The US 30 CAMP is developed in partnership with the City of La Grande, Union County, the Union County Economic Development Corporation (UCEDC), the Oregon Department of Transportation (ODOT), property owners, and other stakeholders in the area.

1.1 BACKGROUND AND PURPOSE

The purpose for this US 30 CAMP is to identify a long-term circulation and access management plan that preserves the capacity of US 30 while accommodating growth and development in southern La Grande and adjacent Union County lands. This study was initiated in response to the planning of the La Grande Business Park south of Gekeler Lane and west of US 30.

1.2 STUDY AREA

The study area for the US 30 CAMP extends along US 30 from East H Avenue to just north of the I-84 ramps. Roadways within the study area include I-84, US 30 (Adams Avenue), Gekeler Lane, McAlister Road, 20th Street, and East H Avenue.

1.3 OBJECTIVES

The objectives for the US 30 CAMP include:

- Involving affected property owners in the study area, the City of La Grande, Union County, the UCEDC, ODOT, and other stakeholders, including businesses operating in the Study Area.
- Evaluating local transportation, environmental, and land use conditions.
- Identifying needed transportation improvements within the Study Area and proposing alternatives that conform to current design standards and accommodate the long-term circulation and access management needs of the local transportation system.
- Developing the plan in accordance with the provisions and the policies of the Oregon Highway Plan and other relevant state transportation laws.

1.4 PUBLIC PROCESS

Recognizing that the success of land use or transportation efforts depends in part on involving citizens and other affected stakeholders, the Project Management Team (PMT) kept property owners and other stakeholders informed at each stage of the planning effort. They were invited to provide comments as the plan developed. Key stakeholders and participants included the PMT, property owners in the study area, the general public, and other groups.

The PMT is an advisory group consisting of representatives from ODOT, the City of La Grande, Union County, and the UCEDC. They are responsible for guiding the planning work of the Contractor (Cogan Owens Cogan, LLC (COC) and David Evans and Associates, Inc. (DEA)). A list of the PMT members is included in Appendix A.

The PMT was responsible for providing input regarding the *US 30: Gekeler Lane to I-84 Circulation and Access Management Plan* (US 30 CAMP) development including goals and objectives, the level of public involvement and technical analysis. PMT members reviewed and commented on all work products and recommendations.

Four meetings were held with the PMT in the course of developing the plan.

Business and Property Owners Working Group

All business and property owners within the study area were invited to join the Business and Property Owners Working Group (BWG), which met three times with the Contractor and ODOT representatives to review and comment on the project work products and recommendations.

Other Stakeholder Groups

Other stakeholder groups included the Union County Chamber of Commerce, Union County Tourism, Union County Emergency Services, Public Works, and Sheriff's Departments, La Grande Fire and Police Departments, La Grande School District, the U.S. Forest Service, local environmental, transportation, or land-use advocacy groups, or other organizations identified as the project proceeds.

Representatives of these stakeholder groups were encouraged to attend the public workshops and comment on the US 30 CAMP planning process.

General Public

All property owners, renters or businesses within the study area, those who use the affected roadways, or other individuals who may have been directly or indirectly impacted by the project were also notified via direct mail and via articles in the newspaper. One public workshop was held on May 25, 2005 to provide project background, evaluation findings, and alternatives to address expected system deficiencies. The workshop report is available under separate cover.

Additional public comments will be solicited at four public hearings where the Plan will be considered. This includes presentations before the Union County and La Grande Planning Commissions, which are anticipated to take place in January 2006. The first adoption hearings before the La Grande City Council and Union County Board of Commissioners are anticipated to take place in February 2006.

2. STUDY AREA

The study area for the US 30 CAMP extends along US 30 from East H Avenue to just north of the I-84 ramps (See Figure 1). Roadways within the study area include I-84, US 30 (Adams Avenue), Gekeler Lane, McAlister Road, 20th Street, and East H Avenue. The general characteristics of the roadways are described below.

I-84, Old Oregon Trail, is an Interstate Highway. I-84 is the main east-west highway through eastern Oregon and Union County although the highway travels predominately northwest-southeast within the US 30 CAMP study area. Within the study area, I-84 is separated by a 40 to 60 foot median with two travel lanes in each direction. The posted speed is 55 mph for trucks and 65 mph for passenger vehicles.

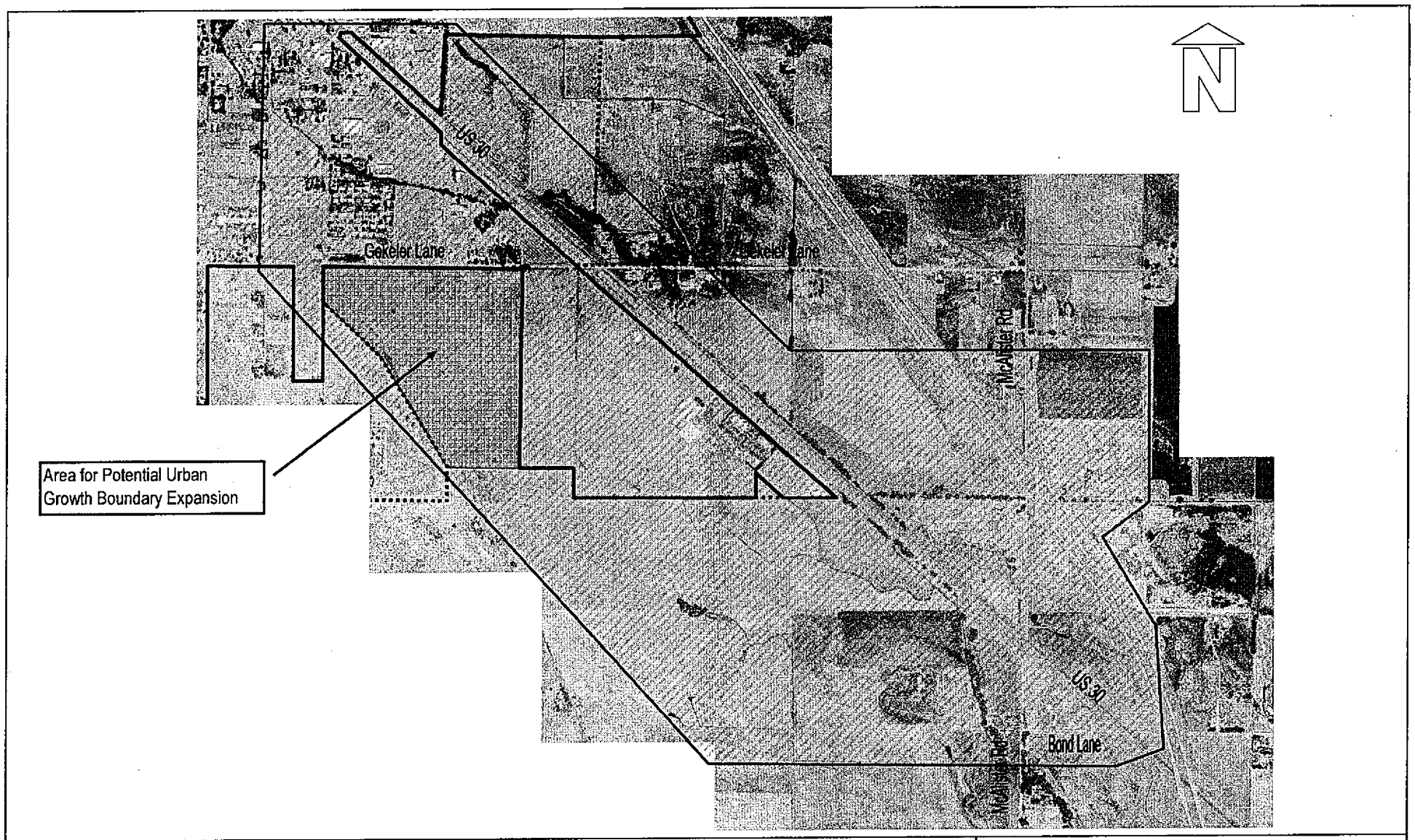
US 30 is a District Highway traveling roughly north-south, paralleling I-84 through most of Union County. Prior to the construction of I-84, US 30 was the primary route between Baker City and La Grande. The route carries primarily farm/ranch and tourism/recreation traffic in the region. Within the study area and within city limits, the speed is 35 mph. Within the study area and outside the city limits, the speed is 55 mph. The roadway is classified as an arterial by the La Grande/Island City TSP, and ODOT classifies it as a District Highway.

The La Grande/Island City TSP classifies Gekeler Lane as a major collector in the urban area and a rural collector in Union County. It is a two-lane road that travels east-west.

McAlister Road travels north-south within the study area, connecting Island Avenue (OR 82) to the north with US 30 to the south. It is classified as a rural arterial in Union County.

All intersections within the study area are either STOP-controlled or uncontrolled intersections. No traffic signals are present.

An inventory of the existing roadway facilities in the study area was compiled and is contained in Appendix B. The inventory includes roadway information such as street names, classifications, jurisdiction responsibility, number of travel lanes, posted (or non-posted speeds), parking, bicycle and pedestrian facilities, traffic control devices, and the type of pavement surface and its conditions.



DAVID EVANS AND ASSOCIATES INC.

City Limits

Urban Growth Boundary

Study Area

FIGURE 1

STUDY AREA

US 30: GEKELER TO I-84 CAMP

3. POLICY DIRECTION

The consultants and the PMT reviewed relevant plans and policies from La Grande, Union County, and the State of Oregon. The documents establish the guidelines for the management of transportation and land use in the study area:

- Statewide Planning Goals 1 (Citizen Involvement), 2 (Land Use Planning), 11 (Public Facilities Planning), and 12 (Transportation), and 14 (Urbanization)
- Oregon Transportation Plan (OTP) (1992)
- 1999 Oregon Highway Plan (OHP)
- Oregon Administrative Rule (OAR) 734-051 (ODOT Division 51 Interchange Area Access Management Spacing Standards for Approaches)
- 2006-2009 Draft Statewide Transportation Improvement Program (STIP)
- La Grande/Island City Transportation System Plan (1999)
- Union County Transportation System Plan (1999)
- City of La Grande Comprehensive Plan (2003)
- Union County Comprehensive Plan (1985)
- La Grande Zoning Ordinance (2003)
- Union County Zoning Ordinance(1996)

3.1 STATEWIDE PLANNING GOALS

Five statewide planning goals help guide the planning of the US 30 CAMP study area: Goal 1, Citizen Involvement; Goal 2, Land Use Planning; Goal 11, Public Facilities Planning; Goal 12, Transportation; and Goal 14, Urbanization.

3.1.1 Statewide Planning Goal 1 (Citizen Involvement)

Goal 1 requires planning decisions to follow "a citizen involvement program that insures the opportunity for citizens to be involved in all phases of the planning process." The Goal goes on to say that citizen involvement programs must be "appropriate to the scale of the planning effort," and must "[enable] citizens to identify and comprehend the issues." It specifically requires state agencies to coordinate their planning efforts with the affected local governing bodies and to utilize the local communities' existing citizen involvement programs whenever possible." Goal 1 requires these involvement programs to result in "Citizen Influence," meaning that the general public must have the opportunity to participate in and influence all aspects of the planning effort, including data collection, plan preparation, adoption process, implementation, evaluation, and revision.

Like all planning projects in Oregon, the US 30 CAMP must meet the citizen involvement requirements described in Goal 1. The project therefore included four Planning Project Management Team (PMT) meetings, one Public Workshop, and additional opportunities for participation and comment before City and County Planning Commissions and decision-making bodies.

3.1.2 Statewide Planning Goal 2 (Land Use Planning)

Goal 2 requires that all land use actions and decisions be based upon an established land use policy framework. It includes five primary requirements that were important to the Gekeler US 30 CAMP project:

- Coordination between local governments and state agencies
- Inclusion of required plan elements and processes
- Consistency between land use decisions and local city or county comprehensive plans
- Preparation of specific implementation measures
- Adoption of plans and implementation measures by the applicable governing body(s)

Goal 2 requires local governments to coordinate their planning efforts with those state agencies that "have programs, land ownerships, or responsibilities within the area included in the plan." Goal 2 is relevant to this project, as it requires both Union County and the City La Grande to coordinate with the Oregon Department of Transportation (ODOT). Both the City and the County must be involved, as the study area includes land both within and outside of the City of La Grande Urban Growth Boundary (UGB). The City of La Grande is responsible for the planning of land within the UGB, while Union County is responsible for land outside the UGB. Coordination is particularly important because land use decisions by the City and the County will affect growth and development in the study area, which will in turn affect future use and operation of the facilities.

Second, Goal 2 requires that land use plans be supported by an "adequate factual base" to support determinations of compliance with review standards. It requires all land use plans to include "identification of issues and problems, inventories and other factual information for each applicable statewide planning goal, [and] evaluation of alternative courses of action and ultimate policy choices," while also considering "social, economic, energy and environmental needs. "

Third, Goal 2 requires that all land use plans be "consistent with the comprehensive plans of cities and counties and regional plans adopted under ORS Chapter 268." This is relevant because the US 30 CAMP will ultimately be adopted by both the county and city, and it may include recommendations that are inconsistent with the existing comprehensive plans.

Fourth, Goal 2 requires land use plans to include specific implementation measures, which "shall be consistent with and adequate to carry out the plans." The US 30 CAMP does not include implementing ordinances as part of the plan; however, as the project did not recommend any land use changes.

Finally, Goal 2 requires that all land-use plans and implementation ordinances be "adopted by the governing body after public hearing and shall be reviewed and, as needed, revised on a periodic cycle." The US 30 CAMP will be considered in at least four public hearings, one each before the La Grande Planning Commission, La Grande City Council, Union County Planning Commission, and Union County Board of Commissioners. Before going into effect, the US 30 CAMP must be adopted by the La Grande City Council and the Union County Board of Commissioners.

3.1.3 Statewide Planning Goal 11 and OAR 660, Division 11 (Public Facilities)

Statewide Planning Goal 11, Public Facilities Planning, requires cities and counties to plan and develop a timely, orderly and efficient arrangement of public facilities and services to serve as a framework for urban and rural development. The goal requires that urban and rural development be "guided and supported by types and levels of urban and rural public facilities and services appropriate for, but limited to, the needs and requirements of the urban, urbanizable and rural areas to be served."

3.1.4 Statewide Planning Goal 12 and OAR 660, Division 12 (Transportation)

Goal 12, Transportation, requires cities, counties, and ODOT to provide and encourage a safe, convenient and economic transportation system. This is accomplished through development of Transportation System Plans (TSPs), which are based on inventories of local, regional and state transportation needs. The La Grande/Island City Transportation System Plan was adopted by the La Grande City Council in 1999. The Union County TSP was adopted in 1999. These plans are described in Sections 3.5 and 3.7 of this memorandum, respectively.

Goal 12 is implemented through OAR 660, Division 12, the Transportation Planning Rule (TPR). The TPR contains numerous requirements governing transportation planning and project development, several of which warrant comment in this report.

The TPR requires local governments to adopt land use regulations consistent with state and federal requirements "to protect transportation facilities, corridors and sites for their identified functions OAR 660-012-0045(2)." This policy is achieved through a variety of measures, including:

- Access control measures that are consistent with the functional classification of roads and consistent with limiting development on rural lands to rural uses and densities;
- Standards to protect future operations of roads;
- A process for coordinated review of future land use decisions affecting transportation facilities, corridors or sites;
- A process to apply conditions to development proposals in order to minimize impacts and protect transportation facilities, corridors or sites;
- Regulations to provide notice to ODOT of land use applications that require public hearings, involve land divisions, or affect private access to roads; and
- Regulations assuring that amendments to land use designations, densities and design standards are consistent with the functions, capacities and performance standards of facilities identified in the TSP. See also OAR 660-012-0060.

The Land Conservation and Development Commission's (LCDC) rules implementing Goal 12 do not regulate access management. ODOT adopted its Access Management Rule (OAR 734, Chapter 51) to address access management. This rule is described in greater detail in Section 3.4 below.

3.1.5 Statewide Planning Goal 14 (Urbanization)

Goal 14, Urbanization, requires an orderly and efficient transition from rural to urban land use. This is accomplished through the establishment of urban growth boundaries and unincorporated

communities. Urban growth boundaries and unincorporated community boundaries separate urbanizable land from rural land. Land uses permitted within the urban areas are more urban and intensive in nature than those allowed in rural areas, which primarily include farm and forest uses. This helps contain the costs of public facilities, including transportation, by reducing the need for such facilities outside of the UGB.

Goal 14 is important to this project because it focuses development within the relatively compact boundaries of the La Grande UGB. The location, type, and intensity of development within the study area will impact the future use and operation US 30, which extends through both urban and rural lands. The US 30 CAMP does not recommend transportation improvements that promote growth, but it does include recommendations to ensure that US 30 corridor will be able to accommodate anticipated future growth.

3.2 OREGON TRANSPORTATION PLAN (1992)

The Oregon Transportation Plan (OTP) was adopted by the Oregon Transportation Commission (OTC) in 1992 and is intended to meet the requirements of ORS 184.618(1), which requires the development of a state transportation policy and a comprehensive long-range plan for a multi-modal transportation system that addresses economic efficiency, orderly economic development, safety, and environmental quality. The OTP consists of two elements. The Policy Element defines goals, policies, and actions for the state over the next 40 years. The System Element identifies a coordinated multi-modal transportation system and a network of facilities and services for different modes of transportation that are to be developed over the next 20 years to implement the goals and policies of the OTP.

The US 30 CAMP must be consistent with the goals and policies of the OTP. The applicable OTP policies to the proposed transportation improvements are Policy 1B (Efficiency), Policy 1C (Accessibility), Policy 1G (Safety), Policy 2B (Urban Accessibility), and Policy 4G (Management Practices). Policy 4G has the most direct relation to the development of the US 30 CAMP because it identifies access management (Action 4G.2) as one of the management practices to be implemented.

3.3 1999 OREGON HIGHWAY PLAN

The 1999 Oregon Highway Plan (OHP) establishes policies and investment strategies for Oregon's state highway system over a 20-year period and refines the goals and policies found in the OTP. Policies in the OHP emphasize the efficient management of the highway system to increase safety and to extend highway capacity, partnerships with other agencies and local governments, and the use of new techniques to improve road safety and capacity. These policies also link land use and transportation, set standards for highway performance and access management, and emphasize the relationship between state highways and local road, bicycle, pedestrian, transit, rail, and air systems. The policies applicable to planning for the US 30 CAMP are described below.

Under Goal 1: System Definition, the following policies are applicable:

- Policy 1A (State Highway Classification System) develops and applies the state highway classification system to guide ODOT priorities for system investment and management. Highway functions are identified as part of the system.

- Policy 1B (Land Use and Transportation) recognizes the need for coordination between state and local jurisdictions. Coordination with local jurisdictions occurred throughout the preparation of the US 30 CAMP. A Project Management Team was formed to help guide work of the contractor. Members included representatives from ODOT, Union County, and the City of La Grande.
- Policy 1C (State Highway Freight System) states the need to balance the movement of goods and services with other uses. A Business and Property Owners Working Group was created to provide input on freight/shipping interests. I-84 is a State Highway Freight Route within the study area.
- Policy 1F (Highway Mobility Standards) sets mobility standards for ensuring a reliable and acceptable level of mobility on the highway system by identifying necessary improvements that would allow the transportation network to function in a manner consistent with OHP mobility standards. The purpose of the US 30 CAMP is to evaluate the operations along US 30 from Gekeler Lane to I-84, assess limitations, identify safety issues, and develop long-term circulation and access management plans in order to ensure consistency with mobility standards
- Policy 1G (Major Improvements) requires maintaining performance and improving safety by improving efficiency and management before adding capacity. This policy indicates four priorities to be used for developing plans to respond to highway needs.

Under Goal 2: System Management, the following policies are applicable:

- Policy 2B (Off–System Improvements) helps local jurisdictions adopt land use and access management policies. The US 30 CAMP includes sections describing existing and future land use patterns, an access management plan, and implementation measures.
- Policy 2D (Public Involvement) is intended to ensure local, county, regional, and tribal governments and government agencies, as well as citizens and businesses, have the opportunity to participate in the decision making process regarding the plans and policies or improvements affecting the state highway system. A Planning Project Management Team was established as part of the interagency and public involvement approach to the project work.
- Policy 2F (Traffic Safety) improves the safety of the highway system. One component of the US 30 CAMP is to identify existing crash patterns and rates and to develop strategies to address safety issues.

Under Goal 3: Access Management, the following policies are applicable:

- Policy 3A (Classification and Spacing Standards) sets access spacing standards for traffic signals, driveways, and approaches to the state highway system.
- Policy 3B (Medians) sets policy for the placement, type, and location of medians and median openings along state highways in order to enhance safety and efficiency of the highways. This policy aims to influence land use development patterns to ensure consistency with approved transportation system plans.
- Policy 3D (Deviations) establishes general policies and procedures for deviations from adopted access management standards and policies.

The US 30 CAMP compares existing access spacing with adopted access standards and proposes improvements to meet the access spacing standards.

3.4 OREGON ADMINISTRATIVE RULE 734, DIVISION 51 (HIGHWAY APPROACHES, ACCESS CONTROL, SPACING STANDARDS AND MEDIANS)

OAR 734-051 governs the permitting, management, and standards of approaches to state highways to ensure safe and efficient operation of the state highways. The OTC formally adopted the revisions to OAR 734-051 dated July 1, 2003 that became effective on March 1, 2004.

OAR 734-051 policies address the following:

- How to bring existing and future approaches into compliance with access spacing standards, and ensure the safe and efficient operation of the highway
- The purpose and components of an access management plan
- Requirements regarding mitigation, modification and closure of existing approaches as part of project development

Section 734-051-0115, Access Management Spacing Standards for Approaches, establishes access spacing standards for public and private approaches to state highways. The Access Management Plan component of this plan compares access spacing with adopted access standards. It proposes future highway improvements to meet the access spacing standards outlined in OAR 734-051-0125.

3.5 2006-2009 DRAFT STATEWIDE TRANSPORTATION IMPROVEMENT PROGRAM (STIP)

The Statewide Transportation Improvement Program (STIP) is ODOT's four-year capital improvement program of transportation projects and programs. This program is developed through the coordinated efforts of ODOT, federal and local governments, Area Commissions on Transportation, tribal governments, and the public.

The draft STIP for 2006 through 2009 is currently available on the state's website at http://egov.oregon.gov/ODOT/HWY/STIP/. This document was reviewed for the US 30 CAMP in August 2005.

The 2006-2009 Draft STIP includes one project in the US 30 CAMP study area: the US 30: Gekeler Lane Upgrade (La Grande) – Key Number 13609. The project description includes realigning the Gekeler Lane/US 30 intersection, repaving Gekeler Lane, and addressing drainage issues. The cost for the project is $2,759,000, and the year is identified as 2008.

3.6 CITY OF LA GRANDE/ISLAND CITY TRANSPORTATION SYSTEM PLAN (ADOPTED SEPTEMBER 1999)

The City of La Grande TSP guides the management of existing transportation facilities and the design and implementation of future facilities for a 20-year horizon. The TSP constitutes the transportation element of the City's Comprehensive Plan and satisfies the requirement of the Oregon Transportation Planning Rule.

The TSP groups the transportation goals into six categories: 1) Transportation Access and Options, 2) Transportation System, 3) Land Use Compatibility, 4) Funding, 5) Coordination, and 6) Implementation.

The La Grande TSP includes a transportation system inventory, which includes a list of street classifications. The following roadways are within the boundaries of the US 30 CAMP study area and classified by the TSP:

Interstate: I-84 (Old Oregon Trail)
Arterials: US 30
Major Collectors: Gekeler Lane
Minor Collectors: 20th Street, East H Avenue (east of US 30)
Local Streets: Century Loop, Foothills Road

The TSP recommends several transportation system improvements within the study area. The projects are broken into three implementation periods: short-term (0-5 years), mid-term (5-10 years), and long-term (10-20 years). The recommended projects include:

- Gekeler Lane reconstruction: 16th St. to Hwy 30. This project would reconstruct the roadway to allow for two travel lanes, bike lanes and sidewalks. It would also realign Gekeler Lane west of US 30 to a connection slightly north of the current intersection to create a squared (90 degree) intersection rather than a skewed intersection. This is currently identified as a mid-term project in the TSP; however, the 2006-2009 Draft STIP identifies the US 30: Gekeler Lane Upgrade project as funded and scheduled for 2008.
- 20th Street reconstruction: Adams Avenue to Gekeler Lane. This project would reconstruct 20th street to provide two travel lanes, bike lanes and sidewalks. This is a mid-term project.
- Adams Avenue reconstruction: Willow Street to 20th Street. This project would reconstruct Adams Avenue, providing two travel lanes, bike lanes, and sidewalks. This is a long-term project.
- East H Avenue extension: 22nd Street to 26th Street. This project would extend H Avenue eastward approximately 1,600 feet, providing two travel lanes, sidewalks, and planting strips. This is a long-term project.
- 25th Street extension: East H Avenue to east of UP Railway. This project would extend 25th Street southward from East H Avenue, providing two travel lanes, bike lanes, and sidewalks. This is a long-term project.

The Union Pacific (UP) railroad tracks run parallel to US 30 on the northeast side of the highway throughout the study area. The railroad tracks limit access to US 30 from the northeast properties. Within the study area, there are three public (East H Avenue, Gekeler Lane, and McAlister Road) and one private rail crossing. Additional crossings are not anticipated.

3.7 UNION COUNTY TRANSPORTATION SYSTEM PLAN (ADOPTED AUGUST 1999)

The Union County TSP includes a determination of future transportation needs for road, transit, bicycle, pedestrian, air, water, rail, and pipeline systems; and a transportation funding program.

The TSP is guided by four goals and their related objectives. These goals include: 1) improve and enhance safety and traffic circulation on the county road system; 2) preserve the function, capacity, level of service, and safety of the state highway system; 3) identify the 20-year roadway system needs to accommodate developing or undeveloped areas without undermining the rural nature of Union County; and 4) increase the use of alternative modes of transportation (walking, bicycling, rideshare/carpooling, and transit) through improved access, safety, and service.

The Union County TSP has a transportation system inventory, which includes a list of street classifications. The following roadways are within the boundaries of the US 30 CAMP study area and classified by the TSP:

State Highways: I-84, US 30
County Rural Arterial: McAlister Road
County Rural Collector: Gekeler Lane

3.8 LA GRANDE COMPREHENSIVE PLAN (2003)

The City of La Grande Comprehensive Plan was originally adopted in 1973 and was last amended in 2003 through Ordinance Number 3013. It provides the foundation for the city's economic development, land use, and transportation decisions.

The land use element of La Grande's Comprehensive Plan is "intended to provide a general guide to the future use of land within the City and its urban growth boundary." The plan includes two objectives regarding land use planning:

"The overall goal of the La Grande Comprehensive Plan is to provide direction for achieving a safe, healthful, attractive, and workable environment for the citizens of La Grande; and to establish a land use planning process and policy framework as a basis for all decisions and actions related to use of land and to assure an adequate factual base for such decisions and actions."

There are four land use designations within the Comprehensive Plan that are included in the US 30 CAMP study area. The Comprehensive Plan designations are summarized below:

- The land north of Gekeler Lane and west of US 30 is designated primarily Commercial within the study area. The definition of relevant permitted uses with the commercial designation is "to provide areas suitable and desirable for retail, wholesale, office, warehouse, tourist and their similar commercial activities which are needed by the City and surrounding areas."
- The land south of Gekeler Lane and west of US 30 is designated primarily Industrial within the study area. There is also a small triangle of industrially zoned land south of East H Avenue and east of US 30. The railroad tracks within the city limits are zoned as industrial land as well. The definition of permitted uses with the industrial designation is "to provide areas suitable and desirable for those activities that are involved in processing or reprocessing materials and/or resources. These activities are needed to maintain or improve the City's economy and employment."
- The land north of Gekeler Lane and east of US 30 is designated primarily Medium Density Residential with the exception of the industrially zoned lane south of East H Avenue. The definition of permitted uses with the medium density residential designation is "to provide

areas suitable and desirable for single-family residential uses which have or will need public water and sewage services, commercial and educational support facilities and employment opportunities. Planned developments and duplexes are usually included provided the density does not exceed the maximums set forth in the Zoning Ordinance."

- There is also one small area south of Gekeler Lane and west of US 30 that is designated as Public Use. The definition of permitted uses in the public use zoning is "to indicate areas desired to be used for existing or anticipated public uses such as schools, and other local public, state or federal activities or facilities."

Under the discussion of Goal 5 – Open Spaces, Scenic and Historic Areas, and Natural Resources, the Comprehensive Plan identifies the flood plain within the study area as well as wetlands and riparian areas. The flood plain map identifies most of the study area west of US 30 as lying within the flood plain. Gekeler Slough is identified as a riparian corridor both east and west of US 30 and is also identified as a wetland east of US 30.

The Comprehensive Plan refers to the adopted TSP for transportation planning goals and facilities.

3.9 UNION COUNTY COMPREHENSIVE PLAN (1985)

The City of La Grande Comprehensive Plan was originally adopted in 1973 and was last amended in 2003 through Ordinance Number 3013. It provides the foundation for the city's economic development, land use, and transportation decisions.

The Union County Comprehensive Plan was originally adopted in 1979 and was last amended in 1985. It provides the foundation for the county's economic development, land use, and transportation decisions. The County Comprehensive Plan applies to the portion of the study area lying outside the La Grande UGB.

The Union County Comprehensive plan organizes the plan policies by the State Planning Goals. Relevant policies include:

- Goal 3 – Agriculture – Agriculture lands as defined by LCDC Goal 3 shall be preserved and maintained for farm use. Agricultural lands will be preserved by adopting exclusive farm use zones which are appropriate for the continuation of the existing commercial agricultural enterprises within the area, unless a valid exception as identified by OAR 660 Division 4 is taken.
- Goal 3 – Agriculture – That encroachment of urban uses into lands designated on Plan maps as suitable to be maintained for agricultural to the north, east, and southeast of La Grande and Island City will be limited to the areas designated Urban, and Rural or Farm Residential.
- Goal 12 – Transportation – That roads created by partitioning and subdividing will be designed to tie into existing or anticipated road systems, and that roads (and adjacent curbs and walks) proposed within and urban growth boundary will be constructed to the standards required by that city within the urban growth boundary.
- Goal 12 – Transportation – That all existing railroad crossings will be maintained or improved to provide needed traffic connections, unless local planning determines that such crossings are not needed.

- Goal 12 – Transportation – That the County Transportation Plan, the City of La Grande's Airport Plan, and various respective city's street plans will be utilized as guidelines for transportation planning.
- Goal 14 – Urbanization – That urban growth boundaries will be changed only after determining that there is a need for additional urban area and a capability for providing urban services and facilities to such area without unduly increasing the financial burden of residents within the existing boundary.
- Goal 14 – Urbanization – That before rural land is converted to urban residential development the area will be included within an urban growth boundary.

There are three land use designations within the Comprehensive Plan that are included in the US 30 CAMP study area:

- A section of land east and west of US 30 between McAlister Road and the I-84 interchange is designated Commercial within the study area. The purpose of the commercial designation is "to provide areas suitable and desirable for 'possible future' commercial activities outside urban areas, near major cross roads and adjacent to existing commercial activities."
- A section of land northeast of US 30 on either side of McAlister Road is designated Industrial within the study area. The purpose of the industrial designation is "to provide areas suitable and desirable for industrial activities outside of urban areas, particularly those industries dependent upon railroad access, air, or freeway transport, or using geothermal resources, and locating on relatively unproductive soils."
- The remainder of the land within the study area and outside of the La Grande UGB is designated Exclusive Agriculture. Although the purpose of this classification is "to preserve productive agricultural lands, to protect such lands from encroaching incompatible uses, and to maintain the quality of live, character values, and living conditions found on farms" some Goal 3 exceptions were identified, as noted above with the commercial and industrial designations. However, the plan also notes "the agricultural land between US Highway 30 and the freeway, and that land extending from the Highway to Foothill Road which is included in the La Grande Urban Growth Boundary. Soils here are primarily Classes II and III. Existing development will preclude such area from being returned to productivity. Rail and freeway access, poor agricultural (equipment) access, service potential, proximity to industrial development at the stockyards, encroaching urban uses and physical location make the area between the freeway and highway better suited in the long run for urbanization than for agriculture."

3.10 LA GRANDE ZONING ORDINANCE (2003)

The La Grande Development Code provides zoning for the portions of the study area inside the UGB. The study area includes nine city zoning designations within the study area: General Commercial (GC), Business Park (BP), Light Industrial (M-1), Heavy Industrial (M-2), Low Density Residential (R-1), Medium Density Residential (R-2), High Density Residential (R-3), Rural Residential (RR-1) and Public Facilities (PF). The zoning designations are summarized below:

- Rural Residential (RR-1) is described in Article 2.2, Section 2.2.003 of the Development Code. The purpose of this zone is "to establish areas for rural residential living styles." Permitted uses within the RR-1 zone include: single-family detached housing, accessory

uses, essential services, group care residential, home occupations, and livestock uses. Conditional uses include accessory residential, community education, community recreation, extensive impact services and utilities, group care residential (day nurseries), and religious assembly. The minimum lot area is 15,000 square feet for individual lots and the average should not exceed 17,000 square feet when two or more lots are created. Residential density is intended to be two dwelling units per acre.

- Low Density Residential (R-1) is described in Article 2.2, Section 2.2.004 of the Development Code. The purpose of this zone is "to establish areas for single-family residences and necessary accessory uses." Permitted uses within the R-1 zone include: single-family detached housing, accessory uses, essential services, group care residential, and home occupations. Conditional uses include accessory residential, community education, community recreation, extensive impact services and utilities, group care residential (day nurseries), religious assembly, and transient habitation. The minimum lot area is 6,000 square feet for individual lots and the average should not exceed 8,700 square feet when two or more lots are created. Residential density is intended to be 4 to 6 dwelling units per acre.

- Medium Density Residential (R-2) is described in Article 2.2, Section 2.2.005 of the Development Code. The purpose of this zone is "to establish areas for single-family and duplex dwelling units and necessary accessory uses." Permitted uses within the R-2 zone include: single-family detached housing, duplex dwellings, accessory uses, essential services, group care residential, and home occupations. Conditional uses include accessory residential, civic administrative services, clinic services, community education, community recreation, cultural exhibits and library services, extensive impact services and utilities, family residential (manufactured home parks), group car residential (day nurseries), neighborhood convenience center, public research area, religious assembly, retail sales (neighborhood), and transient habitation. The minimum lot area is 5,000 square feet for individual lots and the average should not exceed 7,000 square feet when two or more lots are created. Residential density is intended to be 5 to 10 dwelling units per acre.

- High Density Residential (R-3) is described in Article 2.2, Section 2.2.006 of the Development Code. The purpose of this zone is "to provide higher concentrations of dwelling units where the level of public services can adequately accommodate such development." Permitted uses within the R-3 zone include: single-family detached housing, duplex dwellings, apartments, accessory uses, essential services, group care residential, group residential, and home occupations. Conditional uses include accessory residential, civic administrative services, clinic services, community education, community recreation, cultural exhibits and library services, extensive impact services and utilities, family residential (manufactured home parks), medical services, neighborhood convenience center, postal services, public research area, religious assembly, retail sales (neighborhood), and transient habitation. The minimum lot area is 5,000 square feet for the first dwelling plus 1,000 square feet for each additional unit. Residential density is intended to average 11 or more dwelling units per acre.

- The General Commercial (GC) zoning district is described in Article 2.2, Section 2.2.009 of the Development Code. The purpose of this zone is "to provide the full range of retail goods and services serving a large area which normally requires a large space for development." A wide variety of commercial, residential, and public/institutional uses are allowed in the GC zone, although many require a conditional use permit. No minimum or maximum lot sizes apply.

- The Light Industrial (M-1) zoning district is described in Article 2.2, Section 2.2.011 of the Development Code. The purpose of this zone is "to provide for areas where manufacturing, storage, sorting and wholesaling distribution can be undertaken in close proximity to one another without encroaching upon the character of the adjacent land uses." A wide variety of industrial and commercial uses are allowed in the M-1 zone, although many require a conditional use permit. No minimum or maximum lot sizes apply.
- The Heavy Industrial (M-2) zoning district is described in Article 2.2, Section 2.2.012 of the Development Code. The purpose of this zone is "to provide for areas where large areas of land are needed for the fabrication, processing, and movements of raw materials and where the potential impacts of noise, odor, vibration, glare, and/or heat are least likely to affect adjacent land uses." A wide variety of industrial and commercial uses are allowed in the M-2 zone, although many require a conditional use permit. No minimum or maximum lot sizes apply.
- The Public Facilities (PF) zoning district is described in Article 2.2, Section 2.2.013 of the Development Code. The purpose of this zone is "to provide areas primarily for the location and establishment of facilities which are maintained in public and quasi-public ownership and which utilize relatively large areas of land." Uses typically permitted within the PF zone include: city parks, schools and colleges, libraries, government offices and shop facilities, and cemeteries. A variety of other permitted and conditional uses are allowed as well. No minimum or maximum lot sizes apply.
- The Business Park (BP) zoning district is described in Article 2.2, Section 2.2.014 of the Development Code. The purpose of this zone is "to provide areas for the establishment of light manufacturing and warehousing uses in a park-like setting, with flexibility for siting of certain commercial/office uses where appropriate." The code also notes that this zoning is "more restrictive than conventional industrial or commercial zones in order to provide buildings that have architectural excellence, grounds that have an abundance of landscaping and land uses that are non-polluting." A variety of industrial and commercial uses are allowed in the BP zone and there are no conditional uses. No minimum or maximum lot sizes apply. The code does require that business park zoning should be applied only on large tracts of land abutting either collector or arterial streets.

Vehicular access and circulation standards are described in Article 6.2 of the Development Code under public facilities. These standards are intended to "ensure safe ingress or egress to and from properties; to minimize street congestion and traffic hazards; to provide safe and convenient access to business, public services, and places of public assembly; and to make the appearance of vehicular circulation more compatible with surrounding land uses." Any transportation improvements recommended in the US 30 CAMP must conform to these standards.

3.11 UNION COUNTY ZONING ORDINANCE (1996)

The Union County Zoning and Subdivision Ordinance (Ordinance) was adopted in 1977 and most recently amended in 1996. It establishes zoning designations for the portions of the study area outside the La Grande UGB. Most of the study area outside the UGB is zoned Exclusive Farm Use (A-1) but there is also a section zoned Commercial Interchange (C-2) and a section zoned Heavy Industrial (I-2). The zoning designations are summarized below:

- The Exclusive Farm Use (A-1) zoning district is described in Article 2.00 of the Ordinance. This zone is intended to "conserve and maintain productive agricultural land for continued agricultural use, in accord with the Exclusive Agriculture Land Use Plan classification provisions." Farming and related uses, forestry, and limited residential uses are allowed in this zone. The construction and maintenance of transportation facilities is allowed, as follows:
  - Reconstruction or modification of public roads and highways, including the placement of utility facilities overhead and in the subsurface of public roads and highways along the public right-of-way but not including the addition of travel lanes, where no removal or displacement of buildings would occur, or no new land parcels result.
  - Temporary public road and highway detours that will be abandoned and restored to original condition or use at such a time as no longer needed.
  - Minor betterment of existing public road and highway related facilities such as maintenance yards, weigh stations and rest areas, within right-of-way existing as of July 1, 1987, and contiguous public-owned property utilized to support the operation and maintenance of public roads and highways.
- The General Commercial (GC) zoning district is described in Article 2.2, Section 2.2.009 of the Development Code. Its purpose of this zone is "to provide the full range of retail goods and services serving a large area which normally requires a large space for development." A wide variety of commercial, residential, and public/institutional uses are allowed in the CG zone, although many require a conditional use permit. No minimum or maximum lot sizes apply.
- The Commercial Interchange (C-2) zoning district is described in Article 11.00 of the Ordinance. This zone is intended to "provide for the location of needed highway service, commercial facilities at the interchanges on controlled access highways." The Ordinance specifically notes "it is essential that the principal function of the interchange - the carrying of traffic to and from the freeway in a safe and expeditious manner - be preserved." Hotel and motel, restaurant, truck and automobile service station, trailer, pick-up camper or motor home park are some of the uses permitted within this zone.
- The Heavy Industrial (I-2) zoning district is described in Article 13.00 of the Ordinance. This zone is intended to "provide for new or continued industrial development utilizing large amounts of labor, raw materials or energy, and possibly creating smoke, odor, vibration, noise, or other conditions not attracted to urban areas." A variety of permitted and conditional uses are allowed in this zone but "items manufactured, processed or produced in this zone shall be primarily for wholesale."

4. EXISTING CONDITIONS

The existing conditions analysis includes an inventory of the transportation system, an evaluation of existing operating conditions, an inventory of existing public and private access points, a land use inventory, and identification of natural and cultural constraints.

4.1 PHYSICAL INVENTORY AND MAPPING

An inventory of the existing roadway facilities in the study area (see Figure 1) was compiled and is contained in Appendix B. The inventory includes roadway information such as street names, classifications, jurisdiction responsibility, number of travel lanes, posted (or non-posted speeds), parking, bicycle and pedestrian facilities, traffic control devices, and the type of pavement surface and its conditions. Roadways within the study area include I-84, US 30 (Adams Avenue), Gekeler Lane, McAlister Road, 20th Street, and East "H" Avenue. The general characteristics of the roadways are described below.

I-84, Old Oregon Trail, is an Interstate Highway. I-84 is the main east-west highway through eastern Oregon and Union County although the highway travels predominately northwest-southeast within the study area of the US 30 CAMP. Within the study area, I-84 is separated by a 40 to 60 foot median with two travel lanes in each direction. The posted speed is 55 mph for trucks and 65 mph for passenger vehicles.

US 30 is a District Highway traveling roughly north-south, paralleling I-84 through most of Union County. Prior to the construction of I-84, US 30 was the primary route between Baker City and La Grande. The route carries primarily farm/ranch and tourism/recreation traffic in the region. Within the study area and within city limits, the speed is 35 mph. Within the study area and outside the city limits, the speed is 55 mph. The roadway is classified as an arterial by the La Grande/Island City TSP, and ODOT classifies it as a District Highway.

The La Grande/Island City TSP classifies Gekeler Lane as a major collector in the urban area and a rural collector in Union County. It is a two-lane road that travels east-west.

McAlister Road travels north-south within the study area, connecting Island Avenue (OR 82) to the north with US 30 to the south. It is classified as a rural arterial in Union County.

All intersections within the study area are either stop-controlled or uncontrolled intersections. No traffic signals are present.

4.2 OPERATIONAL INVENTORY AND BASELINE ANALYSIS

The operational inventory and baseline analysis includes existing study area traffic volumes and intersection operations, review and analysis of the crash history in the study area, and existing access spacing and standards.

4.2.1 Existing Traffic Volumes

Existing traffic volumes for the roadways within the study area were determined using several sources of information. Average daily traffic volumes were obtained for highways from the 2003

Oregon Department of Transportation (ODOT) Traffic Volume Tables and intersection turning movement counts were taken at the study area intersections. These volumes were used to estimate daily traffic at intersections and design hourly volumes. The methods of determining the traffic volumes are described in detail in this segment of the report.

4.2.1.1 Turning Movement Counts

Manual traffic counts were conducted by ODOT at the intersections of US 30 with Gekeler Lane and at US 30 with McAlister Road. The traffic counts at Gekeler Lane were collected on Tuesday, Feb 1, 2005. The traffic counts at McAlister Road were collected on Wednesday and Thursday, August 13 and 14, 2003.

4.2.1.2 Average Daily Traffic Volumes

The average daily traffic (ADT) volumes for each of the highways inside the study area were obtained from the 2003 ODOT Traffic Volume Tables, which is the most recent volume table available. The ADT for these highways is listed in Table 1. The ADT was estimated for 2005 using trendline growth rates derived from ODOT's traffic volume tables.

Table 1: ADT Volumes for Study Area Highways

Highway Segment	2003 ADT	Estimated 2005 ADT
I-84: MP 262.34 (0.50 miles south of OR 82)	9,400	9,640
I-84: MP 265.42 (0.50 miles south of US 30 Interchange)	9,500	9,720
US 30: MP 2.93 (SE city limits of La Grande - 0.04 miles SE of Jefferson Ave.)	4,200	4,280
US 30: MP 5.29 (0.10 miles west of I-84)	7,100	7,250

Source: ODOT 2003 Volume Tables

4.2.1.3 Design Hourly Volumes

The traffic analysis for the US 30 CAMP is based on design hourly volumes (DHVs) rather than average turning movement volumes. These volumes are assumed to represent the 30th highest hour of traffic during the year. ODOT's Transportation Planning Analysis Unit (TPAU) has developed procedures for calculating current and future year DHVs.

The DHVs are calculated by applying a seasonal factor to the peak hour volumes. The 30th highest hour volume usually occurs during the peak month of the year. The peak hour volume is multiplied by the seasonal factor to obtain the 30th highest hour volume.

Seasonal Adjustment Factors from Automatic Counters

The seasonal adjustment factor is found by using the automatic traffic recorder (ATR) closest to the location of interest with similar traffic flows, area type, and lane configuration. To find the seasonal factor, the ADT from the highest month reported by the ATR is divided by the ADT listed by the ATR representing the month project counts were taken.

For I-84, the Old Oregon Trail, the nearest ATR with similar characteristics are 01-011 (I-84 – Old Oregon Trail north of N. Powder). A seasonal factor of 1.62 was calculated for the interstate.

For US 30, two ATR locations were considered. There is one ATR near La Grande on a non-interstate highway: 31-003, located at MP 1.74 on OR 82, 0.3 miles east of Island City. A seasonal factor of 1.21 was calculated from the ATR data. Another ATR with somewhat similar traffic characteristics is located on US 30 near North Powder at MP 33.20, just south of the Union-Baker County line. A seasonal factor of 1.39 was calculated from the ATR data.

Because the traffic characteristics of these ATR locations differ somewhat from those on US 30 in the study area, another method of seasonally adjusting the traffic counts was also considered.

Seasonal Adjustment from Traffic Counts

Another methodology using the existing traffic data was also evaluated. Traffic counts were collected by ODOT at the intersection of US 30 at McAlister Road during the month of August 2003. No seasonal factor needs to be applied to those counts but they need to be projected to estimate 2005 volumes. The intersection of US 30 at Gekeler Lane was counted in February 2005, so a seasonal adjustment factor is required. By adjusting the February 2005 traffic volumes to balance with the projected August 2005 traffic volumes, a seasonal adjustment factor was obtained.

The August 2003 counts were projected to 2005 using a growth rate of 2.1 percent per year derived from a 19-year trendline analysis (1984 through 2003). Data prior to 1984 was taken at a different location and skews the trendline results.

The volumes between the intersections were then compared, and a factor derived to adjust the February 2005 counts to a peak summer equivalent by balancing the volumes between the intersections. This methodology yielded a seasonal factor of 1.30 for the PM peak hour and 1.09 for the AM peak hour. This PM peak hour adjustment factor is equal to the average of the adjustment factors at the two non-interstate ATR locations. The AM peak hour factor is lower, which reflects that early morning traffic tends to have less seasonal variation because it is comprised of mostly commuter traffic.

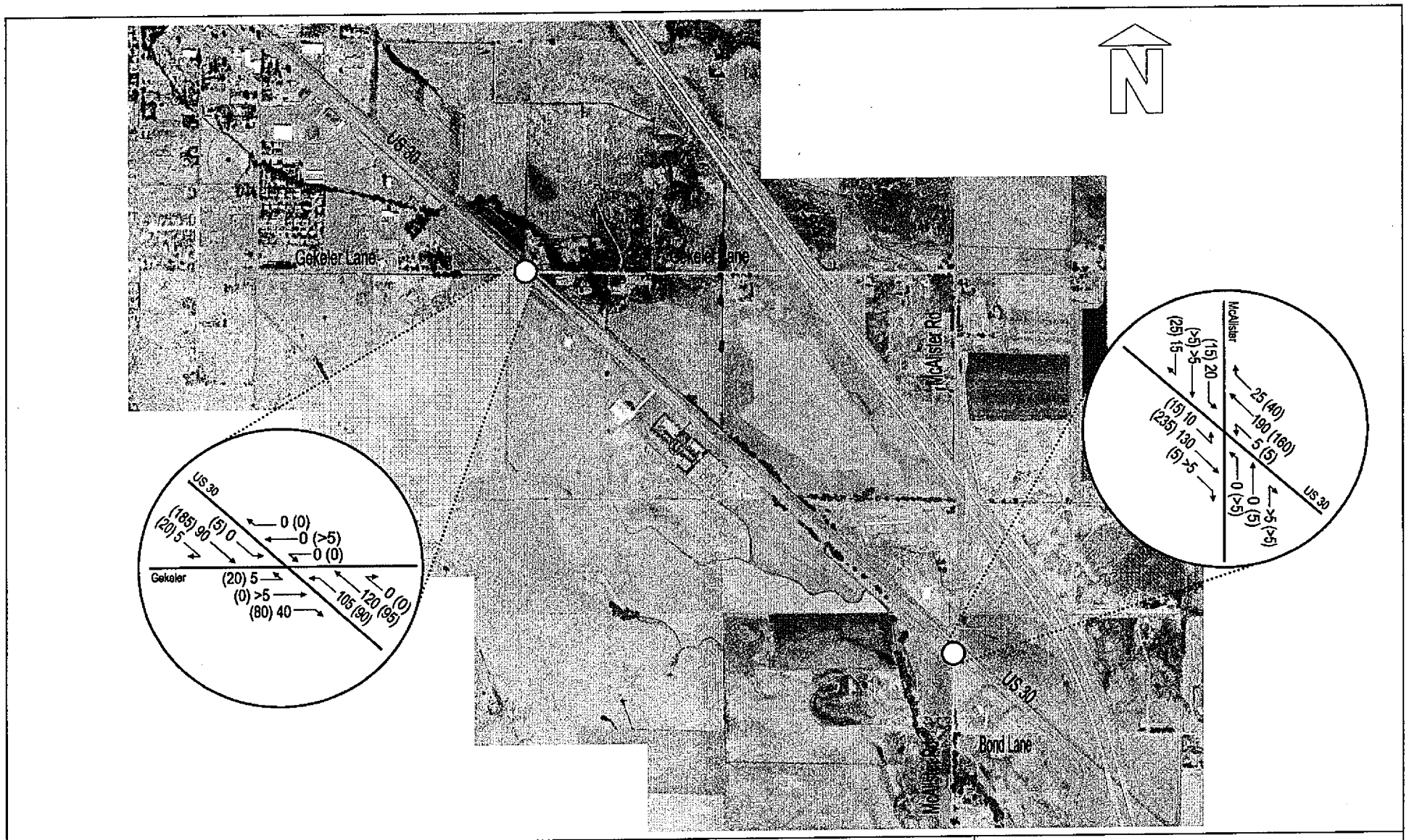
This seasonal adjustment methodology produces a reasonable result and was therefore used to estimate DHVs.

Existing 2005 Traffic Volumes

The morning (AM) and evening (PM) peak hour traffic volumes were collected by ODOT personnel. The intersection of US 30 at Gekeler Lane was collected in February 2005 and was multiplied by the seasonal factor 1.30, and rounded to the nearest five vehicles. The intersection of US 30 at McAlister Road was collected in August 2003. These volumes were projected to 2005 using a historical growth rate of 2.1 percent per year based on a 19-year historical growth trendline. No seasonal factor was applied to these volumes. The resulting peak hour volumes for the study area intersections can be found in Figure 2.

4.2.2 Traffic Operations Analysis

Intersection operations were examined as part of the existing traffic conditions analysis of the US 30 CAMP study area. The procedures and results are described in this section.



DAVID EVANS AND ASSOCIATES INC.

Intersection

Turning Movement

0 (0) AM (PM) Peak Hour Volume

FIGURE 2

2005 EXISTING PEAK PERIOD VOLUMES

US 30: GEKELER TO I-84 CAMP

4.2.2.1 *Operational Criteria*

ODOT has established policies in the 1999 Oregon Highway Plan (OHP) that set standards for projects on ODOT facilities. Goal 1, Policy 1F (Highway Mobility Standards) details the volume-to-capacity (v/c) ratio standards for peak hour operating conditions. The v/c ratio represents the ratio of measured traffic demand (volume) divided by the maximum carrying volume for the roadway or intersection (capacity). When the v/c ratio approaches 0.0, traffic conditions are generally good with free flow travel conditions present. As the v/c ratio approaches 1.0, traffic becomes more congested along roadways and "platoons" of traffic are formed while at intersections, traffic conditions become more unstable with longer delays. Table 6 of the OHP specifies that v/c standards be maintained for ODOT facilities through a 20-year horizon.

According to the OHP, I-84 (Oregon Highway 006) is under the following classifications: Interstate Highway, on the National Highway System (NHS), Freight Route, located inside and outside the Urban Growth Boundary (UGB), and Rural Lands outside UGB. The following OHP requirements apply to this highway:

- Maximum v/c ratio of 0.70 for highways inside the UGB with non-freeway speeds greater than or equal to 45 mph.
- Maximum v/c ratio of 0.70 for highways outside the UGB located in Rural Lands.
- For unsignalized intersections, state highway movements that do not have to stop must meet the v/c requirements of Table 6. For intersections outside the UGB, the movement that must stop or yield right of way must not exceed a v/c ratio of 0.80. Inside the UGB, the movement must not exceed the v/c ratios of 0.80 for the District/Local Interest roads.

US-30 (Oregon Highway 066) is classified as a District Highway and is both inside and outside of UGB within the study area. The following OHP requirements apply to this highway:

- Maximum v/c ratio of 0.80 for highways inside the UGB with non-freeway speeds greater than or equal to 45 mph.
- Maximum v/c ratio of 0.75 for district highways outside the UGB in Rural Lands.
- For unsignalized intersections, state highway movements that do not have to stop must meet the v/c requirements of Table 6. For intersections outside the UGB, the movement that must stop or yield right of way must not exceed a v/c ratio of 0.80. Inside the UGB, the movement must not exceed the v/c ratios of 0.80 for the District/Local Interest roads as shown in Table 6.

Although the OHP v/c ratio standards are the overriding operational standard for Oregon Highways, level of service (LOS) is a widely recognized and accepted measure of traffic operations. Transportation engineers have established various standards for measuring traffic operations at intersections. Each standard is associated with a particular LOS. Six standards have been established to define LOS. They range from LOS A, where traffic is relatively free flowing, to LOS F, where the intersection is totally saturated and traffic movement is very difficult. Both LOS and v/c ratios are reported in this report. Table 2 summarizes the LOS criteria for both signalized and unsignalized intersections based on the criteria established in the methodologies of the Highway Capacity Manual.

Table 2 :Level of Service Criteria

Level of Service	Control Delay (seconds/vehicle) Signalized Intersections	Unsignalized Intersections
A	≤10	≤10
B	>10 and ≤20	>10 and ≤15
C	>20 and ≤35	>15 and ≤25
D	>35 and ≤55	>25 and ≤35
E	>55 and ≤80	>35 and ≤50
F	>80	>50

Note: The LOS criteria are based on control delay, which includes initial deceleration delay, queue move-up time, stopped delay, and final acceleration delay.

Source: Transportation Research Board, Highway Capacity Manual, 2000, p. 16-2 for signalized intersections and p. 17-2 for unsignalized intersections.

Note that the LOS 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 two-way STOP-controlled (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, it is considered that the total delay threshold for any given LOS is less for an unsignalized intersection than for a signalized intersection. Because LOS accounts for driver expectations, while v/c ratios do not, unsignalized intersections can often have a very poor approach LOS while maintaining a relatively good approach v/c ratio.

4.2.2.2 Traffic Operations Software

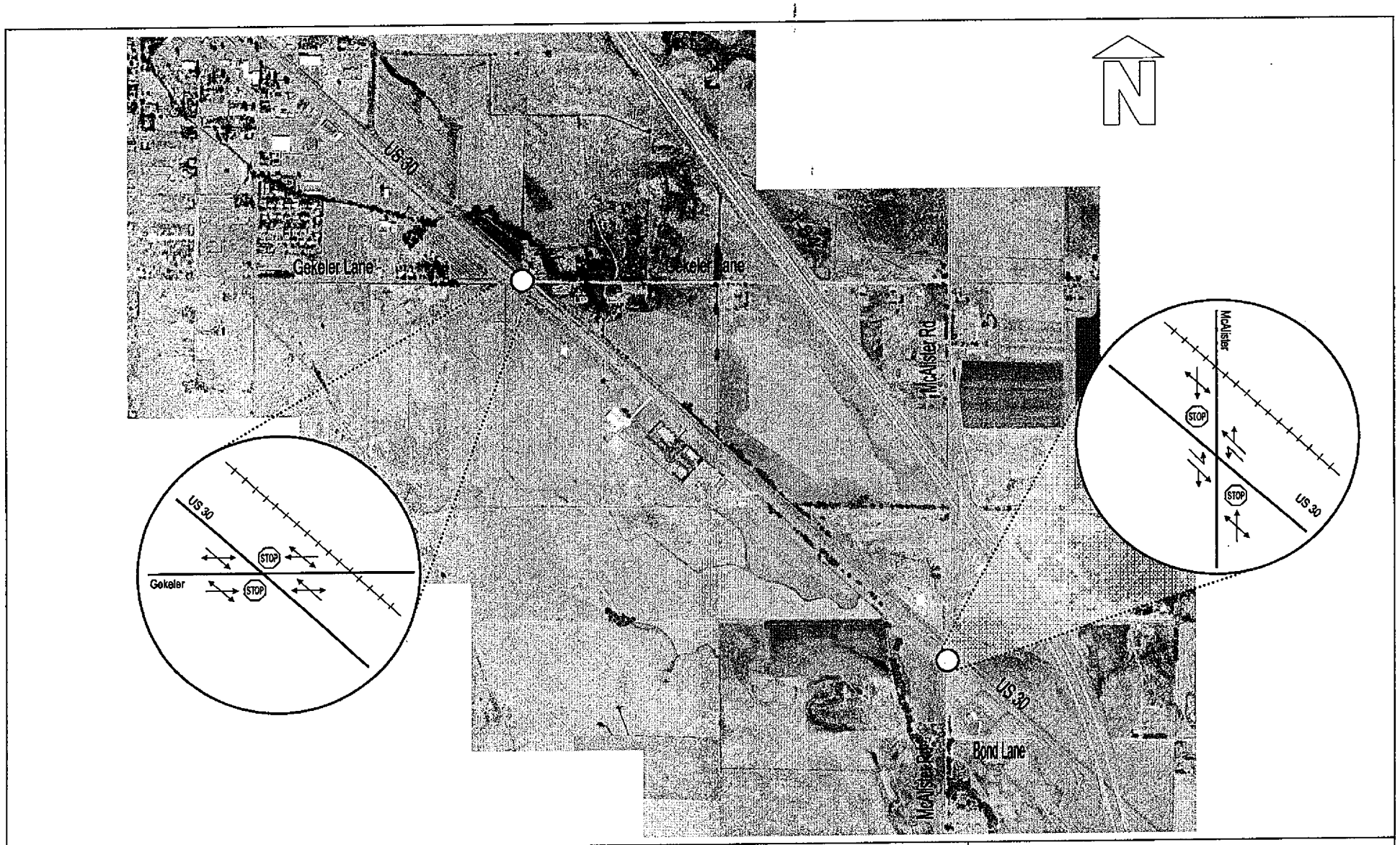
For intersection analysis, the Synchro analysis software package was chosen to evaluate intersection operations for the closely spaced study area intersections. Synchro is a macroscopic model similar to the Highway Capacity Software (HCS), and like the HCS, is based on the methodologies outlined in the *2000 Highway Capacity Manual*. Per ODOT standard, the ideal saturation flow was set at 1,800 vehicles per hour for all traffic analysis.

4.2.2.3 Lane Configuration and Traffic Control

The existing lane configuration and traffic control for the study area intersections are shown in Figure 3.

4.2.2.4 Intersection Operations

The study area intersection operations are summarized in Table 3. The intersections currently operate very well, with extremely low v/c ratios and LOS B or better for all intersections. The results of the intersection operation analysis are consistent with low volume intersections. The LOS A and B indicates these intersections experience little or no delay or queuing.



DAVID EVANS AND ASSOCIATES INC.

Intersection

Turning Movement

STOP Sign Control

Railroad Tracks

FIGURE 3

EXISTING LANE CONFIGURATION AND TRAFFIC CONTROL

US 30: GEKELER TO I-84 CAMP

Table 3: Summary of Existing 2005 Intersection Operations

Intersection		Movement	AM Peak Hour LOS	AM Peak Hour V/C Ratio	PM Peak Hour LOS	PM Peak Hour V/C Ratio
1	US 30 at Gekeler Lane	EB Through, Left, Right	A	0.06	B	0.15
		WB Through, Left, Right	A	0.01	A	0.01
		NWB Left, Through, Right	A	0.08	A	0.07
2	US 30 at McAlister Road	NB Through, Left, Right	A	0.01	B	0.01
		SB Through, Left, Right	B	0.07	B	0.07
		EB Left	A	0.01	A	0.01
		WB Left	A	0.01	A	0.01

Source: David Evans and Associates, Inc.

4.2.3 Safety Analysis

A safety analysis was performed for the roadways within the study area of the US 30 CAMP. The analysis included a review of the ODOT supplied Planning Research Corporation (PRC) crash listings (1999 to 2003), the ODOT Safety Priority Index System data, and a comparison of calculated crash rates to statewide averages. The procedures used for the safety analysis are described in this section.

Crash data is analyzed for three primary reasons: 1) to identify any crash patterns that may exist, 2) to determine the probable causes of crashes with respect to drivers, highways, and vehicles, and 3) to develop measures that will reduce the rate and severity of crashes.

4.2.3.1 PRC Reports

The crash listings were obtained from ODOT personnel in the Crash Analysis and Reporting Unit from statewide crash databases. Reports were generated for the five most recent complete years of crash data. It should be noted that crashes listed in the reports only represent those crashes that were reported. The PRC reports are located in Appendix C.

Crash data was collected for the following roadway segments within the study area:

- US 30: E "H" Avenue to Pierce Rd. (MP 2.90 to MP 6.94)
- Gekeler Lane: 16th St. to Buchanan Lane
- McAlister Road: Buchanan Lane to Foothill-Ladd Canyon Road

From the review of the PRC reports, the type, date, location, and severity of each accident was analyzed. During the five study years, 20 crashes occurred on US 30 within the study area, one crash occurred along Gekeler Lane, and one crash occurred along McAlister Road. The crashes were spread fairly evenly across the five study years. Along US 30, the main crash types were turning, rear end, angle, and fixed object crashes. One crash of interest involved a train at an at-grade railroad crossing. This was located on US 30 southeast of the I-84 interchange, so technically it is outside the study area. No crash patterns became apparent upon inspection of the data. The crashes are summarized in Table 4. For the purposes of this report, crashes reported within 100 feet of the intersection were considered to be intersection crashes.

Table 4: Study Area Crash Summary

Crash Type	No.	Road Conditions Wet	Road Conditions Dry	Time of Day Day	Time of Day Night	Crash Severity PDO	Crash Severity Injury	Crash Severity Fatal
US 30:								
Turn	5	2	3	3	2	5	-	-
Rear End	5	1	4	4	1	4	1	-
Fixed Object	5	1	4	4	1	4	1	-
Angle	4	-	4	4	-	2	2	-
Involving Train	1	-	1	-	1	-	1	-
Gekeler Lane:								
Rear End	1	-	1	1	-	1	-	-
McAlister Road:								
Head-on	1	-	1	1	-	1	-	-

Note: Wet road conditions include ice and snow conditions.
Source: David Evans and Associates, Inc. analysis of ODOT supplied PRC reports.

4.2.3.2 Crash Rates

The crash rates were calculated from the PRC crash reports. Crash information collected represents only those crashes that were reported. In Oregon, legally reportable crashes are those involving death, bodily injury or damage to any one person's property in excess of $1,000 as of August 31, 1997.

Intersection crash rates were calculated using the following equations.

$$rate_{int} = \frac{(Crashes\ x\ 1{,}000{,}000)}{(365\ x\ Years\ x\ ADT)} \quad \text{and} \quad rate_{segment} = \frac{(Crashes\ x\ 1{,}000{,}000)}{(365\ x\ Years\ x\ Length\ x\ ADT)}, \text{ where}$$

$Rate_{int}$ = Crash rate per Million Entering Vehicles (MEV)
$Rate_{segment}$ = Crash rate per Million Vehicle Miles Traveled (MVMT)

Crashes = Number of crashes during the time segment
Years = Number of years being studied

ADT = Average Daily Traffic volumes
Length = Length of roadway segment being studied (for segment rates).

The number of crashes was determined from the PRC reports. The ADT for each intersection was determined using 10 times the PM Peak Hour Volume. The ODOT Transportation Volume Tables contain volumes for highway segments, but do not include the minor street volumes. The ADTs for the segment crash rates were taken from the ODOT volume tables.

Crash rates for the intersections of US 30 at Gekeler Lane and McAlister Rd are shown in Table 6. Table 7 summarizes the segment crash rates along US 30.

Table 5: Intersections Crash Rates

Intersection	Estimated ADT[1]	No. of Crashes	Crash Rate
US 30 at Gekeler Lane	5,100	2	0.22
US 30 at McAlister Road	5,300	1	0.10

[1] Based on ODOT manual turning movement counts
Source: David Evans and Associates, Inc.

The intersection crash rates shown in Table 6 do not indicate reason for concern; the crashes appear to be a random occurrence with no roadway deficiencies creating a pattern of crashes. As shown in Table 6, the five-year crash rates are 0.37 and 0.38 for the two roadway segments listed. These are well below the comparable statewide averages for highways of this type. The first roadway section has a posted speed of 35 mph. The second section has a posted speed of 55 mph.

Table 6: Roadway Segment Crash Rates

Segment	Length (miles)	ADT	Crashes	5 Year Crash Rate	Statewide Crash Rate[1]
US 30: MP 2.90 to MP 3.21	0.31	4720	1	0.37	0.72
US 30: MP 3.21 to MP 6.94	3.73	7250	19	0.38	0.72

[1] From 2003 ODOT State Highway Crash Rate Tables, Table II
Source: David Evans and Associates, Inc. analysis of ODOT supplied PRC reports.

4.2.3.3 SPIS Data

The Safety Priority Index System (SPIS) is a method developed by ODOT for prioritizing locations where funding for safety improvements can be spent most efficiently and effectively. Based on crash data, the SPIS score is influenced by three components: crash frequency, crash rate, and crash severity. Three years of crash data are analyzed for the SPIS score. SPIS locations meet one of two criteria during the previous three years: three or more crashes at the same location, or one or more fatal crashes at the same location. A list of the sites with the top 10% SPIS scores is produced each year. For the year 2003, which includes crash data for 2000, 2001, and 2002, the SPIS scores at or above 45.07 are in the top 10%.

There are no SPIS locations reported in the top 10% in either of the US 30 CAMP study area.

4.3 ACCESS SPACING

Access management is the careful planning of the location, design, and operation of driveways, median openings, interchanges, and street connections. Roads serve two primary purposes. One is mobility and the other is access. Mobility is the efficient movement of people and goods. Access is getting those people and goods to specific properties. A roadway designed to maximize mobility typically does so in part by managing access to adjacent properties. A good example of this is a freeway. A motorist can typically expect interruption-free, efficient travel over a long distance using a freeway. The number of access points is restricted to only freeway interchanges every few miles because this type of roadway primarily serves a mobility function. At the other extreme are local residential streets that provide easy and plentiful access to adjacent properties. This type of roadway primarily serves an access function.

Most state roads serve a function somewhere between the freeway and the local road. One of the responsibilities of ODOT is to ensure that the design of each state road properly balances access and mobility. Access Management is a primary means used to provide this balance. Access Management is also means of increasing safety along street corridors. Allowing more access locations along streets increases the number of potential conflict points between vehicles entering or exiting the approach and vehicle traveling along the main street. This can lead to increased vehicle delay and a corresponding decrease in level of service, as well as a reduction in roadway safety.

4.3.1 Applicable Access Management Standards

The 1999 OHP outlines the requirements for access management for state facilities and the surrounding roadways. The standards apply to distances between the centerlines of adjacent public or private accesses onto the highway (on the same side of the road).

Table 7 tabulates the requirements for district highways.

Table 7: Access Spacing Standards for Statewide and District Highways

Posted Speed	Rural		Urban			
	Expressway	Other	Expressway	Other	UBA	STA
DISTRICT HIGHWAYS[1, 2]						
≥ 55	5,280	700	2,640	700		
50	5,280	550	2,640	550		
40 & 45	5,280	500	2,640	500		
30 & 35		400		400	350	[3]
≤ 25		400		400	350	[3]

References:
1,2 Notes 1 and 2 accompanying Table 15 of the OHP
3 Note 4 accompanying Table 15 of the OHP
All measurements are presented in feet

UBA = Urban Business Area
STA = Special Transportation Area
Source: 1999 OHP Table 15, Appendix C, page 194.

At the southern end of the study area, US 30 is a rural "other" roadway transitioning to an urban "other" roadway where development begins near the City's UGB. The nature of the roadway changes again where it widens to three lanes and adjacent development becomes more intense and could be considered more characteristic of an "Urban Business Area" although it may not have that official designation.

Where the posted speed is 55 mph, the access spacing should be 700 feet whether it is a rural or urban section. Where the posted speed drops to 35 mph, the access spacing should be 400 feet for the urban "other" section or 350 feet for "urban business area."

In addition to the spacing standards on US 30, there are also spacing standards around freeway interchanges. Table 8 and the accompanying exhibit summarize the access spacing standards for interchanges where the mainline is a freeway. For the I-84 interchange just south of the study area, the distance from the interchange ramps to the next intersection should be 1,320 feet or ¼ mile.

Table 8: Standards for Freeway interchanges with Two-Lane Crossroads

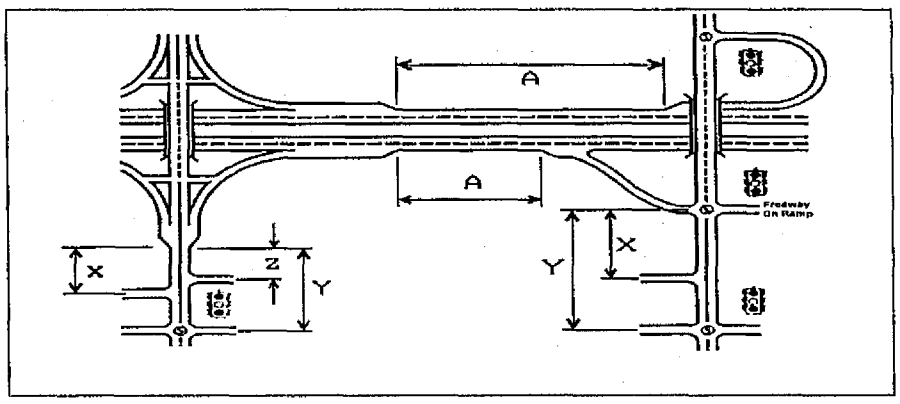
Category of Mainline	Type of Area	Spacing Dimension			
		A[1]	X	Y	Z
FREEWAY	Fully Developed Urban	1 mile	750 ft	1320 ft	1320 ft
	Urban	1 mile	1320 ft	1320 ft	990 ft
	Rural	2 mile	1320 ft	1320 ft	1320 ft

If the crossroad is a state highway, these distances may be superseded by the Access Management Spacing Standards, providing the distances are greater than the distances listed in the above table.
No four-legged intersections may be placed between ramp terminals and the first major intersection.

A = Distance between the start and end of tapers of adjacent interchanges
X = Distance to the first approach on the right; right in / right out only
Y = Distance to first major intersection; no left turns allowed in this roadway section
Z = Distance between the last right in/right out approach road and the start of the taper from the on-ramp
See Figure Z for illustration of measurements.

Source: 1999 OHP Table 16, Appendix C, page 196.

MEASUREMENTS OF SPACING STANDARDS FOR TABLE 8



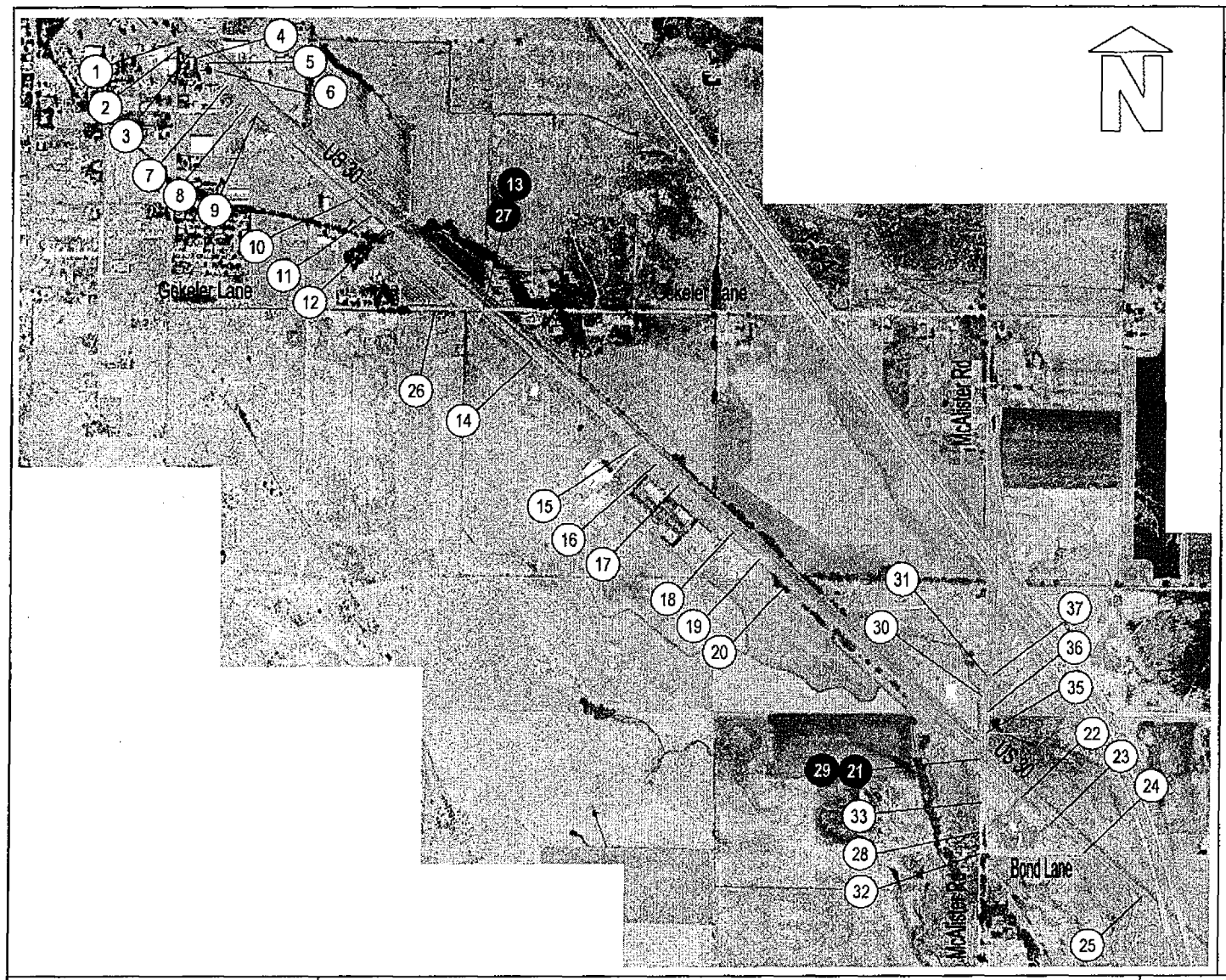
Source: 1999 OHP Figure 18, Appendix C, page 196.

4.3.2 Procedures of Application for Variance

The Oregon Administrative Rules (OAR) Chapter 734 Division 51, commonly referred to simply as Division 51, governs the permitting, management, and standards of approaches to state highways to ensure safe and efficient operation of the state highways. Section 734-051-0135 directs how requests for deviations from the access management spacing standards are submitted and the process of review of those requests.

4.3.3 Existing Access Points

As part of this technical report, the access spacing was compared with the adopted access standards. The comparison assumes that "other" category for the entire roadway length along US 30. Although the "urban business area" may be a better description for the area north of the Bi-Mart driveway, this area does not appear to have that official designation. The existing accesses are presented in Figure 4 and in Table 9.



Access Inventory

#	Type	Width	Use
1	Private: Commercial	24 ft	Les Schwab
2	Private: Residential	14 ft	Residence
3	Private: Commercial	42 ft	Oregon Trader
4	Private: Commercial	30 ft	Quail Run Motor Inn
5	Private: Commercial	15 ft	Quail Run Motor Inn
6	Private: Unknown	38 ft	Unknown
7	Public: Government	53 ft	Oregon Dept. of Forestry
8	Private: Commercial	39 ft	BiMart
9	Private: Commercial	38 ft	Beer Warehouse
10	Private: Institutional	20 ft	7th Day Adventist Church
11	Public: Government	23 ft	School District
12	Private: Unknown	22 ft	Unknown
13	Public: Gekeler Lane	60 ft	Gekeler Lane
14	Private: Commercial	22 ft	Animal Shelter
15	Private: Commercial	25 ft	WastePro Material Recovery
16	Private: Farmland	13 ft	Field
17	Public: Government	21 ft	US Forest Service
18	Private: Commercial	23 ft	Reddaway Trucks
19	Private: Commercial	65 ft	Reddaway Trucks
20	Private: Farmland	10 ft	Field
21	Public: McAlister Rd	40 ft	McAlister Road
22	Private: Commercial	50 ft	Flying J Truck Stop
23	Private: Commercial	52 ft	Flying J Truck Stop
24	Public: Bond Lane	-	Bond Lane
25	Public: I-84 SB Ramp	-	I-84 SB ramps
26	Private: Commercial	55 ft	UPS
27	Public: US 30	40 ft	US 30
28	Private: Residential	15 ft	Residence
29	Public: US 30	90 ft	US 30
30	Private: Commercial	39 ft	New Holland
31	Private: Livestock Rd	59 ft	Livestock Rd
32	Public: Bond Lane	33 ft	Bond Lane
33	Private: Commercial	374 ft	Flying J Truck Stop
34	Public: US 30	60 ft	US 30
35	Private: Farmland	18 ft	Farmland
36	Private: Farmland	22 ft	Gated Field
37	Private: Commercial	29 ft	Steele's

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(#) Private Access Location & Access Table Number

(#) Public Access Location & Access Table Number

FIGURE 4

EXISTING ACCESS INVENTORY

US 30: GEKELER TO I-84 CAMP

Table 9: Existing Roadway Access Inventory

No.	Access Type	Roadway	Side of Road	Approach Width (ft)	Distance to Next Access (ft)	Required Access Spacing (ft)	Comments
Along US 30							
1	Private: Commercial	US 30	West	24	35	400	Les Schwab
2	Private: Residential	US 30	West	14	82	400	Residence
3	Private: Commercial	US 30	West	42	121	400	Oregon Trader
4	Private: Commercial	US 30	West	30	98	400	Quail Run Motor Inn
5	Private: Commercial	US 30	West	15	73	400	Quail Run Motor Inn
6	Private: Unknown	US 30	West	38	136	400	Unknown
7	Public: Government	US 30	West	53	297	400	Oregon Department of Forestry
8	Private: Commercial	US 30	West	39	113	400	Bi Mart
9	Private: Commercial	US 30	West	38	1279	400	Beer Warehouse
10	Private: Institutional	US 30	West	20	243	700	7th day Adventist Church
11	Public: Government	US 30	West	23	193	700	School District
12	Private: Unknown	US 30	West	22	200	700	Unknown
13	Public: Gekeler Lane	US 30	East/West	60	711	700	Gekeler Lane
14	Private: Commercial	US 30	West	22	1361	700	Animal Shelter
15	Private: Commercial	US 30	West	25	264	700	Waste Pro Material Recovery Facility
16	Private: Farmland	US 30	West	13	307	700	Field
17	Public: Government	US 30	West	21	710	700	Forest Service
18	Public: Reserved ROW	US 30	West	23	360	700	Grayback Forestry/Steele's Septic
19	Private: Commercial	US 30	West	65	371	700	Steele's Septic Tank Services
20	Private: Farmland	US 30	West	10	2610	700	Field
21	Public: McAlister Road	US 30	East/West	40	520	700	McAlister Road
22	Private: Commercial	US 30	West	50	382	700	Flying J Truck Stop
23	Private: Commercial	US 30	West	52	453	700	Flying J Truck Stop
24	Public: Bond Lane	US 30	West	-	370	700	Bond Lane
25	Public: I-84 SB ramps	US 30	West	-	-	700	I-84 SB ramps
Along Gekeler Lane							
26	Private: Commercial	Gekeler Ln	South	55	450		UPS
27	Public: US 30	Gekeler Ln	North/South	40	-		US 30
Along McAlister Road							
28	Private: Residential	McAlister	West	15	950		Residence
29	Public: US 30	McAlister	West/East	90	570		US 30
30	Private: Commercial	McAlister	West	39	150		New Holland
31	Private: Livestock Road	McAlister	North/South	59	-		Livestock Rd
32	Public: Bond Lane	McAlister	East	33	343		Bond Lane
33	Private: Commercial	McAlister	East	374	455		Flying J Truck Stop
34	Public: US 30	McAlister	West/East	60	271		US 30
35	Private: Farmland	McAlister	East	18	198		Farmland
36	Private: Farmland	McAlister	East	22	350		Gated Field
37	Private: Commercial	McAlister	East	29	-		Steele's

As shown in Table 8, few accesses in the study area currently meet the OHP spacing standards. No accesses on the portion of US 30 with a posted speed of 35 mph currently meet the 400-foot spacing standard. The portion of US 30 with a posted speed of 55 mph contains only four accesses that currently meet access 700-foot spacing standard. There are also three access points (Bond Lane, and the two Flying J truck stop driveways) within ¼-mile of the I-84 ramp.

4.4 LAND USE INVENTORY

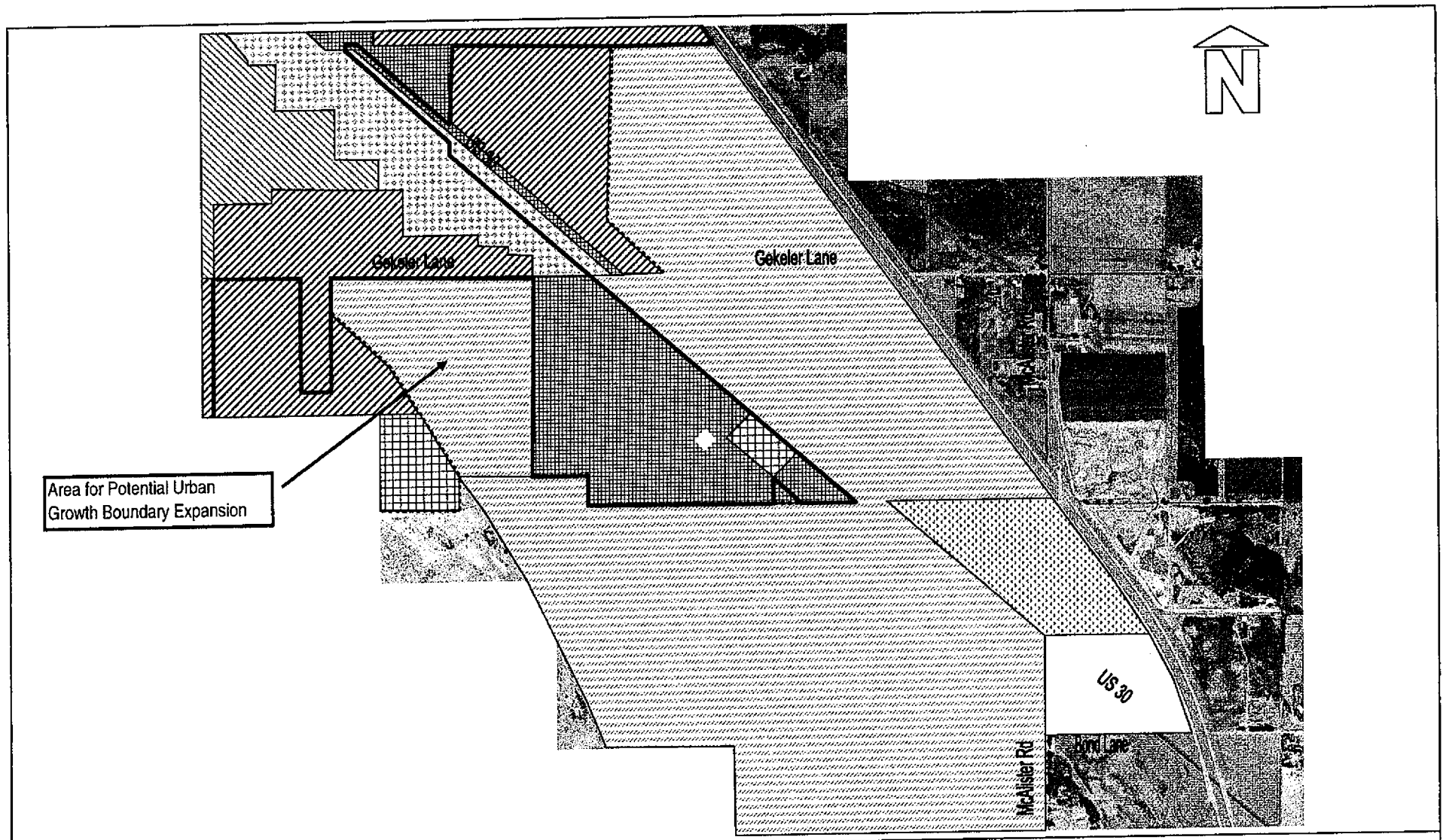
The existing land use inventory includes a discussion of existing policies and zoning and existing land uses within the study area.

4.4.1 Existing Planning Policies and Zoning Designations

As described in Chapter 3, La Grande has the primary planning responsibility for areas within the Urban Growth Boundary (UGB), while Union County has jurisdiction over areas outside the UGB. Land use and planning decisions within the La Grande UGB are governed by the City of La Grande Comprehensive Plan (adopted in 1973, last amended in 2003), and the La Grande Zoning Ordinance. Outside the UGB, these decisions are governed by the Union County Comprehensive Plan (adopted 1979, acknowledged 1985) and the Union County Zoning and Subdivision Ordinance (adopted in 1977, last amended in 1996).

There are five land use designations within the La Grande Comprehensive Plan that are included in the US 30 CAMP study area. These designations are further subdivided into nine zoning designations within the study area: General Commercial (GC), Business Park (BP), Light Industrial (M-1), Heavy Industrial (M-2), Rural Residential (RR-1), Low Density Residential (R-1), Medium Density Residential (R-2), High Density Residential (R-3), and Public Facilities (PF). The Comprehensive Plan designations and land use zoning are summarized below and shown in Figure 5 and Figure 6:

- The land north of Gekeler Lane and west of US 30 is designated primarily Commercial within the study area. The definition of relevant permitted uses with the commercial designation is "to provide areas suitable and desirable for retail, wholesale, office, warehouse, tourist and their similar commercial activities which are needed by the City and surrounding areas." The Zoning Map shows this land designated as General Commercial (GC).
- The land south of Gekeler Lane and west of US 30 is designated primarily Industrial within the study area. This area is in the process of expanding as part of a UGB expansion that will incorporate a triangle of land between Foothill Road, Gekeler Lane, and the existing industrial land. There is also a small triangle of industrially zoned land south of East H Avenue and east of US 30, which is in the process of expanding through the rezoning of some residential areas. The railroad tracks within the city limits are designated as industrial land as well. The definition of permitted uses with the industrial designation is "to provide areas suitable and desirable for those activities that are involved in processing or reprocessing materials and/or resources. These activities are needed to maintain or improve the City's economy and employment." South of Gekeler Lane, part of the industrial land is zoned Business Park (BP) and part is zoned Heavy Industrial (M-2). The industrial area south of East H Avenue is zoned Light Industrial (M-1).
- The land north of Gekeler Lane and east of US 30 is designated primarily Medium Density Residential with the exception of the industrially zoned land south of East H Avenue. There is another section of Medium Density Residential along Gekeler Lane east of US 30 and its adjacent Commercial zoning. The definition of permitted uses with the medium density residential designation is "to provide areas suitable and desirable for single-family residential uses which have or will need public water and sewage services, commercial and educational support facilities and employment opportunities. Planned developments and duplexes are usually included provided the density does not exceed the maximums set forth in the Zoning Ordinance." The zoning for these residential designations is a mix of Medium Density Residential (R-2), and Low Density Residential (R-1). The R-2 zoning has a density of 6 to 10 dwelling units per gross acre. The R-1 zoning has a density of 4 to 6 dwelling units per gross acre.

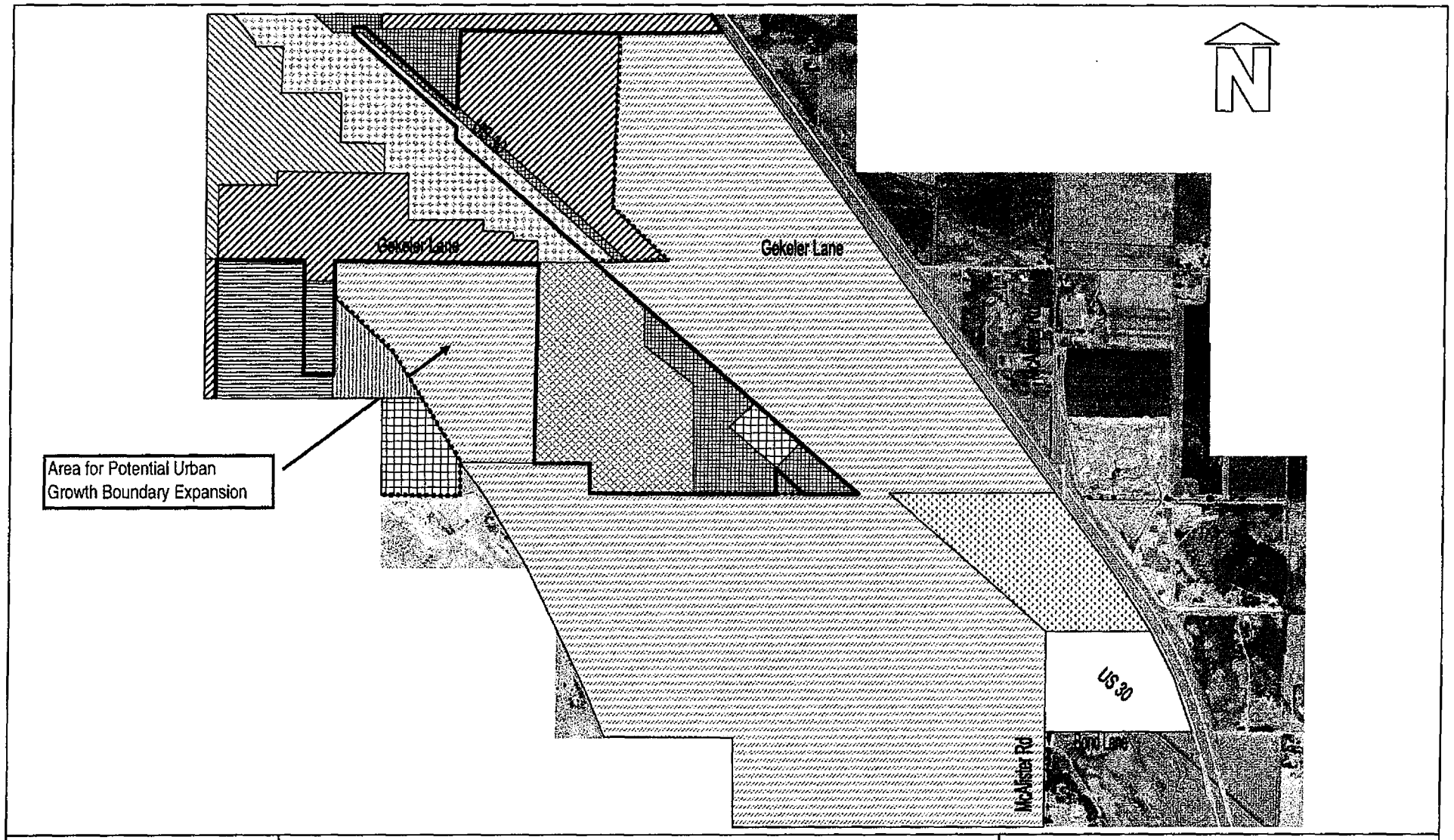


DAVID EVANS AND ASSOCIATES INC.

FIGURE 5

COMPREHENSIVE PLAN LAND USE DESIGNATIONS IN STUDY AREA

US 30: GEKELER TO I-84 CAMP



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- City Limits
- Urban Growth Boundary
- RR-1 Rural Residential (City)
- R-1 Low Density Residential (City)
- R-2 Medium Density Residential (City)
- R-3 High Density Residential (City)
- GC General Commercial (City)
- M-1 Light Industrial (City)
- BP Business Park (City)
- PF Public Facilities (City)
- I-2 Heavy Industrial (County)
- C-2 Commercial Interchange (County)
- A-1 Exclusive Farm Use (County)

FIGURE 6

LAND USE ZONING IN STUDY AREA

US 30: GEKELER TO I-84 CAMP

- There is also some land west of US 30 and north of Gekeler Lane that is designated High Density Residential. The definition of permitted uses with the High Density Residential (R-3) designation is "to provide areas desirable and suitable for all types of high density residential development including apartments, planned developments, and other multi-family dwelling unites. Under certain conditions, with appropriate safeguards, low traffic generating non-residential land uses may be suitably located in close association with high density residential uses." The zoning for this residential designation is all High Density Residential (R-3) with a minimum density of 11 dwelling units per gross acre.
- There is also one small area south of Gekeler Lane and west of US 30 that is designated as Public Use. The definition of permitted uses in the public use zoning is "to indicate areas desired to be used for existing or anticipated public uses such as schools, and other local public, state or federal activities or facilities." The zoning for this area is Public Facilities (PF).

There are three land use designations within the Union County Comprehensive Plan that are included in the US 30 CAMP study area:

- A section of land east and west of US 30 between McAlister Road and the I-84 interchange is designated Commercial within the study area and zoned C-2. The purpose of the commercial designation is "to provide areas suitable and desirable for 'possible future' commercial activities outside urban areas, near major cross roads and adjacent to existing commercial activities."
- A section of land northeast of US 30 on either side of McAlister Road is designated Industrial within the study area and zoned I-2. The purpose of the industrial designation is "to provide areas suitable and desirable for industrial activities outside of urban areas, particularly those industries dependent upon railroad access, air, or freeway transport, or using geothermal resources, and locating on relatively unproductive soils."
- The remainder of the land within the study area and outside of the La Grande UGB is designated Exclusive Farm Use and zoned A-1. Although the purpose of this classification is "to preserve productive agricultural lands, to protect such lands from encroaching incompatible uses, and to maintain the quality of live, character values, and living conditions found on farms" some Goal 3 exceptions were identified. Some of these exceptions are noted above with the commercial and industrial designations. However, the plan also notes "the agricultural land between US Highway 30 and the freeway, and that land extending from the Highway to Foothill Road which is included in the La Grande Urban Growth Boundary. Soils here are primarily Classes II and III. Existing development will preclude such area from being returned to productivity. Rail and freeway access, poor agricultural (equipment) access, service potential, proximity to industrial development at the stockyards, encroaching urban uses and physical location make the area between the freeway and highway better suited in the long run for urbanization than for agriculture."

4.4.2 Residential Lands

Data provided by Union County indicates that there are approximately 109 existing residences in the US 30 CAMP study area, as shown in Table 10. This includes 47 single-family homes, one duplex, and one apartment complex with approximately 60 units. Ninety-nine of these are on land zoned for residential use, with the remaining 10 homes on land zoned for commercial or agricultural use. Six of the residences are outside the City of La Grande's Urban Growth Boundary.

Table 10: Study Area Residential Lands

Zoning	Total Parcels	Total Acreage	Buildable Parcels	Residences Existing
Rural Residential (La Grande RR-1)	1	14.2	1	1
Low-Density Residential (La Grande R-1)	2	0.76	1	1
Medium-Density Residential (La Grande R-2)	40	23.69	12	37
High-Density Residential (La Grande R-3)	1	3.74	0	60
Existing Residences in Other Zones				10
Full Study Area				109

4.4.3 Employment Lands

The study area includes approximately 321 acres of employment land, or land zoned for commercial or industrial use. This is made up of approximately 89 acres of commercial land and 232 acres of industrial land. The industrial land includes 6.5 properties zoned Business Park, totaling 161.52 acres. While many of the properties in these zones have improvements on them, others contain uses such as churches or residences that generate little or no employment.

Table 11: Study Area Employment Lands

Zone	Parcels	Total Acreage
Commercial (Union County C-2)	2.5	35.66
General Commercial (La Grande GC)	22	53.76
Total Commercial	*24.5*	*89.42*
Business Park (La Grande BP)	6.5	161.52
Industrial (Union County I-2)	5	39.3
Heavy Industrial (La Grande M-2)	8	31.23
Total Industrial	*19.5*	*232.05*
Total Employment Lands	44	321.47

4.4.4 Agricultural Lands

The remainder of the study area includes 700 acres of agricultural lands located outside of the La Grande UGB.

4.5 NATURAL AND CULTURAL RESOURCES CONSTRAINTS

To assess natural and cultural resources constraints in the US 30 CAMP study area, archaeological resources, historic properties, wetlands, flood plains, and wildlife inventories were searched. The location of potential hazardous materials was also researched.

4.5.1 Archaeological Resources

The Comprehensive Plans for the City of La Grande and Union County do not address archaeological resources. The Oregon Department of Transportation (ODOT) Geo-Environmental Section was contacted for further inquiry. To date, ODOT does not have any archaeological data for projects in the study area.

Depending on the scope of work, ODOT will contact the State Historic Preservation Office (SHPO) to verify the presence of archeological sites or surveys in the project vicinity, and conduct an archeological survey/field reconnaissance before work is to take place within the project area.

4.5.2 Cultural Resources-Historic Properties

La Grande's Comprehensive Plan dated 2003 (with updates from 2001 and 2002) indicates that historical properties and two historical districts exist northeast of the US 30 CAMP study area.

If any archaeological, cultural, or historical material were found during ground disturbance or construction, the construction contractor would cease operations and notify the State Historic Preservation Office Archeologist to ensure proper identification, evaluation, and disposition.

4.5.3 Wetlands

National Wetlands Inventory (NWI) Maps (1991) were used to identify wetlands in the study area. The maps identify many different wetland areas within the US 30 CAMP study area, as shown in Figure 7. A number of these areas are a result of man made ditches, specifically including the Grande Ronde and Gekeler Slough Ditches. Most wetland areas identified in the US 30 CAMP study area are located in the southern section of the Gekeler Slough (see Figure 7). The city's Local Wetland Inventory (LWI), was approved by Oregon's Division of State Lands in 2003, and identifies the wetlands near Gekeler Slough as important fish and wildlife habitat.

4.5.4 Floodplains (FEMA maps)

Floodplain maps prepared by the Federal Emergency Management Agency (FEMA) were examined to identify floodplains in the study area. Improvements to the interchange must consider floodplain protection needs, including permits, proper erosion control and scour protection along with habitat protection needs and constraints.

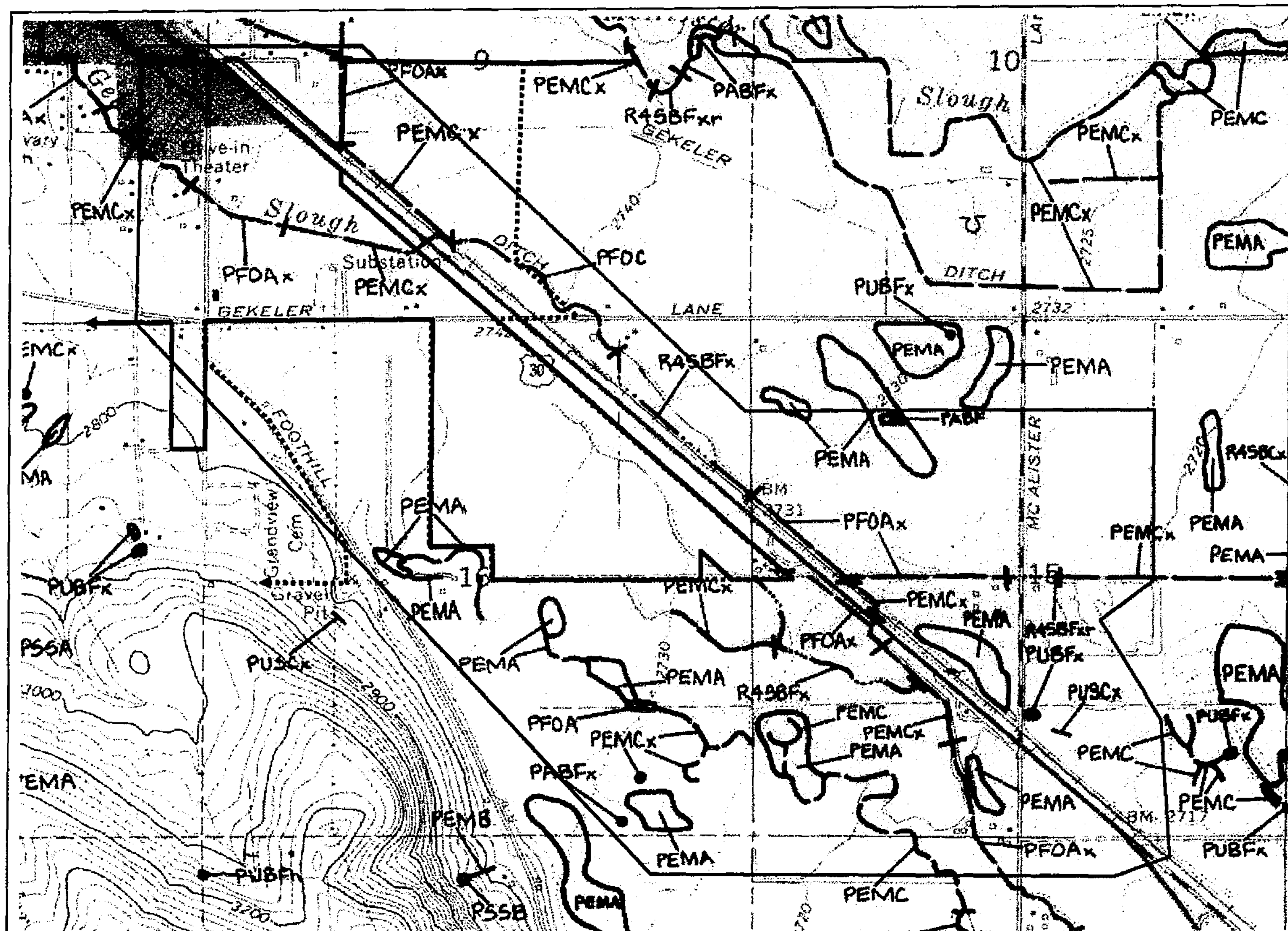
Gekeler Slough, its tributaries, and the Grande Ronde Ditch run within the US 30 CAMP study area. FEMA has established the 100-year floodplains, as shown in Figure 8. The Gekeler Slough floodplain extends southeast of US 30 lies within the study area.

Much of the flooding in the study area results from manmade barriers (roadway, railroad) that impact the natural flow of the sloughs; the City of La Grande has identified a series of slough bypass improvements to carry water during flood events.

4.5.5 Natural Resources and Wildlife

Natural resources and wildlife inventories were checked to determine the resources in the study area. The Grande Ronde Ditch and Gekeler Slough flow through the US 30 CAMP study area. The Oregon Department of Fish and Wildlife (ODFW) identify the riparian corridor along Gekeler Slough as an important fish and wildlife area. According to the 2003 La Grande Comprehensive Plan, the city is to designate the Gekeler Slough (north of Gekeler Lane) as a riparian corridor.

The city's comprehensive plan does not identify any Wilderness Areas within the La Grande Urban Growth Boundary. The City of La Grande uses the Oregon State Register of Natural Heritage



TYPES OF WETLANDS

PABF Palustrine, aquatic bed, flooded
PEMA Palustrine, emergent, temporarily flooded
PEMC Palustrine, emergent, seasonally flooded
PEMCx Palustrine, emergent, seasonally flooded, excavated
PFOA Palustrine, forested, temporarily flooded
PFOAx Palustrine, forested, temporarily flooded, excavated
PFOC Palustrine, forested, seasonally flooded
PUBFx Palustrine, unconsolidated bottom, semi-permanently flooded
PUSCx Palustrine, unconsolidated shore, seasonally flooded, excavated
R4SBCx Riverine, intermittent, streambed, seasonally flooded, excavated
R4SBFx Riverine, intermittent, streambed, semi-permanently flooded, excavated
R4SBFxr Riverine, intermittent, streambed, semi-permanently flooded, excavated, artificial substrate

Source: National Wetlands Inventory

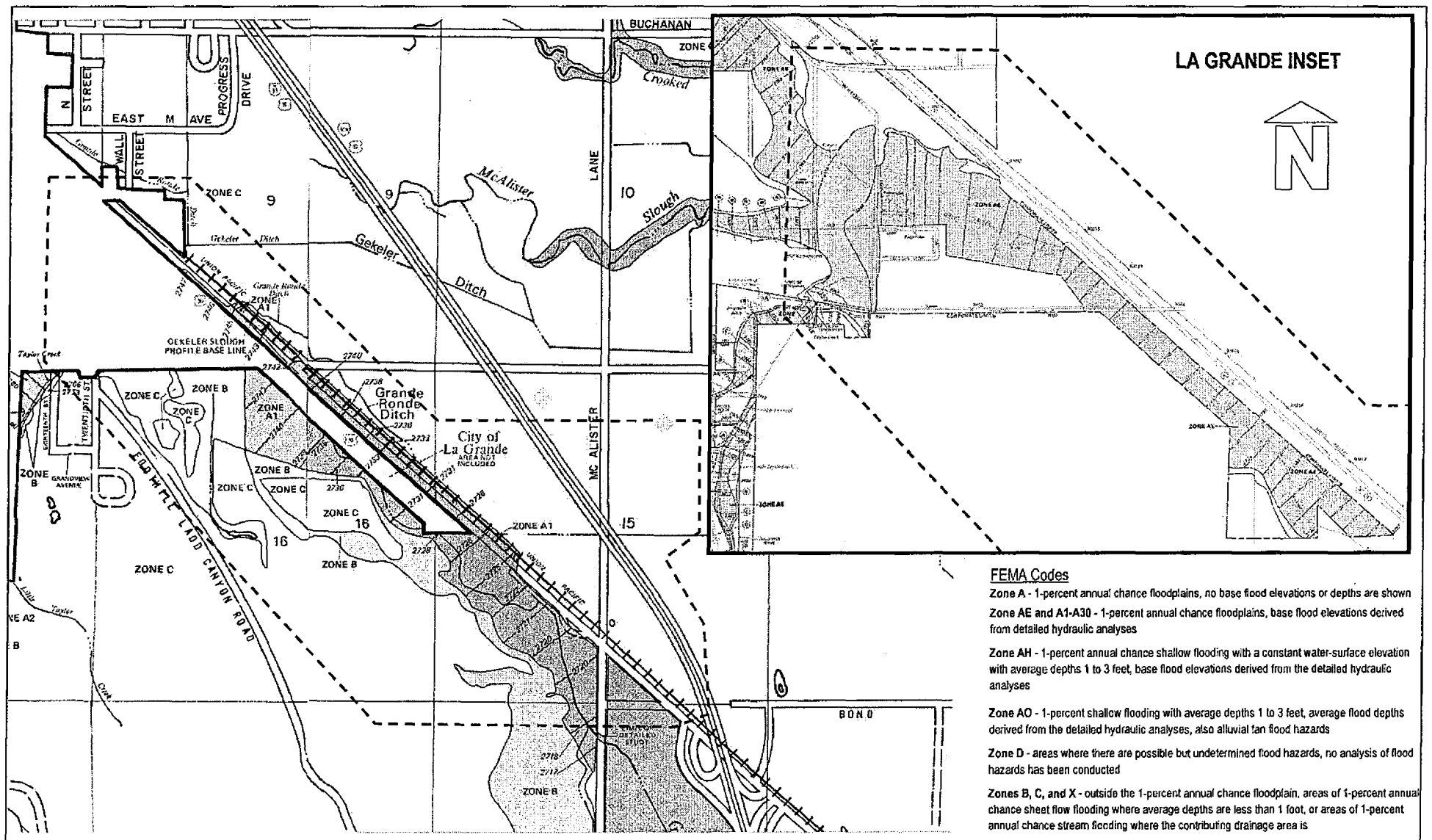
DAVID EVANS AND ASSOCIATES INC.

City Limits
Urban Growth Boundary
Study Area

FIGURE 7

NATIONAL WETLANDS INVENTORY MAP

US 30: GEKELER TO I-84 CAMP



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Source: FEMA Flood Insurance Rate Maps for La Grande and Union County

FIGURE 8

FEDERAL EMERGENCY MANAGEMENT AGENCY (FEMA) FLOODPLAIN MAP

US 30: GEKELER TO I-84 CAMP

Resources Inventory for natural resources and wildlife. Two natural areas identified in the La Grande Comprehensive Plan are located south of La Grande at Ladd Marsh, which is outside the Urban Growth Boundary. One area includes a low elevation vernal pond with saltgrass and cordgrass. The second area is a bulrush-cattail marsh with aquatic beds.

Union County has a natural resources and wildlife inventory. This inventory lists natural areas, waterfowl species, fish species, furbearing animals and big game animals, none of which are present near the study area.

4.5.6 Hazardous Materials

Several databases were checked to identify potentially hazardous sites within the study area. The Oregon State Fire Marshal Hazardous Substance Incident Search identified three previous hazardous material sites within the US 30 CAMP study area. The site located on the 22nd block of Gekeler Lane was a natural gas leak resulting from a broken plastic natural gas line. The other two sites were identified as hazardous material spills occurring on Interstate 84. In 2002, one spill included the release of 1.5 gallons of an herbicide at milepost 266. In 2001, the release of 10 gallons of the vapor ammonia anhydrous occurred at milepost 267. All three hazardous material sites were temporary incidents and will not affect future project construction within the US 30 CAMP study area. The United States Environmental Protection Agency's National Priorities List Sites in Oregon, as well as Oregon Department of Environmental Quality's Superfund Database and The National Priorities List, do not identify hazardous material sites within the study area. The Right-To-Know (RTK NET) database provides the following hazardous material information:

- Toxic Release Inventory (TRI)-none in study area
- Permit Compliance System (PCS)- none in study area
- Resource Conservation Recovery Act (RCRA) Biennial Reporting System (BRS)-none in study area
- Integrated Compliance Information System (ICIS) formerly Docket Data-one docket case, unknown if in study area
- Emergency Response Notification System (ERNS)-8 potential locations, incidents occurred 4 or more years ago
- Resource Conservation Recovery Information System (RCRIS)-none in study area
- National Pollutant Release Inventory (NPRI)-none
- Accidental Release Information Program (ARIP)-none
- Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA)- none in study area
- Records of Decision (RODs)-none
- Chemical Update System (CUS)-none
- National Priorities List (NPL)-none
- Superfund Enforcement Tracking System (SETS) Potentially Responsible Parties (PRPs)-none

5. FUTURE CONDITIONS ANALYSIS

The future condition analysis presents the land use analysis and forecasts, the future traffic forecasts derived from the land use, and the future operating conditions analysis.

5.1 RESIDENTIAL BUILD-OUT ANALYSIS

5.1.1 Existing Residences

The study area includes three parcels currently zoned Union County A-1 that have been recommended for inclusion in the UGB with a La Grande comprehensive plan designation of Industrial. These are tax lots 700, 800, and 900 on assessor's map number 03S 38E Section 16. These parcels are located just south of Gekeler Lane and are bordered by Foothill Road to the west and the La Grande Industrial Park to the east. This report assumes that these parcels will be added to the UGB, designated Industrial in the city's Comprehensive Plan, and zoned Business Park upon annexation to the city limits. A portion of parcel 900 was already in the UGB, zoned RR-1 (La Grande zoning). This report assumes that 14.2-acre portion of parcel 900 will retain its current zoning, and it is included in this residential lands analysis.

Data provided by Union County indicates that there are approximately 109 existing residences in the US 30 CAMP study area (see Table 10). These 109 residences are comprised of 47 single-family homes, one duplex, and one apartment complex with approximately 60 units. Ninety-nine of these are on land zoned for residential use, with the remaining 10 on land zoned for commercial or agricultural use. Six of the residences are outside the City of La Grande's Urban Growth Boundary.

5.1.2 Residential Build-Out Potential

Some of the residentially zoned parcels within the study area are vacant or underdeveloped. The underdeveloped parcels are those that contain a residence, but are large enough to subdivide and create new residential parcels given their zoning. Cogan Owens Cogan (COC) reviewed the size, current use, and existing zoning for each parcel to determine the "full build-out," or maximum number of residential parcels that could be accommodated within the study area. In making these calculations, 30% of the total acreage of each parcel was removed from the buildable lands inventory to allow for the construction of roads and other public facilities as well as steep slopes and other environmental constraints.

This parcel-by-parcel analysis reveals that current zoning would allow a "full build-out" of 228 residential parcels. In addition to the 109 existing residences, there is the potential for 119 additional units. These calculations are summarized above in Table 12. Table 12 also shows the number of buildable parcels within each study area, by zoning designation. This includes both vacant parcels and those that could accommodate additional residence(s) because they are more than twice the minimum lot size given their zoning. For example, the Medium Density Residential zone (La Grande zoning R-2) has a minimum lot size of 5,000 square feet, meaning that an 18,000 square foot parcel in that zone could subdivide into three residential parcels. The Potential New column represents the number of additional new residences that could be constructed if all buildable residential parcels were to be subdivided to the maximum extent possible.

Table 12: Full Build-Out of Residentially Zoned Land

Zoning	Total Parcels	Buildable Parcels	Residences		
			Existing	Potential New	Total
Rural Residential (La Grande RR-1)	1	1	1	27	28
Low-Density Residential (La Grande R-1)	2	1	1	2	3
Medium-Density Residential (La Grande R-2)	40	12	37	90	127
High-Density Residential (La Grande R-3)	1	0	60	0	60
Existing Residences in Other Zones			10	0	10
Full Study Area Build-Out			**109**	**119**	**228**

Sources: Union County Assessor's Office; Cogan Owens Cogan.

This full build-out analysis assumed that all future development in the study area will be detached single-family homes. While duplexes are allowed in both the R-1 and R-2 zones (La Grande zoning), there is only one duplex in the study area at this time. Multi-family apartment buildings are not allowed in those zones. An apartment complex of approximately 60 units occupies the one parcel in the study area zoned R-3 (La Grande zoning). The parcel appears to be fully built-out, and this study assumes that no additional units will be constructed on that parcel within the 20-year planning horizon.

Various types of residential uses, including multi-family housing, are allowed in the City of La Grande's General Commercial (GC) zone. There are currently four residential parcels in the portion of the study area zoned CG, and another on a parcel outside the UGB, zoned C-2 by Union County. To be conservative from a potential development impact analysis standpoint, our analysis assumes that no new residential development will take place in the commercially zoned portions of the study area within the 20-year planning horizon.

The Union County Zoning, Partition and Subdivision Ordinance and state land use laws allow for the construction of new residences within the EFU zone under certain circumstances. The number of residences that could be built on agriculturally zoned parcels represents only a small fraction of those that could be built in the total study area. Therefore, this analysis does not account for any new growth in the agricultural zones.

The approval of Ballot Measure 37 in November 2004 creates some uncertainty in the application of existing zoning restrictions based on the date the owner acquired the property. Some agriculturally-zoned parcels within the study area may be eligible for Measure 37 claims, which could require Union County to decide to deny a claim, compensate the landowners, or waive the restrictions limiting development on those properties.

5.2 EMPLOYMENT LANDS ANALYSIS

The study area includes approximately 321 acres of employment land, or land zoned for commercial or industrial use. This is made up of approximately 89 acres of commercial land and 232 acres of industrial land. The industrial land includes 6.5 properties zoned Business Park (La Grande zoning), totaling 162 acres. The total acreage within each employment zone is shown in Table 13.

Table 13: Study Area Employment Lands

	Total Parcels	Legal Acres
Commercial Land		
Commercial (Union County C-2)	2.5	35.66
General Commercial (La Grand GC)	22	53.76
Total Commercial	*24.5*	*89.42*
Industrial Land		
Business Park (La Grande BP)	6.5	161.52
Industrial (Union County I-2)	5	39.3
Heavy Industrial (La Grande M-2)	8	31.23
Total Industrial	*19.5*	*232.05*
Total	**44**	**321.47**

Of the 44 tax lot parcels within the study area that are zoned for commercial or industrial use, 24 are already "committed," or developed with a use that is not likely to grow or generate significantly more employment or vehicle traffic over the next 20 years. Examples of committed parcels in the study area are those occupied by Les Schwab Tires (tax lot 03S3808DA 100) and Bi-Mart (tax lot 03S3809CB 900). One parcel (tax lot 03S3809CD 200) is considered unbuildable because it is mostly within the 100-year floodplain.

The 20 buildable parcels include 11.5 vacant lots and 8.5 that are considered redevelopable, as they are zoned for commercial or industrial use but occupied by a single-family home, barn, or trailer.

COC and DEA estimated the total employment that could be generated on the vacant and redevelopable parcels. First, a reduction factor was applied to the available acreage to account for future roads, other public facilities, and environmental constraints. The La Grande Development Code recommends using a reduction factor of 20% for unknown right-of-way needs and public facilities; however, a factor of 30% was applied for the US 30 CAMP to account for potential environmental constraints associated with Gekeler Slough and its various tributaries as well as the Grande Ronde River. This generates the total number of developable acres, as shown in Table 14.

The developable acres figures were then multiplied by an employee-per-acre ratio for each zoning district. Ratios for the industrial land were taken from the draft Goal 9 Rule Compliance section of the La Grande Comprehensive Plan. These ratios were 14.9 jobs per acre for industrial parks and 18.5 jobs per acre for heavy industrial land. The ratios for commercial land were taken from the Oregon Department of Land Conservation and Development's *Draft Goal 9 Economic Development Guidebook*, which suggests a range of 14-20 employees-per-acre for commercial lands. We used the midpoint of this range, estimating 17 employees-per-acre for commercial land. This analysis determined that the study area could eventually accommodate up to 2,440 employees. These calculations are summarized in Table 14.

Table 14: Study Area Employment Lands Analysis

	Total Parcels (Vacant and Redevelopable)	Legal Acres	Developable Acres	Potential Employees	
				Per Acre[1]	Total
Commercial Land					
Commercial (Union County C-2)	1.5	28.64	20.05	17	341
General Commercial (La Grande GC)	8	25.09	17.56	17	299
Total Commercial	*9.5*	*53.73*	*37.61*	*17*	*639*
Industrial Land					
Business Park (La Grande BP)	6.5	161.52	113.06	14.9	1,685
Heavy Industrial (La Grande M-2)	4	8.93	6.25	18.5	116
Total Industrial	*10.5*	*170.45*	*119.32*	*N/A*	*1,800*
Total	**20.5**	**224.18**	**156.93**	**NA**	**2,440**

Notes:

1. Employee per acre ratios from Draft Goal 9 Economic Development Guidebook, Department of Land Conservation and Development, and Johnson Gardner, LLC (for use in the Goal 9 Rule Compliance section of the La Grande Comprehensive Plan).

Sources: Union County Assessor's Office; Draft Goal 9 Economic Development Guidebook, Department of Land Conservation and Development; Cogan Owens Cogan.

5.3 FUTURE TRAVEL DEMAND FORECAST

Although there is a travel demand forecasting model for the La Grande area, the US 30 CAMP is projecting traffic based on a full build-out scenario in the study area. Therefore, the model forecasts are used to develop background growth forecasts and then traffic associated with land use in the study area has been added to the background number to develop the full build-out scenario in the study area.

5.3.1 Background Traffic Growth

Although specific growth is planned for the study area, background growth associated with through traffic and traffic from outside of the La Grande area is also expected to occur. This background growth was estimated from forecasts on US 30 as prepared by the Oregon Department of Transportation's (ODOT) Transportation Planning and Analysis Unit (TPAU). The growth rates for US 30 in La Grande are actually based on the travel demand forecasting model forecasts. These are summarized in Table 15.

Table 15: Background Traffic Forecasts

		Average Daily Traffic (ADT)			
		2003[1]	2023[2]	2025[3]	AAGR[4]
Traffic Volume Forecasts on US 30					
2.93	Southeast city limits of La Grande, 0.04 mile southeast of Jefferson Avenue	4000	7800	8180	3.3%
5.29	0.10 mile west of Old Oregon Trail (I-84)	7000	8900	9090	1.2%

Notes:
1. Historical traffic counts from ODOT Traffic Volumes Tables, 2003.
2. Forecasts for the year 2023 are based on the model forecasts prepared by the ODOT's Transportation Planning and Analysis Unit.
3. Forecasts for the year 2025 were extrapolated by DEA from the straight-line growth from 2003 through 2023.
4. The AAGR is the average annual growth rate from 2003 to 2025.

Sources. Oregon Department of Transportation. David Evans and Associates, Inc.

A background growth rate of 3.3 percent per year was applied to all of the study area traffic movements. This rate more closely reflects the rate of growth associated with the city while the 1.2 percent per year reflects activity in the vicinity of the I-84 interchange. Using the higher growth rate for all traffic movements more provides for a worst case scenario when examining the future baseline traffic operations.

5.3.2 Land-Use-Based Traffic Forecasts

The land-use-based traffic forecasts were generated in several steps based on the recommended land use forecasts from Sections 1 and 2 of this document. First, the land use was allocated into subareas based on available acreage and roadway network. Then, trip generation estimates for the different subareas were calculated using average trip rates for the different land uses. Lastly, the trips for each subarea were distributed and assigned to the roadway network in each study area.

5.3.2.1 Subarea Land Use Calculations

These general forecast for the study area was divided into subareas according to the available acreage and the roadway network. The subareas and land use assumptions are summarized in Table 16.

An estimate of building gross square footage (GSF) was prepared for the commercial land use subareas because most trip generation for commercial uses is based on building size rather than the number of employees. This reflects the varying nature of employment in the retail industry. Building GSF was estimated 35 percent building coverage of the lots.

Table 16: SubArea Land Use Assumptions

Subarea	Land Use
Residential	Dwelling Units
North of Gekeler & West of 30	119
Industrial	Employees
South of Gekeler & West of 30	116
Business Park	Employees
South of Gekeler & West of 30	1,685
Commercial[1]	Employees/GSF
North of Gekeler & West of 30	299/267,765
On McAlister & North of 30	258/230,946
On McAlister & South of 30	83/74,705

Note:
1. Building gross square footage (GSF) was estimated for the commercial subareas because most commercial trip generation is based on building size rather than employment. GSF was estimated assuming 17 employees per acre and 35% of acreage used for buildings.

Source. David Evans and Associates, Inc.

5.3.2.2 Trip Generation

Once the land use was allocated to the different subareas, daily, AM peak hour, and PM peak hour trips were estimated for each subarea using average trip rates from the Institute of Transportation Engineers' (ITE) report *Trip Generation, 7th Edition, 2003.* For the residential subareas, ITE land use category Single-Family Residential (210) was used. For the industrial subareas, ITE land use category General Light Industrial (110) was used because information for heavy industrial is limited. For the business park subarea, Business Park (770) was used. For the commercial subareas, ITE land use category Shopping Center (820) was used. This latter category can include a variety of uses including big box anchors with smaller outbuildings such as banks, restaurants, gas stations, etc. The resulting trip generation is summarized in Table 17.

5.3.2.3 Trip Distribution and Assignment

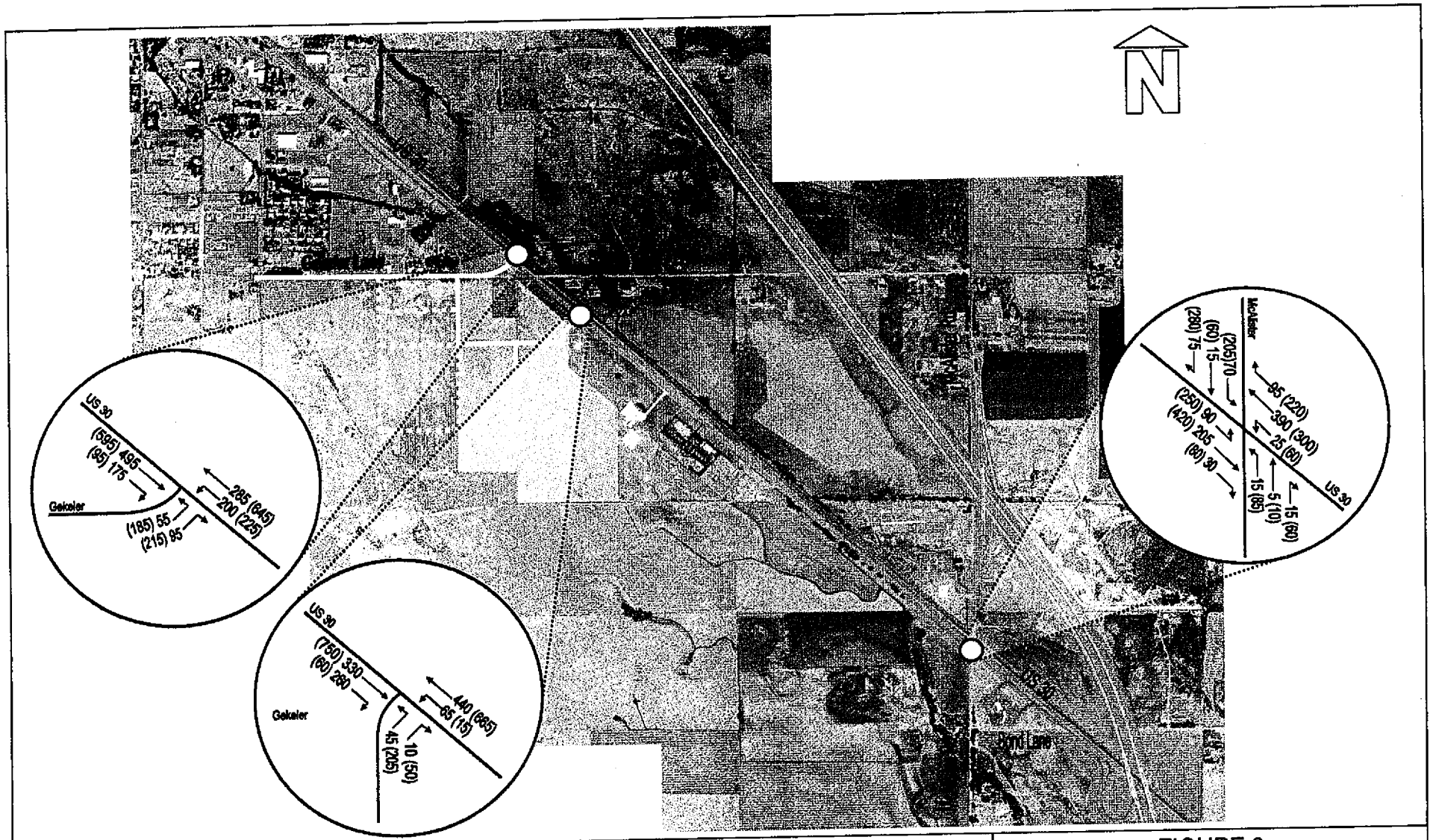
Trip distribution patterns for each subarea were developed based on traffic patterns in the area and applied to the trip generation in Table 17 to create trip assignments to the roadway network.

5.3.3 Future Traffic Forecasts

The 2025 background traffic volumes estimated from the trendlines and the land-use-based traffic forecasts were combined to calculate 2025 future traffic volumes in the study area. The resulting traffic volume forecasts are shown in Figure 9.

5.4 FUTURE CONDITIONS ANALYSIS

Operations of the intersections in the study area are summarized in Table 18. Conditions in 2025 would be more congested than existing conditions primarily because of the growth in land use assumed with the future build-out scenario. While the operations on US 30 would continue to meet



DAVID EVANS AND ASSOCIATES INC.

Business Park - Early Phases

Business Park - Future Phases

Business Park

Intersection

Turning Movement

0 (0) AM (PM) Peak Hour Volume

FIGURE 9

2025 PEAK HOUR VOLUMES

US 30: GEKELER TO I-84 CAMP

the ODOT mobility standards, many of the side street approaches would have traffic demand that exceeds available capacity (i.e., v/c ratio >1.0).

Table 17: SubArea Trip Generation

Subarea	Land Use	Daily Traffic	AM Peak Hour Traffic In	AM Peak Hour Traffic Out	PM Peak Hour Traffic In	PM Peak Hour Traffic Out
Residential[1]	Dwelling Units					
North of Gekeler & West of 30	119	1,140	20	65	75	45
Industrial[2]	Employees					
South of Gekeler & West of 30	116	350	40	10	10	40
Business Park[3]	Employees					
South of Gekeler & West of 30	1,685	6,810	645	115	145	510
Commercial[4]	GSF					
North of Gekeler & West of 30	267,765	11,490	170	110	480	520
On McAlister & North of 30	230,946	9,910	145	95	415	450
On McAlister & South of 30	74,705	3,210	45	30	135	145
Total		**32,910**	**1,065**	**425**	**1,260**	**1,710**

Note:
1. Residential trip generation is calculated based on number of dwelling units using rates from ITE Land Use Single Family Residential (210)
2. Industrial trip generation is calculated based on number of employees using rates from ITE Land Use General Light Industrial (110).
3. Business park trip generation is calculated based on number of employees using rates from ITE Land Use Business Park (770).
4. Commercial trip generation is calculated based on building gross square footage using rates from ITE Land Use Shopping Center (820).

Source. Institute of Transportation Engineers, Trip Generation, 7th Edition, 2003. David Evans and Associates, Inc.

Table 18: Summary of 2025 Build-Out Intersection Operations

Intersection	Movement	AM Peak Hour LOS	AM Peak Hour V/C Ratio	PM Peak Hour LOS	PM Peak Hour V/C Ratio
1 US 30 at Gekeler Lane	SEB Through, Right	A	0.25	A	0.29
	NEB Left	E	0.70	F	>1.0
2 US 30 at McAlister Road	NB Left, Through, Right	C	0.14	F	>1.0
	SB Left, Through, Right	D	0.58	F	>1.0
	SE Left	A	0.10	A	0.27
	NWB Left	A	0.02	A	0.06
3 US 30 at Business Park	NWB Left	A	0.07	A	0.02
	NEB Left, Through	D	0.31	F	>1.0
	SWB Left	A	0.01	A	0.01

Source: David Evans and Associates, Inc.

6. TRANSPORTATION ALTERNATIVES

An initial analysis was presented to the PMT and at a public meeting on May 25, 2005 to gather feedback on the alternatives. Comments were noted and the alternatives were refined to address concerns. Two additional alternatives were identified and added to the list presented in this report.

6.1 EVALUATION CRITERIA

The following criteria were used to evaluate the alternatives under consideration for the US 30 CAMP:

- Traffic Projections – How would the alternative change the 2025 traffic forecasts in the study area?
- Operations Analysis – How would the alternative impact future intersections in the study area?
- Access Spacing – Would the alternative meet access spacing standards?
- Traffic Circulation – How would the alternative change traffic circulation patterns in the study area?
- Safety – Would the alternative improve safety within the study area?
- Impact to Adjacent Lands – What are the potential impacts to adjacent lands?
- Goal Exceptions – Would this project require any exceptions to statewide planning goals?
- Other – What other potential issues or conflicts could be associated with this project?
- Cost – What the conceptual cost of the alternative?

6.2 ALTERNATIVES ANALYSIS

The alternatives in the US 30 CAMP were generally developed to address long-term operational and access concerns. General concepts were discussed at both a Planning Project Management Team (PMT) meeting and a public meeting.

6.2.1 Baseline Improvements

The 2025 future build-out analysis indicates that while the operations on US 30 would continue to meet the ODOT mobility standards, many of the side street approaches would have traffic demand that exceeds available capacity (i.e., v/c ratio >1.0). A series of baseline improvements were considered as part of all the alternatives. The need for these improvements is based on the full build-out operations analysis and ODOT's criteria for adding turn lanes and traffic signals.

At the US 30/Gekeler Lane intersection, baseline improvements include signalization and additional lanes (right-turn deceleration and left-turn) on US 30. The estimated cost of for these improvements is $1.0 million but it may be lower if the turn lanes are added as part of the STIP improvement project on Gekeler Lane. All of these improvements would be within ODOT's right-of-way for US 30 and would not require any additional right-of-way acquisition.

At the US 30/business park intersection, baseline improvements include additional lanes (right-turn deceleration and left-turn) on US 30. The estimated cost of for these improvements is $0.5 million. These additional lanes would be within ODOT's right-of-way for US 30 and would not require any additional right-of-way acquisition. It is possible, they could be constructed as the business park infrastructure develops and the extension to US 30 creates this new intersection.

At the US 30/McAlister Road intersection, baseline improvements include signalization and additional lanes on US 30 (southeastbound right-turn deceleration) and McAlister Road (right-turn and left-turn), and some realignment to provide a more perpendicular connection. The widening of McAlister Road north of US 30 would also require the reconstruction of the rail crossing and would need to address some drainage issues. The estimated cost of for these improvements is $1.5 million. The improvements on US 30 would be within ODOT's right-of-way and would not require any additional right-of-way acquisition but those on McAlister Road would likely require additional right-of-way not included in the cost. It would also be desirable to reduce the skew of this intersection when making the intersection improvements, which could require more right-of-way acquisition.

6.2.2 Option 1

Option 1 would extend the easternmost roadway in the business park southward from its currently planned terminus to the City's UGB where it would turn eastward to connect with US 30. An extension of the new roadway would extend northward behind the existing development (Reddaway and USFS) to another connection with US 30. This extension would eventually provide alternate access to US 30 from the adjacent properties. Option 1 is illustrated in Figure 10.

Purpose: This option would provide additional connections to the business park along with a service road behind the existing development on US 30. The connections would meet the state's access spacing standards if the private accesses were eventually closed and rerouted to the service road.

Traffic Projections: Additional connections would allow traffic from the business park and other properties to access US 30 through more outlets, which would reduce the demand at any one intersection.

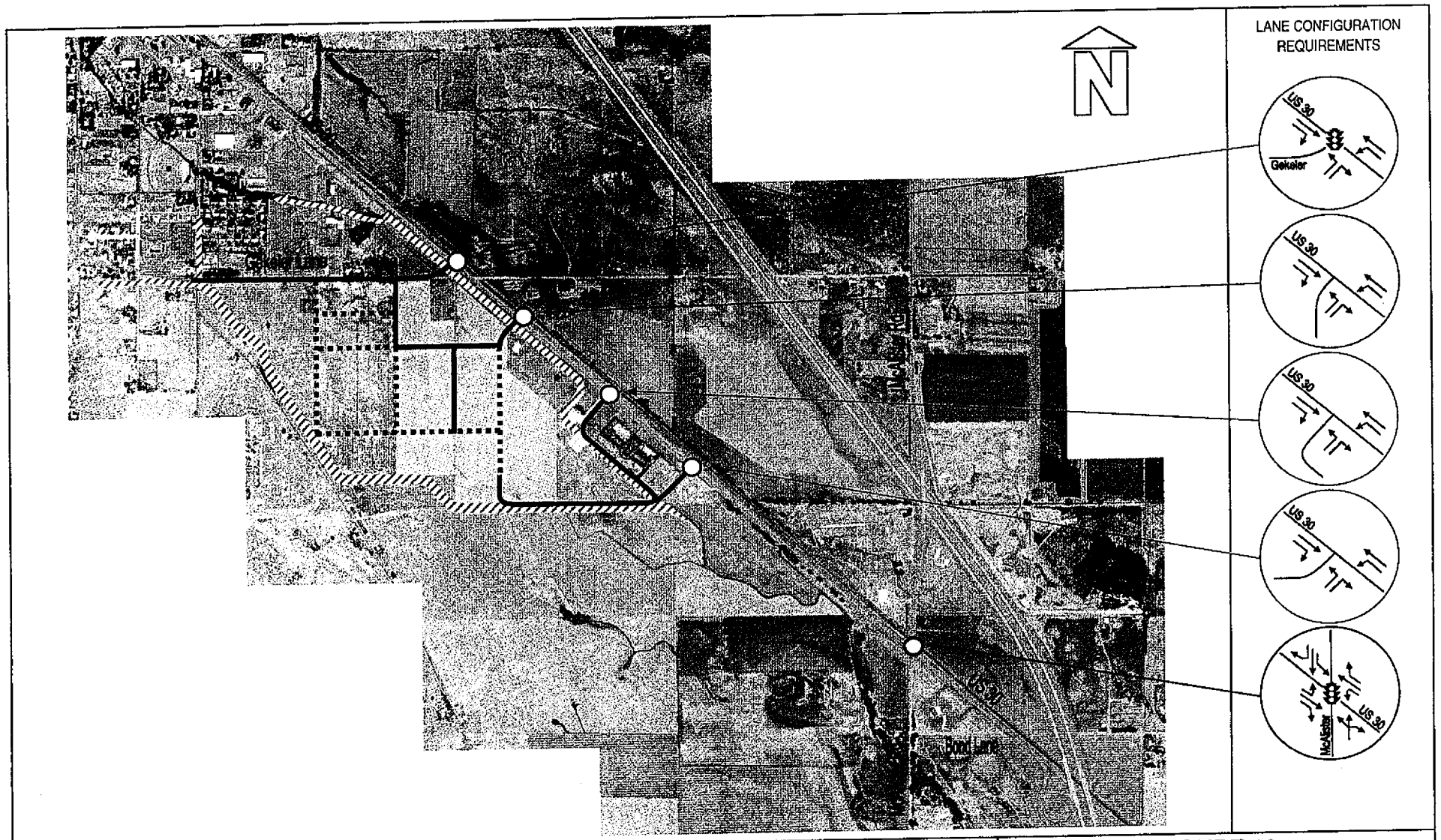
Operations Analysis: Additional connections would reduce traffic demand at other intersections and improve operations.

Access Spacing: The roadways in Option 1 could help consolidate driveways on US 30 to meet access standards.

Traffic Circulation: The expanded roadway network and through connections to US 30 would allow more circulation options in the study area.

Safety: Consolidating access would reduce the number of conflict points on US 30 and improve safety.

Impact to Adjacent Lands: The connecting roadways in Option 1 would affect the adjacent lots and possibly the driveways of some businesses. In addition to the parcel in the business park (Tax Map 03S38E16 Lot 500), nine other parcels would be impacted by the new roadways (Tax Map 03S38E16AD Lots 100, 101, 102, 200, 300, 400, 500, and 600 and Tax Map 038S38E15 Lot 900).



DAVID EVANS AND ASSOCIATES INC.

- Business Park - Early Phases
- Business Park - Future Phases
- Business Park
- Potential Gekeler Slough Bypass Alignments
- Additional Roadway Improvements
- Alignment Variations
- Other Improvement Options

FIGURE 10

OPTION 1 - BUSINESS PARK ROADWAY NETWORK EXTENSIONS TO US 30

US 30: GEKELER TO I-84 CAMP

By aligning the roadway improvements along parcel boundaries, impacts to the adjacent properties could be minimized.

Goal Exceptions: No goal exceptions would be required since the improvements would be entirely within the La Grande UGB.

Other: Several other concerns are associated with the roadway extensions in Option 1. The improvements would be located within the floodplains associated with Gekeler Slough and some of its tributaries. The roadway improvements could cross one of the smaller Gekeler Slough tributaries several times depending on the alignments. Although this tributary runs through land that had been disturbed by farming and other uses, it is identified as palustrine, emergent, seasonally flooded, and excavated in the National Wetlands Inventory.

Because of the flooding in the study area resulting from manmade barriers (roadway, railroad) that impact the natural flow of the sloughs, the City of La Grande has identified a series of slough bypass improvements to carry water during flood events. Option 1 would not cross the major slough bypass but could require a crossing of one of the other channels under consideration.

Cost: The total construction cost of Option 1 is estimated at $3.8 million. This cost includes an 80-foot structure across one of the slough bypass channels, right-turn deceleration lanes on US 30, left-turn lanes on US 30, and approximately 5,000 feet of roadway construction. The cost does not include right-of-way acquisition.

6.2.3 Option 2

Option 2 is a variation of Option 1. It would extend the southernmost roadway in the business park eastward from its currently planned terminus to US 30. An extension of the new roadway would extend southeastward behind the existing development (Reddaway and USFS) to another connection with US 30. This extension would eventually provide alternate access to US 30 from the adjacent properties. Option 2 is illustrated in Figure 11.

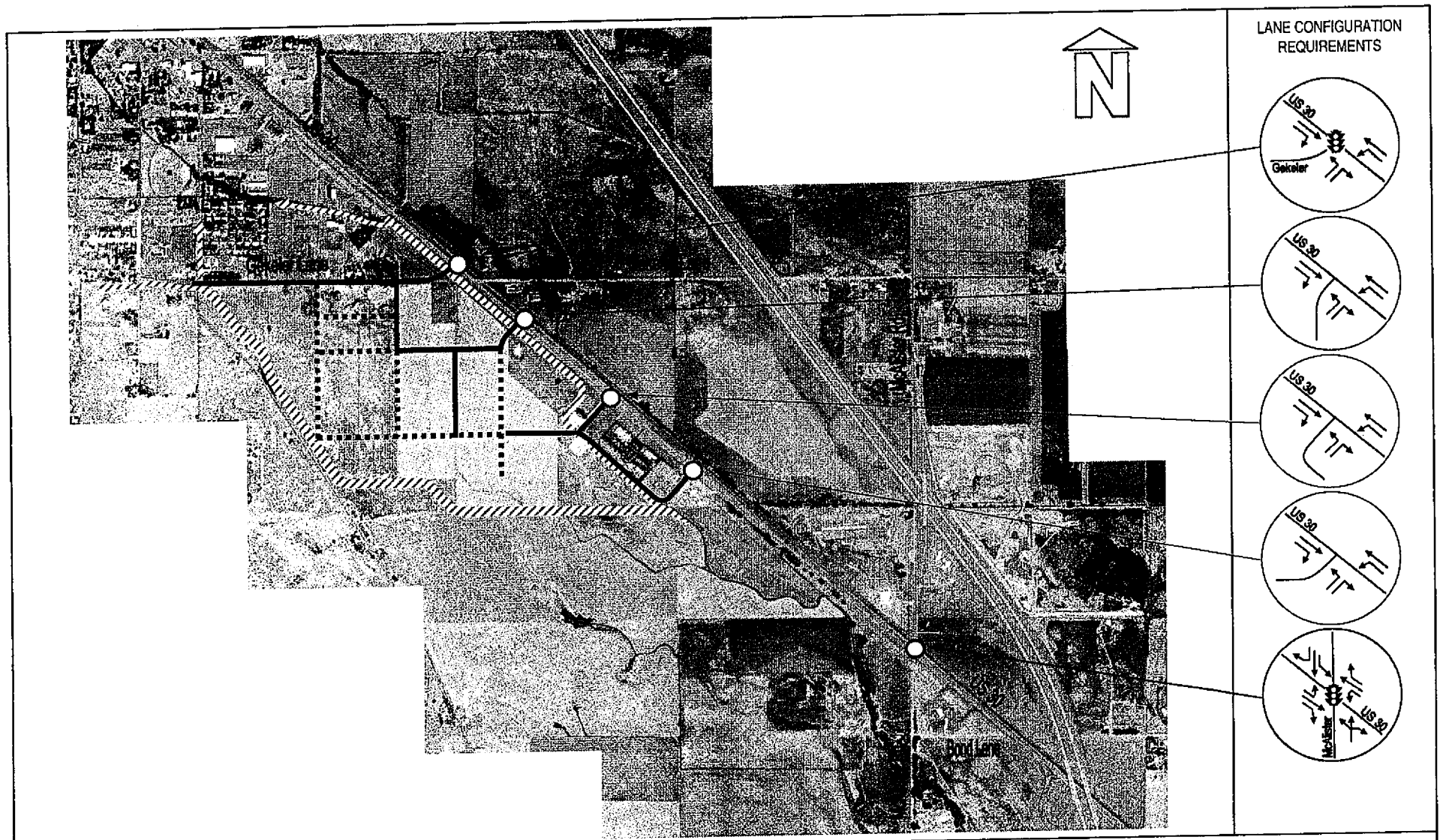
Purpose: Like Option 1, this option would provide additional connections to the business park along with a service road behind the existing development on US 30. The connections would meet the state's access spacing standards if the private accesses were eventually closed and rerouted to the service road.

Traffic Projections: Additional connections would allow traffic from the business park and other properties to access US 30 through more outlets, which would reduce the demand at any one intersection.

Operations Analysis: Additional connections would reduce traffic demand at other intersections and improve operations.

Access Spacing: The roadways in Option 2 could help consolidate driveways on US 30 to meet access standards.

Traffic Circulation: The expanded roadway network and through connections to US 30 would allow more circulation options in the study area.



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- Business Park - Early Phases
- Business Park - Future Phases
- Business Park
- Potential Gekeler Slough Bypass Alignments
- Additional Roadway Improvements
- Alignment Variations
- Other Improvement Options

FIGURE 11

OPTION 2 - BUSINESS PARK ROADWAY NETWORK EXTENSIONS TO US 30

US 30: GEKELER TO I-84 CAMP

Safety: Consolidating access would reduce the number of conflict points on US 30 and improve safety.

Impact to Adjacent Lands: The connecting roadways in Option 2 would affect the adjacent lots, driveways, and possibly one structure in an adjacent business. In addition to the parcel in the business park (Tax Map 03S38E16 Lot 500), nine other parcels would be impacted by the new roadways (Tax Map 03S38E16AD Lots 100, 101, 102, 200, 300, 400, 500, and 600 and Tax Map 038S38E15 Lot 900). By aligning the roadway improvements along parcel boundaries, impacts to most of the adjacent properties could be minimized.

The biggest impact would be to WastePro, a materials recovery business located on the parcel (Tax Map 03S38E16AD Lot 100) immediately east of the business park. The roadway extending eastward from the business park would divide this parcel into two sub-parcels and could impact the existing structures on the site. If it were possible to salvage the business with this option, dividing the parcel would still require the business to operate on both sides of the roadway.

Goal Exceptions: No goal exceptions would be required since the improvements would be entirely within the La Grande UGB.

Other: The other impacts associated with Option 2 are the same as those identified for Option 1.

The improvements would be located within the floodplains associated with Gekeler Slough and some of its tributaries. The roadway improvements could cross one of the smaller Gekeler Slough tributaries several times, depending on the alignments. As noted with Option 1, this tributary runs through land that had been disturbed by farming and other uses but is identified as palustrine, emergent, seasonally flooded, and excavated in the National Wetlands Inventory.

Although it would not cross the major Gekeler Slough bypass, Option 2 could cross one of the bypass channels that is part of the system of improvements to control flooding created by manmade barriers that impact the natural flow of water through the study area.

Cost: The construction cost of Option 2 is estimated at $3.2 million. This cost includes an 80-foot structure across one of the slough bypass channels, right-turn deceleration lanes on US 30, left-turn lanes on US 30, and approximately 3,500 feet of roadway construction. The cost does not include right-of-way acquisition or the impacts to structures.

6.2.4 Option 3

Option 3 would extend the southernmost roadway in the business park westward across the Gekeler Slough Bypass to connect with Foothill Road. This extension could be combined with either of the first two options. Option 3 is illustrated in Figure 12.

Purpose: This option would eventually provide another alternate access to the business park.

Traffic Projections: The additional connection may attract some traffic from Gekeler Lane but would not affect volumes on US 30. It would increase volumes on Foothill Road.

Operations Analysis: Because this option would not affect volumes on US 30, it would not affect the operations at the major intersections either. However, it could impact the operations on Foothill Road. Foothill Road is a narrow, two-lane roadway that generally serves more rural development

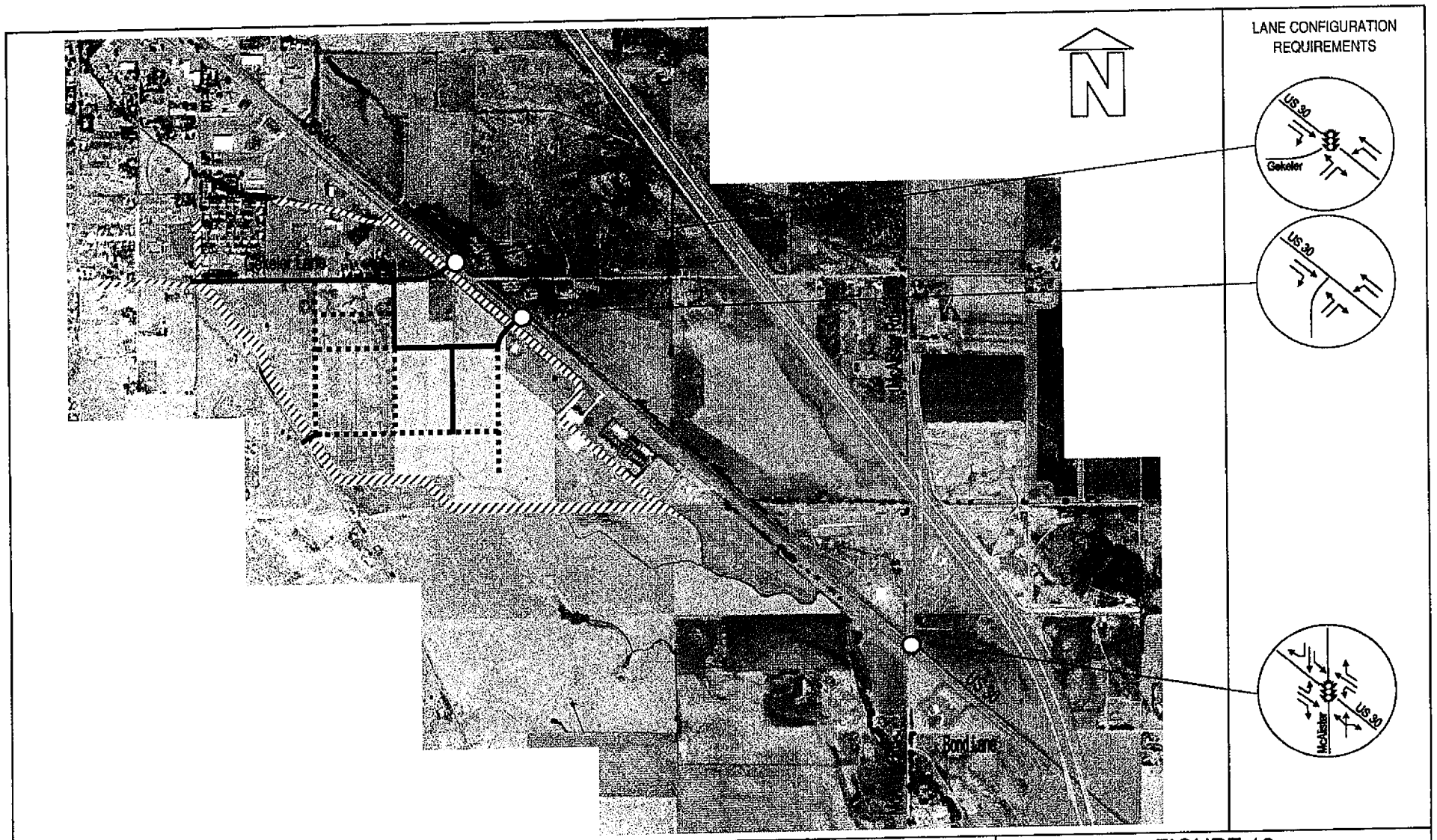

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FIGURE 12

OPTION 3 - BUSINESS PARK ROADWAY NETWORK EXTENSION TO FOOTHILL ROAD

US 30: GEKELER TO I-84 CAMP

south of the city. The La Grande TSP does not identify any future improvements to Foothill Road as part of the recommended roadway and intersection projects. Therefore, Foothill Road is not an ideal roadway for carrying larger volumes of traffic.

Access Spacing: The connection in Option 3 would not affect access spacing on US 30.

Traffic Circulation: This option would provide another circulation option for the business park.

Safety: The addition of traffic to Foothill Road, a narrow, two-lane roadway, could raise safety concerns because it is not designed to carry large volumes of traffic.

Impact to Adjacent Lands: The Option 3 connection would have some minor impacts at the south end of one parcel (Tax Map 03S38E16 Lot 900). This parcel is currently zoned for agricultural use by Union County but is part of an area under consideration for annexation by La Grande. Zoning would most likely be Business Park or Industrial.

Goal Exceptions: No goal exceptions would be required since the improvements would be entirely within the La Grande UGB.

Other: Option 3 would cross the Gekeler Slough bypass that is part of the system of improvements to control flooding created by manmade barriers that impact the natural flow of water through the study area.

Cost: The construction cost of Option 3 is estimated at $0.9 million. This cost includes a 100-foot structure across one of the slough bypass channels and approximately 200 feet of roadway construction. The cost does not include right-of-way acquisition.

6.2.5 Option 4

Option 4 would realign Gekeler Lane east of the railroad tracks to connect with US 30 opposite the business park connection through the animal shelter. This option could be combined with any of Options 1 through 3. Option 4 is illustrated in Figure 13.

Purpose: This option would eliminate the offset access points on US 30 and improve the safety of vehicles turning left onto Gekeler Lane either side of US 30.

Traffic Projections: Traffic volumes on this realigned roadway would be very low since the land is currently zoned for agricultural use.

Operations Analysis: This connection would not affect the operations of the business park access opposite or change the lane configuration requirements of the intersection.

Access Spacing: Realignment opposite the business park would reduce the number of intersections on US 30.

Traffic Circulation: Option 4 would not change traffic circulation.

Safety: Realigning Gekeler Lane east of US 30 would eliminate the conflicting left-turn offset with Gekeler Lane west of US 30.

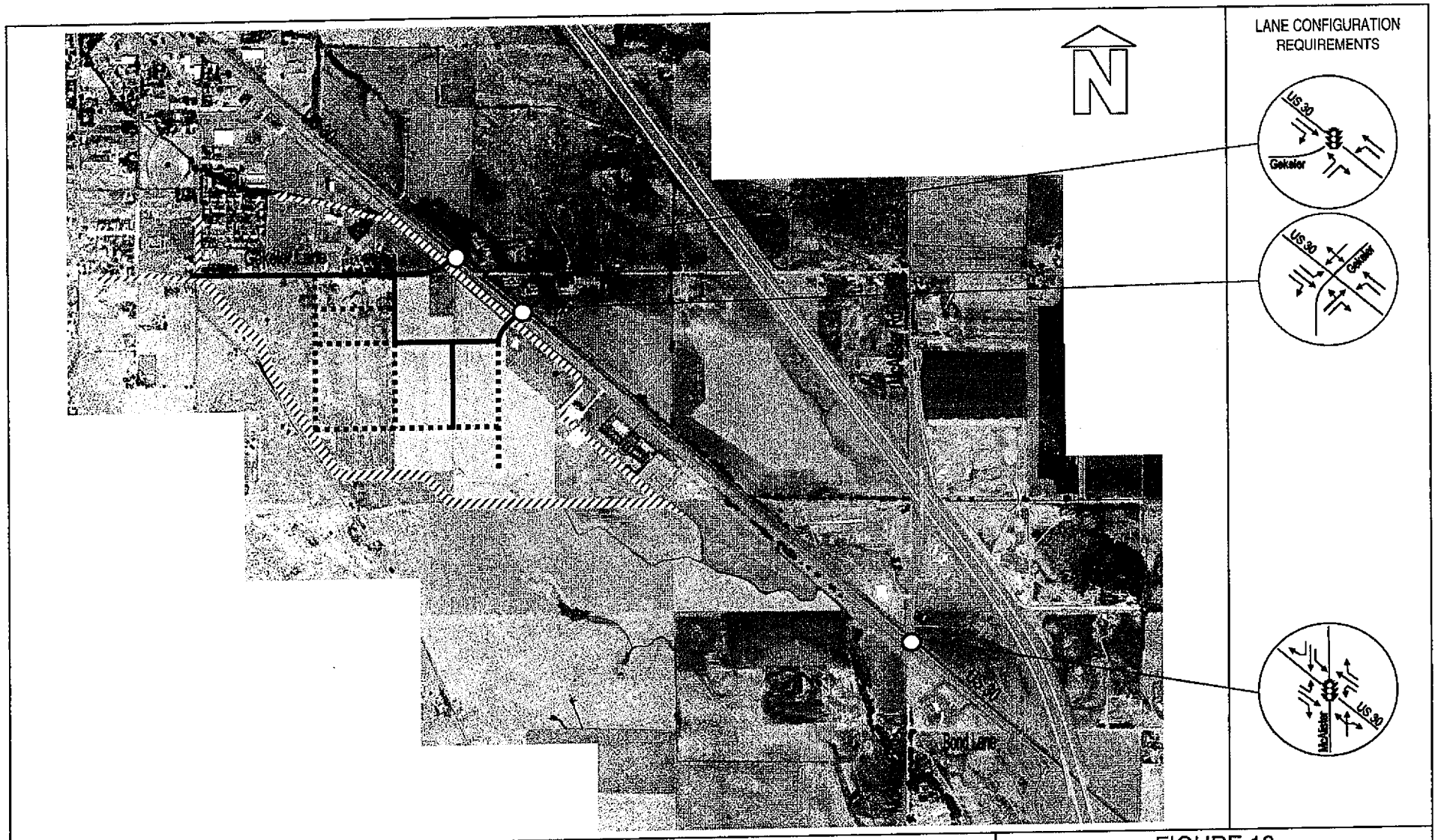


FIGURE 13

OPTION 4 - EAST GEKELER LANE REALIGNMENT SOUTHWARD

US 30: GEKELER TO I-84 CAMP

Impact to Adjacent Lands: The Option 4 realignment of Gekeler Lane would have some impacts to two agricultural parcels east of US 30. The 4.16-acre parcel immediately south of Gekeler Lane and east of the railroad tracks (Tax Map 03S38E16 Lot 200) would be split by the realigned roadway resulting in two smaller parcels of about two acres each. At least one existing structure on the property would be impacted by the roadway realignment. The next parcel to the east (Tax Map 03S38E16 Lot 100) could also be affected by the roadway realignment but only the northwesternmost corner of the property would likely be impacted and the existing structures on this parcel could be avoided.

Other: The Option 4 realignment of Gekeler Lane would require a new crossing of Gekeler Slough, which is identified as palustrine, forested, temporarily flooded, and excavated.

Another concern with Option 4 would be a new railroad crossing. Even with the closure of the existing Gekeler Lane crossing, negotiations with the railroad would be necessary and a fully gated crossing could be required rather than the rural crossing currently allowed.

Goal Exceptions: This alternative would lie outside of the La Grande UGB and could require goal exceptions to implement.

Cost: The construction cost of Option 4 is estimated at $1.3 million. This cost includes a 30-foot structure across the slough, a full urban railroad crossing, and approximately 1,100 feet of roadway construction. If the option were constructed to a rural standard with a culvert instead of a structure, the cost would be estimated at $0.9 million. The cost does not include right-of-way acquisition or impacts to structures.

6.2.6 Option 5

Option 5 would extend East H Avenue to the east and create a new connection from East H Avenue to US 30 opposite Gekeler Lane where it is realigned west of US 30. Gekeler Lane east of US 30 would then be realigned to connect into the extension from East H Avenue. Option 5 is illustrated in Figure 14.

The La Grande TSP includes an extension of 25th Street southward from East H Avenue to the railroad tracks as a project to be constructed "as development occurs." Option 5 is a similar concept on a slightly different alignment that would allow the extension to tie into US 30 as well.

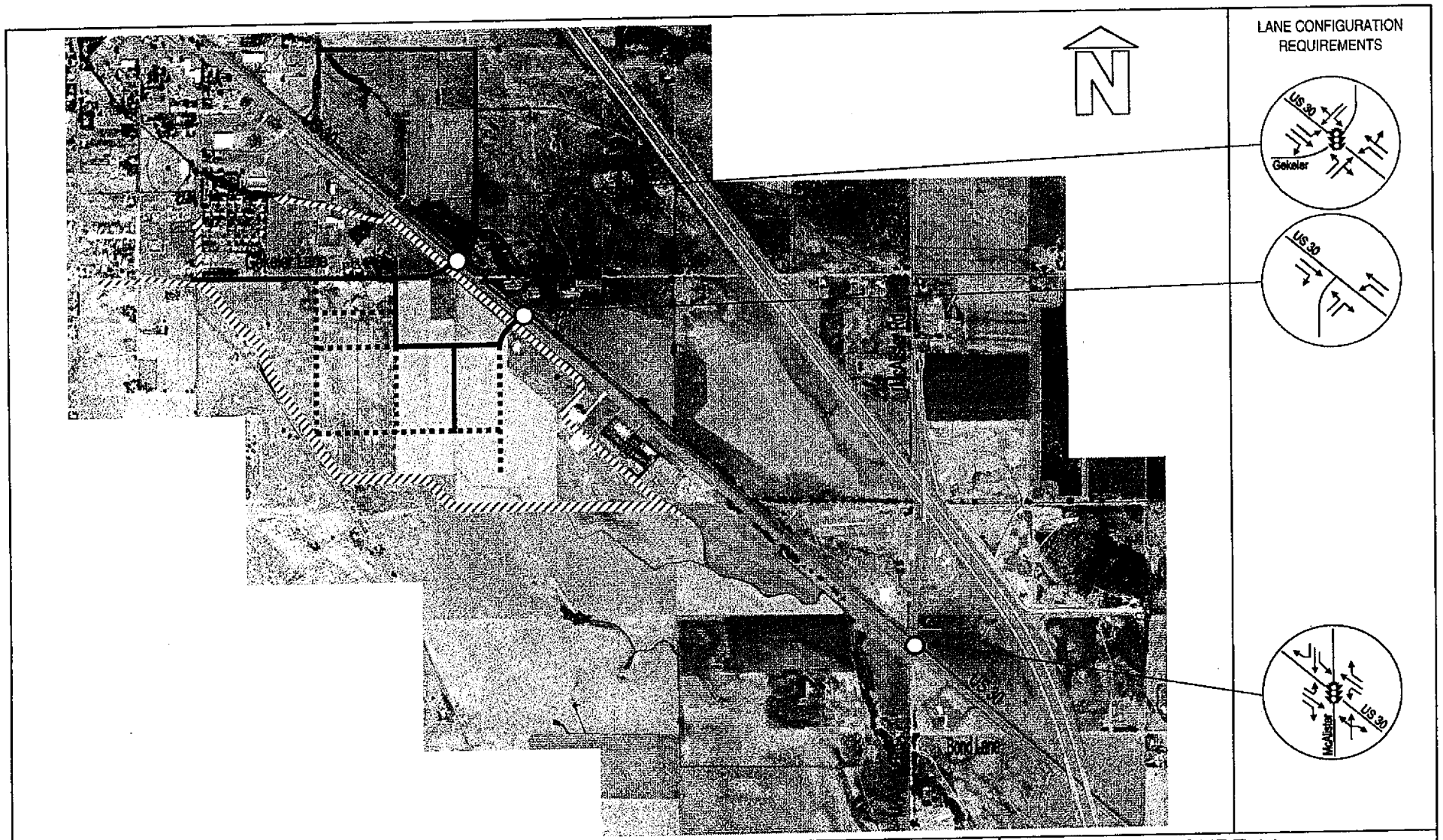
Purpose: This option would provide a circulation alternative east of the railroad tracks to serve future residential and industrial development in this area.

Traffic Projections: This connection would bring traffic from the residential and industrial areas east of US 30 to the Gekeler Lane intersection on an alternate route to the highway.

Operations Analysis: The connection would affect the operations of the Gekeler intersection although the mobility standards for US 30 could still be met.

Access Spacing: The new connection and realignment of Gekeler Lane would reduce the number of intersections on US 30.

Traffic Circulation: The expanded roadway network and through connections to US 30 would allow more circulation options in the study area.



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- Business Park - Early Phases
- Business Park - Future Phases
- Business Park
- Potential Gekeler Slough Bypass Alignments
- Additional Roadway Improvements
- Alignment Variations
- Other Improvement Options

FIGURE 14

OPTION 5 - EAST ROADWAY NETWORK EXTENSIONS AND GEKELER LANE REALIGNMENT

US 30: GEKELER TO I-84 CAMP

Safety: Realigning Gekeler Lane east of US 30 would eliminate the conflicting left-turn offset with Gekeler Lane west of US 30.

Impact to Adjacent Lands: This option would impact adjacent properties, which are primarily undeveloped or in agricultural use. Eight parcels would be affected by the roadway extensions in Option 5. Five of these parcels (Tax Map 03S38E09BD Lots 3200, 3300, 3400, and 3500 and Tax Map 03S38E09AC Lot 4200) lie north of East H Avenue and are zoned Medium Density Residential. The southern boundary of these properties would run along the extension, and all could potentially have access to East H Avenue. One of these parcels (Tax Map 03S38E09 Lot 1600) lies south of East H Avenue and is currently zoned Medium Density Residential although the City is considering rezoning this parcel to an Industrial designation. The northern boundary of this property would run along the extension, and it could potentially have access to East H Avenue. Two parcels (Tax Map 03S38E09 Lots 1500 and 2900) lie south of East H Avenue and either side of the potential connection to US 30. Both are currently zoned Medium Density Residential and both could take access from either the East H Avenue extension or the new connection to US 30. The realignment of Gekeler Lane east of US 30 would also affect Lot 2900.

Goal Exceptions: A portion of this option lies outside of the current La Grande UGB and could require goal exceptions to implement.

Other: The Option 5 connection between the East H Avenue extension and US 30 would require a new crossing of Gekeler Slough, which is identified as palustrine, forested, temporarily flooded, and excavated. It would also involve crossing Gekeler Ditch.

Another concern with Option 5 would be a new railroad crossing. Even with the closure of the existing Gekeler Lane crossing, negotiations with the railroad would be necessary and a fully gated crossing could be required rather than the rural crossing currently allowed.

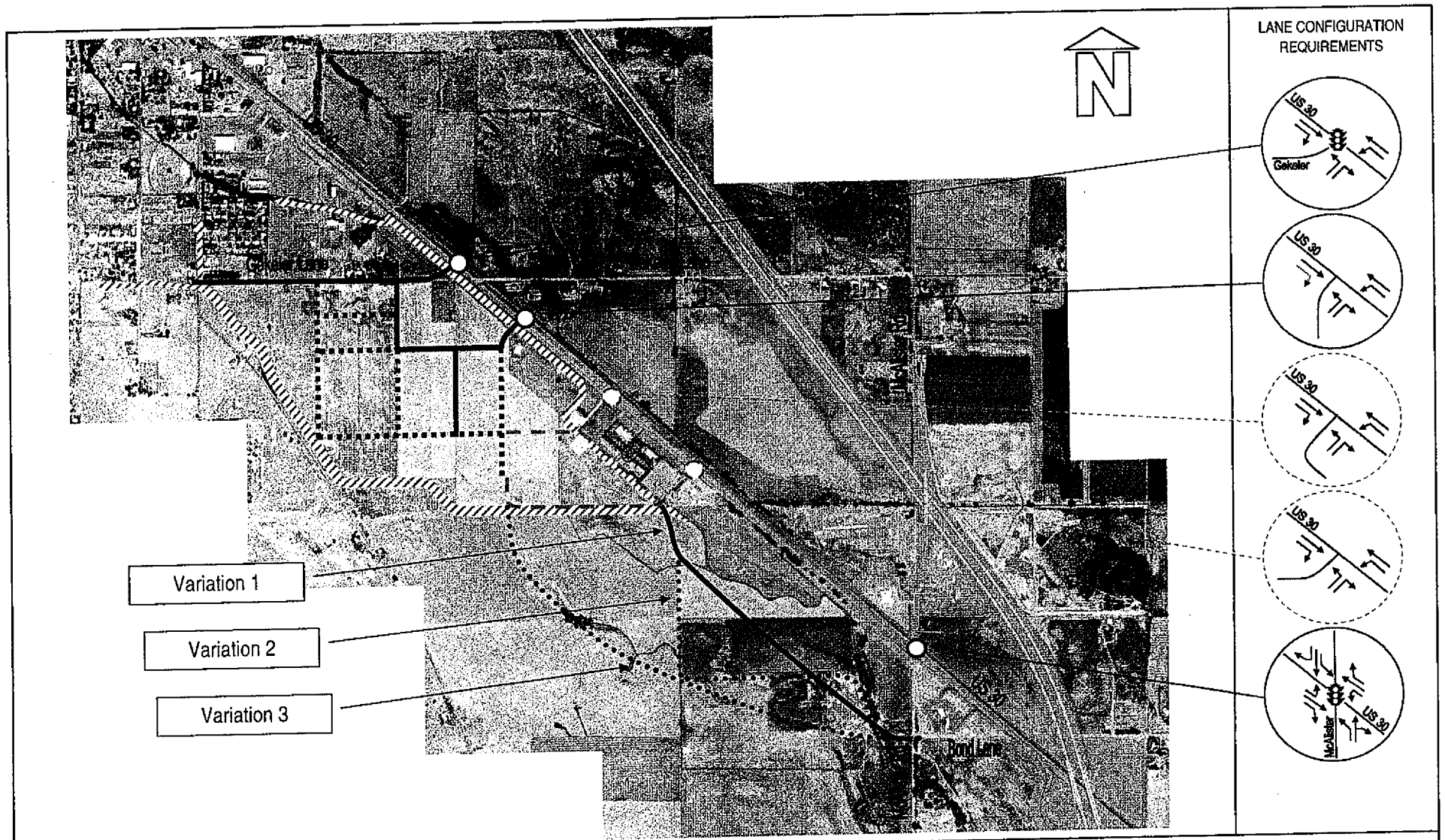
Cost: The construction cost of Option 5 is estimated at $3.3 million. This cost includes a 30-foot structure across both Gekeler Ditch and Gekeler Slough, a full urban railroad crossing, and approximately 5,300 feet of roadway construction. The cost does not include right-of-way acquisition or impacts to structures.

6.2.7 Option 6

Option 6 would create a frontage road southwest of US 30 that would extend from the extended business park network (Options 1 and 2) to McAlister Road. Option 6, with three variations in alignment, is illustrated in Figure 15.

Purpose: This option is a long-term improvement concept to serve adjacent lands should the City's UGB expand or should development occur along US 30 through other changes in land use.

Traffic Projections: This connection would provide an alternate route from the business park to McAlister Road and would serve adjacent development with future rezoning. Future volumes have not been developed because there are no specific zoning designations or intensities to use for estimating trip generation associated with the adjacent lands. Approximately 275 acres of land could be served by this frontage road.



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- Business Park - Early Phases
- Business Park - Future Phases
- Business Park
- Potential Gekeler Slough Bypass Alignments
- Additional Roadway Improvements
- Alignment Variations
- Other Improvement Options

FIGURE 15

OPTION 6 - ACCESS ROAD SOUTHWEST OF US 30

US 30: GEKELER TO I-84 CAMP

Operations Analysis: The additional connection through to McAlister Road could improve the operations of some intersections and worsen the operations at others. The biggest impact on operations is likely to come from the development of the adjacent lands. Without specific zoning designations or intensities, it is difficult to assess the impact of the development on intersection operations. The City of La Grande or Union County should require an assessment of traffic impacts when UGB expansion and/or proposed rezoning occurs.

Access Spacing: This option would serve as an access road for adjacent properties and would reduce the need for additional connections to US 30.

Traffic Circulation: This connection would provide an alternate route from the business park to McAlister Road and would serve adjacent development with future rezoning.

Safety: Option 6 would reduce the need for future connections to US 30, thus reducing the number of conflict points and increasing safety.

Impact to Adjacent Lands: The three variations in alignment would have different impacts on adjacent lands.

Variation 1, closest to US 30 would cut across several parcels, dividing them into smaller lots. This could potentially impact the ability to develop some of these parcels but access to a service road could ultimately benefit the properties. Two parcels (Tax Map 03S38E15 Lots 1000 and 1900) would be split with this alignment while the northeast corner of a third parcel (Tax Map 03S38E16 Lot 601) could also be affected.

Variation 2, which runs along property lines, would have fewer impacts to the adjacent properties but would result in a service road that is considerably further from US 30. This variation would run the access roadway between the parcels (Tax Map 03S38E15 Lots 1000 and 1900) to avoid splitting them. The northeast corner of the third parcel (Tax Map 03S38E16 Lot 601) could also be affected with this variation.

Variation 3 would connect to the business park farther west than the other variations, making it the most distant variation from US 30. The alignment shown would cut across several parcels, dividing them into smaller lots. Two parcels (Tax Map 03S38E16 Lots 601 and 1300) would be split with this alignment while the southern boundary of another parcel (Tax Map 03S38E15 Lot 1900) could also be affected.

Other: All three alignment variations would require crossing the major Gekeler Slough bypass and each would also cross one or more tributaries of Gekeler Slough. For most of the area under consideration, Gekeler Slough is identified as palustrine, emergent, seasonally flooded, and excavated in the National Wetlands Inventory.

Goal Exceptions: All of the alignment variations for this alternative lie outside of the current La Grande UGB and could require goal exceptions to implement.

Cost: The construction cost of Option 6 is estimated at $2.6 million. This cost includes one 30-foot structure across Gekeler Slough and approximately 5,600 feet of roadway construction (the longest variation). The cost does not include right-of-way acquisition or impacts to structures.

6.2.8 Option 7

Option 7 would create a frontage road northeast of US 30 that would extend from Gekeler Lane to McAlister Road. It would also improve Gekeler Lane east of US 30 to a minor collector standard. Option 7 is illustrated in Figure 16.

Purpose: This option is a long-term improvement concept to serve adjacent lands should the City's UGB expand or should development east of the railroad tracks occur through other changes in land use.

Traffic Projections: This connection would provide an alternate route from Gekeler Lane to McAlister Road and would serve adjacent development with future rezoning. Future volumes have not been developed because there are no specific zoning designations or intensities to use for estimating trip generation associated with the adjacent lands. Approximately 140 acres of land could be served by this frontage road.

Operations Analysis: The additional connection through to McAlister Road could improve the operations of some intersections and worsen the operations at others. The biggest impact on operations is likely to come from the development of the adjacent lands. Without specific zoning designations or intensities, it is difficult to assess the impact of the development on intersection operations. The City of La Grande or Union County should require an assessment of traffic impacts when UGB expansion and/or proposed rezoning occurs.

Access Spacing: This option would serve as an access road for adjacent properties and would reduce the need for additional connections to US 30.

Traffic Circulation: This connection would provide an alternate route from Gekeler Lane to McAlister Road and would serve adjacent development with future rezoning.

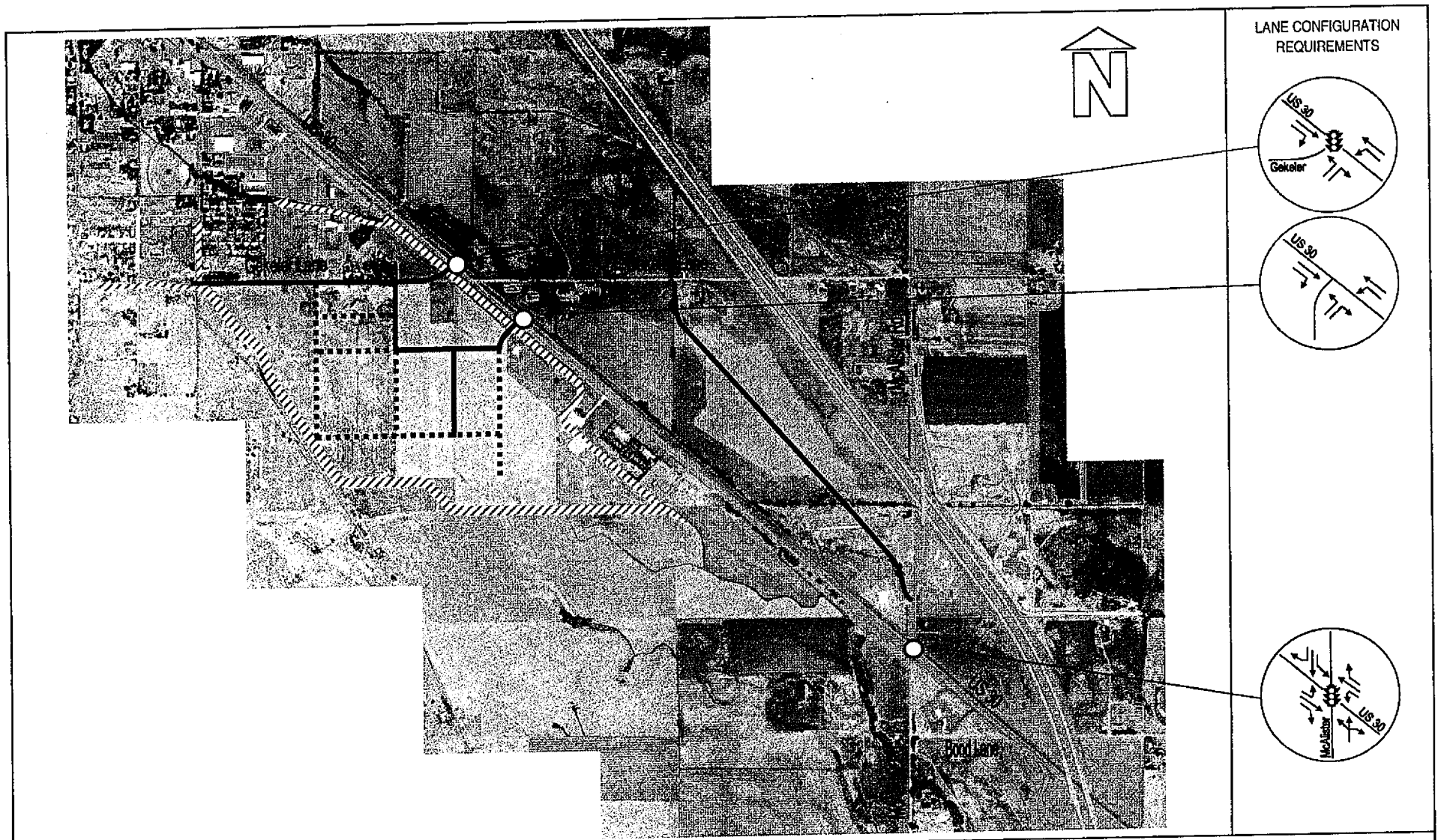
Safety: Option 7 would reduce the need for future connections to US 30, thus reducing the number of conflict points and increasing safety.

Impact to Adjacent Lands: Only one alignment has been shown for Option 7, however, other variations are possible. To connect McAlister Road to Gekeler Lane east of US 30 would impact four parcels (Tax Map 03S38E15 Lots 700, 1100, and 1101 and Tax Map 03S38E16 Lot 100), dividing three of them into smaller lots. This could potentially impact the ability to develop some of these parcels but access to a service road could ultimately benefit the properties. A fifth parcel (Tax Map 03S38E15 Lots 800), identified as Grande Ronde Ditch, would be crossed by the connection.

Other: Option 7 would require crossing the Grande Ronde Ditch.

Goal Exceptions: This alternative lies outside of the current La Grande UGB and could require goal exceptions to implement.

Cost: The construction cost of Option 7 is estimated at $2.6 million. This cost includes two 30-foot structures across Gekeler Slough and approximately 5,100 feet of roadway construction (the longest variation). The cost does not include right-of-way acquisition or the impacts to structures.



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- Business Park - Early Phases
- Business Park - Future Phases
- Business Park
- Potential Gekeler Slough Bypass Alignments
- Additional Roadway Improvements
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- Other Improvement Options

FIGURE 16

OPTION 7 - ACCESS ROAD NORTHEAST OF US 30

US 30: GEKELER TO I-84 CAMP

6.2.9 Option 8

Option 8 would connect Gekeler Lane over I-84 with an overpass (not an interchange). Option 8 is illustrated in Figure 17.

Purpose: This option is a long-term improvement concept to provide additional connections into the area bound by the railroad tracks to the west and I-84 to the east. Should the City's UGB expand or should development east of the railroad tracks occur through other changes in land use, the overpass would connect the area to McAlister Road at a second location, facilitating travel northward towards Island City.

Traffic Projections: The overpass would expand the roadway network serving the land bound by the railroad tracks to the west and I-84 to the east. Future volumes have not been developed because there are no specific zoning designations or intensities to use for estimating trip generation associated with the adjacent lands. Also, this connection would be affected by the development of land east of I-84, which cannot be accounted for. Approximately 150 acres of land are bound by the railroad tracks to the west and I-84 to the east.

Operations Analysis: The overpass and connection through to McAlister Road could improve the operations of some intersections and worsen the operations at others. The biggest impact on operations is likely to come from the development of the adjacent lands. Without specific zoning designations or intensities, it is difficult to assess the impact of the development on intersection operations. The City of La Grande or Union County should require an assessment of traffic impacts when UGB expansion and/or proposed rezoning occurs.

Access Spacing: This option would provide another circulation option for properties within the study area and would reduce the need for additional connections to US 30.

Traffic Circulation: This option would provide another circulation option for properties within the study and would serve adjacent development with future rezoning.

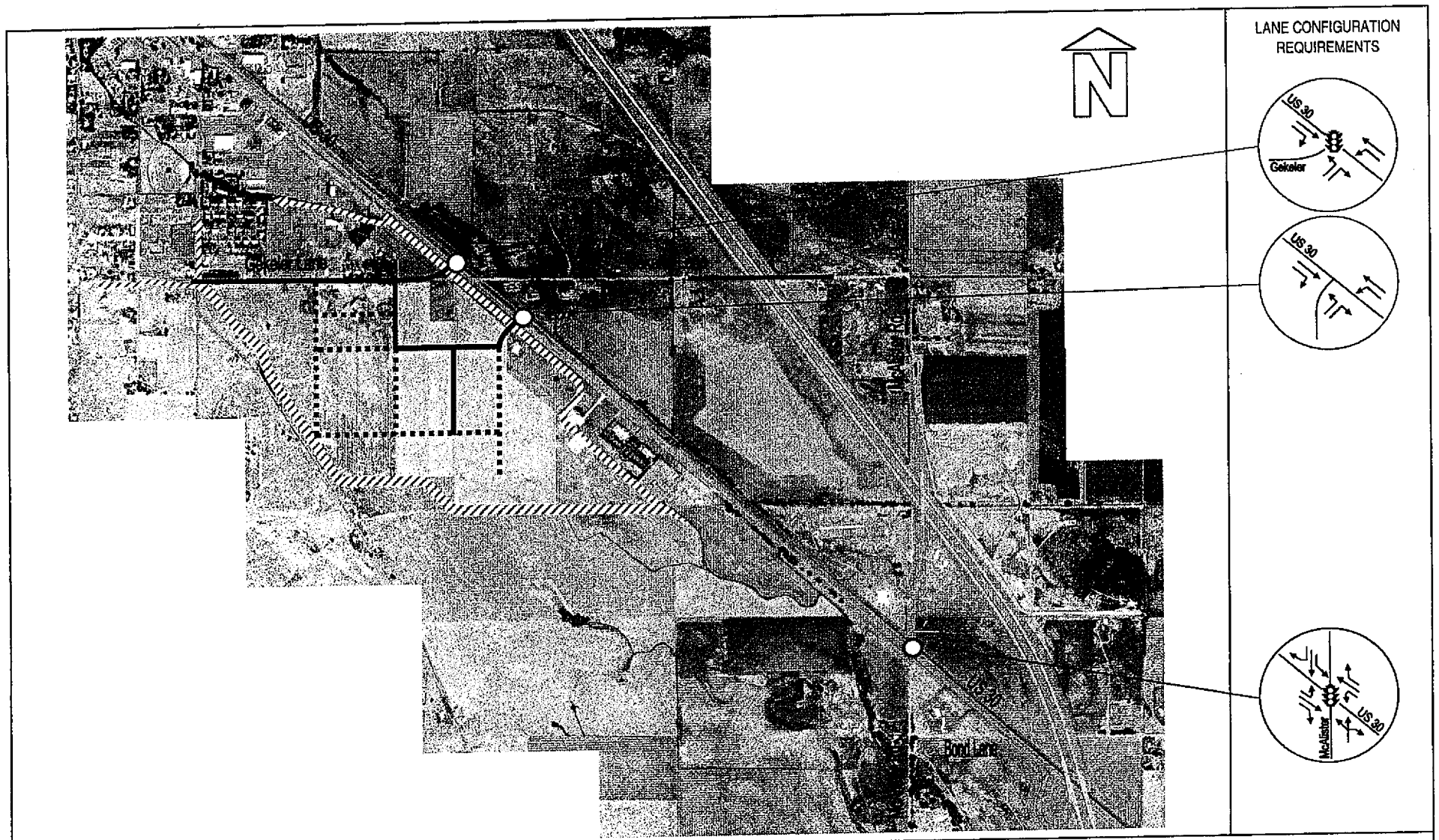
Safety: Option 8 would reduce the need for future connections to US 30, thus reducing the number of conflict points and increasing safety.

Impact to Adjacent Lands: The overpass would have significant impacts to adjacent lands because of the fill required to create the I-84 overpass. Impacts from the overpass would extend several hundred feet in each direction from the freeway. Some of the structures along Gekeler Lane could be impacted by this fill and access could also be changed as a result of the overpass. Nine parcels could be affected by the overpass (Tax Map 03S38E09CD Lots 100 and 1000, Tax Map 03S38E10 Lots 600, 601, and 700, Tax Map 03S38E15 Lots 300, 301, and 600, and Tax Map 03S38E16 Lot 100).

Other: This improvement would not cross any wetlands or irrigation ditches.

Goal Exceptions: This alternative lies outside of the current La Grande UGB and could require goal exceptions to implement.

Cost: The construction cost of Option 8 is estimated at $5.5 million. This cost is for an overpass only, not an interchange. The cost does not include right-of-way acquisition or the impacts to structures.



DAVID EVANS AND ASSOCIATES INC.

- Business Park - Early Phases
- Business Park - Future Phases
- Business Park
- Potential Gekeler Slough Bypass Alignments
- Additional Roadway Improvements
- Alignment Variations
- Other Improvement Options

FIGURE 17

OPTION 8 - I-84 OVERPASS AT GEKELER LANE

US 30: GEKELER TO I-84 CAMP

7. EVALUATION/SCORING OF ALTERNATIVES

The transportation options described in Chapter 6 were scored considering the benefits and costs of each project along with the purpose for implementing the project. From this scoring, a set of recommended transportation system improvements has been developed.

7.1 SCORING SYSTEM

A scoring system was developed to take into account the benefits and impacts of each of the alternatives. Different factors were given different weights to reflect their relative importance in determining which alternatives should be included in the US 30 CAMP.

Five factors were considered as potential benefits of the alternatives. The focus of these factors is on maximizing the benefits provided by the improvement. They were:

- Traffic Volume – The option maximizes benefits if it is expected to serve traffic volumes greater than 1,000 vehicles per day. This factor was given a value of between one and two stars. Options that would serve less than 1,000 vehicles per day were given one star and those would serve more were given two stars.
- Capacity – The option maximizes benefits if it increases capacity of the roadway system to meet forecast demand. This factor was given a value of between two and three stars. Those options that provide additional capacity to meet forecast demand were given three stars while those that provide additional capacity for lower volume roadways were given two stars.
- Access – The option maximizes benefits the closer it comes to meeting ODOT's access spacing standards. This factor was given a value between zero and three stars. Those improvements that meet access spacing standards were given three stars. Those that improved access spacing but did not fully meet standards were given one or two stars. Those that did not improve access were given no stars.
- Circulation – The option maximizes benefits if it retains or improves traffic circulation options. This factor was given a value between zero and two stars. Those improvements that improve traffic circulation were given two stars. Those that provide less convenient circulation options while meeting other goals (access and capacity) were given one star. Those that did not improve traffic circulation were given no stars.
- Safety – The option maximizes benefits if it improves safety of the roadway system. This factor was given a value between one and three stars. Those improvements that provide the greatest safety improvement were given three stars while those that had fewer safety benefits were given one or two stars.

Three factors were considered as potential impacts of the alternatives. The focus of these factors was on minimizing the impacts of the improvements. They were:

- Adjacent Properties – The option minimizes impacts if it protects the use of and access to adjacent properties. This factor was given a value between zero and two stars. Those improvements that minimized impacts to properties were given two stars while those that had some impacts were given one star. If an improvement had significant impacts to adjacent properties, it was given no stars.

- Goal Exceptions – The option minimizes impacts if it is not likely to require a goal exception for implementation. This factor was given a value between zero and one star. Those improvements that were less likely to require a goal exception were given one star while those that were likely to require an exception were given no stars.
- Other – The option minimizes impacts if it has fewer crossings of the area sloughs or slough bypass plans. This factor was given a value between zero and two stars. Those improvements that had no crossings were given two stars while those that had one or two crossings were given one star. If an improvement had more than two crossings, it was given no stars

One additional factor was developed to reflect the benefits of the improvement relative to the cost. This factor is:

- Benefit/Cost – The option balances benefits for the estimated cost. This factor was given a value between zero and three stars. Those improvements that would provide the most benefit for the estimated cost were given three stars while those that provided little benefit for the cost were given no stars. A project that had a high benefit but also a high cost was given two stars and those which had lower benefits but lower costs were given one star.

7.2 ALTERNATIVES SCORING

Table 19 presents the scoring of the transportation options described in Chapter 6.

7.3 COMPARISON OF ALTERNATIVES AND RECOMMENDATIONS

The transportation alternatives were developed to address different capacity, safety, and access issues identified through inventories, operational analysis, and public input. The alternatives, either individually or grouped by purpose, are discussed below, comparing the purpose of the improvement and the scoring results. Recommendations based on the scoring and PMT discussions are identified.

Table 19: Scoring of Alternatives

Option				Option Maximizes Benefits					Option Minimizes Impacts				
No.	Title/Location	Description	Project Cost (2005 $)	Traffic Volume	Capacity	Access	Circulation	Safety	Adjacent Properties	Goal Exceptions	Other	Benefit/Cost	Total (*)
		Maximum Weight Factor ==>		**	***	***	**	***	**	*	**	***	21
1	Business Park Roadway Network Extensions to US 30	Provide additional connections to the business park along with a service road behind the existing development on US 30.	$3,800,000	**	***	***	**	**	**	*	*	***	19
2	Business Park Roadway Network Extensions to US 30	Provide additional connections to the business park along with a service road behind the existing development on US 30.	$3,200,000	**	***	***	**	**		*	*	**	16
3	Business Park Roadway Network Extension to Foothill Road	Connect from Foothill Road into the business park.	$900,000		*		*	*	**	*	*	*	8
4	East Gekeler Lane Realignment Southward	Realign Gekeler Lane east of the railroad tracks to connect with US 30 opposite the business park connection through the animal shelter.	$1,300,000		*	***	*	***	*	*	*	**	13
5	East Roadway Network Extensions and Gekeler Lane Realignment	Extend East H Avenue to the east and create a new connection from East H Avenue to US 30 opposite the realigned Gekeler Lane. Realign Gekeler Lane east of the railroad tracks to tie in with the new connection.	$3,300,000	**	***	***	**	***	*	*	*	**	18
6	Access Road Southwest of US 30	Create a southwest frontage road running parallel to US 30 and extending from Options 1 or 2 to McAlister Road.	$2,600,000	**	***	***	**	**	*		*	**	16
7	Access Road Northeast of US 30	Create a northeast frontage road running parallel to US 30 and extending from Gekeler Lane to McAlister Road.	$2,600,000	**	***	***	**	**	*		*	**	16
8	I-84 Overpass at Gekeler Lane	Connect Gekeler Lane across I-84 with an overpass.	$5,500,000	**	***		**				**	*	10

Evaluation Criteria:

Traffic Volume - Option maximizes benefits if it is expected to serve traffic volumes greater than 1,000 vehicles per day.
Capacity - Option maximizes benefits if it increases capacity of the roadway system to meet forecast demand.
Access - Option maximizes benefits the closer it comes to meeting ODOT's access spacing standards.
Circulation - Option maximizes benefits if it retains or improves traffic circulation options.
Safety – Option maximizes benefits if it improves safety of the roadway system.
Adjacent Properties - Option minimizes impacts if it protects the use and access to adjacent properties.
Goal Exceptions - Option minimizes impacts if it is not likely to require a goal exception for implementation.
Other - Option minimizes impacts if it has fewer conflicts with the area sloughs or slough bypass plans.
Benefit/Cost - Option maximizes benefit/cost when it maximizes benefits for the estimated cost.

7.3.1 Options 1 and 2

Options 1 and 2 both involve the roadway network extensions from the business park to US 30. Option 1 would extend the easternmost roadway in the business park southward from its currently planned terminus to the City's UGB where it would turn eastward to connect with US 30 while Option 2 would extend the southernmost roadway in the business park eastward from its currently planned terminus to US 30. Both options would extend another new roadway behind the existing development (Reddaway and USFS) to another connection with US 30. This extension would eventually provide alternate access to US 30 from the adjacent properties.

These options were developed to provide additional connections to the business park along with a service road behind the existing development on US 30. The connections would meet the state's access spacing standards if the private accesses were eventually closed and rerouted to the service road.

Option 1 scored higher that Option 2 because it would have many fewer impacts to the adjacent properties. The roadway alignments in Option 1 would run along parcel boundaries to minimize impacts. With Option 2, the extension eastward from the business park would divide one developed property (WastePro Material Recovery Facility) and would be likely to impact a structure on the property. Otherwise the scoring for the alternatives was similar.

Recommendation: Based on the scoring of alternatives and discussion with the PMT, Option 1 is recommended for the US 30 CAMP with several qualifications. First, an alignment variation that would be a hybrid of Options 1 and 2 was recommended for further consideration when the project is developed. This hybrid alignment would be located midway between the Option 1 and 2 alignments, and was recommended because it might require less roadway construction than Option 1 while having fewer property impacts than Option 2. The second qualification was that the project should be constructed incrementally with the southern connection to US 30 being the first phase, the connection extension northward behind the USFS being the second phase, and the northern connection to US 30 constructed only if traffic volumes indicate a need.

This project should be implemented within 10 years with development of the business park.

7.3.2 Option 3

Option 3 would extend the southernmost roadway in the business park westward across the Gekeler Slough Bypass to connect with Foothill Road.

This option was developed to eventually provide another alternate access to the business park. Although it increases circulation opportunities, Option 3 would not be likely to serve much traffic, it connects to a rural roadway, and it would need to cross the Gekeler Slough Bypass. Therefore, it did not score well in the evaluation.

Recommendation: Based on the scoring of the alternatives and discussion with the PMT, Option 3 is not recommended as part of the US 30 CAMP.

7.3.3 Options 4 and 5

Options 4 and 5 both realign Gekeler Lane east of US 30 to connect opposite another intersecting roadway. Option 4 would realign Gekeler Lane east of the railroad tracks to connect with US 30

opposite the business park connection through the animal shelter. Option 5 would extend East H Avenue to the east and create a new connection from East H Avenue to US 30 opposite Gekeler Lane where it is realigned west of US 30. Gekeler Lane east of US 30 would then be realigned to connect into the extension from East H Avenue.

Options 4 and 5 were developed to eliminate the intersection offset with conflicting left turns that will occur when Gekeler Lane west of US 30 is realigned to a new connection northwest of the current intersection. Although Option 5 would involve more extensive roadway improvements, it would also provide more benefits in terms of capacity, circulation, and the potential traffic volume served; therefore, it scored higher that Option 4, which focused on just the realignment of Gekeler Lane.

Recommendation: Based on the scoring of the alternatives and discussion with the PMT, Option 5 is recommended for the US 30 CAMP. The project should be constructed incrementally as the residential area between US 30 and I-84 develops. The extension of East H Avenue eastward is likely to be the first phase of construction with the connection from East H Avenue to US 30 constructed as a second phase.

This project should be implemented within 20 years with development of the adjacent residential lands.

7.3.4 Option 6

Option 6 would create a frontage road southwest of US 30 that would extend from the extended business park network (Options 1 and 2) to McAlister Road. Three variations in alignment were considered with this alternative.

This option was developed as a long-term improvement concept to serve lands southwest of US 30 should the City's UGB expand or should development occur along US 30 through other changes in land use. Forecasts of traffic demand on this roadway were not developed since the adjacent lands are currently zoned for agricultural uses. Should the zoning change, this frontage road option would provide capacity, access control, and circulation options that would help preserve the function of US 30; therefore, it scored moderately well in the evaluation.

Recommendation: Based on the scoring of the alternatives and discussion with the PMT, Option 6 is recommended for the US 30 CAMP.

Because the adjacent lands are currently zoned for agricultural uses, and the City of La Grande's Goal 9 process did not consider expanding its UGB into this area, this project is expected to be very long-term (beyond 20 years).

7.3.5 Option 7

Option 7 would create a frontage road northeast of US 30 that would extend from Gekeler Lane to McAlister Road. It would also improve Gekeler Lane east of US 30 to a minor collector standard.

This option was developed as a long-term improvement concept to serve lands northeast of US 30 and the railroad tracks should the City's UGB expand or should development occur along US 30 through other changes in land use. Forecasts of traffic demand on this roadway were not developed since the adjacent lands are currently zoned for agricultural uses. Should the zoning change, this

frontage road option would provide capacity, access control, and circulation options that would help preserve the function of US 30; therefore, it scored moderately well in the evaluation.

Recommendation: Based on the scoring of the alternatives and discussion with the PMT, Option 7 is recommended for the US 30 CAMP.

Because the adjacent lands are currently zoned for agricultural uses, and the City of La Grande's Goal 9 process did not consider expanding its UGB into this area, this project is expected to be very long-term (beyond 20 years).

7.3.6 Option 8

Option 8 would connect Gekeler Lane over I-84 with an overpass (not an interchange).

This option was developed as a long-term improvement concept to provide additional connections into the area bound by the railroad tracks to the west and I-84 to the east. Should the City's UGB expand or should development east of the railroad tracks occur through other changes in land use, the overpass would connect the area to McAlister Road at a second location, facilitating travel northward towards Island City. While this alternative would provide circulation options and some additional system capacity, it would have a high cost and would have little impact on access or safety. It scored moderately in the evaluation.

Recommendation: Although this option did not score highly in the evaluation, it has some community support; therefore, Option 8 is recommended for the US 30 CAMP.

Because the adjacent lands are currently zoned for agricultural uses, and the City of La Grande's Goal 9 process did not consider expanding its UGB into this area, this project is expected to be very long-term (beyond 20 years).

8. PLANNED IMPROVEMENTS

The US 30 CAMP is composed of two elements: an access management plan and a roadway improvement plan.

8.1 ACCESS MANAGEMENT PLAN

One of the goals of the US 30 CAMP is to develop an access management strategy that helps preserve the functionality of US 30, protecting its ability to accommodate traffic volumes safely and efficiently into the future. The safety and efficiency of the highways and connections to the interstate system are vital to the adjacent property owners who need access for their businesses and residences. It has been shown, however, that a proliferation of driveways and minor street intersections near a ramp terminal can drastically increase conflicts. This causes operational problems, decreases the capacity of the intersections, and generally degrades service for all system users.

The access management strategy must balance the competing needs of traffic capacity and safety for I-84 and the study area and local access needs. The OHP devotes an entire section to the discussion of access management. More detailed requirements and the access spacing standards for state highways are specified in OAR 734, Division 51. Ideally, a project will include provisions by which access within the project limits can be made fully compliant with Division 51. In many instances, however, access needed for current parcels will not allow these standards to be met. When the requirements and standards cannot be met, the access management strategy must demonstrate progress toward meeting the applicable standards.

The strategy and actions in the US 30 CAMP are based on existing land uses for each study area. When a property is developed, redeveloped or a change-of-use occurs, an application for an approach road will be required if access is proposed to the state highway system. At that time, any existing approach road, and any new proposed approach road, will be evaluated. The US 30 CAMP will guide ODOT when completing a change-of-use assessment.

8.1.1 Spacing Standards

OAR 734-051 and the OHP contain standards for private driveway and public road approach spacing based on highway classifications and speeds. According to these standards on US 30, a District Highway, accesses (either public or private) shall be at least 700 feet apart where the posted speed is 55 mph and 400 feet apart where the posted speed is 35 mph. Access shall also be 1,320 feet from the I-84 interchange ramps that lie at the southern end of the study area. Requests for deviations from these standards can be made through the process is outlined in OAR 734-051-0135.

OAR 734-051-0115 (1)(c)(C) and 734-051-0125 (1)(c)(C) require that "for a highway or interchange construction or modernization project...the project will improve spacing and safety factors by moving in the direction of the access management spacing standards, with the goal of meeting or improving compliance with the access management spacing standards." The OAR 734-051 and OHP access spacing standards apply to both streets and driveway approaches and are measured from the center of one access to the center of the next access on the same side of the road.

8.1.2 Access Management Strategy and Actions

The overall strategy of this access management plan is to protect traffic safety and operations within the study area. This section identifies actions to be implemented consistent with the US 30 CAMP goals. These actions are recommended as land use changes and redevelopment occurs, or in concurrence with other future roadway improvement projects.

The strategy and actions in the US 30 CAMP are based on existing land uses for each parcel. When a property is developed, redeveloped, or a change-of-use occurs, an application for an approach road will be required if access is proposed from the state highway system. At that time, any existing approach road and any new proposed approach road will be evaluated by ODOT. ODOT may use the US 30 CAMP as a guide when completing change-of-use assessments.

When a proposed approach cannot meet the spacing standards, it is referred to as a deviation from the spacing standard. As part of the approach permit approval process, deviation findings will be prepared, if necessary, to explain why the approach cannot meet the standards as required by OAR 734-051-0135 (Deviations from Access Management Spacing Standards). Deviation findings will identify OAR 734-051-0135 (3)(a) as a rationale for approval of public approach deviations. As per OAR 734-051-0135 (7), the Region Access Management Engineer may require that a plan identify measures to reduce the number of approaches to the highway in order to approve a deviation for a public approach. This access management strategy identifies measures to reduce the number of approaches near Interchanges 302 and 306, and therefore would fulfill this potential requirement.

8.1.2.1 Issue Reservations of Access

Since alternative access for some parcels is not practical at this time, reservations of access will be issued for existing approaches within the interchange influence area. A reservation of access gives a property owner the common law right of access to the state highway only at specific locations. The property owner must still submit an Application for State Highway Approach at these locations when the property is developed, redeveloped, or a change of use occurs. A reservation of access may contain use restrictions and does not guarantee approval of the approach or the location of the approach. Reservations of access will be recorded in the property deeds.

8.1.2.2 Summary of Actions

The access management actions to be implemented in the US 30 CAMP are summarized in Table 20.

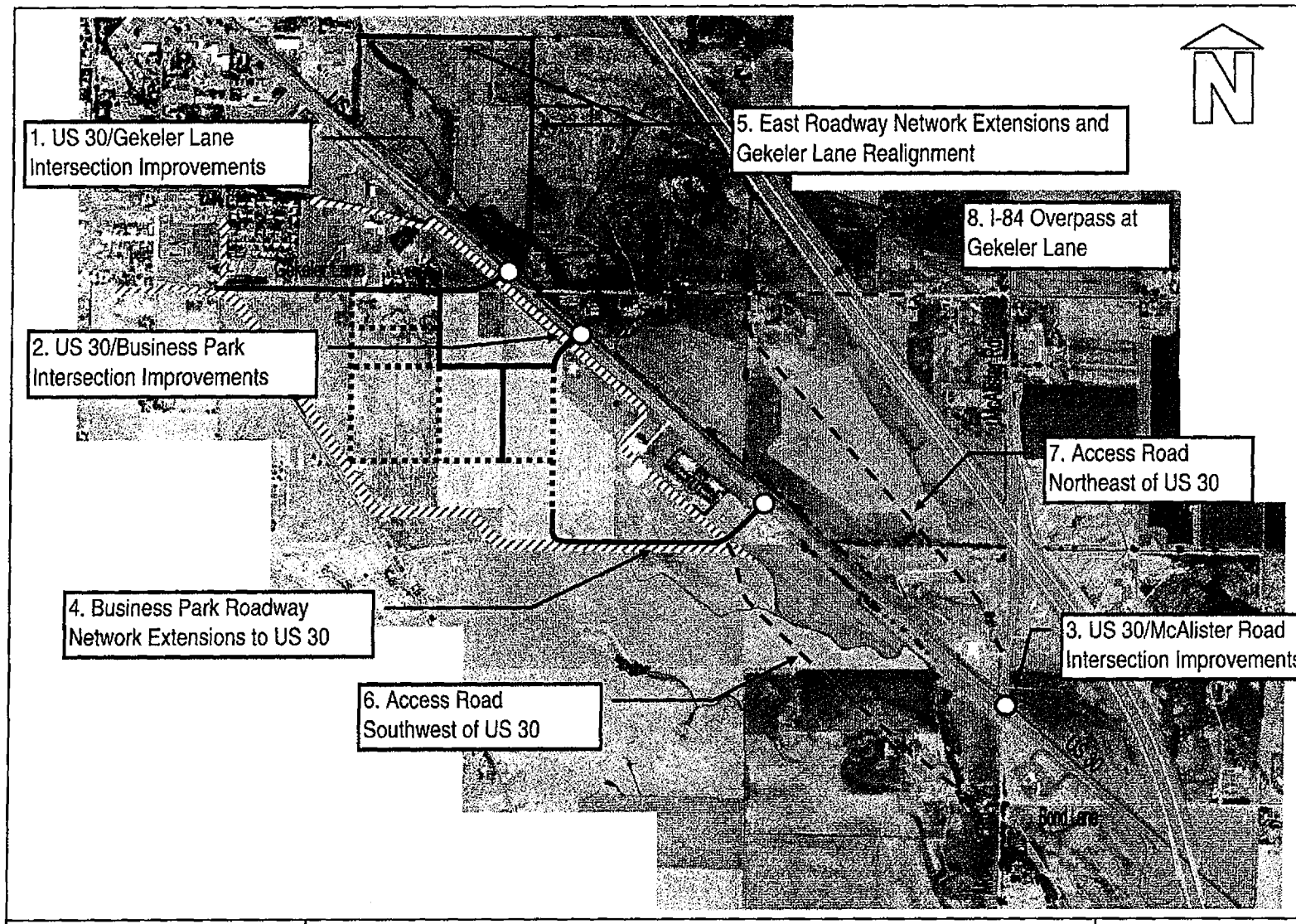
Table 20: Access Management Actions Summary

Access No.	Type: Use	Side of Road	Approach Width (ft)	Tax Map	Tax Lot No.	Action
Along US 30						
1	Private: Commercial (Les Schwab)	West	24	03S38E08CB	200&201	Consolidate with other site driveways.
2	Private: Residential (Residence)	West	14	03S38E08CB	400	Consolidate with redevelopment of property.
3	Private: Commercial (Oregon Trader)	West	42	03S38E08CB	500	Consolidate with redevelopment of property.
4	Private: Commercial (Quail Run Motor Inn)	West	30	03S38E08CB	600	Consolidate with redevelopment of property.
5	Private: Commercial (Quail Run Motor Inn)	West	15	03S38E08CB	600	Consolidate with redevelopment of property.
6	Private: Unknown	West	38	03S38E08CB	700	Consolidate with ODF driveway.
7	Public: Government (Oregon Department of Forestry)	West	53	03S38E08CB	801	No Action.
8	Private: Commercial (Bi-Mart)	West	39	03S38E08CB	801	No Action.
9	Private: Commercial (Beer Warehouse)	West	38	03S38E08CB	801	Consolidate with Bi-Mart driveway.
10	Private (7th Day Adventist Church)	West	20	03S38E08CB	801	No Action.
11	Public: Government (School District)	West	23	03S38E08CB	801	Consolidate with Church driveway.
12	Private: Unknown	West	22	03S38E08CB	801	Close.
13	Public: Gekeler Lane	East/ West	60			W of US 30 - Realign with STIP project. E of US 30 – Realign opposite W side.
14	Private: Commercial (Animal Shelter)	West	22	03S38E16	501	Consolidate with business park access.
15	Private: Commercial (Waste Pro Material Recovery Facility)	West	25	03S38E16AD	100	Potentially consolidate with business park extensions in roadway plan
16	Private: Farmland (Field)	West	13	03S38E16AD	200	Consolidate with business park extensions in roadway plan.
17	Public: Government (Forest Service)	West	21	03S38E16AD	300	Potentially relocate access to business park extension in roadway plan.
18	Public: Reserved ROW	West	23	03S38E16AD	400,500& 600	Construct through street to business park and connect to adjacent businesses
19	Private: Commercial (Steele's Septic)	West	65	03S38E15	900	continue access in front of property and connect to future business extension on N. side of business
20	Private: Farmland (Field)	West	10	03S38E15	1000	No Action.
21	Public: McAlister Road	East/ West	40			No Action.
22	Private: Commercial (Flying J Truck Stop)	West	50	03S38E15	1800	Consolidate with redevelopment of property.
23	Private: Commercial (Flying J Truck Stop)	West	52	03S38E15	1800	Consolidate with redevelopment of property.
24	Public: Bond Lane (Bond Lane)	West	-			No Action.
Along Gekeler Lane						
26	Private: Commercial (UPS)	South	55	03S38E16	691	No Action
Along McAlister Road						
28	Private: Residence	West	15	03S38E15	1900	No Action.
30	Private: Commercial (New Holland)	West	39	03S38E15	1100	Consolidate with redevelopment of property.
31	Private: Livestock Road (Livestock Rd)	West	59	03S38E15	1101	No Action.
32	Public: Bond Lane (Bond Lane)	East	33			No Action
33	Private: Commercial (Flying J Truck Stop)	East	374	03S38E15	1800	Narrow with opening set back at least 300 feet from US 30.
35	Private: Farmland (Farmland)	East	18	03S38E15	1700	Consolidate with redevelopment of property.
36	Private: Farmland (Gated Field)	East	22	03S38E15	1200	Consolidate with redevelopment of property.
37	Private: Commercial (Steele's)	East	29	03S38E15	1203& 1204	Consolidate with redevelopment of property.

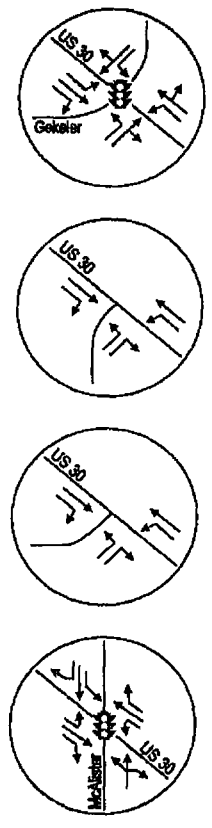
8.2 ROADWAY IMPROVEMENT PLAN

As part of the process for developing the US 30 CAMP, alternative transportation improvements within the study area were developed to enhance the capacity, access, circulation, and safety of the transportation system while conforming to the provisions and the policies of the Oregon Highway Plan and other relevant state transportation laws.

Through a technical evaluation and a public involvement process, a list of roadway improvement projects was developed for the US 30 CAMP. These projects are summarized in Table 21 and the locations are identified in Figure 18.



LANE CONFIGURATION REQUIREMENTS



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- Business Park - Early Phases
- Business Park - Future Phases
- Business Park
- Potential Gekeler Slough Bypass Alignments
- Additional Roadway Improvements
- Conceptual Roads*

* Conceptual roads outside the UGB will occur only if the county or city change zoning to something that would allow development (from EFU to industrial, commercial, or residential).

FIGURE 18

RECOMMENDED ROADWAY IMPROVEMENT PLAN

US 30: GEKELER TO I-84 CAMP

Table 21: Recommended Roadway Improvement Plan

New No.	Project Location	Project Description	Project Justification				Potential Financial Partners				Estimated Project Cost	Implementation
			Capacity	Access	Circulation	Safety	ODOT	Union County	La Grande	Other		
1	US 30/Gekeler Lane Intersection Improvements	Add a traffic signal at the intersection and a southeastbound right-turn deceleration lane and left-turn lanes on US 30.	✓			✓	◆				$1,000,000	When warranted
2	US 30/business park Intersection Improvements	Add a southeastbound right-turn deceleration lane and northwestbound left-turn lane on US 30.	✓			✓	◆				$500,000	When warranted
3	US 30/McAlister Road Intersection Improvements	Add a traffic signal at the intersection, a southeastbound right-turn deceleration lane on US 30 and turn lanes on McAlister Road. Realign intersection to a more perpendicular connection.	✓			✓	◆	◆			$1,500,000	When warranted
4	Business Park Roadway Network Extensions to US 30	Provide additional connections to the business park along with a service road behind the existing development on US 30.	✓	✓	✓	✓	◆	◆	◆	◆	$3,800,000	Constructed in phases within 10 years as the business park develops
5	East Roadway Network Extensions and Gekeler Lane Realignment	Extend East H Avenue to the east and create a new connection from East H Avenue to US 30 opposite the realigned Gekeler Lane. Realign Gekeler Lane east of the railroad tracks to tie in with the new connection.	✓	✓	✓	✓	◆	◆	◆	◆	$3,300,000	Constructed in phases within 20 years as the residential area between US 30 and I-84 develops
6*	Access Road Southwest of US 30	Create a southwest frontage road running parallel to US 30 and extending from Options 1 or 2 to McAlister Road.	✓	✓	✓	✓	◆	◆	◆		$2,600,000	Beyond 20 years
7*	Access Road Northeast of US 30	Create a northeast frontage road running parallel to US 30 and extending from Gekeler Lane to McAlister Road.	✓	✓	✓	✓	◆	◆	◆		$2,600,000	Beyond 20 years
8*	I-84 Overpass at Gekeler Lane	Connect Gekeler Lane across I-84 with an overpass.	✓		✓		◆	◆	◆		$5,500,000	Beyond 20 years

* Projects 6, 7, and 8 are conceptual and would only be implemented if the county or city change zoning to something that would allow development (from EFU to industrial, commercial, or residential);.

The transportation improvement project list identifies the location of the project and describes the type of improvement to be implemented. It summarizes the justification for the project. Planning-level cost estimates are included along with potential financial partners. Lastly, it recommends project phasing.

The recommended projects include:

1. At the US 30/Gekeler Lane intersection, provide signalization and additional lanes (southeastbound right-turn deceleration and left-turn) on US 30. The estimated cost of for these improvements is $1.0 million but it may be lower if the turn lanes are added as part of the STIP improvement project on Gekeler Lane. All of these improvements would be within ODOT's right-of-way for US 30 and would not require any additional right-of-way acquisition. When Gekeler Lane is realigned as part of the STIP project, consideration should be given to the roadway grade needed to eventually extend it further eastward across the railroad tracks.

   This project should be implemented when traffic volumes at the intersection meet ODOT's warrants for signalization and supplemental turn lanes.

2. At the US 30/business park intersection, provide additional lanes (southeastbound right-turn deceleration and northwestbound left-turn) on US 30. The estimated cost of for these improvements is $0.5 million. These additional lanes would be within ODOT's right-of-way for US 30 and would not require any additional right-of-way acquisition. It is possible, they could be constructed as the business park infrastructure develops and the extension to US 30 creates this new intersection.

   This project should be implemented when traffic volumes at the intersection meet ODOT's warrants for supplemental turn lanes.

3. At the US 30/McAlister Road intersection, baseline improvements include signalization and additional lanes on US 30 (southeastbound right-turn deceleration) and McAlister Road (right-turn and left-turn). The widening of McAlister Road north of US 30 would also require the reconstruction of the rail crossing. The estimated cost of for these improvements is $1.1 million. The improvements on US 30 would be within ODOT's right-of-way and would not require any additional right-of-way acquisition but those on McAlister Road would likely require additional right-of-way not included in the cost. It would also be desirable to reduce the skew of this intersection when making the intersection improvements, which could require more right-of-way acquisition.

   This project should be implemented when traffic volumes at the intersection meet ODOT's warrants for signalization and supplemental turn lanes.

4. Provide additional connections to the business park along with a service road behind the existing development on US 30. Extend the easternmost roadway in the business park southward from its currently planned terminus to the City's UGB where it would turn eastward to connect with US 30. Extend another new roadway behind the existing development (Reddaway and USFS) to another connection with US 30. The connections would meet the state's access spacing standards if the private accesses were eventually closed and rerouted to the service road. The estimated cost of these improvements is $3.8 million excluding right-of-way acquisition.

   This project should be implemented within 10 years with development of the business park. A phased implementation process should be considered with the southern connection to US 30 being the first phase, the connection extension northward behind the USFS being the

second phase, and the northern connection to US 30 constructed only if traffic volumes indicate a need.

5. Extend East H Avenue to the east and create a new connection from East H Avenue to US 30 opposite Gekeler Lane where it is realigned west of US 30. Gekeler Lane east of US 30 would then be realigned to connect into the extension from East H Avenue. These improvements would eliminate the intersection offset with conflicting left turns that will occur when Gekeler Lane west of US 30 is realigned to a new connection northwest of the current intersection. The extensions will also add more system capacity, improve circulation options, and improve safety. The estimated cost of these improvements is $3.3 million excluding right-of-way acquisition.

   This project should be implemented within 20 years with development of the adjacent residential lands. The project should be constructed incrementally as the residential area between US 30 and I-84 develops. The extension of East H Avenue eastward is likely to be the first phase of construction with the connection from East H Avenue to US 30 constructed as a second phase.

6. Create a frontage road southwest of US 30 that would extend from the extended business park network to McAlister Road. Three variations in alignment were considered with this alternative. This would be a long-term improvement to serve lands southwest of US 30 should the City's UGB expand or should development occur along US 30 through other changes in land use. The estimated cost of these improvements is $2.6 million excluding right-of-way acquisition.

   Because the adjacent lands are currently zoned for agricultural uses, and the City of La Grande's Goal 9 process did not consider expanding its UGB into this area, this project is expected to be very long-term (beyond 20 years) and would only be implemented if the county or city change zoning to something that would allow development (from EFU to industrial, commercial, or residential).

7. Create a frontage road northeast of US 30 that would extend from Gekeler Lane to McAlister Road. It would also improve Gekeler Lane east of US 30 to a minor collector standard. This would be a long-term improvement to serve lands northeast of US 30 and the railroad tracks should the City's UGB expand or should development occur along US 30 through other changes in land use. The estimated cost of these improvements is $2.6 million excluding right-of-way acquisition.

   Because the adjacent lands are currently zoned for agricultural uses, and the City of La Grande's Goal 9 process did not consider expanding its UGB into this area, this project is expected to be very long-term (beyond 20 years) and would only be implemented if the county or city change zoning to something that would allow development (from EFU to industrial, commercial, or residential).

8. Connect Gekeler Lane over I-84 with an overpass (not an interchange). This would be a long-term improvement to provide additional connections into the area bound by the railroad tracks to the west and I-84 to the east. Should the City's UGB expand or should development east of the railroad tracks occur through other changes in land use, the overpass would connect the area to McAlister Road at a second location, facilitating travel northward towards

Island City. The estimated cost of these improvements is $5.5 million excluding right-of-way acquisition.

Because the adjacent lands are currently zoned for agricultural uses, and the City of La Grande's Goal 9 process did not consider expanding its UGB into this area, this project is expected to be very long-term (beyond 20 years) and would only be implemented if the county or city change zoning to something that would allow development (from EFU to industrial, commercial, or residential).

9. ADOPTION AND IMPLEMENTATION

The La Grande City Planning Commission will hold its first hearing on the draft US 30 CAMP in January 2006. The first adoption hearing before the La Grande City Council is anticipated to take place in February 2006.

The Union County Planning Commission will hold its first hearing on the draft US 30 CAMP in January 2006. The first adoption hearing before the Union County Board of Commissioners is anticipated to take place in February 2006.

The Oregon Department of Transportation (ODOT) Transportation Commission (OTC) is expected to adopt the US 30 CAMP after the local adoption processes.

10. PREPARERS

Project Manager, Jennifer Danziger, PE, David Evans and Associates, Inc.

Public Involvement Coordinator, Kirstin Greene, AICP, Cogan Owens Cogan, LLC.

Project Planner, Damian Pitt, AICP, Cogan Owens Cogan, LLC.

Traffic Analyst, Dan Johnson, EIT, David Evans and Associates, Inc.

Reviewer, Dwayne Hofstetter, PE, David Evans and Associates, Inc.