

BEFORE THE MORROW COUNTY COURT
OF MORROW COUNTY

AN ORDINANCE ADOPTING THE PORT OF
MORROW AND INTERCHANGE
84/HIGHWAY730 INTERCHANGE AREA
MANAGEMENT PLANS AS AMENDMENTS
TO THE MORROW COUNTY
TRANSPORTATION SYSTEM PLAN

COUNTY ORDINANCE

NO. MC-2-2012

WHEREAS, ORS 203.035 authorizes Morrow County to exercise authority within the county over matters of County concern; and

WHEREAS, Morrow County adopted a Comprehensive Land Use Plan which was acknowledged by the Land Conservation and Development Commission on January 15, 1986; and

WHEREAS, Morrow County adopted a Transportation System Plan in 1998, a significant update in 2005, and with minor updates in 2006, 2007, 2009 and 2010, and a major update in 2012; and

WHEREAS, the Port of Morrow received funds through HB 2001 (2010) which provides for the development of roads in the East Beach Industrial Area, and

WHEREAS, a requirement of HB 2001 (2010) the Port of Morrow is to complete Interchange Area Management Plans for both the Port of Morrow and the Interstate 84/Highway 730 interchanges, and

WHEREAS, a Technical Advisory Committee was established consisting of members from the Port of Morrow, the City of Boardman, Morrow County and the Oregon Department of Transportation, and

WHEREAS, the Technical Advisory Committee working with the consulting team lead by Kittelson and Associates drafted both Interchange Area Management Plans with associated changes to the Transportation System Plan, Comprehensive Plan and Zoning maps, and the Zoning and Subdivision Ordinances, and

WHEREAS, the Port of Morrow made application for Morrow County to adopt the Interchange Area Management Plans and related changes through the Post-Acknowledgment Plan Amendment (local file number ATSP-052-11); and

WHEREAS, the Morrow County Planning Commission held a hearing to review the request on December 20, 2011, at the Port of Morrow Riverfront Center in Boardman, Oregon; and on January 17, 2012, at the Port of Morrow Riverfront Center in Boardman, Oregon; and

WHEREAS, the Morrow County Planning Commission unanimously recommended approval of the request and adopted Final Planning Commission Findings of Fact dated January 19, 2012; and

WHEREAS, the Morrow County Court held a hearing to consider the recommendation of the Morrow County Planning Commission on February 15, 2012, at the Port of Morrow Riverfront Center in Boardman, Oregon; and

WHEREAS, the Morrow County Court did consider the testimony and evidence presented to them;

NOW THEREFORE THE COUNTY COURT OF MORROW COUNTY ORDAINS AS FOLLOWS:

Section 1 Title of Ordinance:

This Ordinance shall be known, and may be cited, as the 2012 "Port of Morrow and Interstate 84/Hwy730 Interchange Area Management Plans amendment to the Morrow County Transportation System Plan."

Section 2 Affected and Attached Documents

1. Adopt the Port of Morrow and Interstate 84/Highway 730 Interchange Area Management Plans (IAMPs) as amendments to the Morrow County Transportation System Plan which is, by reference, a part of the Morrow County Comprehensive Plan (both attached).
2. Amend the Comprehensive Plan and Zoning Maps to include the IAMP Management Area and define its boundary (attached).
3. Approve amendments to the Transportation System Plan, Zoning Ordinance and Subdivision Ordinance, specifically as follows:(as attached).
 - Repeal and replace Chapter 2 of the Transportation System Plan.
 - Repeal and replace Article 4 Supplementary Provisions and Article 9 Administrative Provisions of the Morrow County Zoning Ordinance.
 - Repeal and replace the Morrow County Subdivision Ordinance in its entirety.
4. Adopt, by reference, the improvements listed in Table 7-1 in both IAMPs as part of the identified projects for action as funding is identified.

Section 3 Effective Date

As this process has taken longer than anticipated, and because the project needs to be in front of the Oregon Transportation Commission for adoption as part of the Oregon Highway Plan, an emergency is declared. Therefore this ordinance and the Port of Morrow and

Interstate 84/Highway 730 Interchange Area Management Plans amendment to the Morrow County Transportation System Plan 2012 shall be effective on February 22, 2012.

Date of First Reading: February 22, 2012

Date of Second Reading: February 22, 2012

DONE AND ADOPTED BY THE MORROW COUNTY COURT THIS 22nd DAY OF FEBRUARY, 2012.

ATTEST:



MORROW COUNTY COURT:

*Bobbi Childers by
Sheresa Crawford Deputy Clerk*
Bobbi Childers, County Clerk

Recused
Terry K. Tallman, Judge

Ken Grieb
Ken Grieb, Commissioner

APPROVED AS TO FORM:

Ryan Swinburnson
Ryan Swinburnson, County Counsel

Leann Rea
Leann Rea, Commissioner

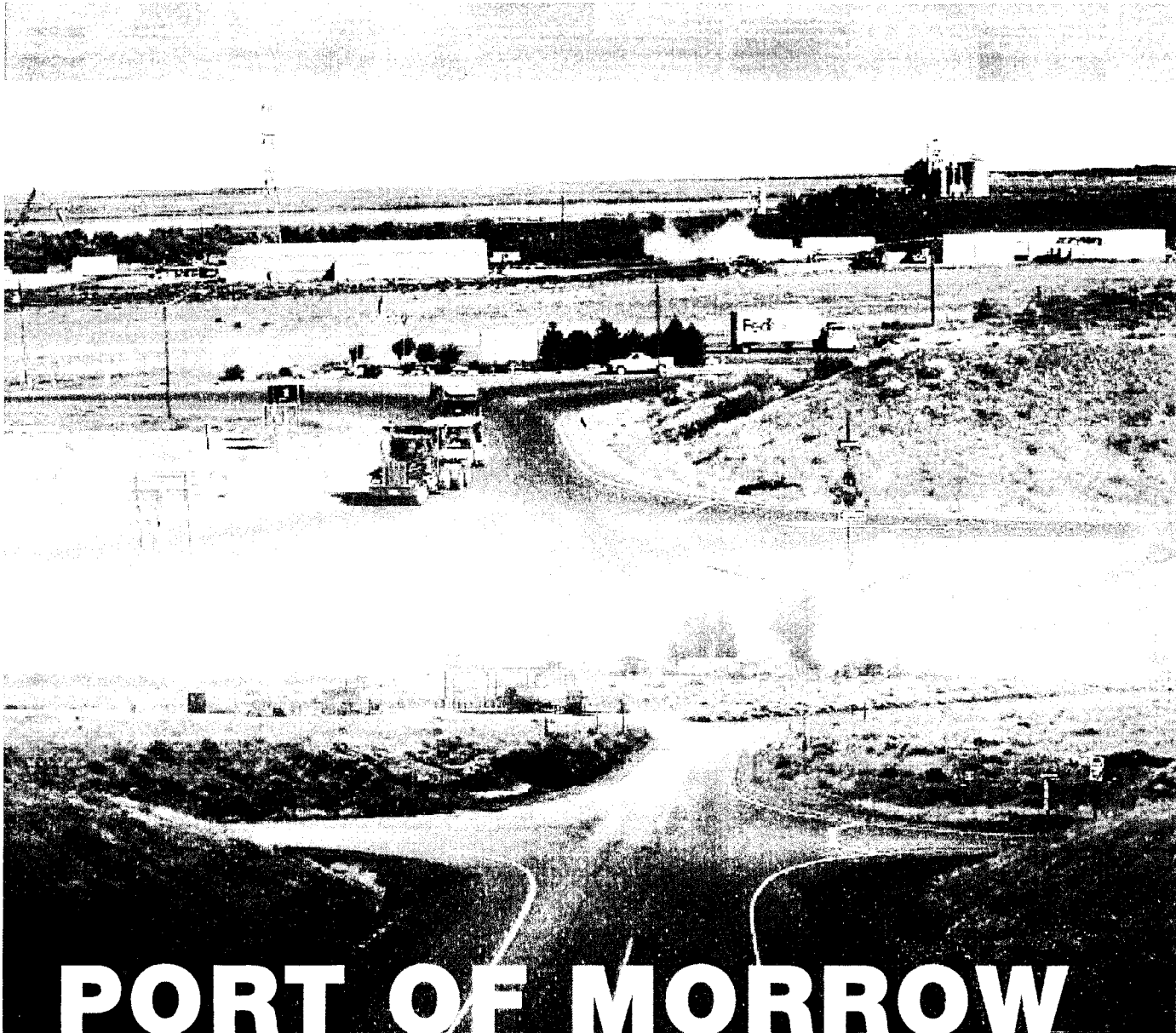
MORROW COUNTY, OREGON **CJ2012-0012**
Commissioners' Journal 02/22/2012 10:17:10 AM



I, Bobbi Childers, County Clerk for Morrow County, Oregon, certify that the instrument identified herein was recorded in the Clerk records.

Bobbi Childers - County Clerk





PORT OF MORROW

INTERCHANGE AREA MANAGEMENT PLAN

Boardman, Oregon

November 2011



KITTELSON & ASSOCIATES, INC.
MANAGEMENT, ENGINEERING, PLANNING



Port of Morrow Interchange Area Management Plan

Boardman, Oregon

Draft

November 2011

Port of Morrow Interchange Area Management Plan

Boardman, Oregon

Prepared For:
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Project No. 11253.0

November 2011



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PREFACE

The development of this plan was guided by the Project Management Team (PMT), Technical Advisory Committee (TAC), and Public Advisory Committee (PAC). The members these groups are identified below, along with members of the consultant team. The PMT members were all part of the TAC and PAC. The TAC and PAC members were responsible for reviewing all work products and guiding the planning work. They devoted a substantial amount of time and effort to the development of the Port of Morrow Interchange Area Management Plan (IAMP) and their participation was instrumental in the development of the recommendations that are presented in this plan.

Project Management Team (PMT)

Patrick Knight
ODOT Region 5 Planning

Gary Neal/Ron McKinnis
Port of Morrow

Technical Advisory Committee (TAC)

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City of Boardman

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Oregon DLCD

Bob Nairns
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Karen Pettigrew
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Dave Warrick
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Swede Hays
ODOT Rail

Tom Kuhlman/Jeff Wise
ODOT Region 5 Traffic



Public Advisory Committee (PAC)

Blair Purcell
ConAgra Foods

Randy Yates/Kevin Taylor
Area Property and Business Owners

Ed Glenn
City Council/Area Property Owner

Rich Devin
Pacific Pride

Jeff Wenzholz
Morrow County Commission

Consultant Team

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Nick Foster – *Project Analyst*
Marc Butorac, PE, PTOE – *Project Principal*

Angelo Planning Group, Inc.
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Section 1
Introduction

INTRODUCTION

An Interchange Area Management Plan (IAMP) has been prepared for the Interstate-84 (I-84) / Laurel Lane Interchange (aka Port of Morrow interchange) in Boardman, Oregon. The following section provides an overview of the purpose and intent of the IAMP and defines: the interchange function, the project goals and objectives, and the study area. These elements have been defined through a collaborative effort between the project TAC and PAC.



Purpose and Intent

The IAMP is a strategic transportation plan that is designed to protect the long-term function of the Port of Morrow (POM) interchange by preserving the capacity of the interchange while providing safe and efficient operations between connecting roadways. The IAMP will identify land use management strategies, short-term and long-term transportation improvements, access management goals, and strategies to fund identified improvements.

The intent is that the IAMP planning efforts will result in policies, ordinances, and other provisions that will be adopted into the City of Boardman's and Morrow County's respective Transportation System Plans (TSPs) and Comprehensive Plans. The IAMP will be adopted by the Oregon Transportation Commission (OTC) as an amendment to the Oregon Highway Plan (OHP).

Problem Statement

Under House Bill 2001, the OTC allocated funds to the POM for extending Lewis & Clark Drive to US 730 and constructing Gar Swanson Drive to connect to Lewis & Clark Drive. Special condition of approval for this funding was to complete an IAMP for the POM and I-84/US 730 interchanges. The IAMP for the I-84/US 730 interchange is contained in a separate plan, *I-84/US 730 Interchange Area Management Plan*.

While sufficient to meet today's needs, it is recognized that long-term growth within the POM will likely cause the POM interchange ramp terminals to fall below ODOT's mobility standards through the year 2030. In addition, the proximity of the POM and its supporting local circulation network does not meet

the desired access spacing standards for major interchange ramp terminals. As such, an IAMP is sought to identify opportunities to improve long-term operations at the ramp terminals, improve the close intersection spacing, and do so in a way that minimizes impacts to freight mobility and POM properties.

Interchange Function and Classification

The primary function of the POM interchange is to provide truck and vehicular access to the POM, allowing goods to be transported between the Port and destinations in Oregon, Washington, and Idaho via I-84. A secondary function is to provide access to the residential areas and farm lands on the south side of I-84 and east of the City of Boardman. I-84 classified as an Interstate Highway by the Oregon Highway Plan (OHP) and is also a Federally Designated Truck Route and a Statewide Freight Route. Laurel Lane is classified as an arterial by the City of Boardman TSP.

Goal and Objectives

The primary goal of the IAMP process is to protect the function of the interchange by anticipating changes in land use and traffic patterns and planning for necessary improvements over a 20-year planning horizon. As stated in Policy 3C of the 1999 Oregon Highway Plan, *"it is the policy of the State of Oregon to plan for and manage grade-separated interchange areas to ensure safe and efficient operation between connecting roadways."* From this definition, the objectives of the POM IAMP are to:

- Consider the surrounding contextual land use and roadway network;
- Provide for efficient connectivity, right-of-way, and access control in the analysis area of the interchange;
- Refine and prioritize improvements needed to maintain acceptable traffic operations at the interchange while providing safe access to adjacent land uses;
- Provide plans for improved local street connectivity in the Interchange Management Study Area (IMSA) while limiting cul-de-sacs or other non-connected streets;
- Evaluate existing and potential land use designations, intensities, conditions, and actions that could have favorable effect on the facility or an adverse effect on the facility;
- Include implementation policies to be adopted into the City and County comprehensive plans, transportation system plans, interchange access standards, and zoning ordinances, as appropriate;
- Collaborate throughout the planning process with design professionals, jurisdictional representatives, developers, and local property owners; and

- Comply with the intent of Statewide Planning Goal 1: Public Involvement, 2: Land Use Planning, 5: Natural Resources, 6: Air, Water and Land Resources Quality, 7: Areas Subject to Natural hazards, 8: Recreation Needs, 9: Economic Development, 12: Transportation, and 14: Urban Growth Boundaries.

Evaluation Criteria

Based on the above objectives, the following evaluation criteria were assembled to ensure that each concept developed throughout the project would be evaluated for consistency with the overall intent of the community and the project. These are basic criteria that will guide the development of future alternative concepts. Detailed criteria based on these will be developed later for use in the screening process. The six evaluation criteria categories are outlined below:

- **Transportation Operations:** This category consists of those criteria that assess the ability for all modes to travel through and within the study area. Special considerations within this category include safety, local connectivity and mobility, including freight mobility.
- **Land Use:** This category consists of those criteria that assess right-of-way impacts, consistency with adopted land use and economic development plans, transportation capacity impacts of changes in land use intensity, impacts to utilities, and impacts to existing and proposed developments.
- **Economic Development:** This category consists of those criteria that assess the potential for near-term (1-5 years), mid-term (5-15 years), and long-term growth (15-25 years) for areas within the vicinity of the interchange.
- **Cost:** This category consists of those criteria that assess the practicality of a design concept from a construction cost and feasibility perspective.
- **Environmental, Social, and Equity factors:** This category consists of those criteria that assess the degree to which a concept is compatible with the natural and built environment including environmental (i.e., storm water drainage and hazardous waste) and socio-economic (i.e., stakeholders' needs) impacts.
- **Accessibility:** This category consists of those criteria that assess the ability to access properties and businesses within the IMSA to/from the regional infrastructure network including the balance between local access and roadway function, future access for undeveloped properties, and adherence to the access spacing standards.

Interchange Management Study Area (IMSA)

To provide a comprehensive study and to achieve effective and meaningful results, the IMSA for each interchange need to include an assessment of developable and re-developable properties and major roadways that would significantly affect the interchange function over the next 20 years. Under today's condition, development in the area is likely to primarily affect only one interchange; however, in the future as the POM develops and connects to US 730, growth will affect both interchanges. Therefore, only one IMSA is drawn for both interchanges. At a minimum, the IMSA should include properties within ½-mile from the existing POM and I-84/US 730 interchanges as defined by the IAMP Guidelines. The study areas should also take into account facilities and properties that will impact the operations of the interchange and any natural or cultural resources in the vicinity of the interchange.

An IMSA map is shown in Figure 1-1. This figure identifies key features and boundaries of the area to be included in the IAMP. The following describes the criteria used to create the IMSA map.






The IMSA includes all properties located roughly within a ½-mile of the existing POM and I-84/US 730 interchanges and encompasses key intersections that have potential to affect traffic operations in the interchange area over the planning period. These study boundaries identify the area for which operational analysis will be completed and the area that will be considered in the Access Management Plan element of the IAMP. From a land use perspective, properties identified with potential to affect the interchange are included in the IMSA boundaries and are those that are expected to utilize either one of the interchanges as their primary connection to I-84 or those that may be necessary to examine to improve local circulation.

The study intersections for the POM interchange include:

- I-84 Eastbound / Laurel Lane ramp terminal
- I-84 Westbound / Laurel Lane ramp terminal
- Columbia Avenue / Laurel Lane
- Columbia Avenue / Olson Road
- Columbia Avenue / Ulman Boulevard
- Columbia Avenue / Rippee Road



LEGEND

-  Minimum 1320' IAMP Limits
-  Interchange Management Study Area
-  Operations/Access Study Area
-  Boardman UGB
-  Boardman City Limits

**INTERCHANGE MANAGEMENT STUDY AREA
MORROW COUNTY, OREGON**

**FIGURE
1-1**

H:\profile1

Development of the IAMP

The POM IAMP has been guided by the TAC and PAC, as well as area residents and business owners. TAC and PAC roster lists are provided in the Preface of this document and in Section 2. Regular TAC and PAC meetings held throughout the course of the project have provided opportunities for the two committees to review and guide the technical analysis prepared by the consultant team and the overall project direction. A summary of the individual TAC and PAC meetings is provided in the *Technical Appendix*.

PUBLIC INVOLVEMENT

In addition to the regular TAC and PAC meetings, local citizens, property owners, and business owners provided their input by participating in three public workshops. The first workshop provided participants with background information on the project and then gave them the opportunity to develop and present their ideas for design concepts. At the second workshop, participants provided their input on the design concepts that had previously been developed. The third workshop was focused on a review of the draft IAMP. Members of the public also submitted comments directly to the project management team either through correspondence or by attending a TAC or PAC meeting. In addition, adoption of the plan will have included public hearings before the City of Boardman Planning Commission and Council, Morrow County Planning Commission and County Commission, and the Oregon Transportation Commission.

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The development of the POM IAMP began in December 2010 with the first meeting of the consultant team and POM, City, County, and ODOT staff. Work with the TAC and PAC began shortly thereafter in January 2011. Since then these groups participated in an extensive process that involved reviewing existing and future transportation conditions, future land use analyses, interchange design and local access and circulation concepts, and financing options.

Sections 1 through 9 comprise Volume 1 of the IAMP and provide the main substance of the plan. These are supplemented by Technical Appendices in Volume 2 which contains the technical memoranda documenting each step in the process. The organization and description of each element of the IAMP are outlined below:

Section 1 describes the IAMP process, purpose, and goals and outlines the remainder of the document;



Section 2 details the interagency and public involvement program;

Section 3 provides the plan and policy review;

Section 4 outlines the existing land use patterns and transportation facilities within the IMSA;

Section 5 documents the future land use and transportation conditions and how they were addressed by the planning effort;

Section 6 provides a description of the concepts analysis and transportation planning efforts involving the selection of a preferred interchange form, supporting local access and circulation network, access management plan, and land use management plan;

Section 7 is the POM IAMP, including the local circulation and access elements and the transportation improvement projects that are necessary to ensure the continued long-term safety and function of the interchange;

Section 8 provides guidance on IAMP adoption, monitoring, and updates; and,

Section 9 documents how the POM 730 IAMP complies with the Oregon Administrative Rules for the development of an interchange area management plan as well as the Oregon Highway Plan.

Section 2
Interagency and Public Involvement Program

INTERAGENCY AND PUBLIC INVOLVEMENT PROGRAM

As part of the POM IAMP, interagency and public involvement occurred through: a kick-off meeting with agency staff; a TAC and a PAC that had regular meetings; three public workshops involving local citizens, property owners, and business owners; and public adoption hearings in front of the City of Boardman Planning Commission and Council, Morrow County Planning Commission and County Commission, and the Oregon Transportation Commission. An overview of the TAC and PAC meetings and public workshops is provided below.



Technical Advisory and Public Advisory Committees

The TAC and PAC guided the planning work and were responsible for reviewing all work products, providing input on all planning recommendations, such as the IMSA, goals and objectives, technical analysis, and the proposed concepts. Ultimately the TAC and PAC helped select the preferred interchange form, local circulation/access, land use management, and coordination elements of the IAMP. In addition, the PMT performed a coordination function, planning and executing project management tasks related to project schedule and meeting logistics. The PMT included representation from ODOT, the Port of Morrow, Morrow County, the City of Boardman, and the consultant team. All members of the PMT were also members of the TAC.

Membership on the TAC and PAC was established through input from POM, City, County, and ODOT representatives. A proposed TAC and PAC membership roster was presented and finalized at a project kick-off meeting held December 16, 2010. A list of TAC and PAC members is included in Tables 2-1 and 2-2.

Table 2-1 Technical Advisory Committee

Agency	Name	Position/Title	Role
Port of Morrow	Gary Neal	POM Director	PMT and TAC
	Ron McKinnis	POM Engineer	PMT and TAC
Morrow County	Bob Nairns	Assistant Public Works Director	TAC
	Carla McLane	Planning Director	PMT and TAC
ODOT	Dave Warrick	Interchange Engineer	TAC
	Don Fine	Region 5 Traffic Operations & Analysis	TAC
	Marilyn Holt	District 12	TAC
	Patrick Knight	Region 5 Planning	ODOT Project Manager PMT and TAC
	Rich Lani	District 12	TAC
	Swede Hays	Rail	TAC
	Tom Kuhlman/ Jeff Wise	Region 5 Traffic Section Manager	TAC
Oregon DLCD	Grant Young	Field Representative	TAC
City of Boardman	Barry Beyeler	Community Development Director	TAC
	Karen Pettigrew	City Manager	TAC

Table 2-2 Public Advisory Committee

Name	Representing
Blair Purcell	ConAgra Foods
Ed Glenn	City Council/Area Property Owner
Jeff Wenholz	Morrow County Commission
Rand Yates/Kevin Taylor	Area Property and Business Owners
Rich Devin	Pacific Pride

The TAC members were selected in order to provide representation from key components of interested government agencies. PAC members were selected in order to provide a good representation of City and County officials, and area property and business owners. In addition to the PAC members, a number of area property and business owners attended PAC meetings and participated in the process. An outline of all of the TAC and PAC meetings is included below.

Public Involvement Plan

To ensure that adequate project coordination and public participation occurred throughout the development of the POM IAMP, a series of TAC and PAC meetings, public workshops, and public joint work sessions were held over the course of the project. Morrow County also conducted public hearings to adopt the plan. A summary of all of the meetings associated with the project, as well as the meeting objectives, are summarized in Table 2-3.

Table 2-3 Meeting Summary

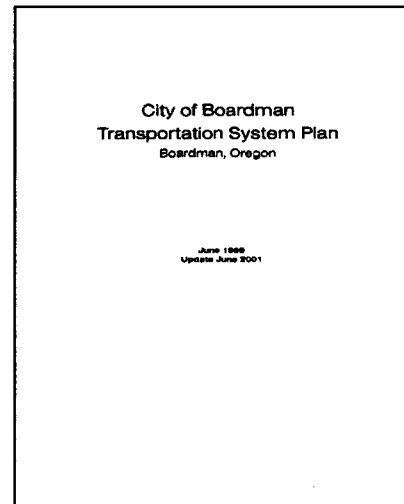
Meeting	Date/Location	Meeting Objectives/Purpose
Kick-off Meeting	December 16, 2010/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review project process and goals - Review TAC and PAC membership - Review project schedule
TAC/PAC Meeting #1	January 18, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review project schedule and approach - Presentation: IAMP 101 - Review Tech Memorandums #1 and #2 (IAMP Definition and Background and Plans and Policy Review) <p>The purpose of Meeting #1 was to introduce the I-84/US 730 and POM IAMP projects and the consultant team; review the project schedule; review the project goals, objectives, and evaluation criteria; familiarize TAC/PAC members with the IAMP process and their roles; confirm the IMSA; confirm the project schedule; and review the project's policy framework.</p>
TAC/PAC Meeting #2	February 17, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review Tech Memorandums #3/4 (Existing Conditions), #5 (Environmental), and #6 (Future Conditions) - Presentation: Interchange Design 101 - Brainstorm design concepts <p>The purpose of Meeting #2 was to review the existing and future land use and traffic operations, the environmental review, and involve the TAC and PAC in a brainstorming exercise to develop interchange design, local circulation, and access management concepts for the existing roadway system.</p>
Public Workshop #1	February 17, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Project Overview - Summary of Existing and Future Conditions - Presentation: Interchange Design 101 - Brainstorm design concepts <p>The purpose of the first public workshop was to present the project goals and objectives and findings to date, educate the public and stakeholders on the IAMP process and interchange design and access management practices, and engage the participants to help develop potential interchange design, local circulation, and access management concepts.</p>
TAC/PAC Meeting #3	April 7, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review Tech Memorandum #7a (Preliminary Concept Development & Analysis) - Screen Concepts <p>The purpose of Meeting #3 was to review the Concepts Analysis and determine the concepts that would move forward for refined analysis.</p>
Public Workshop #2	April 7, 2011/	<ul style="list-style-type: none"> - Review concept evaluation

	Boardman – Port of Morrow	The purpose of the second public workshop was to present the concepts being considered, the results of the concepts analysis, and provide the public with the opportunity to give their feedback on the concepts being considered.
TAC/PAC Meeting #4	June 21, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review Tech Memorandum #7b (Detailed Concept Analysis) - Determine Preferred Concepts The purpose of Meeting #4 was to review the evaluation of the refined concepts developed at the last set of PAC and TAC meetings and determine preferred concepts. Feedback from this meeting resulted in slight refinement of the preferred concepts.
TAC/PAC Meeting #5	October 25, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review Draft IAMP The purpose of Meeting #5 was to review the draft IAMP. The committees provided feedback that has been incorporated into the IAMP.
Public Workshop #3	October 25, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review Draft IAMP The purpose of the third Public Workshop was to review the draft IAMP and provide the public an opportunity to comment on the document.
Planning Commission Hearing #1	TBD	
Planning Commission Hearing #2	TBD	
County Commission Hearing	TBD	
OTC Hearing	TBD	

Section 3
Plan and Policy Review

PLAN AND POLICY REVIEW

One of the project objectives of the IAMP is to ensure that the plan is consistent with local and state transportation policies and standards. To meet this objective, a review and evaluation of existing plans, policies, standards, and laws that are relevant to the IMSA was conducted. A summary of the documents reviewed is provided below. Detailed information from this review can be found in the Technical Appendix.



Documents Reviewed

The following transportation and land use plans were reviewed for policies and regulations applicable to the POM Interchange.

STATE/ODOT

- Statewide Planning Goals
- Oregon Transportation Plan (2006)
- Oregon Highway Plan (1999, last amended 2006)
- Oregon Administrative Rule 734, Division 51 (Access Management Rule)
- Highway Design Manual (2003)

LOCAL

- Port of Morrow Agricultural Learning Center Business Plan
- Port of Morrow Rail Plan (2009)
- US Army Umatilla Chemical Depot Redevelopment Plan (2010)
- Morrow County Comprehensive Plan (2010)
- Morrow County Transportation System Plan (2005)
- Morrow County Zoning Ordinance (Revised, 2001)
- Morrow County Subdivision Ordinance (Revised, 2005)
- City of Boardman Comprehensive Plan (2003)

- City of Boardman Transportation System Plan (2001)
- City of Boardman Development Code (Revised, 2009)

Consistency with Existing Plans

The IAMP has been developed to be consistent with local and state transportation policies. The review of local policies and regulations did not reveal conflicts with the primary goal of the IAMP to protect the function of the interchange. At the same time, the existing regulatory tools also do not adequately address the future transportation needs in the area. Additional requirements regarding access management, local street connectivity, and transportation financing must be adopted if the transportation system in this area of Boardman and Morrow County is going to support future planned growth. See Sections 7 and 8 for proposed amendments to existing plans required to make existing plans consistent with the IAMP.

Section 4
Existing Transportation and Land Use Conditions

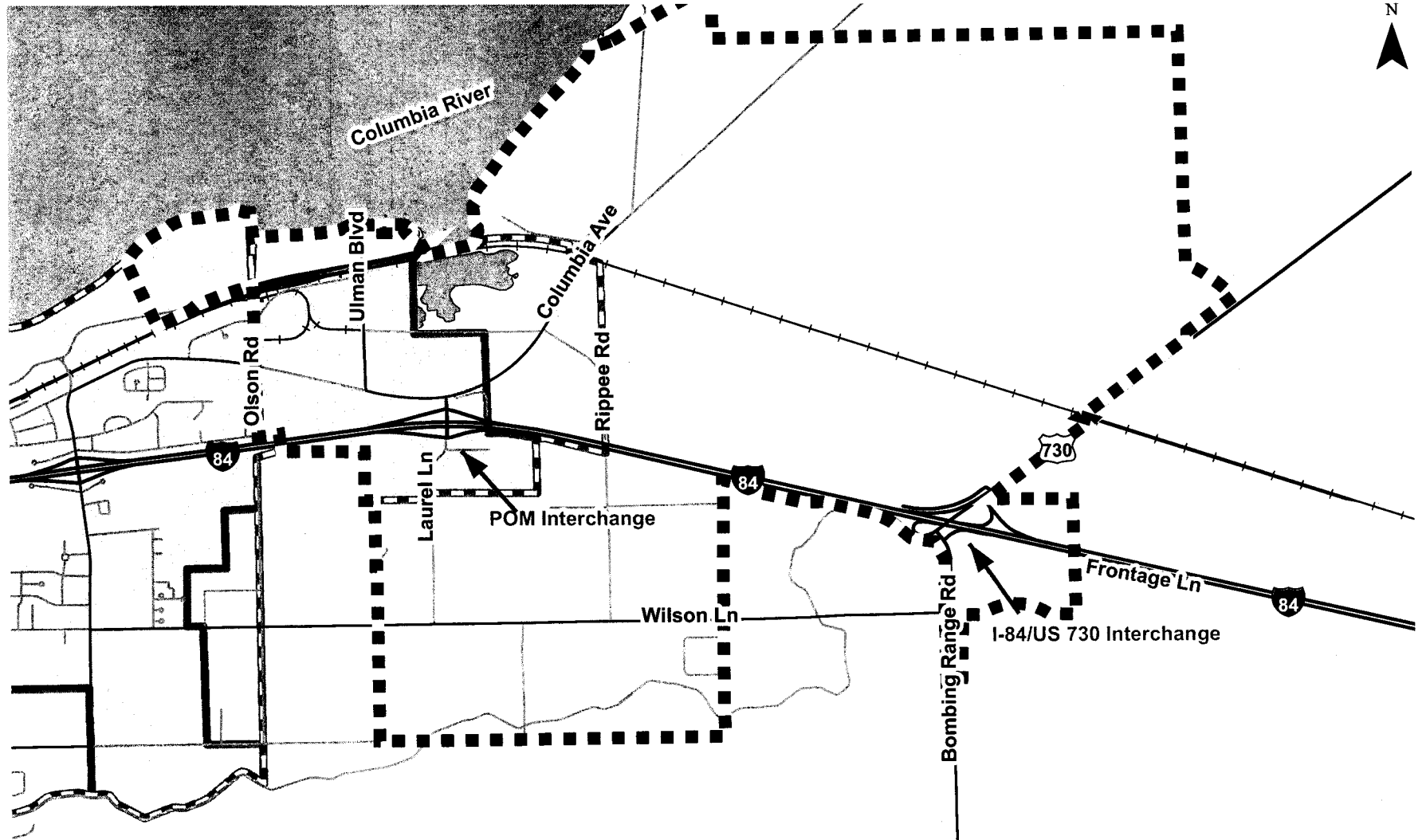
EXISTING TRANSPORTATION AND LAND USE CONDITIONS

This section provides a review of existing land uses and transportation facilities as well as natural and cultural resources within the vicinity of the POM interchange. As shown in Figure 4-1, the interchange is located the east side of the city of Boardman. The information identified in this section provides a basis for identifying opportunities and constraints for meeting the goals and objectives of the IAMP.





Interchange Management Study Area

The Interchange Management Study Area (IMSA), depicted in Figure 4-2, defines the extent of the land use and traffic operations review. Currently development in the IMSA is likely to primarily affect only one interchange; however, in the future as the POM develops and connects to US 730, growth within the overall IMSA will affect both interchanges. At a minimum, the IMSA includes all properties located roughly within a ½-mile of the existing POM and I-84/US 730 interchanges and encompasses key intersections. Beyond the minimum requirements, the IMSA includes properties whose development may have a direct impact on the function of either interchange. Generally, land uses outside of this area are not anticipated to directly impact the function of the interchange. This is because these properties do not directly access the interchange, have other travel route options within Boardman, or have limited potential to generate new trips (e.g., the land is already developed, the land has limited redevelopment potential, or the current zoning or location restricts its development potential). The Operation/Access Study Area boundaries identify the area for which operational analysis will be completed and the area that will be considered in the Access Management Plan element of the IAMP.



LEGEND






-  Boardman Urban Growth Boundary (UGB)
-  Boardman City Limits

STUDY AREA VICINITY
MORROW COUNTY, OREGON **FIGURE 4-1**

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LEGEND

-  Minimum 1320' IAMP Limits
-  Interchange Management Study Area
-  Operations/Access Study Area
-  Boardman UGB
-  Boardman City Limits

**INTERCHANGE MANAGEMENT STUDY AREA
MORROW COUNTY, OREGON** **FIGURE
4-2**

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Existing Land Use

Pursuant to the requirements stated in the Oregon Administrative Rule 734-051-0155 for the preparation of an IAMP, a land use inventory has been prepared for the IMSA. This section provides a description of the existing land-use patterns and zoning regulations that currently exist within the IMSA. The following describes existing zoning and how the land is currently being used within the IMSA. Land use-related information will ultimately be combined with findings about existing transportation system conditions in an overall existing conditions section of the IAMP.

EXISTING ZONING AND DEVELOPMENT STANDARDS

Any development in the IMSA will have some direct impact on the facility, so it is important to review the existing zoning for parcels surrounding the interchange and connecting roads. Permitted land uses and the applicable standards associated with the zone designations are an indicator of the potential for growth in the area. Recommendations for restricting uses or modifying development standards (e.g., restricting uses with high traffic generation rates, developing trip budgets, or limiting building size) are a possible outcome of the IAMP process. Zoning for areas within the IMSA are shown in Figure 4-3. This map includes both city and county zoning, as the IMSA includes unincorporated areas of Morrow County.

Morrow County Zoning

Morrow County zoning designations in the vicinity of the POM interchange include Port Industrial (PI), General Industrial (MG), Small Farm (SF 40), and Farm Residential (FR2). A portion of the PI and MG zoned land in the IMSA to the northeast of the POM interchange is inside the Boardman UGB but outside the Boardman city limits. Pursuant to an intergovernmental agreement that exists between the City and County, the City is included in the County's development review process, but development approval is subject to existing County zoning requirements, as described below. If this land is annexed in the future, the corresponding City zoning that would be applied is General Industrial (GI), which is discussed later in this section.

The I-84/US 730 interchange is adjacent to land zoned General Industrial (MG), Port Industrial (PI), and Exclusive Farm Use (EFU). Uses permitted in the EFU zone are primarily restricted to uses that are associated with farming; consistent with state law, the County has identified certain uses that are permitted outright, while others require a conditional use permit.

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LEGEND

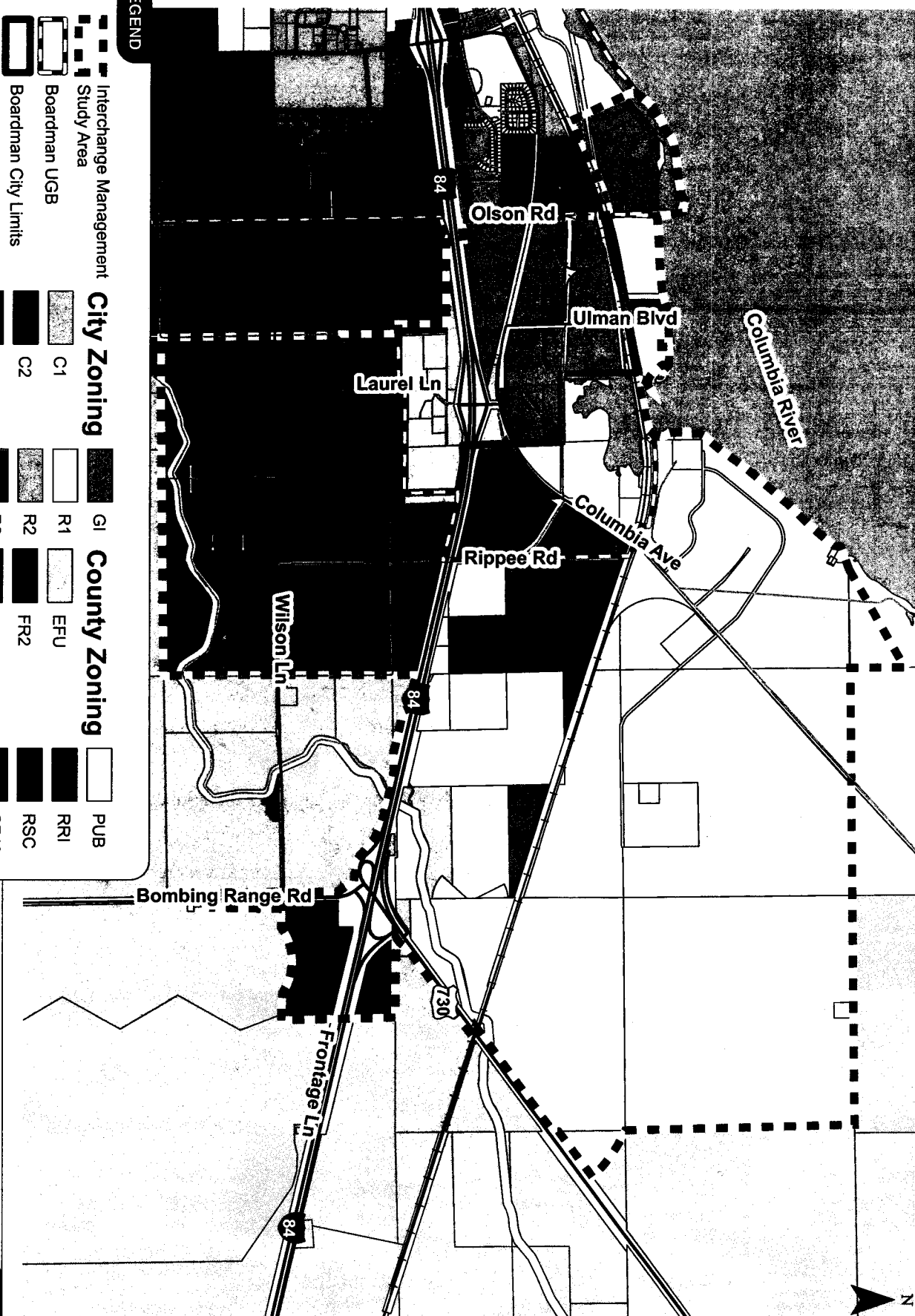
- Interchange Management
- Study Area
- Boardman UGB
- Boardman City Limits

City Zoning

- C1
- C2
- C3
- CFU

County Zoning

- GI
- R1
- R2
- R3
- SC
- EFU
- FR2
- MG
- PI
- PUB
- RRI
- RSC
- SF40
- SR1



STUDY AREA ZONING
MORROW COUNTY, OREGON

An overview of permitted uses and development requirements of these zones, as regulated by the Morrow County Zoning Ordinance, is provided below.

- Port Industrial (PI) (Section 3.073). The PI zone was established to “provide for port-related industrial uses and aerospace-related industrial uses which are not devoted to research and development. The zone is intended to provide an industrial sanctuary, limiting commercial uses to those appropriate and necessary to serve the needs of the workers employed within the zone.” As stated in its purpose, the zone allows uses that are port-related, especially water-dependent, aerospace, manufacturing, and heavy industrial uses. Commercial and retail uses are allowed conditionally and are limited in floor area so that they are clearly secondary to the primary uses in the zone. There are no restrictions on building height or minimum requirements for lot coverage in this zone.
- General Industrial (MG) (Section 3.070). Retail and wholesale businesses, construction-related businesses, freight hubs, warehouses and distributions centers, machine shops, and food processing are amongst the uses allowed outright in the MG zone. More intensive manufacturing and processing uses, industrial uses entailing outdoor storage, and public and semi-public uses are conditionally permitted in the MG zone. There are no specific minimum lot size or setback standards other than stream setbacks (100 feet) and building setbacks that range from 20 to 50 feet depending on whether the building fronts a local street, collector, or arterial.
- Small Farm (SF40) (Section 3.042). The SF40 zone was created to preserve land for farm use. Agricultural uses, single-family and accessory dwellings (subject to restrictions), farm worker dwellings, replacement buildings, wetland and habitat, specified road improvements, utilities, schools (intended for rural areas only and located at least three miles from the Urban Growth Boundary), churches and cemeteries, solid waste facilities, mining and energy exploration, and wineries are permitted outright. Single-family dwellings not in conjunction with a farm use, a “hardship” dwelling, commercial uses in conjunction with farm uses, more intensive mining uses, private recreation facilities, government- and non-profit-owned parks and community centers, other utilities, private airports, other solid waste and composting facilities, fair and rodeo grounds are amongst the uses that are permitted conditionally. Although initially established with a minimum lot size of 40 acres, state law has since required this minimum to be raised to 80 acres. Income and capability tests are required for residential uses in the zone. Stream setbacks are 100 feet.

- Farm Residential (FR2) (Section 3.041). This zone is a rural residential zone that acknowledges pre-existing homes on small lots outside the Urban Growth Boundary (UGB), although state policy and law discourages the expansion of such development. Single-family housing, farming (with some restriction), utilities, parks, community centers, and other public uses that serve rural residential uses are allowed outright in the FR2 zone. Duplexes, water and sewer facilities, golf courses, stables, and vet clinics are permitted conditionally. Lots in this zone must be at least two acres.
- Exclusive Farm Use (EFU) (Section 3.010). The EFU zone targets the preservation of agricultural land and uses and is designed to only allow uses that are compatible with agricultural uses. Agricultural production and harvesting, buildings associated with agricultural uses, accessory dwellings, farm worker dwellings, restoration of established dwellings and other lawful buildings, improvements to roads, schools not within three miles of the UGB, churches, wineries, and solid waste disposal facilities (with restrictions) are permitted outright in the EFU zone. Certain single-family homes, mining operations, golf courses, private recreation facilities, public- or non-profit-owned parks and community centers, utilities, road expansions, and other solid waste and composting facilities are amongst uses that are permitted conditionally. The lot standard for agricultural units in the zone is 160 acres. Income and capability tests are required for residential uses in the zone. Uses are subject to 100-foot stream setbacks, as in other zones.

A traffic impact analysis is required when a proposed use in any of these zones is projected to generate more than 400 passenger vehicle trips daily (or an equivalent).

City of Boardman Zoning

The POM interchange is surrounded by City of Boardman Service Center (SC) commercial. Further north lies City industrial land, zoned General Industrial (GI).

Chapter 2 of the City of Boardman Zoning Ordinance implements zoning “districts” that establish permitted uses and development standards for residential, commercial, and industrial zones. Below is an overview of these provisions for the zoning districts within the IMSA.

- General Industrial (GI) (Chapter 2.3). The GI district is intended for a range of light and heavy industrial uses and to provide business services close to employment centers, while limiting impacts on adjacent districts and keeping incompatible uses separate. Heavy and light industrial and manufacturing uses, warehouses and distribution centers, offices and commercial uses that serve industrial uses, limited retail uses, government facilities “where

the public is not generally received," vocational schools, open space, and Utilities are among the uses permitted outright in the GI district. Transportation facilities and improvements that are in the TSP, are part of an approved land division, or do not require land use approval are also permitted outright; transportation improvements that are not in the TSP or part of an approved land division are permitted conditionally. The maximum lot coverage in the district is 75% and building height is restricted to three stories or 35 feet. Additional standards apply to uses with significant noise, light/glare, dust, vibration, or traffic impacts, as defined in Section 2.3.160, including possible traffic impact analyses for uses that would increase average daily traffic by 20 percent or more and 100 vehicles per day.

- Service Center (SC) (Section 2.2.200). The Service Center designation is a sub-district of the City's Commercial district. The sub-district was established to accommodate heavy commercial uses and light industrial uses along segments of the I-84 corridor. The development standards of the Commercial district apply to the sub-district, except where modifications are specified. Lot coverage is capped at 85% in the sub-district. Maximum height is four stories or 50 feet. Design and additional standards as well as pedestrian amenity requirements apply to uses in this sub-district.

There are areas of County Port Industrial (PI) and General Industrial (MG) zoning northeast of the interchange on land that is inside the City of Boardman UGB but outside the city limits. The land could develop under current County zoning or could be annexed and, if so, most likely re-zoned with corresponding City General Industrial (GI) zoning. The existing County zoning and potential City zoning generally allow the same types of industrial uses. The City zoning is slightly more prescriptive when it comes to development standards, including maximum lot coverage of 75% and maximum building height of three stories or 35 feet.

LAND USE INVENTORY

For purposes of describing existing zoning and land uses within the IMSA, as well as conducting the transportation analysis, the narrative below will consider the surroundings for each interchange.

POM Interchange

Land uses directly adjacent to the POM interchange lie entirely within Boardman's city limits. Land in the immediate vicinity, both north and south of the highway, is zoned for highway "service" uses (SC). Industrial zoned land lies further north of this commercial land and includes land within the city zoned General Industrial and property within the City's UGB, but outside of city limits, zoned Port Industrial

and General Industrial. Notably, the IMSA encompasses all of the City of Boardman's industrial land (zoned General Industrial) and all of the POM's developable, industrial zoned land ("Port Industrial") north of I-84, in the vicinity of both the POM and the I-84/US 730 Interchange. Currently, there are no developed commercial uses north of the interchange. Industrial development begins further to the north, in proximity to the Columbia River and Columbia Avenue, and near Rippee Road to the east.

South of the interchange, there is only one developed commercial property, the Pacific Pride fueling station. The City's SC zoned land is coterminous with the city limits and UGB in this area. Land further south is in the County, zoned for small farms (SF40) and rural residential (FR2). The County expects some future growth in residential development in the FR2 zoned land.

I-84/US 730 Interchange

The I-84/US 730 interchange lies entirely within Morrow County, with land in the vicinity zoned for agricultural uses (south of I-84 and west of Bombing Range Road and west of US 730), Port Industrial (north of I-84 and west of US 730), and General Industrial immediately to the east.

The IMSA encompasses all of the POM's developable, industrial zoned land ("Port Industrial") north of I-84. The County Court recently approved a significant land use amendment for POM land in the vicinity of the I-84/US 730 interchange. In January 2011, the County Court approved the rezoning of 513.86 acres from EFU to Port Industrial (PI) north of the interchange; in an associated action, the County Court rezoned 515 acres of General Industrial (MG) south of the interchange, west of Bombing Range Road, to EFU. This action included a condition of approval; prior to the County issuing building permits on the recently zoned PI land, an IAMP must be completed that includes an analysis of the traffic implications of development on the 514 acres.

POM tenants include businesses engaged in agricultural products processing and shipping, cold storage, forest products, barge transportation, and trucking. Included in the IMSA boundary is also a hotel and restaurant located along the waterfront. The POM has also developed a business plan and feasibility study for an Agricultural Learning Center that would serve as a visitor's center for POM tenants and would house the local Chamber of Commerce. As will be discussed in depth in Section 5, the POM has a large amount of vacant land available for future industrial users.

Parcels that will have little, if any, future impact on the transportation system are those lands zoned for Exclusive Farm Use (EFU) southwest and northeast of the I-84/US 730 Interchange. Statewide Planning Goal 3, Agricultural Lands, requires that agricultural lands be preserved and maintained for farm use. The Goal is implemented through the County's EFU zoning that limits uses on agricultural lands to "farm uses and those nonfarm uses defined by commission rule that will not have significant

adverse effects on accepted farm or forest practices." Because of the minimal future impacts expected from EFU, the IMSA has been drawn to exclude areas with this zoning.

The Coyote Springs Wildlife Area is also located in the general vicinity, west of the Boardman Irrigation Canal. This approximately 143-acre parcel is shown as "PUB" on Figure 4-3 to recognize the public management of this area by the Oregon Department of Fish and Wildlife (ODFW) for wildlife habitat. Coyote Springs is accessed off of Rippee Road, via the POM interchange and Columbia Avenue.

Existing Transportation Inventory

The second major component of the existing conditions evaluation process is to document the transportation system. The existing transportation inventory provides a detailed description of all transportation facilities and travel modes within the study area. In addition, the inventory identifies the current operational, traffic control, and geometric characteristics of roadways and other transportation facilities within the IMSA. A detailed description of these facilities is provided in the following sections.

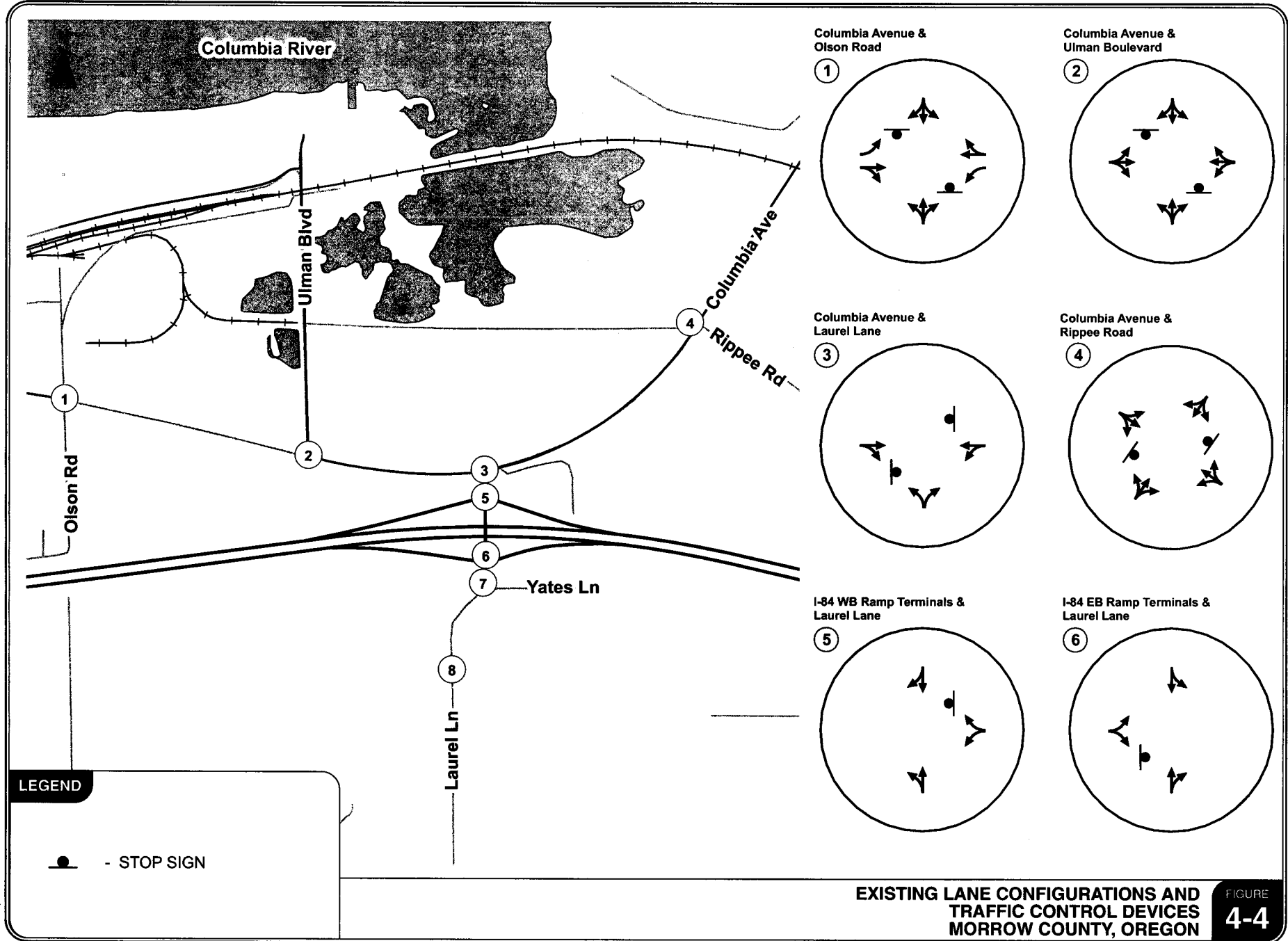
ROADWAY FACILITIES

The roadways within the IMSAs include state, county, and city roadways. A description of each of the functionally classified roadway facilities is summarized below for the POM interchange in Table 4-1. Figure 4-4 illustrates the existing lane configurations and traffic control devices at each study intersection.

Table 4-1 Existing Transportation Facilities and Roadway Designations

Roadway	Existing Roadway Ownership/ Functional Classification ¹	Cross-section	Posted Speed (mph)	Sidewalks?	Bicycle Lanes?	On-Street Parking?
Interstate-84	ODOT/Interstate Highway	4-lane	65	No	Shoulders	No
Columbia Avenue	City-County/Arterial	2/3-lane	35/40	No	Shoulders	No
Laurel Lane	City-County/Arterial	2-lane	35	No	No	No
Olson Road	City/Arterial	2-lane	35	No	No	No

¹ODOT highway classifications are from the 1999 Oregon Highway Plan (Reference 1) and City roadway classifications are from the Boardman Transportation System Plan (Reference 2)



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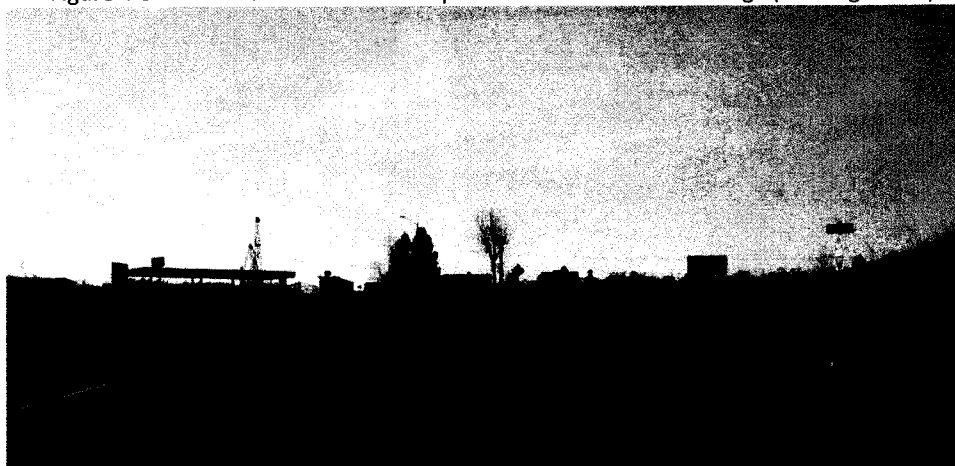
Interstate-84

I-84 is a four-lane interstate highway that runs east-west through Morrow County. It is the main east-west travel route within the state of Oregon providing a connection between Portland, Oregon and Boise, Idaho. I-84 is part of the National Highway System and is designated in the 1999 Oregon Highway Plan as an Interstate Highway, Freight Route, and Truck Route.

POM Interchange Ramps

The POM interchange ramps are currently configured in a diamond interchange form. Both ramp terminals are stop-controlled on the off-ramp approaches. Due to the area's topography, I-84 is elevated over Laurel Lane. As a result of the area's topography, sight distance is limited for vehicles exiting I-84 eastbound. Figure 4-5 provides a view of the vertical and horizontal curves on Laurel Lane immediately south of the eastbound ramp terminal (photo is taken from southbound Laurel Lane).

Figure 4-5 I-84 Eastbound Ramp Terminal at POM Interchange (Looking South)



The westbound ramp terminal is located in close proximity (approximately 200 feet) to the Laurel Lane/Columbia Avenue intersection. Generally speaking, such close spacing can create problems with queuing blocking the ramp terminal. However, the Laurel Lane approach at this intersection is not stop-controlled at this time, so queues are not currently a high concern on Laurel Lane.

Laurel Lane

Laurel Lane is a City and County roadway that provides a north-south connection across I-84 on the east side of Boardman. It is also an important roadway for providing access to the Port of Morrow area. It is a two-lane roadway with narrow shoulders that are partially paved and partially gravel. Within the Boardman Urban Growth Boundary (UGB) it is classified as an arterial by the City of Boardman TSP.

Columbia Avenue

Columbia Avenue is a two- to three-lane City arterial roadway connecting the Port of Morrow area to Laurel Lane and to the commercial core area of Boardman. Formerly, it provided a connection between Irrigon and Boardman, but that connection no longer exists. Currently, the majority of Port of Morrow traffic must use Columbia Avenue to access I-84. The County and City TSPs identify the need for additional emergency access to the Port of Morrow area. Many Port properties and local streets connect to Columbia Avenue.

Olson Road

Olson Road provides access to Port and other industrial properties. It is a two-lane roadway with a northern terminus just south of the railroad and a southern terminus at I-84. Olson Road is also present south of I-84 as a County roadway. The County and City TSPs contain long-term plans to build an overpass over I-84 connecting both segments of this roadway.

PUBLIC TRANSPORTATION FACILITIES

There are no fixed line public transportation facilities that operate within the IMSA. Morrow County Special Transportation provides para-transit services, including dial-a-ride and medical transportation, to senior and disabled Boardman residents. According to the County TSP, there is one bus and three cars available to Boardman residents. The drivers are volunteers. Other users may take advantage of the service so long as they do not displace qualified users. Intercity bus service is provided by Greyhound. Daily service is provided in Boardman on an as-needed basis, meaning passengers waiting along the route must flag-down the bus. The service provides connections to Portland and Pendleton, Oregon, and Boise, Idaho.

PEDESTRIAN AND BICYCLE FACILITIES

Due to the rural and industrial natures of the study areas, exclusive pedestrian and bicycle facilities (e.g. sidewalks and bike lanes) are limited in the study areas. Sidewalks are generally not present on the study roadways. Bike lanes are also not provided; however, many of the study roadways have shoulders that are at least partially paved and provide additional space for autos and bicycles to share on the roadway. Traffic volumes are also relatively low on many of the City and County roadways in the study area, making it more comfortable for non-motorized and motorized users to share the roadways.

While not along any of the study roadways, the Columbia River Heritage Trail is in the vicinity of the POM interchange. The Trail follows the Columbia River in the vicinity of the study area before

connecting to Main Street in Boardman. This multi-use path also extends to the northeast to Irrigon, providing a non-motorized connection between the two cities.

MARINE FACILITIES

The Port of Morrow is strategically located along the Columbia River. Goods can be shipped via barge west to Portland and Seattle or upriver to the Tri-Cities in Washington and Lewiston, Idaho. Goods barged from the Port can reach oceangoing freighters in Portland within 24 hours, accessing markets through the Pacific Ocean. According to the Port, Tidewater Terminal is the largest container terminal upriver of Portland (Reference 3).

RAIL FACILITIES

The Union Pacific Mainline passes through the IMSA. Businesses in the Port of Morrow are able to ship their goods across the country via rail due to the nearby location of the Hinkle Railyard, which is the largest hump yard in the West. Connections at Hinkle provide shippers the ability to send goods north and south via rail.

EXISTING TRAFFIC VOLUMES AND PEAK HOUR OPERATIONS

Manual intersection turning movement counts were obtained from ODOT at each of the study intersections to assess the operational performance and characteristics within the study area. These counts were conducted on mid-week days in April 2010. A description of the analysis conducted with this data is summarized in the following sections.

Intersection Volumes

Turning movement counts at each intersection were recorded from 6:00 a.m. to 10:00 p.m. Separate peak hours for each interchange area are identified due to their different natures (e.g. the POM interchange serves primarily industrial traffic and the I-84/US 730 interchange serves regional commuter and through traffic) and the distance between them. The weekday p.m. peak hour in the POM interchange area occurs from 3:00-4:00 p.m. The turning movement volumes at each study intersection are balanced where appropriate during this hour to account for the differences in data collection. The existing unadjusted turning movement traffic counts are provided in the *Technical Appendix*.

Seasonal Adjustments

Following the methodology outlined by ODOT's Analysis Procedures Manual (APM, Reference 4), a seasonal adjustment factor was applied to the traffic counts collected for the existing conditions



analysis in order to estimate 30th highest hour volumes. The exception to this is I-84, since its volumes are taken from automatic traffic recorder (ATR) #25-008, which is located nearby on I-84 west of US 730, during the peak month (July). In consultation with ODOT staff, ATR #30-002, located on US 730 northeast of the study area and east of Umatilla at milepost 193.70, was determined to have the most similar characteristics to US 730 within the study area. The seasonal adjustment factor for counts conducted on US 730 and local roadways within the study area during April is 1.21.

Figure 4-6 illustrates the 16-hour volume peaking characteristics of the I-84 through traffic. Figures 4-7 through 4-8 illustrate the 16-hour volume peaking characteristics of the I-84 ramps at the POM interchange. Figure 4-9 shows the same for Laurel Lane. The volumes shown in these figures have been seasonally adjusted.

Figure 4-6 16-Hour Volume Profile for I-84 West of US 730

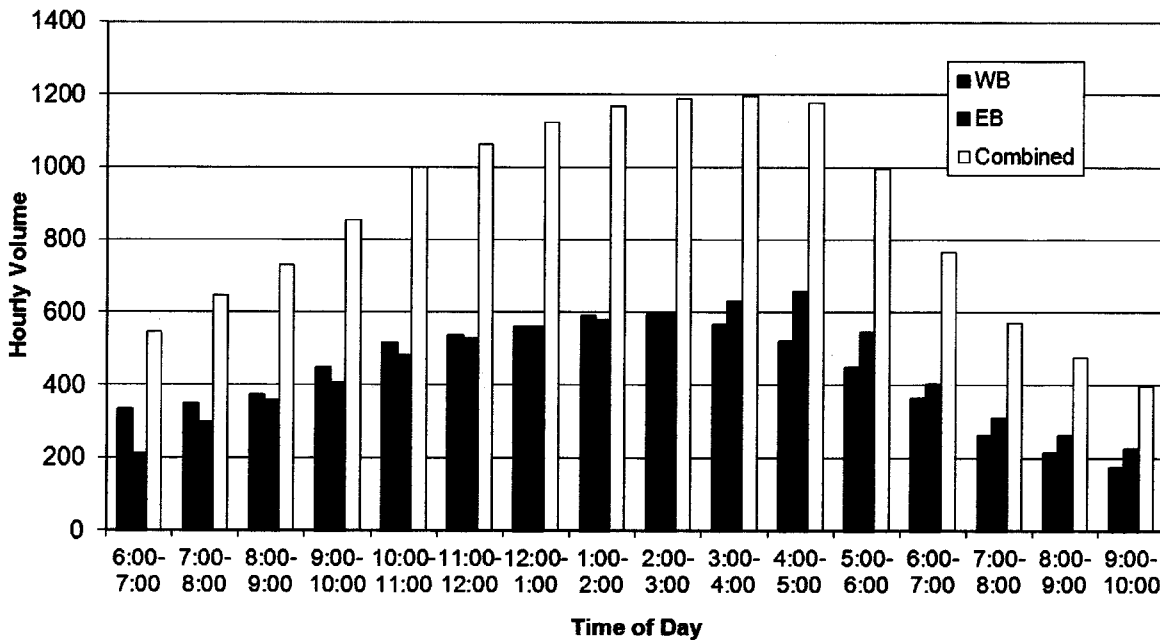


Figure 4-7 16-Hour Volume Profile for I-84 WB Ramps at Laurel Lane

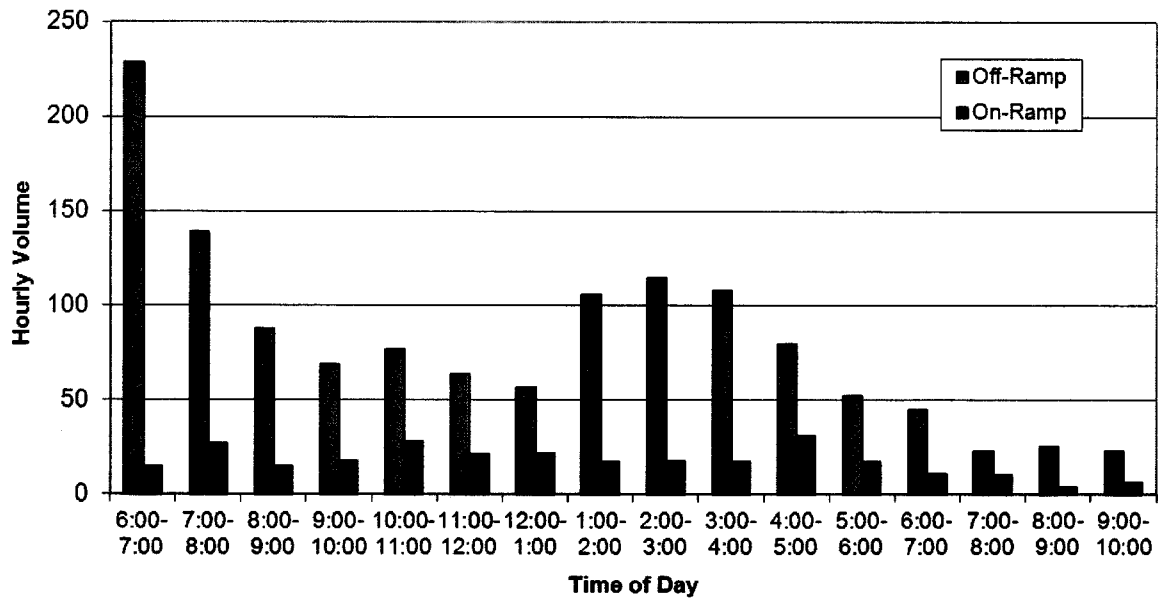


Figure 4-8 16-Hour Traffic Volume Profile for I-84 EB Ramps at Laurel Lane

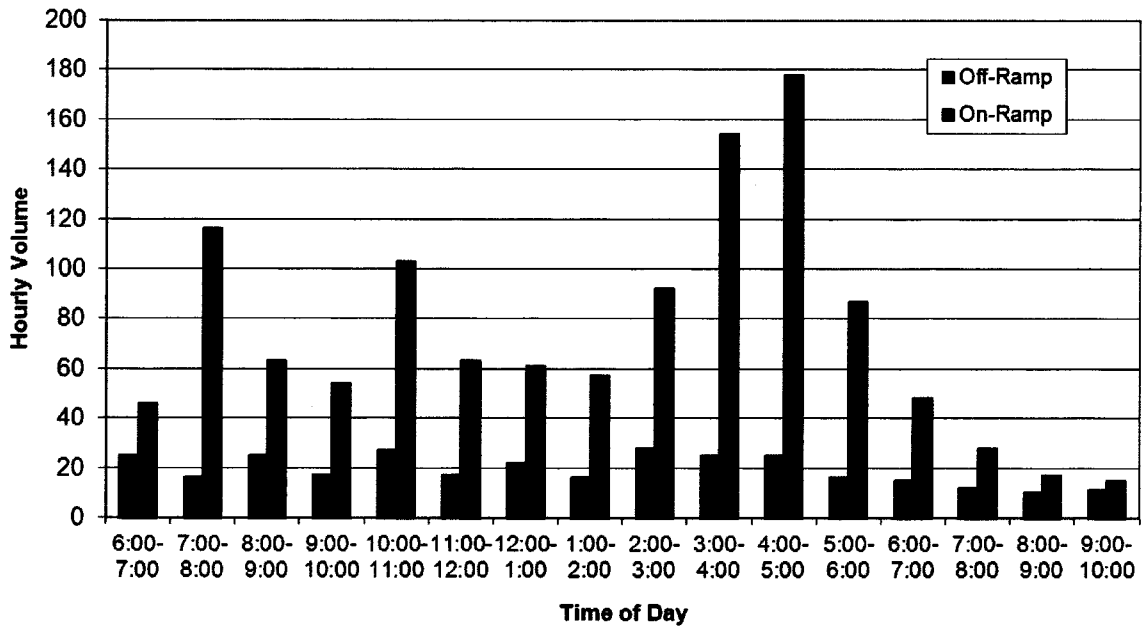
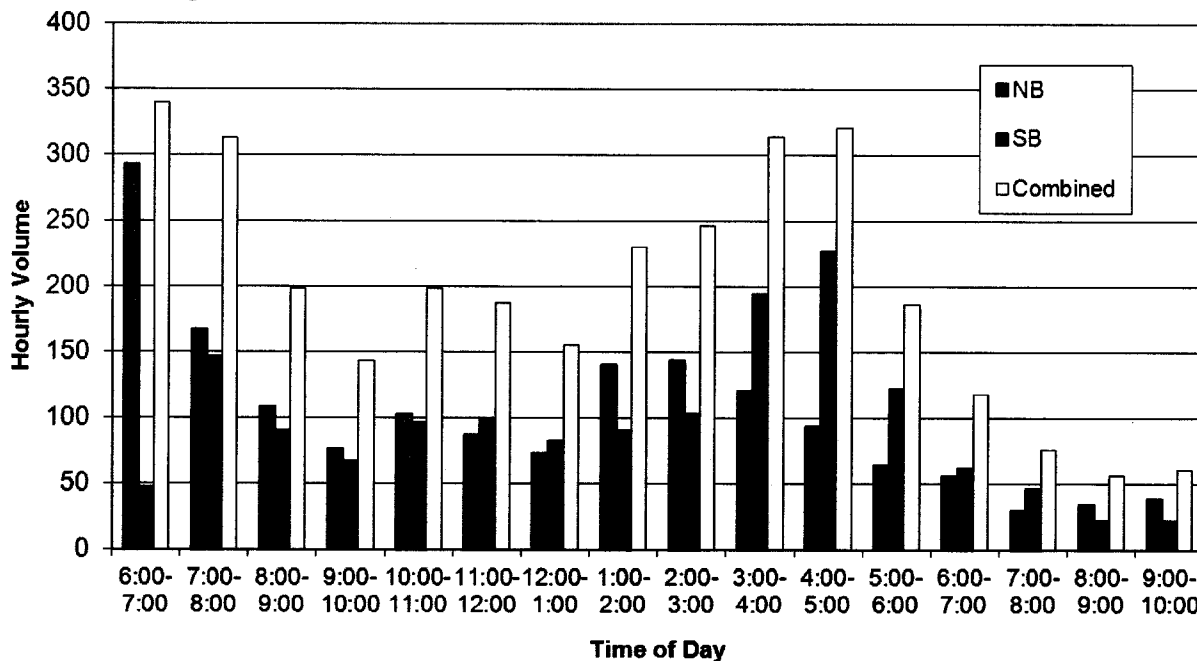


Figure 4-9 16-Hour Traffic Volume Profile for Laurel Lane North of I-84



Traffic traveling to and from I-84 significantly influences traffic volumes on Laurel Lane. As the figures show, the peak hour volumes on each of the I-84 ramps are approximately 80% of the volumes on Laurel Lane during that same period. Essentially, most of the traffic on Laurel Lane in the proximity of I-84 is traveling to or from the interstate.

Figures 4-7 and 4-8 show that the I-84 ramps at the POM interchange each have a dominant traffic pattern that lasts throughout the day. Traffic volumes on the I-84 westbound off-ramp are significantly higher than volumes on the westbound on-ramp throughout the 16-hour period that counts were conducted. The exact reverse pattern occurs on the eastbound ramps, where the off-ramp has significantly lower volumes than the on-ramp. This indicates that much of the traffic utilizing this interchange is coming from and going to the east on I-84.

The weekday 30th highest hour intersection turning movement counts used for the existing conditions analysis are shown in Figure 4-10.

Figure 4-10 Existing Traffic Conditions, 30th Highest Hour



Truck Traffic

Not shown in these figures is the amount of truck traffic on certain study roadways. Given the industrial nature of the Port of Morrow area, heavy truck traffic makes up a significant proportion of the total traffic volumes on roadways in the area. For instance, during the weekday p.m. peak hour, truck traffic makes up approximately 12-16% of all traffic on Columbia Avenue near Laurel Lane and 16-24% of all traffic on Laurel Lane from just south of the I-84 Eastbound ramp terminal to Columbia Avenue.

Existing Intersection Operations

All operations analyses described in this report were performed in accordance with the procedures stated in the *Highway Capacity Manual 2000* (Reference 5). The OHP sets operational standards based on volume-to-capacity (v/c) ratios for the interchange ramp terminals (v/c of 0.85 for the POM ramp terminals). These standards apply to the overall v/c ratio at signalized intersections and to the state highway approaches at unsignalized intersections. The minor street approaches that are stop-controlled at unsignalized intersections have a standard of a v/c ratio of 0.90.

The operational standard for intersections involving only City and County roadways is based on level-of-service (LOS). The City maintains a LOS standard of "C" or better for all intersections. The County's standard is LOS "D" or better for areas within a City's UGB (i.e., intersections along Columbia Avenue).

As shown in Figure 4-10, all study intersections currently meet applicable operation standards. The existing conditions operations worksheets are provided in the *Technical Appendix*.

TRAFFIC SAFETY

The crash histories at the study area intersections and along I-84 were reviewed in an effort to identify potential safety issues. Crash records were obtained from ODOT for the five-year period from January 1, 2005 through December 31, 2009. Table 4-2 contains the summary of reported crashes at the intersections and Table 4-3 contains the summary of reported crashes along the highways.

Table 4-2 Intersection Crash Histories (January 1, 2005 through December 31, 2009)

Intersection	# of Crashes	Crash Rate ¹	Angle	Crash Type			Severity		
				Rear-End	Turning	Other	PDO	Injury	Fatality
I-84 WB Ramp Terminal/Laurel Ln	No Crashes Reported								
I-84 EB Ramp Terminal/Laurel Ln	No Crashes Reported								
Columbia Ave/Laurel Ln	1	0.16	0	1	0	0	1	0	0
Columbia Ave/ Ulman Blvd	No Crashes Reported								
Columbia Ave/Olson Rd	No Crashes Reported								
Columbia Ave/Rippee Rd	No Crashes Reported								

¹Crash rate is expressed in terms of crashes per million entering vehicles

Table 4-3 I-84 Segment Crash Histories (January 1, 2005 through December 31, 2009)

Roadway	# of Crashes	Crash Rate ¹	Angle/ Turning	Rear- End	Crash Type			Severity		
					Sideswipe	Fixed Object	Other	PDO	Injury	Fatality
I-84: Boardman – East of US 730	29	0.20	1	3	7	8	10	14	14	1

¹Crash rate is expressed in terms of crashes per million vehicle miles

Table 4-2 shows that only one crash has been reported at the study intersections.

As Table 4-3 shows, just over half of all the crashes on I-84 result in an injury or fatality. The fatality was the result of a vehicle running off the road and overturning. The fatal crash occurred during daylight on dry roads. No other vehicles were involved in the crash. ODOT crash data summary sheets are provided in the *Technical Appendix*.

Truck Traffic Considerations

As was previously mentioned, truck traffic makes up a significant portion of traffic on the roadways around the POM interchange. Trucks generally take longer to accelerate and decelerate than passenger vehicles and need a larger turning radius at intersections. They also occupy more space when stopped at an intersection, thereby increasing queue lengths.

The combination of increased queue length and acceleration and deceleration needs should be considered when examining safety at interchange ramp terminals with relatively high truck volumes. A safety issue can arise if vehicles stopped on an exit ramp stack up into the space needed for a vehicle to safely decelerate. Generally, approximately 770-1320 feet of deceleration length is needed for vehicles decelerating from freeway speeds to a complete stop on a downgrade, such as is found on the POM interchange ramps (Reference 6). Currently, the eastbound off-ramp provides approximately 1600 feet

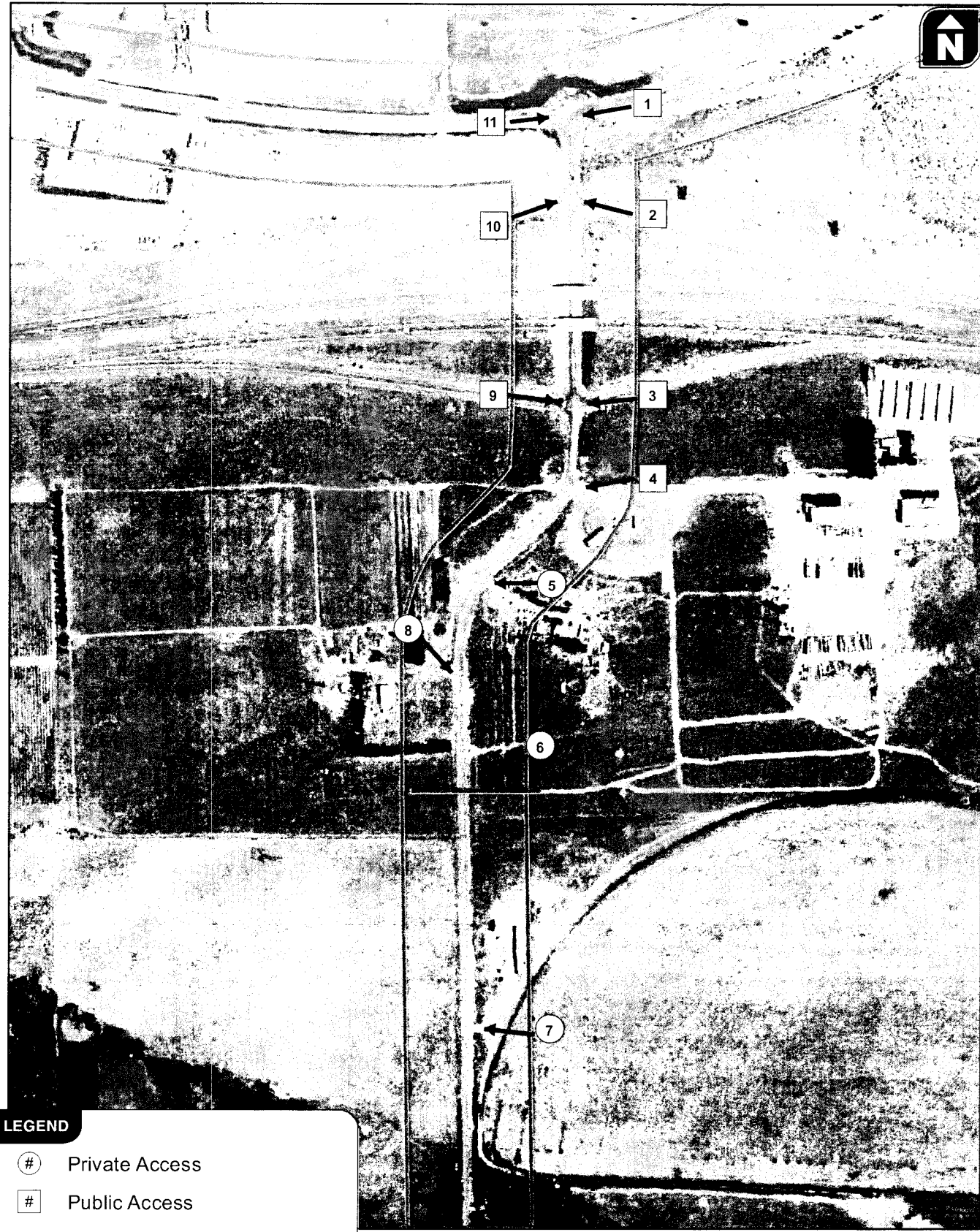
of deceleration length and the westbound off-ramp provides approximately 1400 feet. Based on the existing traffic volumes and truck traffic percentages, 95th-percentile queues are estimated to be no more than one vehicle length, or approximately 25-75 feet, depending on whether the vehicle is a passenger car or large truck. Therefore, queues are not currently estimated to back up to into the distance required for deceleration.

EXISTING ROADWAY ACCESS CONDITIONS





Existing roadway access conditions have been inventoried. This inventory was conducted along Laurel Lane. The inventory along US 730 north of the I-84 Westbound ramp terminal was provided by ODOT, which maintains detailed records regarding access to state highways. The inventory was conducted by the project team and is cursory. The following is a summary of the inventory.

There are currently 7 public and private access points (excluding the interchange ramp terminals) on Laurel Lane located within the Operations and Access Study Area (from roughly ½ mile south of the POM interchange to its terminus at Columbia Avenue). Of these access points, 2 are located north of the interchange, while the remaining 5 access points are located south of the interchange. Figure 4-11 illustrates the location and type (public or private) of each of the access locations along Laurel Lane within the Operations and Access Study Area. Table 4-4 summarizes the type of use served by the access point.

Oregon Administrative Rule 734, Division 51 and the Oregon Highway Plan (OHP) identify ODOT's access management standards within the vicinity of interchanges. Based on an outright application of the standards, no full public or private access is allowed within 1320 feet (¼ mile) from the ramp terminals. Figure 4-11 shows the 1320 feet access control area as measured from the Interstate-84 ramp terminal intersections. As shown, 3 private and 3 public accesses are located within the 1320-foot control area on either side of the POM interchange.



LEGEND

-  Private Access
-  Public Access
-  Minimum 1320' IAMP Limits
-  Operations/Access Study Area

H:\p\profile1

**ACCESS INVENTORY
POM INTERCHANGE
BOARDMAN, OREGON** **FIGURE
4-11**

Table 4-4 Public/Private Approach Inventory

Figure 4-11 ID	Roadway	Approach Type	Side of Roadway	Type of Use Served
1	Laurel Lane	Public	East	Columbia Avenue
2	Laurel Lane	Public	East	I-84 Westbound Ramp Terminal (off-ramp)
3	Laurel Lane	Public	East	I-84 Eastbound Ramp Terminal (on-ramp)
4	Laurel Lane	Public	East	Yates Lane
5	Laurel Lane	Private	East	Residential
6	Laurel Lane	Private	East	Farm/Industrial
7	Laurel Lane	Private	East	Farm
8	Laurel Lane	Private	West	Residential
9	Laurel Lane	Public	West	I-84 Eastbound Ramp Terminal (off-ramp)
10	Laurel Lane	Public	West	I-84 Westbound Ramp Terminal (on-ramp)
11	Laurel Lane	Public	West	Columbia Avenue

EXISTING ROADWAY DEFICIENCIES

No significant existing roadway deficiencies were identified within the study area along the paved sections of roadway.

Environmental

The existing environmental conditions and potential issues were identified. The following is a summary of potential environmental issues, permits, and additional actions that may be required as the project moves forward. A more detailed description of these items and the baseline conditions may be found in the Technical Appendix.

WILDLIFE-HABITAT COMMUNITIES

The Area of Potential Impact (API) contains our general wildlife-habitat communities: urban & mixed environs; agriculture, pasture & mixed environs; herbaceous wetlands; and eastside (interior) riparian-wetlands, shown in Figure 4-12. These communities are described below:

- **Urban and mixed environs wildlife-habitat community** comprises approximately 99 acres within the POM 730 Interchange area. Vegetation within this community is almost entirely non-native. This community contains moderate road density and approximately 30% impervious surface cover.

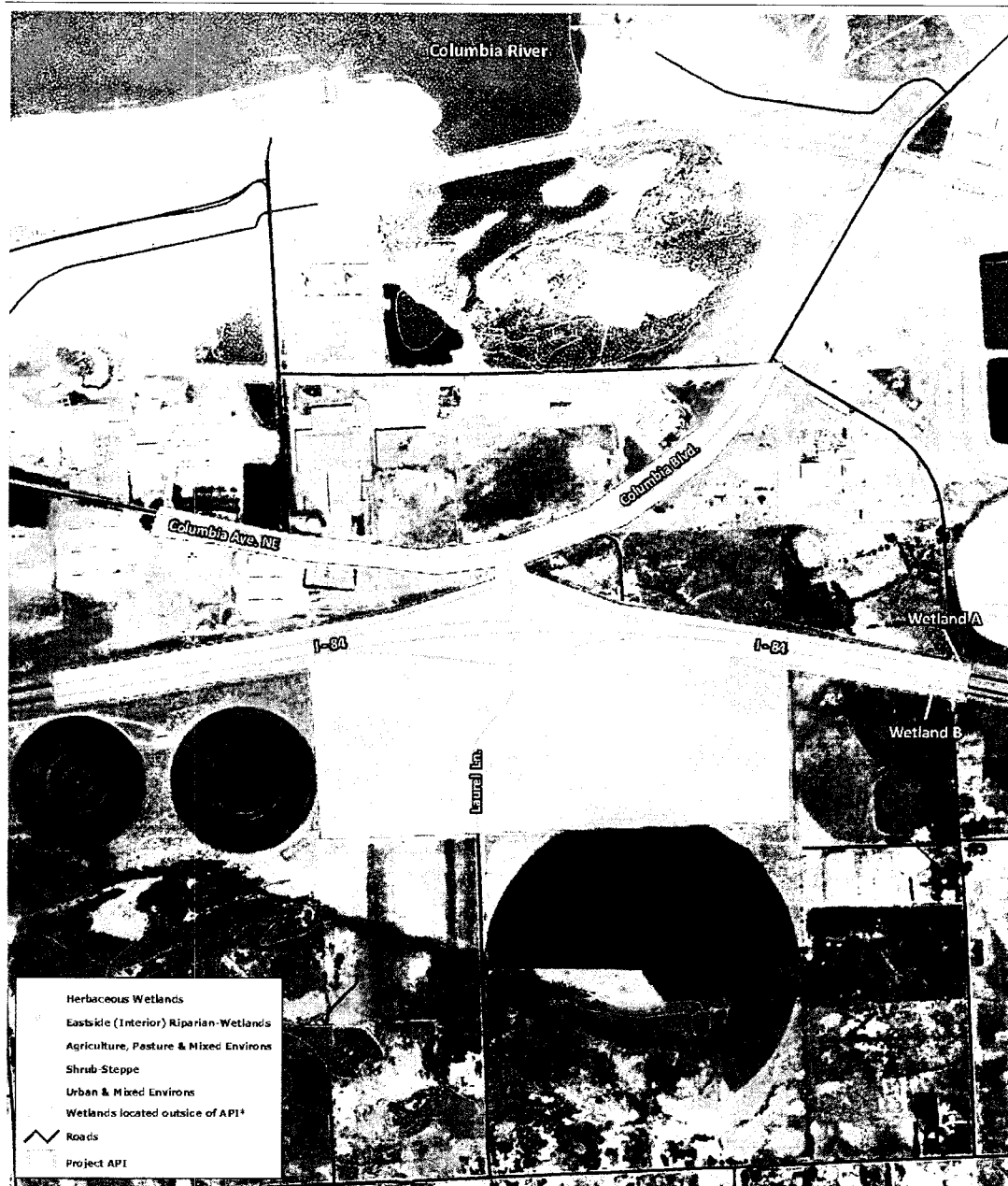


Figure 4-12 Natural Resources Map¹

The agriculture, pastures and mixed environs wildlife-habitat community is located adjacent to road ROWs. This community comprises approximately 122 acres within the POM Interchange area. Areas utilized for agriculture within the API are irrigated for cultivated crops and are also used for cattle grazing.

¹Figure provided by Mason, Bruce & Girard, Inc.

- **The eastside (interior) riparian-wetlands wildlife-habitat community** is scattered throughout the API. This community comprises less than one acre within the POM Interchange area. Within the API, this habitat type is primarily composed of willow (*Salix sp.*), and broad-leaf cattail (*Typha latifolia*).
- **The herbaceous wetlands wildlife-habitat community** is located mainly in swales adjacent to roadways within the API. This community comprises less than one acre within POM Interchange area. This habitat type is a mix of emergent herbaceous plants with grasses. Within the API, this habitat type is scattered, and is composed primarily of broad-leaf cattail.

THREATENED AND ENDANGERED SPECIES

Data from the US Fish and Wildlife Service (USFWS), StreamNet, and Oregon Natural Heritage Program (ONHP) focused on a 2-mile radius of the API indicated that two wildlife and fisheries species that are listed as threatened or endangered under the federal and state Endangered Species Acts (ESA) have the potential to occur within the vicinity of the API (References 7-9). A listing of these species, including their federal and state status and whether critical habitat is designated, is shown in Table 4-5. No listed plant species were identified during the records review or site investigation.

Table 4-5 Threatened and Endangered Species with the Potential to Occur within the API

Scientific Name	Common Name	Federal Status	State Status	Critical Habitat?	Habitat
<i>Oncorhynchus mykiss</i>	Steelhead (Middle Columbia River DPS, spring run)	Threatened	Sensitive Vulnerable	Yes, within the Columbia River north of the project API	Columbia River and tributaries
<i>Urocitellus washingtoni</i>	Washington ground squirrel	Species of Concern	Endangered	No	Sagebrush grassland in silty loam soils, particularly soils in the Warden series

Although habitat for steelhead does not exist within the API, this species is known to inhabit the Columbia River, located north of the API. Steelhead is included due to the potential for indirect impacts to this species from contaminants contained in stormwater runoff flowing from the proposed interchange improvements.

No Washington ground squirrel habitat was observed within API in the Port of Morrow Interchange area.

NOXIOUS WEEDS

Twenty-one weed species listed by the Oregon Department of Agriculture (ODA) occur within Morrow County (Reference 10). During the December 16, 2011 site investigation, project team biologists observed an unidentified knapweed species (*Centaurea sp.*), which is likely listed on the ODA noxious weed list (Reference 11). Due to the timing of the site investigation outside the optimal blooming period for noxious weeds, not all weed species or populations may have been identified. In addition, only small portions of the API were traversed on foot, which likely further limited identification of weed species or populations. A complete noxious weed survey within the project footprint would be required during later design phases of the project to comply with ODOT requirements.

WETLANDS AND WATER RESOURCES

Two small potential wetlands were identified during the site investigation. One herbaceous and one scrub-shrub wetland, totaling 0.52 acre are located within the POM Interchange area. Due to the wetlands' proximity to agricultural fields, it is possible that the wetlands have increased in size or have been created by irrigation practices in the Boardman area.

No previous wetland delineations have been conducted within the API (Reference 13). The Boardman Canal does not appear on the 1870 General Land Office (GLO) survey, but is shown as an irrigation canal on the 1940 GLO survey (Reference 14). No historic streams are mapped on the GLO surveys within the API.

WATER QUALITY RESOURCES

Water quality parameters and standards have been established by the Department of Environmental Quality (DEQ) to protect the beneficial uses of Oregon's waterways. Development, agricultural activities, and industrial and commercial uses have affected the water quality within the Columbia River, the receiving waterbody for runoff from the API. As such, DEQ has listed the segment of the Columbia River located north of the API as a 303(d) water quality-limited waterbody because it does not meet water quality standards for pH and temperature. In addition, the segment of the Columbia River located north of the API has an approved total maximum daily load (TMDL) for dioxin and total dissolved gas. There are no water-quality-limited waterbodies located within the API (Reference 15).

DEQ declared the Lower Umatilla Basin a Groundwater Management Area (GMA) in 1990 due to elevated nitrate levels detected in groundwater samples. An action plan was published in 1997 that identifies point-source pollutants and plans to reduce groundwater contamination. The major point-source nitrate-nitrogen pollutants in the GMA include irrigated agriculture; food processing water;

confined animal feeding operations, domestic sewage where septic systems occur in high densities, and Umatilla Chemical Depot's washout lagoons (Reference 16).

REGULATORY SUMMARY

Table 4-6 provides details regarding the applicable permits, approvals, and clearances likely needed for potential projects in the API.

Table 4-6 Summary of Potential Applicable Permits, Approvals, and Clearances

Type of Permit / Approval/ Clearance	Issuing Agency	Permit / Approval / Clearance	Estimated Timeline (after submittal)
ESA Consultation for federally-listed fish species	NMFS	SLOPES Approval or Biological Opinion	30 days (SLOPES) 45 days (NLAA) 135 days (LAA)
ESA Consultation for state-listed wildlife species	ODFW	ODFW Project Approval	90 days
Migratory Bird Treaty Act Compliance for tree clearing	ODOT	None (if trees and shrubs are removed outside MBTA nesting period of March 1 – September 1)	N/A
Noxious Weed Clearance	ODOT	Botanical Clearance Report	N/A
Letter of Concurrence	DSL	Wetland/Waters Delineation Report approval	120 days
Jurisdictional Determination	ACOE	Wetland/Waters Delineation Report approval	60 days
Removal/Fill Permit	DSL	Joint Permit Application approval	GP: 40 days after Wetland/Waters Delineation Report concurrence Individual Permit: 120 days
Section 404 Clean Water Act Permit	ACOE	Joint Permit Application approval	Nationwide permit: 75 days, Individual permit: 120 days
Section 401 Clean Water Act Certification	DEQ	401 Water Quality Certification	Up to 1 year
Section 402 Clean Water Act Certification	DEQ	1200-C	30 days
Dewatering disposal approval	DEQ	Special letter permit or letter from DEQ	Several weeks to several months
Water rights	WRD	Limited license or water right	30 days to 1 year

Summary

- The primary roadways within the Interchange Management Study Area (IMSA) include Interstate-84, Laurel Lane, and Columbia Avenue.
- All of the study intersections meet their respective ODOT, City, or County mobility standard.
- There are no identified safety issues within the study area based on a review of the most recent five years of available crash data.
- Due to its rural nature, pedestrian and bicycle facilities are limited in the study area.
- There are currently 7 access points located on Laurel Lane within the Operations and Access Study Area. The existing access points are a combination of public and private approaches.
- ODOT's access spacing standard within the vicinity of the interchange is 1,320 feet (¼-mile) from the ramp terminals to any type of access (partial or full). Within this ¼-mile control area there are 3 private and 3 public accesses on Laurel Lane.
- Up to twelve Environmental permits, approvals, and clearances will be required for projects within the vicinity of the interchange.
- Two threatened and endangered species may be present near the API.
- There are two wetlands within the API.

Section 5
2030 Future Conditions

2030 FUTURE CONDITIONS

This section documents the future land use as well as the forecast traffic operations in the vicinity of the POM interchange. The future traffic projections are based on anticipated future land uses. Future land use information was determined through working with the City, County, and POM.



Future Land Uses

The analysis of future land uses in the vicinity of the POM and I-84 / US 730 interchanges was focused on areas that are expected to have development or redevelopment potential that would generate traffic in the Interchange Management Study Area (IMSA). The IMSA defined in Figure 5-1 includes land both inside and outside the City of Boardman and its urban growth boundary (UGB) and contains a variety of zones, including commercial, rural residential, industrial, farm use, and exclusive farm use zones.

Based on conversations with Morrow County and POM staff, development is anticipated to occur within the IMSA in the POM properties, south of I-84 in the City and unincorporated Morrow County, and at the Naval Weapons System Testing Facility (NWSTF).

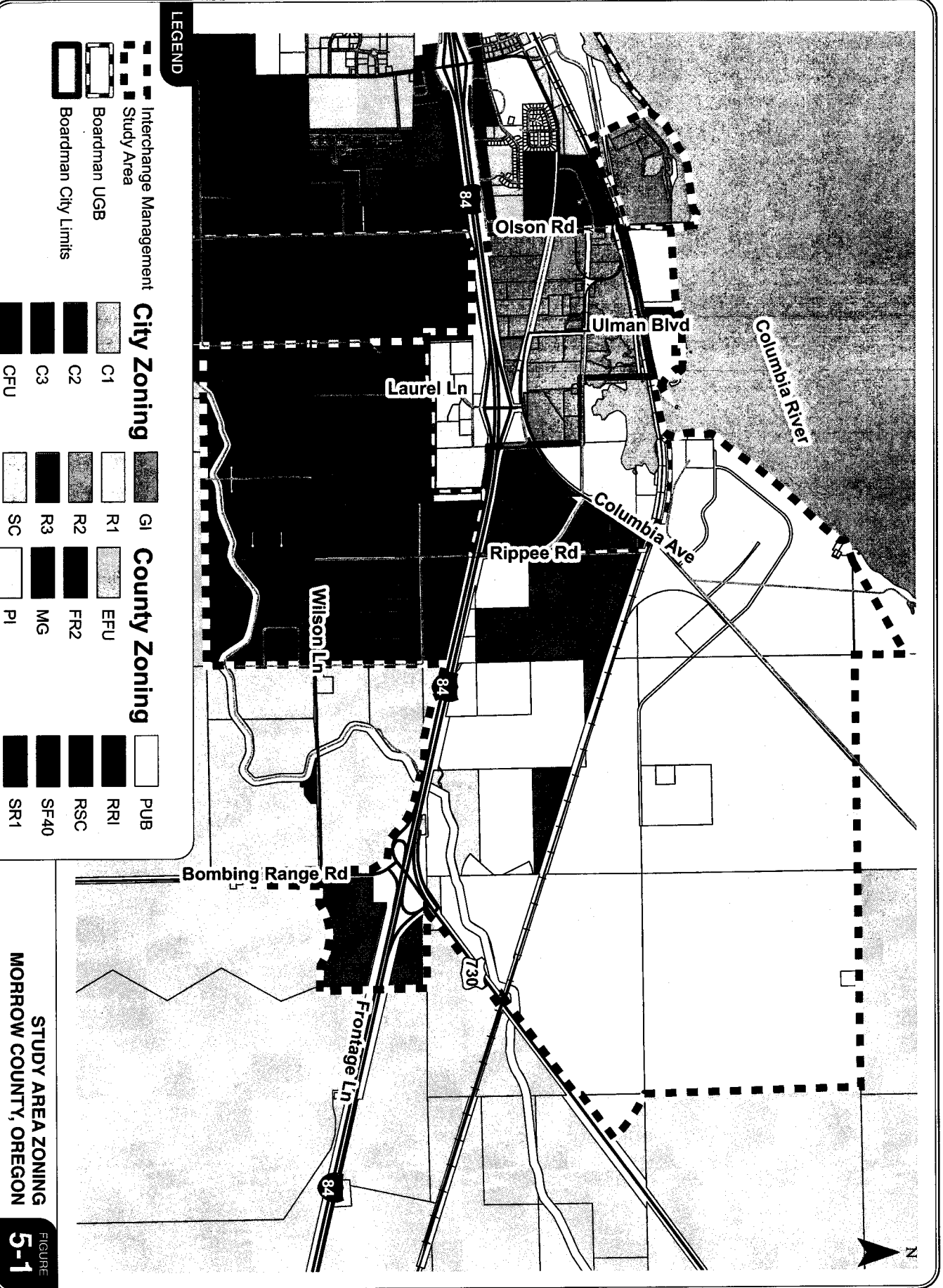
UNINCORPORATED MORROW COUNTY

Through consultation with Morrow County staff, new residential development is anticipated to occur in the IMSA south of I-84. This development would occur under the FR2 zoning, which requires a minimum lot size of two acres. The specific areas identified as likely to develop in the next 20 years are identified in Figure 5-2. This is expected to equate to about 81 additional single family homes, assuming these areas develop with according to approvals or minimum lot sizes.

CITY OF BOARDMAN

The area immediately south of I-84 adjacent to the POM interchange is located within Boardman City limits and is zoned as Service Center (SC), which is a sub-district of the Commercial district. This zone allows for highway-oriented commercial uses along the I-84 corridor. In order to be conservative, it

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LEGEND

- Interchange Management
- Study Area
- Boardman UGB
- Boardman City Limits

City Zoning

- C1
- C2
- C3
- CFU

County Zoning

- G1
- R1
- R2
- R3
- SC
- EFU
- FR2
- MG
- PI

PUB

- PUB
- RRI
- RSC
- SF40
- SR1

STUDY AREA ZONING
MORROW COUNTY, OREGON

FIGURE
5-1

was assumed that the area served by Yates Lane in the southeast quadrant of the POM interchange redeveloped under this zone (shown in Figure 5-2). Specifically, it was assumed that a full truck stop replaces the existing card-lock fueling station, given the location's proximity to the POM and uses allowed in the SC sub-district.

PORT OF MORROW

The POM industrial area is essentially split into two areas by the Union Pacific (UP) mainline railroad. Most of the existing development in the industrial park is located south of the UP mainline and much of this area is built out. Consequently, POM staff expects that this area will likely only experience a 15% increase in the amount of industrial related development over the next 20 years. The area north of the UP mainline is known as the East Beach area and is largely undeveloped. POM staff anticipates that most future development in the industrial park will occur in this area and that there could be a five-fold increase in the amount of industrial uses over the next 20 years.

NWSTF BOARDMAN

The US Navy is considering expanding its operations at its NWSTF Boardman site. This facility is located south of the IMSA between Bombing Range Road and Tower Road. Increased operations at the site would have an effect on operations at the I-84/US 730 interchange. The US Navy recently began the process of preparing an Environmental Impact Statement (EIS) for expanded operations. Currently this process is at the beginning stages and the potential traffic related impacts of the increased operations cannot be accurately assessed.

Future Traffic Conditions

Based on the potential levels of development and redevelopment in the IMSA, and factoring in regional growth from outside the IMSA, future year 2030 traffic conditions were estimated along the study area roadways and intersections.

YEAR 2030 NO-BUILD TRAFFIC VOLUMES FORECAST METHODOLOGY

Year 2030 "No-Build" traffic volume forecasts for intersection turning movements and street segments were developed in order to analyze the effects of traffic growth on the POM and I-84 / US 730 interchanges and the surrounding transportation system. The year 2030 No-Build scenario was developed based on the currently adopted City of Boardman and Morrow County Comprehensive Plans and anticipated development within the POM. The remainder of this section describes the methodology and assumptions used to develop year 2030 forecasts.



LEGEND

City SC Development

County FR2 Development

Interchange Management Study Area

Boardman UGB

Boardman City Limits

**PROBABLE 20-YEAR DEVELOPMENT AREAS
MORROW COUNTY, OREGON**

**FIGURE
5-2**

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Future year 2030 no-build traffic volumes were developed by considering the following traffic growth through year 2030:

- Future traffic related to regional growth within the larger context of the City of Boardman, Morrow County, and along the I-84 and US 730 corridors.
- Future traffic growth related to development and redevelopment of land in the IMSA.

The specific assumptions used in each of these traffic growth components are summarized below.

Background Traffic Growth

The proposed annual growth rates were determined based on a review of future development assumptions within the study area.

Local Roadways

The local roadways in the vicinity of the POM interchange almost exclusively serve traffic related to the POM. Growth on these roadways was accounted for in the consideration of development in the POM in the manner described later in this section.

Development and Redevelopment Traffic

As was previously mentioned, development and redevelopment is anticipated to occur within the IMSA in the POM industrial area and in unincorporated Morrow County south of I-84. The traffic estimated from the specific development areas identified by the County and from growth in the POM industrial area was used to estimate the future year traffic volumes.

Unincorporated Morrow County

In order to be conservative, it was estimated that the areas shown in Figure 5-2 would develop under the minimum two-acre lot size allowed by the FR2 zone if developments of a certain size had not been approved yet. This estimation was applied to Areas 3 through 6. Table 5-1 summarizes the development potential of each area under the existing FR2 zoning.

Table 5-1 Development Potential of Unincorporated Morrow County Areas

Figure 6-2 Area #	Size (Acres)	# of Homes
1	33.5	14
2	13.8	5
3	21.7	10
4	38.7	19
5	34.2	17
6	33.1	16
Total	175	81

Using the information in Table 5-1, the trip generation potential for each area was calculated for the weekday p.m. peak hour using the 8th Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE, Reference 17). Table 5-2 summarizes the estimated size and trip generation potential the areas identified in Figure 5-2 (all trip generation numbers in Table 5-2 have been rounded up to the nearest five).

Table 5-2 Trip Generation Potential of Unincorporated Morrow County Development

Size (Acres)	# of Homes	Weekday PM Peak Hour Trips		
		Total	In	Out
175	81	85	55	30

Table 5-2 shows that this development is estimated to generate approximately 85 trips during the weekday p.m. peak hour (55 in and 30 out). The assumed distribution patterns of trips generated within each area were based on the existing zoning, existing travel patterns, and relative attractions within the overall IMSA.

City of Boardman

The ITE *Trip Generation* manual does not contain information for truck stops. Therefore, the trip generation of a potential truck stop located on Yates Lane was calculated using site-specific data collected at other truck stops in the Northwest and California. Table 5-3 summarizes the estimated trip generation potential of a truck stop replacing the existing Pacific Pride fueling station in the location shown on Figure 5-2 (all trip generation numbers in Table 5-3 have been rounded to the nearest five).

Table 5-3 Trip Generation Potential of a Truck Stop

Use	Size	PM Peak Hour Trips		
		Total	In	Out
Truck Stop	6 Truck Fueling Positions	65	30	35
	8 Auto Fueling Positions	140	60	80
Total Trip Generation Potential		205	90	115
<i>Existing Trips to Pacific Pride</i>		45	25	20
Net New Driveway Trips		160	65	95
<i>Pass-By Trips</i>		30	15	15
Net New Trips		130	50	80

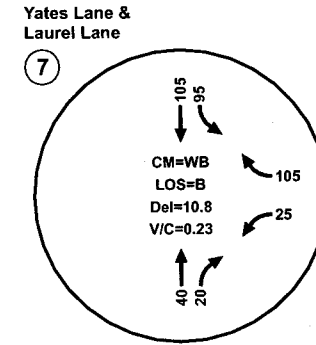
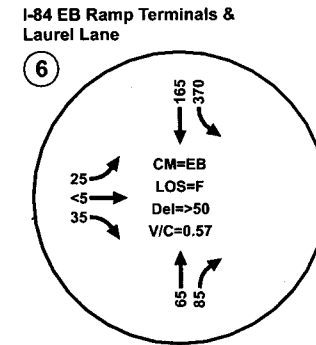
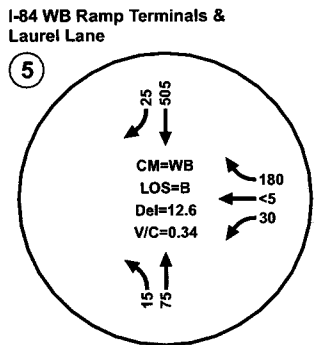
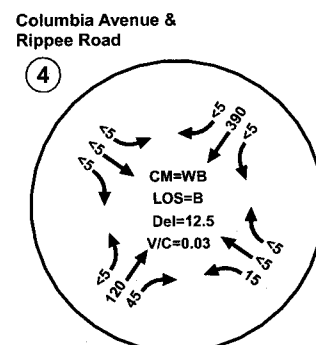
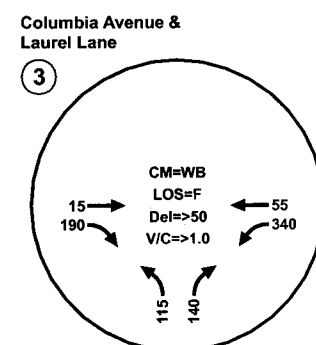
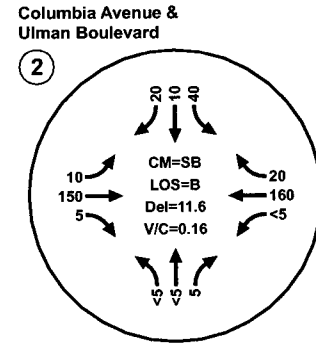
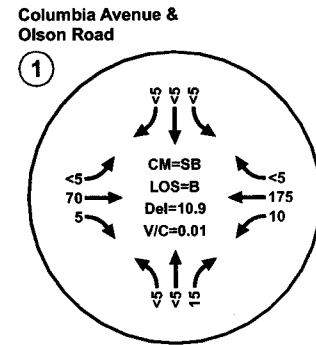
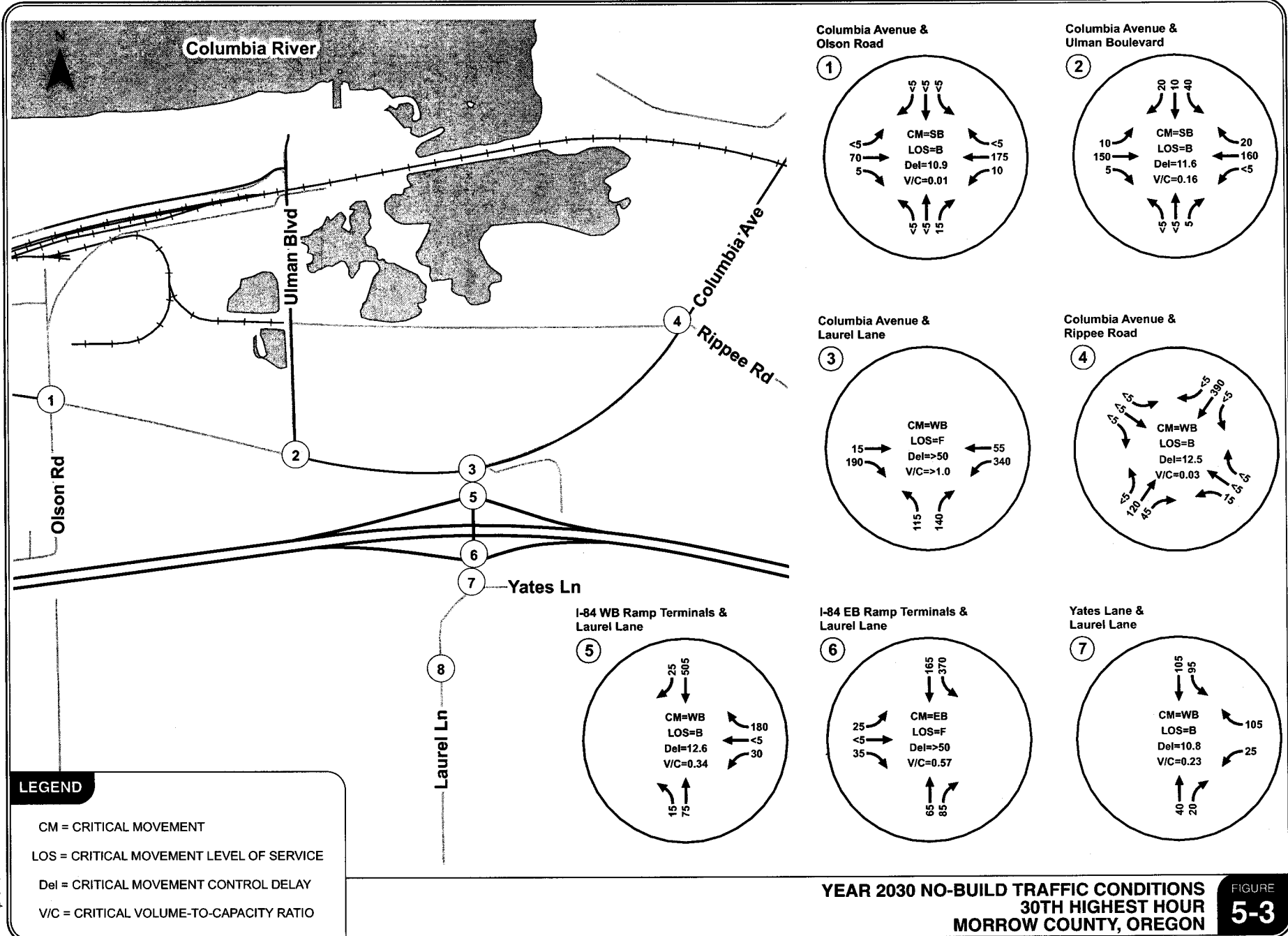
The table shows that the development of a truck stop with six truck fueling positions and eight passenger automobile fueling stations is anticipated to generate approximately 130 (50 in and 80 out) new trips to the area. Based on existing traffic patterns and the nature of traffic to and from the surveyed stops, many of these new trips will be from vehicles passing by on I-84 Eastbound and diverted POM traffic.

Port of Morrow

As was previously discussed, POM staff expects that development in POM properties south of the UP mainline will increase by approximately 15% over existing levels in the next 20 years. The East Beach area is expected to grow by about 500% over its existing level of development during this time. Recognizing that existing traffic volumes in the study area along Columbia Avenue and Laurel Lane are primarily related to activity on POM properties, it assumed that growth in development of POM properties will result in a proportional increase in traffic on these roadways. Therefore a total growth rate of 500% is applied to traffic volumes related to the East Beach area (i.e., northbound and southbound traffic on Columbia Avenue at Rippee Road) and a total growth rate of 15% is applied to traffic volumes related to the POM properties south of the UP mainline (i.e., all other movements on Columbia Avenue, Laurel Lane, and intersecting side streets).

YEAR 2030 NO-BUILD TRAFFIC CONDITIONS

Future year 2030 No-Build weekday p.m. peak hour traffic volumes were determined by applying the previously discussed growth rates and trip generation estimates to the existing traffic network. The resulting year 2030 No-Build weekday p.m. peak hour traffic volumes are shown in Figure 5-3.



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The transportation operations analysis was performed according to the methodologies and standards previously outlined in Section 4.

Traffic operations analyses were performed for the study intersections using the forecast year 2030 "No-Build" weekday p.m. peak hour traffic volumes shown in Figure 5-3. This No-Build analysis assumes that no improvements have been made to the existing transportation system. The results of these analyses are also shown in the figure. As the figure shows, nearly all intersections are forecast to meet their applicable operational standard under year 2030 No-Build conditions. The Columbia Avenue/Laurel Lane intersection is the exception to this as it is forecast to operate at LOS "F" and have insufficient capacity to meet the projected demand. The I-84 Eastbound ramp terminal approach at Laurel Lane is also forecast to operate with significant delays; however, the OHP mobility standard is based on v/c ratio and this movement is forecast to have an acceptable v/c ratio. The failing operations at both intersections are due largely to the growth in traffic from the East Beach area. More detailed information on this analysis can be found in the *Technical Appendix*.

Queuing Analysis

As was mentioned in Section 4, the potential for trucks to stack up on the I-84 off-ramps into the area needed for deceleration is a concern as traffic volumes grow at the POM interchange. Generally, approximately 770-1,320 feet of deceleration distance is needed for vehicles decelerating from freeway speeds to a complete stop on a downgrade, such as is found on the POM interchange ramps. Currently, the eastbound off-ramp provides approximately 1,600 feet of deceleration length and the westbound off-ramp provides approximately 1,400 feet. Based on the year 2030 No-Build forecast traffic volumes and truck traffic percentages, 95th-percentile queues are estimated to be no more than two vehicle lengths, or approximately 50-150 feet, depending on whether the vehicle is a passenger car or large truck on the westbound off-ramp. On the eastbound off-ramp, 95th-percentile queues are estimated to be no more than three cars, or 75-225 feet. Therefore, queues are not currently estimated to back up to into the distance required for deceleration on either off-ramp; though they will be close, particularly on the westbound off-ramp.

PLANNED TRANSPORTATION IMPROVEMENTS

Morrow County's TSP identifies a few planned transportation improvements within the IMSA. Of these improvements, the one that is expected to occur within the next 20 years is a connection from the POM's East Beach area to US 730. This road will be called Lewis & Clark Drive and a segment of it has already been constructed from Columbia Avenue toward US 730. A potential alignment of the extension

of Lewis & Clark Drive is shown in Figure 5-4. Another possible alignment for the extension would be a direct connection to the I-84/US 730 interchange.

For comparison purposes, an operations analysis has been conducted assuming this connection and subsequent re-routing of traffic volumes to and from the East Beach area. The results of the year 2030 traffic operations analysis assuming that Lewis & Clark Drive is extended to US 730 are shown in Figure 5-5. As the figure shows, the extension of Lewis & Clark Drive is anticipated to serve the majority of traffic traveling to and from the East Beach area. Consequently, the intersections around the POM interchange would be expected to meet their applicable operational standard. The *Technical Appendix* includes a summary of the 2030 operational analyses with the Lewis & Clark Drive extension.

Lewis & Clark Drive / US 730 Intersection

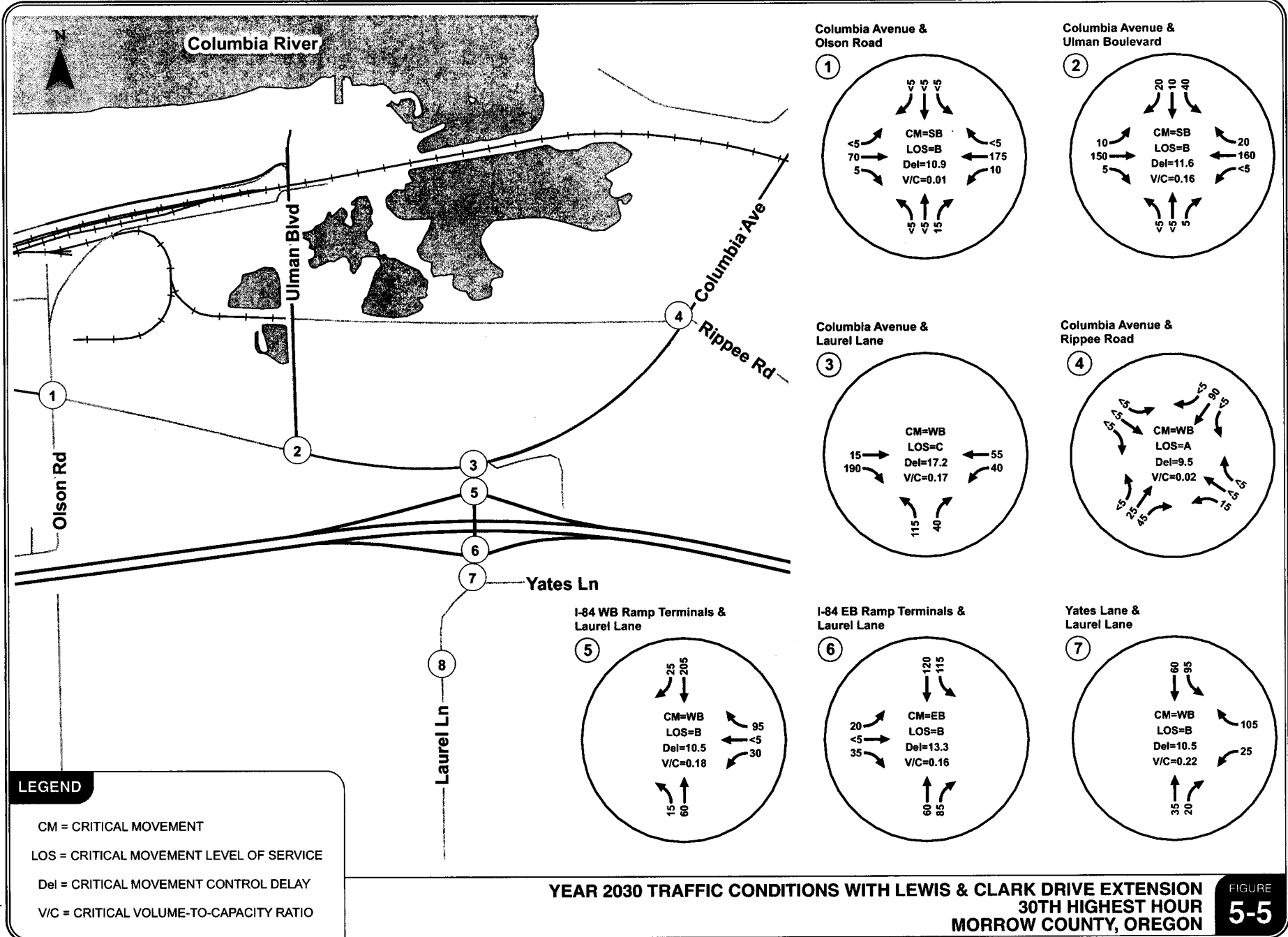
A final configuration for the Lewis & Clark Drive/US 730 intersection has not been determined. The analysis shown in Figure 5-5 assumes a three-leg intersection with the Lewis & Clark Drive approach being stop-controlled and US 730 traffic allowed to flow freely. Per the ODOT Analysis Procedure Manual (APM, Reference 4), left-turn and right-turn lane warrants would be met on US 730 given the volumes shown in the figure. Therefore, this analysis assumes that US 730 has a northeast-bound left-turn lane and southwest-bound right-turn lane at this intersection.

Queuing Analysis

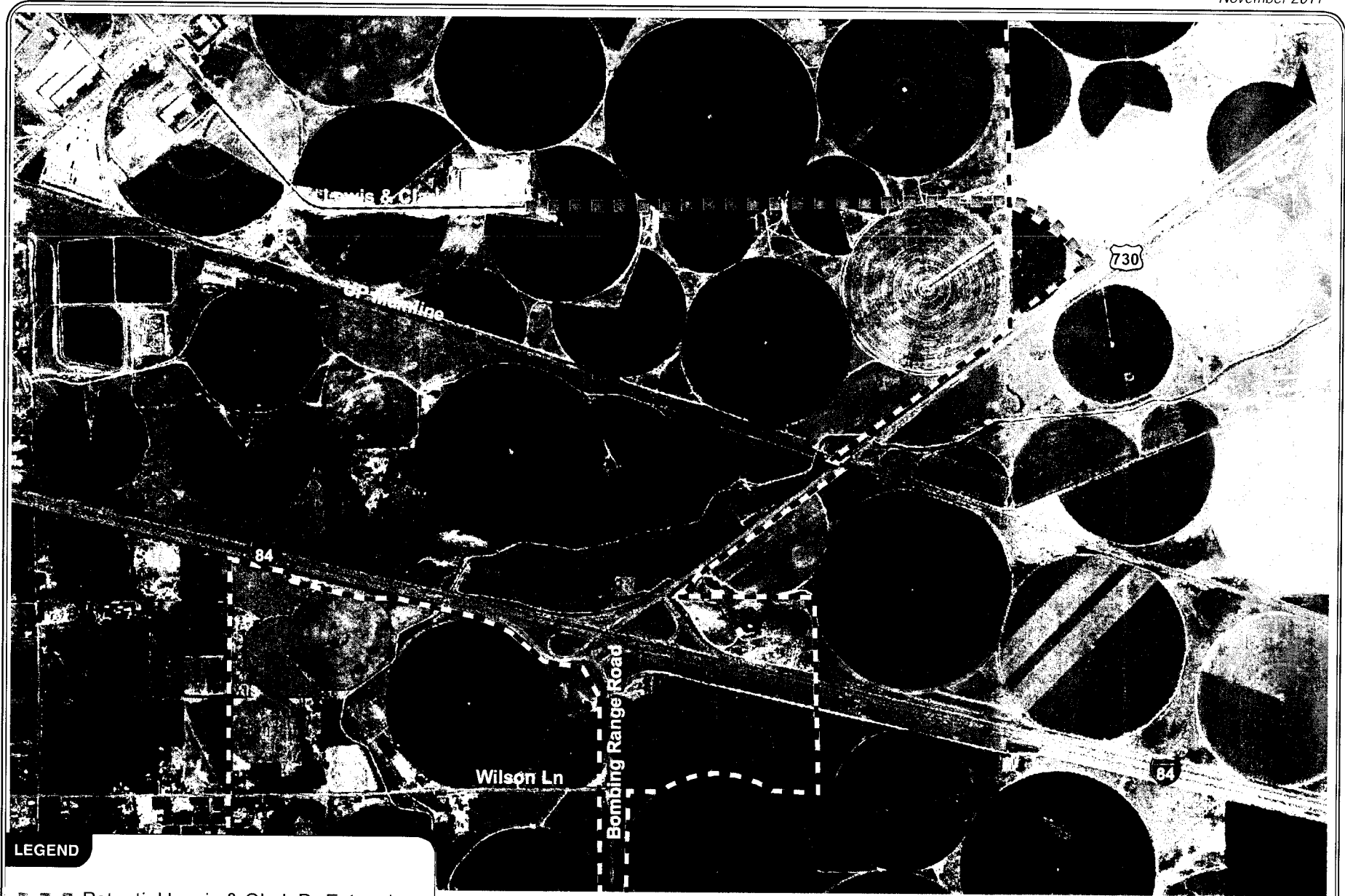
With the relief provided by the Lewis & Clark Drive extension, queues on either off-ramp at the POM interchange in 2030 are anticipated to be no more than one vehicle, similar to existing conditions.

THRESHOLD ANALYSIS

A rough sensitivity analysis was run in order to determine when, in terms of level of growth in the POM East Beach area, the at-grade Lewis & Clark Drive/US 730 intersection described above would no longer operate acceptably. This analysis showed that the Lewis & Clark Drive approach will fail to meet the applicable OHP mobility standard during the p.m. peak hour when development in the east beach area is approximately 1200% of, or 12 times greater than, what it is today. The northbound left-turn from US 730 into Lewis & Clark Drive is estimated to fail to meet its mobility standard during the a.m. peak hour when development reaches a level of 1400% of today. Grade separated interchanges would provide additional life for the connection. Due to the forecasted directionality of the traffic volumes, a diamond interchange's utility beyond an at-grade intersection would be limited. A Parclo-B loop ramp configuration for northbound US 730 would extend the functionality of the interchange until traffic volumes reached saturation levels, projected to be when development is nearing levels 30 times



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LEGEND

- Potential Lewis & Clark Dr Extension
- Interchange Management Study Area

**POTENTIAL ALIGNMENT OF LEWIS & CLARK DRIVE EXTENSION
MORROW COUNTY, OREGON**

**FIGURE
5-4**

Hi-profile

greater than existing conditions. Such levels of development are not anticipated to occur within the 2030 horizon year of this plan. Therefore any concepts developed to address such growth will be considered part of the long-term vision for the area and not part of the 20-year plan.

SUMMARY OF YEAR 2030 FUTURE YEAR CONDITIONS

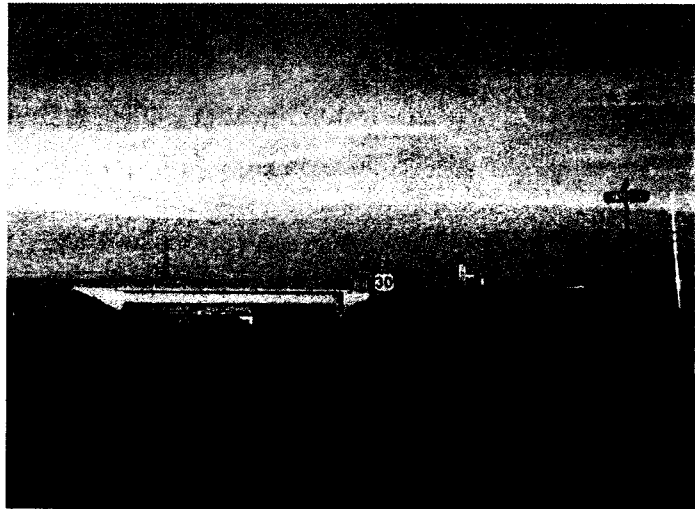
The forecasts and analysis for the year 2030 No-Build conditions, with and without the Lewis & Clark Drive extension, resulted in the following findings:

- Based on the growth assumptions described in this memo and without the Lewis & Clark Drive extension in place:
 - The westbound approach at the Columbia Avenue/Laurel Lane intersection will operate with lengthy delays and insufficient capacity;
 - The I-84 Eastbound off-ramp at the POM interchange will operate with lengthy delays, but with sufficient capacity; and
 - Forecast 95th-percentile queues on the I-84 Westbound off-ramp at the POM interchange will be close to encroaching on the deceleration distance required for vehicles exiting the freeway.
- The Lewis & Clark Drive extension to US 730 is anticipated to provide sufficient relief to the above mentioned problem areas, with all study intersections meeting their applicable operational standard.
 - The Lewis & Clark Drive connection to US 730 could operate acceptably as a minor-street stop-controlled intersection. Turn lanes would be warranted on US 730.

Section 6
Concept Development and Analysis

CONCEPT DEVELOPMENT AND ANALYSIS

This section documents the development and evaluation of the local circulation and access concepts for the IAMP. Ten unique concepts were developed and taken through a thorough screening process that included input from the TAC, PAC, local property and business owners, and the public at-large. Based on results of the initial screening, a refined analysis was conducted that resulted in the identification of the preferred transportation



improvement plan. The following subsections document the concepts that were evaluated and the results of the screening process.

Concept Development Process

The development of the initial interchange concepts for the IAMP began with three separate design workshops. The first two workshops were held for members of the TAC and PAC committees, while the third workshop was held for interested citizens, business owners, and landowners in a public open house setting. All three workshops were held on February 17th, 2011.

Within each workshop, participants were presented with an overview of applicable interchange design forms and basic design parameters. Following these presentation overviews, participants were asked to sketch their ideas for improving circulation at the interchange and within the immediate interchange study area.

Following the completion of the TAC, PAC, and public workshops, the project team took all of the individual design ideas and grouped them into common themes. After the initial grouping, each set was further sorted into common and unique interchange concepts. Based on this process, a representative concept diagram was developed from the common and unique interchange form concepts. As part of this process, the project team made some technical refinements to the interchange form concepts to ensure basic design parameters were being met. This process resulted in ten different concepts for the POM Interchange area.

Concept Summaries

Each of the concepts developed for the POM Interchange and their key design components are described below. Access management improvements around the interchange are essentially the same between most concepts and are described in greater detail in Section 7. Detailed double-line drawings of concepts that passed the initial screening and moved forward for more detailed analysis can be found later in this section. Single-line illustrations of the other concepts can be found in the *Technical Appendix*.

CONCEPTS #1

This concept would involve the following changes/improvements:

- The Columbia Avenue/Laurel Lane intersection would be realigned to the north, increasing the spacing from the I-84 Westbound ramp terminal from approximately 200 feet to approximately 700 feet.

CONCEPT #2

This concept would involve the following changes/improvements:

- Columbia Avenue would be widened to the north to provide an additional westbound through lane through the Laurel Lane intersection. This lane would be separated from the existing westbound lane and would act as a bypass lane allowing westbound through traffic to flow freely through the Laurel Lane intersection.
- Lindsay Way would no longer be able to access Columbia Avenue in its current location. Alternate access to the undeveloped parcels on the north side of Columbia Avenue would be provided via an access road connecting to Columbia Avenue on the east side of the property and south of Rippee Road.

CONCEPT #3

This concept would involve the following changes/improvements:

- Laurel Lane would be widened between Columbia Avenue and Yates Lane to provide a center turn lane.

CONCEPT #4

This concept would involve the following changes/improvements:

- Re-grading the east and west shoulders of Laurel Lane to provide intersection sight distance at Yates Lane (355 feet of intersection sight distance for southbound left-turning vehicles from Laurel Lane onto Yates Lane and 610 feet of intersection sight distance for westbound traffic on Yates Lane approaching Laurel Lane).
- A new Collector street connection to Yates Lane that would access Laurel Lane just north of the existing BPA transition easement.
- The existing Yates Lane Laurel Lane intersection would be restricted to right-in/right-out access only.
- Realigning Laurel Lane south of the I-84/Laurel Lane eastbound ramp terminal to improve the vertical and horizontal profile.

CONCEPT #5

This concept would involve the following changes/improvements:

- A roundabout would be constructed at the Yates Lane/Laurel Lane intersection along with modifications to the Laurel Lane and Yates Lane approaches.

CONCEPT #6

This concept would involve the following changes/improvements:

- Starting at its current intersection with Yates Lane, Laurel Lane would be realigned to the east of its existing alignment such that it travels straight up the grade instead of winding through it. Laurel Lane would curve around the existing residence south of the grade and then connect back to its existing alignment approximately 1,200 feet south of Yates Lane. The existing alignment of Laurel Lane would end in a cul-de-sac just before the downgrade. To improve spacing from the I-84 Eastbound ramp terminal, Yates Lane would be realigned further to the south.

CONCEPT #7

This concept would involve the following changes/improvements:

- The I-84 Westbound off-ramp, Laurel Lane from the I-84 Westbound ramp terminal to Columbia Avenue, and Columbia Avenue east of Laurel Lane would all be widened to allow for free-flowing right-turns for vehicles traveling from I-84 Westbound to eastbound Columbia Avenue (i.e., traffic exiting I-84 Westbound and destined for Columbia Avenue

eastbound would travel in a dedicated lane through the ramp terminal and Columbia Avenue intersections without needing to stop).

CONCEPT #8

This concept would involve the following changes/improvements:

- The I-84 Eastbound ramps would be reconstructed in a Parclo-A configuration with an entering loop ramp from Laurel Lane onto I-84 Eastbound and with the ramp terminal relocated south on Laurel Lane to approximately across from the existing Yates Lane intersection.
- Laurel Lane would be reconstructed south of the new ramp terminal to improve sight-distance and roadway grades.
- A new connection to Yates Lane would be constructed approximately 1,200 feet south of the existing Yates Lane intersection with Laurel Lane, as in Concept #4.
- The existing Yates Lane intersection with Laurel Lane would be closed due to the relocation of the I-84 ramp terminal.

CONCEPT #9

This concept would involve the following changes/improvements:

- The I-84 ramps would all be extended to provide additional room for vehicles to accelerate when entering the freeway and to decelerate safely before stopping at the ramp terminal when exiting the freeway.

CONCEPT #10

This concept would involve the following changes/improvements:

- The existing interchange would be relocated nearly ½-mile to the east.
- Columbia Avenue would be realigned south of Rippee Road to connect with the new interchange roadway. This realignment would result in traffic traveling to and from the southwest of the connection being stop-controlled at the new intersection while traffic on the new connecting roadway and Columbia Avenue to the northeast of the intersection would travel freely through the intersection.
- The new interchange roadway would connect with Laurel Lane approximately 1,200 feet south of Yates Lane.



Concept Screening

In order to arrive at the preferred transportation improvement plan, the concepts went through three levels of screening. The first level was a high-level screening to determine if any of the concepts did not meet the basic purpose of the project. After this, a second level was applied to the concepts involving a qualitative assessment of each concept based on the project's adopted evaluation criteria. Following this screening, the remaining concepts were examined quantitatively to determine the final preferred concepts.

The following section provides detailed explanation of this screening process and identifies which concept was selected by the TAC and PAC as the preferred transportation improvement plan. The *Technical Appendix* contains more details about the screening process.

PRELIMINARY PROBLEM STATEMENT SCREENING

The project team first performed a preliminary assessment to determine if any of the concepts were not meeting the basic intent of the project purpose and problem statement. The official Purpose and Problem Statement, as approved by the TAC and PAC is outlined below:

Purpose of the Project:

The IAMP is a strategic transportation plan that is designed to protect the long-term function of the Interstate 84 (I-84) / Laurel Lane (Exit 165, aka POM interchange) and the I-84 / US 730 interchanges by preserving the capacity of the interchange while providing safe and efficient operations between connecting roadways. The IAMP will identify land use management strategies, short-term and long-term transportation improvements, access management goals, and strategies to fund identified improvements.

Problem Statement:

Located in the eastern portion of the City of Boardman, the Port of Morrow (POM) is an intermodal transport hub for commodities throughout Oregon, Washington, and Idaho. The POM takes full advantage of its location at the crossroads of I-84, US 730, the Columbia River, and the Union Pacific Railroad.

Under House Bill 2001, the OTC allocated funds to the POM for extending Lewis & Clark Drive to US 730 and constructing Gar Swanson Drive to connect to Lewis & Clark Drive. Special condition of

approval for this funding was to complete an IAMP for the I-84/Laurel Lane (POM) and I-84/US 730 interchanges².

While sufficient to meet today's needs, it is recognized that long-term growth within the POM will likely cause the POM interchange ramp terminals to fall below ODOT's mobility standards through the year 2030. In addition, the proximity of the POM and its supporting local circulation network does not meet the desired access spacing standards for major interchange ramp terminals. As such, an IAMP is sought to identify opportunities to improve long-term operations at the ramp terminals, improve the close intersection spacing, and do so in a way that minimizes impacts to freight mobility and POM properties.

It was generally concluded that all of the interchange concepts met the basic intent of the project purpose and problem statement as reproduced above.

BASIC QUALITATIVE CONCEPT SCREENING

To assist in the evaluation process, the project team reviewed the adopted evaluation criteria and developed a screening level evaluation process by which each of the concepts could be evaluated at a high level qualitative perspective. As a part of this process, it was recognized that at this particular level of evaluation, certain evaluation criteria could not be applied to each concept because the criterion was determined to be too specific, required a higher level of detailed information, or was a non-differentiating factor. In these instances, a screening level evaluation was not applied to the concepts. The following outline lists the five screening level categories and the selected evaluation criteria within each category that were investigated as part of this process for each of the interchange areas.

Category #1 - Transportation

Evaluation Criteria - Addresses future operations issues if Lewis & Clark Drive is not extended to US 730

Category #2 - Land Use

Evaluation Criteria - Level of right-of-way (ROW) impacts

Category #3 - Cost/Implementation

Evaluation Criteria - Level of construction costs

²The IAMP for the I-84/US 730 interchange is contained in a separate plan, *I-84/US 730 Interchange Area Management Plan*.

Evaluation Criteria – Construction challenges

Category #4 – Environmental

Evaluation Criteria – Level of environmental impacts

Category #5 – Accessibility

Evaluation Criteria – Meets or moves in the direction of the access spacing standards

Based on the criteria outlined above, an evaluation matrix for each concept was created. These matrices are contained within Attachment “B.” A summary of the qualitative screening process is provided in Table 6-1 below. (Note: In general, a “+” indicates the interchange concept is positively meeting the basic parameters of the evaluation criterion, a “-” indicates the interchange concept is not meeting the basic parameters of the evaluation criterion, and a “0” indicates the interchange concept is neither positively nor negatively meeting the basic intent of the evaluation criterion. See the Technical Appendix for a detailed explanation of the screening level scoring definitions).

Table 6-1 Summary of Qualitative Screening Process

Evaluation Criteria	Concept									
	#1	#2	#3	#4	#5 ¹	#6	#7	#8	#9	#10
Operations	0	0	0	0		0	0	+	0	+
ROW Impacts	-	0	+	-		-	0	-	+	-
Cost	0	0	0	0		0	0	-	0	-
Construction Feasibility	+	+	-	+		-	-	-	+	+
Environmental Impacts	+	+	+	+		+	+	+	+	-
Access Spacing	0	0	-	+		0	-	+	-	+

¹ Concept #5 was considered fatally flawed (see the Technical Appendix for an explanation)

INITIAL SCREENING RESULTS

At a meeting on April 7, 2011, the TAC and PAC were presented with general descriptions, graphical layout illustrations, and a qualitative assessment of the various advantages/disadvantages of the concepts. Upon reviewing the preliminary interchange layouts and advantages and disadvantages of each, both the TAC and PAC committee members assisted in the screening of concepts that would move forward for a more detailed quantitative evaluation.

After going through the screening process, the TAC and PAC committees determined that a number of concepts either did not adequately address current and future operational issues, had significant impacts, or posed significant cost/constructability/policy problems. Those concepts and the main issues behind their elimination for further study are detailed in the *Technical Appendix*. For summary purposes, they are briefly outlined in Table 6-2 below.

Table 6-2 Recommended List of Concepts to Move Forward in the Evaluation Process

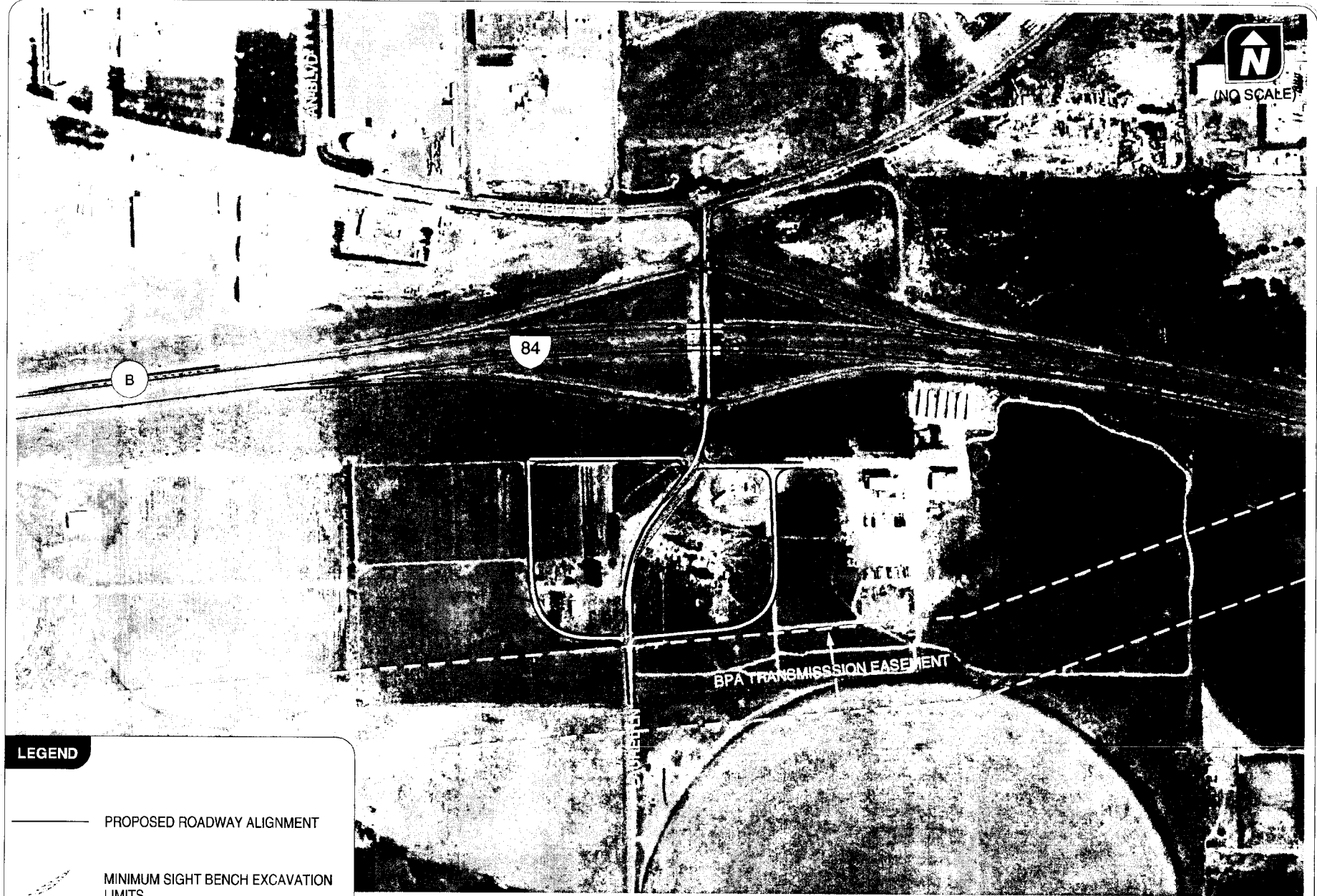
Concepts	Recommended for Further Evaluation by the TAC and PAC	Final Selection/ Primary Disadvantages to Concept
1	No	No – Operations, Land Use Impacts
2	No	No – Cost, Operations
3	Yes	Yes
4	Yes	Yes
5	No	No – Constructability
6	No	No – Cost, Land Use Impacts
7	No	No – Cost, Operations
8	No	No – Cost
9	Yes	Yes
10	No	No – Cost

Based on these findings and feedback from the PAC and TAC, Concepts 3, 4 and 9 were moved forward for detailed evaluation. Furthermore, based on direction from the TAC and PAC and their complimentary nature, all three concepts were combined into an overall concept for evaluation. This overall concept is shown in Figure 6-1, with proposed lane configurations and traffic control devices shown in Figure 6-2.



DETAILED QUANTITATIVE EVALUATION

A more detailed evaluation was performed of the concepts remaining after the basic qualitative screening process was completed. This analysis consisted of quantitative operational and cost evaluations. A more detailed description of this evaluation process may be found in the *Technical Appendix*.

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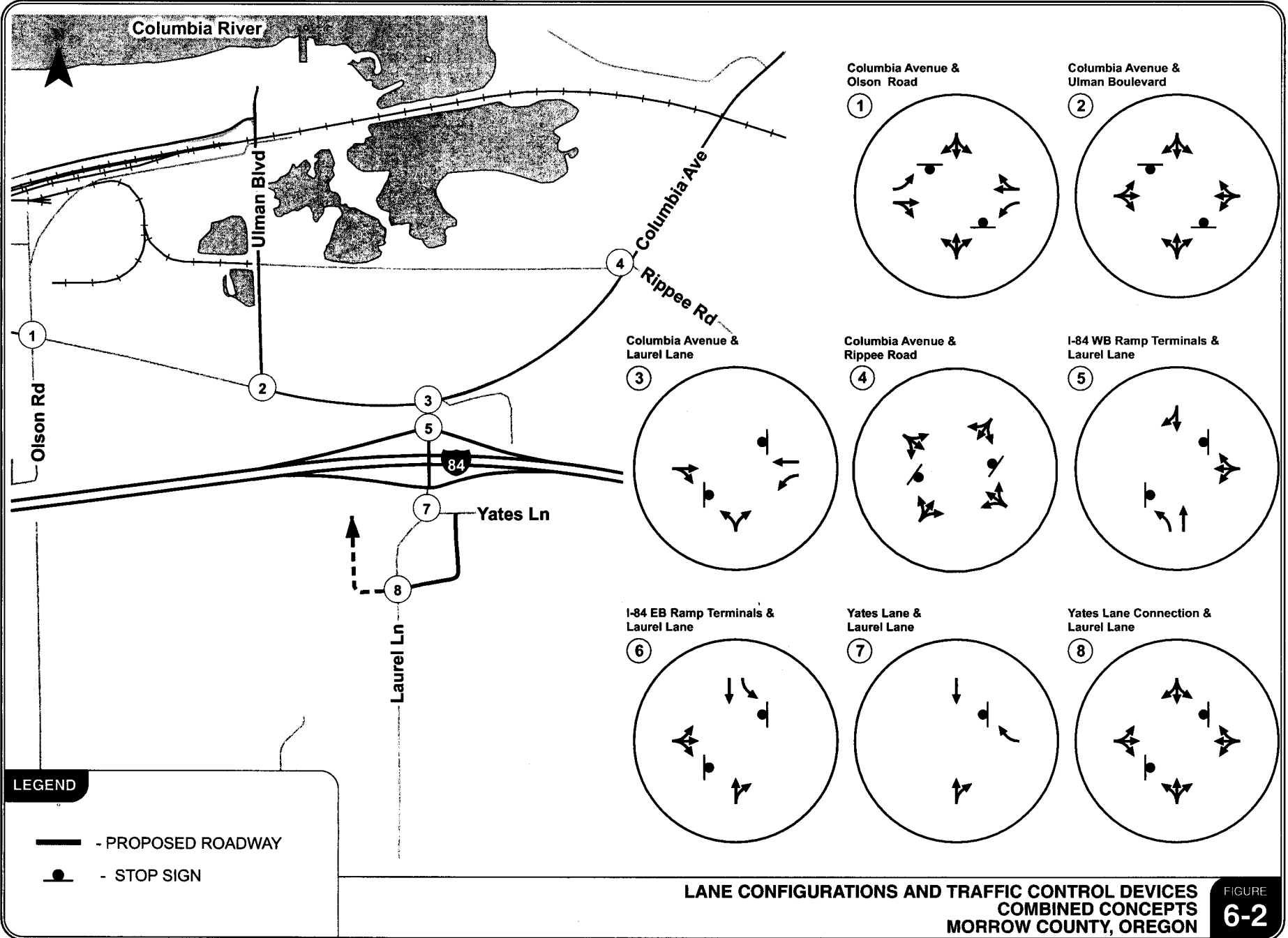


LEGEND

-  PROPOSED ROADWAY ALIGNMENT
-  MINIMUM SIGHT BENCH EXCAVATION LIMITS

PORT OF MORROW INTERCHANGE CONCEPTS
BOARDMAN, OREGON

FIGURE
6-1



H:\profile1

Transportation Operations

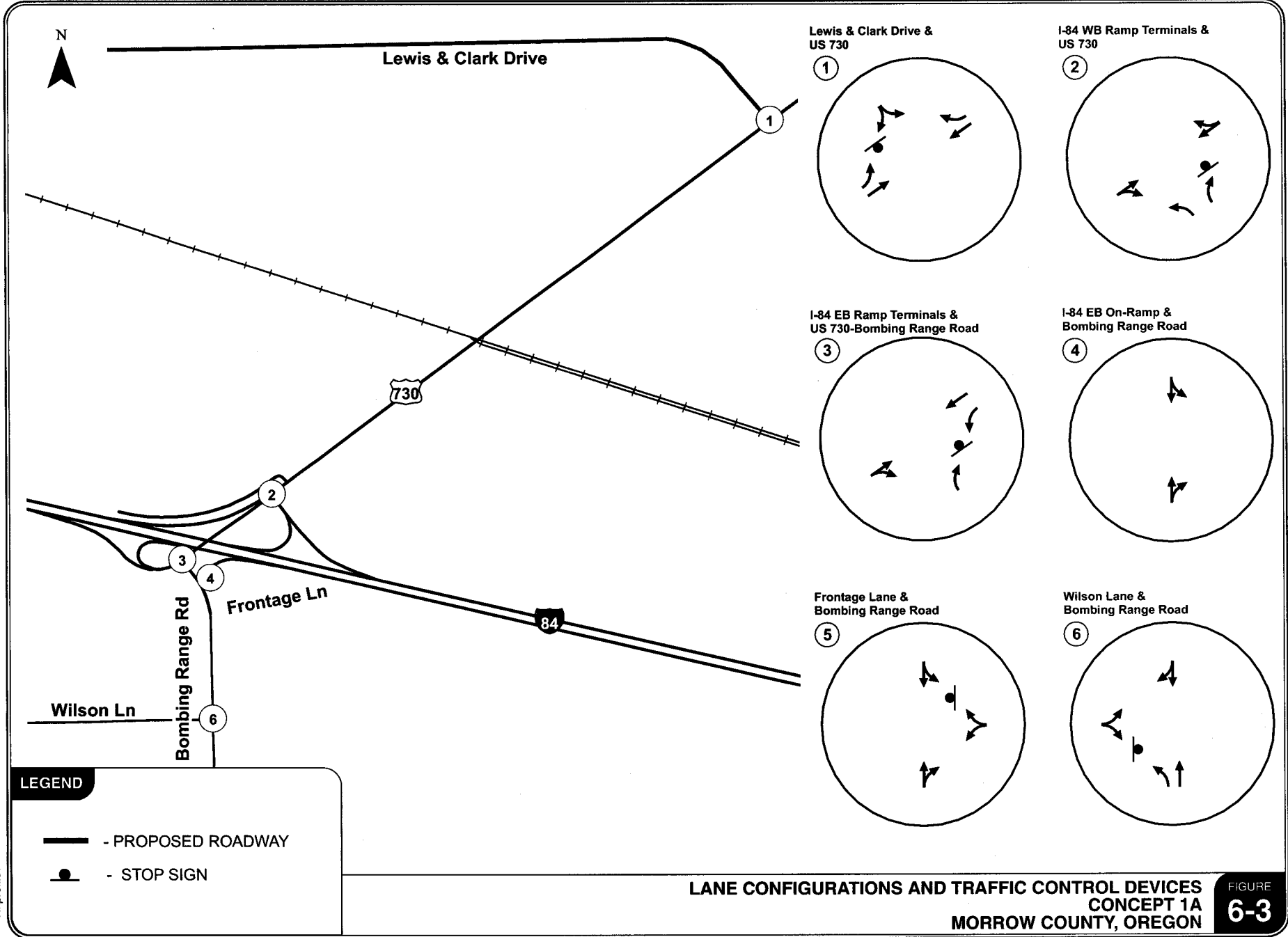
A transportation operations analysis was performed on the remaining concepts according to the methodologies and standards previously outlined in Section 4. Figures 6-3 and 6-4 show the resulting traffic operations analysis without and with an extension of Lewis & Clark Drive to US 730. Operational analysis results without and with this extension are shown in order to demonstrate the affect that improvements at the I-84/US 730 interchange will have on the POM interchange.

These figures show that the POM concepts alone will not be enough to improve forecast operations at the Columbia Avenue/Rippee Road intersection and I-84 Eastbound ramp terminals to acceptable levels without an extension of Lewis & Clark Drive. However, the center turn lane from POM Concept 3 will provide some operational benefit at the I-84 ramp terminals and minimize the possibility of queues of left-turning vehicles blocking through movements on Laurel Lane around the ramp terminals. Concept 4's relocation of the full movement access to the businesses on Yates Lane further south on Laurel Lane away from the I-84 Eastbound ramp terminals will reduce the possibility of vehicular queues on Laurel Lane backing up in front of the ramp terminals. The lengthening of the I-84 ramps from Concept 9 will improve freeway operations by providing vehicles more distance to accelerate onto I-84 and improve safety on the off-ramps by providing longer deceleration distances and more room for vehicles to stack up before they back into the deceleration distance.

Figure 6-4 shows that all intersections are forecast to operate acceptably assuming that Lewis & Clark Drive is extended to US 730.

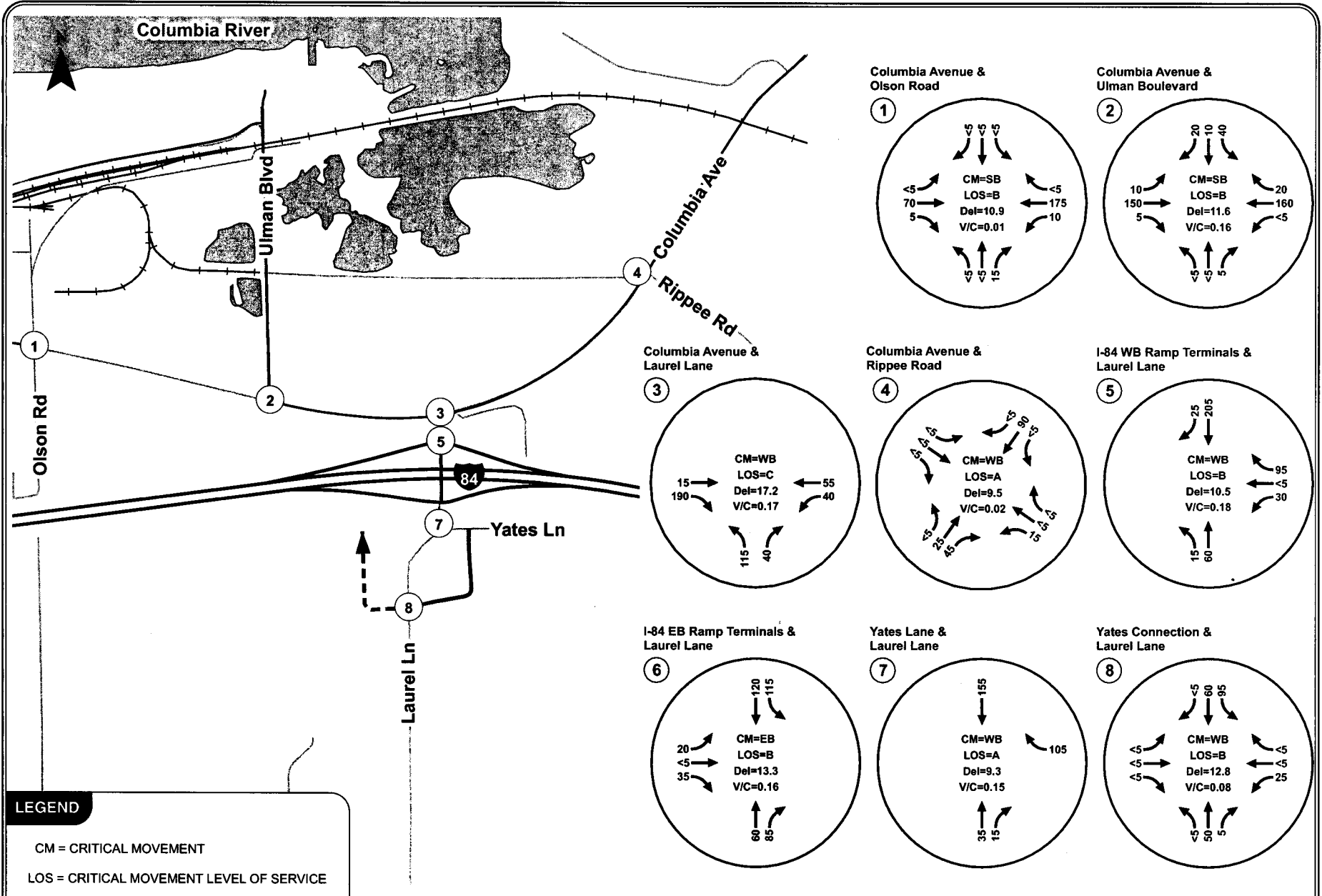
Preliminary Cost Estimates

Preliminary cost estimates were prepared for each concept. These estimates are preliminary and subject to change as the concepts move into more detailed development. Table 6-3 summarizes the preliminary construction and ROW cost estimates for the concepts. The *Technical Appendix* contains the detailed cost estimate sheets.



LANE CONFIGURATIONS AND TRAFFIC CONTROL DEVICES
CONCEPT 1A
MORROW COUNTY, OREGON

FIGURE
6-3



LEGEND

- CM = CRITICAL MOVEMENT
- LOS = CRITICAL MOVEMENT LEVEL OF SERVICE
- Del = CRITICAL MOVEMENT CONTROL DELAY
- V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

**YEAR 2030 CONCEPT BUILD TRAFFIC CONDITIONS WITH LEWIS & CLARK DRIVE EXTENSION
 30TH HIGHEST HOUR
 MORROW COUNTY, OREGON**

FIGURE
6-4

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Table 6-3 Preliminary Cost Estimates

Preliminary Cost Estimate			
Concept	Construction	ROW ¹	Total
3	\$800,000	0 ²	\$800,000
4	\$2,500,000	\$160,000	\$2,660,000
9	\$1,500,000	\$0 ²	\$1,500,000
Combined Concepts	\$4,800,000	\$160,000	\$4,960,000

¹ROW costs are estimated by the project team based on area property values and are unofficial

²The identified improvements are anticipated to occur within existing ODOT Right-of-Way

The concepts are estimated to cost from approximately \$0.8 to \$2.7 million each. Constructing all three concepts would cost approximately \$5.0 million. These costs are primarily construction costs as much of the improvements would likely take place on property already owned by ODOT.

After reviewing this analysis the TAC and PAC concluded that the combined concepts should be moved forward as the preferred improvement plan. They are complimentary in nature and could be phased in as they are warranted.

Interchange Area Access Management Improvements

Access to the parcels on the west side of Laurel Lane across from Yates Lane would need to be addressed under any of the concepts. These currently vacant parcels will require access when they develop. As discussed below, access to these parcels could be provided directly across from Yates Lane in the near-term. However, in the long-term, access would need to be provided via a new Collector Street connection that would access Laurel Lane just north of the existing BPA transmission easement, similar to the proposed connection to Yates Lane.

Phasing of Laurel Lane Access Improvements

As shown in Figure 6-1, the preferred group of concepts would improve access spacing on Laurel Lane by constructing new public street connections that would access Laurel Lane just north of the BPA transmission easement. These connections would provide access to the parcels immediately south of the interchange and allow for Yates Lane, and any access constructed across from it, to be restricted to right-in/right-out movements. This improved spacing would decrease the likelihood of queues of vehicle waiting to turn into Yates Lane from backing up in front of the ramp terminal, as well as decrease the number of conflict points in a relatively short amount of space.

In order to determine when these new connections would be warranted, the project team analyzed potential development scenarios on the parcels immediately south of the interchange. This analysis assumed development that would be allowed under the current zoning of the parcels. It does not consider whether such levels of development are likely to occur in the next 20 years. This analysis is performed by adding trips from these development scenarios, calculated in accordance with the ITE *Trip Generation* manual for the weekday p.m. peak hour, on to the volumes shown in Figure 6-4 (with Lewis & Clark Drive extension). Table 6-4 summarizes the results of this analysis.

Table 6-4 Access Spacing Improvement Triggers

Connection	Trigger	Approximate Level of Development Required to Meet Trigger
East Side (Yates Lane)	Peak southbound left-turn 95 th -percentile queue backs up to the I-84/Laurel Lane eastbound ramp terminal	<ul style="list-style-type: none"> • 135,000 square feet of retail space; and • Truck stop with 8 truck and 12 auto fueling positions; or • Any development producing approximately 360 southbound left-turns onto Yates Lane during the peak hour
West Side (Currently Undeveloped)	Eastbound approach to Laurel Lane (assuming one is constructed) operates at LOS "E" or worse.	<ul style="list-style-type: none"> • 90,000 square feet of retail space; • 161 room motel with restaurant; and • 60 space RV park; or • Any development producing approximately 215 eastbound left-turning vehicles onto Laurel Lane from the west side

Section 7
Interchange Area Management Plan

INTERCHANGE AREA MANAGEMENT PLAN

The POM IAMP provides a transportation improvement plan and an Access Management Plan (AMP). The transportation improvement plan includes interchange and local circulation improvements, right-of-way requirements, as well as a phasing schedule. The AMP documents the justification for the necessary deviations to ODOT's access management standards.



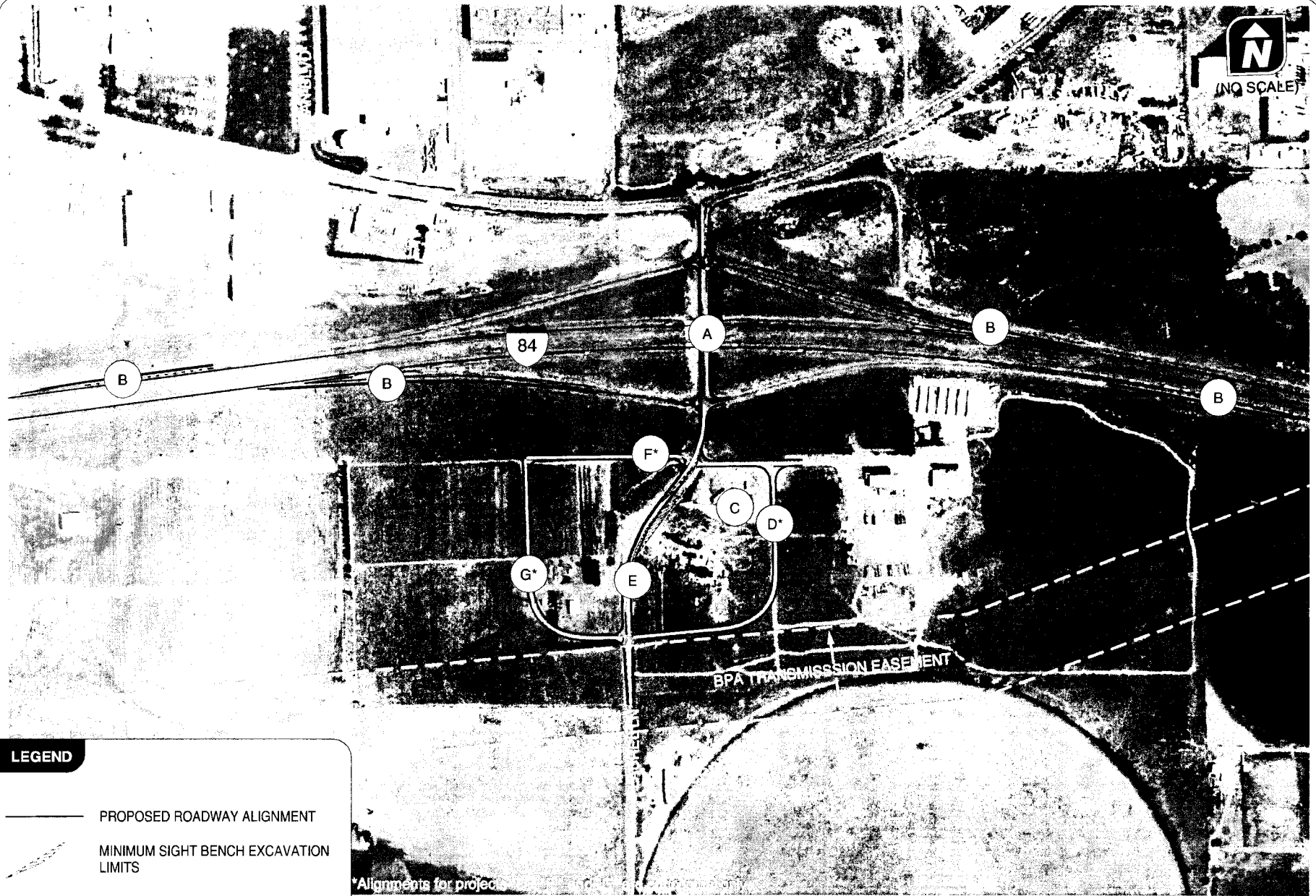
Through adoption by the City of Boardman, Morrow County, and ODOT, future development located within the Interchange Management Study Area (IMSA) will be required to make circulation and access improvements, as identified in this plan. Implementation of the IAMP is expected to preserve the functional integrity of the interchange over time and ensure viable access to existing and future land uses. Finally, the action items contained within the implementation plan (Section 8) will ensure that proper coordination between the various stakeholders occur to allow the IAMP to serve as a long-term dynamic planning tool.

Transportation Improvement Plan Overview




A comprehensive transportation improvement plan including a local circulation and access plan within the IMSA was developed based on the concept screening and evaluations outlined in Section 6. Figure 7-1 illustrates the new transportation facilities and the near- and long-term transportation improvement plans, while Figure 7-2 provides a closer look at improvements south of the interchange. This plan includes the development of new collector roadways to serve future development south of I-84, realigning and widening Laurel Lane, and modifying other existing roadways, ramps, and intersections. Each transportation improvement identified in the figure is described in Table 7-1.

The following section provides details on the major improvements identified in the Transportation Improvement Plan, including possible deviations from standards that may be required.

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LEGEND

-  PROPOSED ROADWAY ALIGNMENT
-  MINIMUM SIGHT BENCH EXCAVATION LIMITS
-  IMPROVEMENT (SEE TABLE 7-1 FOR DESCRIPTION & COST ESTIMATE)




**PORT OF MORROW IAMP OVERALL TRANSPORTATION IMPROVEMENT PLAN
BOARDMAN, OREGON**

**FIGURE
7-1**

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LEGEND

-  PROPOSED ROADWAY ALIGNMENT
-  MINIMUM SIGHT BENCH EXCAVATION LIMITS
-  IMPROVEMENT (SEE TABLE 7-1 FOR DESCRIPTION & COST ESTIMATE)

**PORT OF MORROW IAMP TRANSPORTATION IMPROVEMENT PLAN
SOUTH OF POM INTERCHANGE
BOARDMAN, OREGON**

**FIGURE
7-2**

Table 7-1 POM IAMP Transportation Improvement Plan

Figure 7-1 Label	Near-Term Improvement Description	Trigger for Improvement	Estimated Cost	Potential Funding Source
A	<ul style="list-style-type: none"> Widen Laurel Lane to include a 16' wide center turn lane between Columbia Avenue and the I-84 Eastbound ramp terminal. 	Southbound or northbound 95 th percentile vehicle queues exceed the available storage between the I-84 ramp terminals.	\$0.8M	PDF STIP
B	<ul style="list-style-type: none"> Lengthen the I-84 eastbound and westbound on- and off-ramps (to current design standards) to provide additional room for vehicles to accelerate when entering the freeway and to decelerate when exiting the freeway. 	In conjunction with future I-84 mainline resurfacing projects.	\$1.5M	STIP PDF
C	<ul style="list-style-type: none"> Acquire right-of-way and re-grade the east and west shoulders of Laurel Lane to provide intersection sight distance at Yates Lane (355 feet of intersection sight distance for southbound left-turning vehicles from Laurel Lane onto Yates Lane and 610 feet of intersection sight distance for westbound traffic on Yates Lane approaching Laurel Lane). 	New development along Yates Lane that generates 25 or more daily trips.	\$0.06M ¹	PDF
Long-Term Improvement Description				
D	<ul style="list-style-type: none"> Construct a new Collector street connection to Yates Lane that would access Laurel Lane just north of the existing BPA transmission easement. Restrict the Laurel Lane/Yates Lane intersection to right-in/right-out access only. 	Peak southbound left-turn 95 th -percentile queue backs up to the I-84/Laurel Lane eastbound ramp terminal.	\$1.2M	PDF
E	<ul style="list-style-type: none"> Realign Laurel Lane south of the I-84/Laurel Lane eastbound ramp terminal to improve the vertical and horizontal profile. Provide a southbound left-turn lane along Laurel Lane at the new Yates Lane access described in Project "D" above. 	Peak southbound left-turn 95 th -percentile queue backs up to the I-84/Laurel Lane eastbound ramp terminal. -- or -- Eastbound approach to Laurel Lane (described in Project "F" below) operates at LOS "E" or worse.	\$1.4M	PDF
F	<ul style="list-style-type: none"> Construct a new Collector Street connection to the parcels in the southwest quadrant of the interchange. This connection would access Laurel Lane directly across from Yates Lane. 	New development requiring access east of Laurel Lane.	\$0.03M	PDF
G ²	<ul style="list-style-type: none"> Construct a new Collector Street connection to the remaining parcels in the southwest quadrant of the interchange. The connection would access Laurel Lane just north of the existing BPA transmission easement. Restrict the access described in Project "F" above to right-in/right-out access only. 	Eastbound approach to Laurel Lane (described in Project "F" above) operates at LOS "E" or worse.	\$1.8M	

STIP – State Transportation Improvement Project

PDF – Private Development Funds

¹ - Construction costs only, does not include right-of-way costs

² – New Collector roadway may be waived by the City if all parcels to the east or west of Laurel Lane are consolidated, developed, and owned by a single entity.

NEAR-TERM IMPROVEMENTS

The following near-term improvements are identified for Laurel Lane and the I-84 ramps.

A). Laurel Lane Widening (Yates Lane to I-84 Westbound Ramp Terminal)

Laurel Lane will be widened to include a center turn lane between Yates Lane and the I-84 Westbound ramp terminal. A 16' wide center turn lane will allow left-turning vehicles on Laurel Lane to wait for a gap in traffic to make their turn without impeding free flowing through or right-turning traffic; thereby improving operations and reducing the likelihood of vehicles stacking from one ramp terminal through another. *This improvement would be constructed when one of the ramp terminal intersections along this section of Laurel Lane fails to meet its operational standard or when the 95th-percentile queue from one intersection stacks in front of another.*

B). I-84 Ramp Improvements

The I-84 eastbound and westbound on- and off-ramps do not meet current acceleration and deceleration design standards. These ramps will be lengthened to provide additional room for vehicles to accelerate when entering the freeway and to decelerate when exiting the freeway. The extensions will improve safety on I-84 and at the ramp terminal intersections. *The ramp improvements will be constructed in conjunction with future I-84 mainline resurfacing projects.*

C). Laurel Lane Sight Distance Improvements

To improve intersection sight distance at the Laurel Lane/Yates Lane intersection, existing embankment will be re-graded. The embankments alongside Laurel Lane will be excavated to provide approximately 355 feet of intersection sight distance for southbound left-turning vehicles from Laurel Lane onto Yates Lane and 610 feet of intersection sight distance for westbound approach vehicles on Yates Lane approaching Laurel Lane. *This improvement will be conditioned upon the approval of new development on Yates Lane that generates 25 or more daily trips.*

LONG-TERM IMPROVEMENTS

Long-term improvements to the transportation system involve developing new connections to the properties immediately south of the interchange to improve access spacing and operations along Laurel Lane.

D). Yates Lane Access Connection

A new connection to Yates Lane from Laurel Lane will be constructed (at City Collector standards) just north of the existing BPA transmission easement. The existing Yates Lane intersection will remain as a

right-in/right-out access. *This improvement will be warranted when the southbound left-turn 95th-percentile queue backs up to the I-84/Laurel Lane eastbound ramp terminal.*

E). Laurel Lane Realignment

To support long-term commercial growth on the south side of the interchange, Laurel Lane will be realigned within the sight distance grading identified under Project "C" to improve the horizontal and vertical alignment. *The need for the realignment will be triggered by the need for the new Yates Lane connection described in Project "D."*

F). Near-Term SW Quadrant Access

To serve potential future development in the southwest quadrant of the interchange, a new access to Laurel Lane (constructed at City Collector standards) will be provided across from Yates Lane.

G). Long-Term SW Quadrant Access

A new Collector street connection will be constructed off of Laurel Lane just north of the BPA power transmission easement to provide access to the parcels in the southwest quadrant of the interchange. *The need for this improvement is dependent upon additional development within the southwest quadrant of the interchange and the operational threshold of Project "F". When this connection is made, the near-term access described in Project "F" will be restricted to right-in/right-out access.*

POSSIBLE EXCEPTIONS/DEVIATIONS FROM STANDARDS

The deviations that will be required for the IAMP transportation improvement plan are related to the access spacing standards outlined under Oregon Administrative Rule 734, Division 51 and the Oregon Highway Plan (OHP). These deviations are discussed in the access management subsection below.

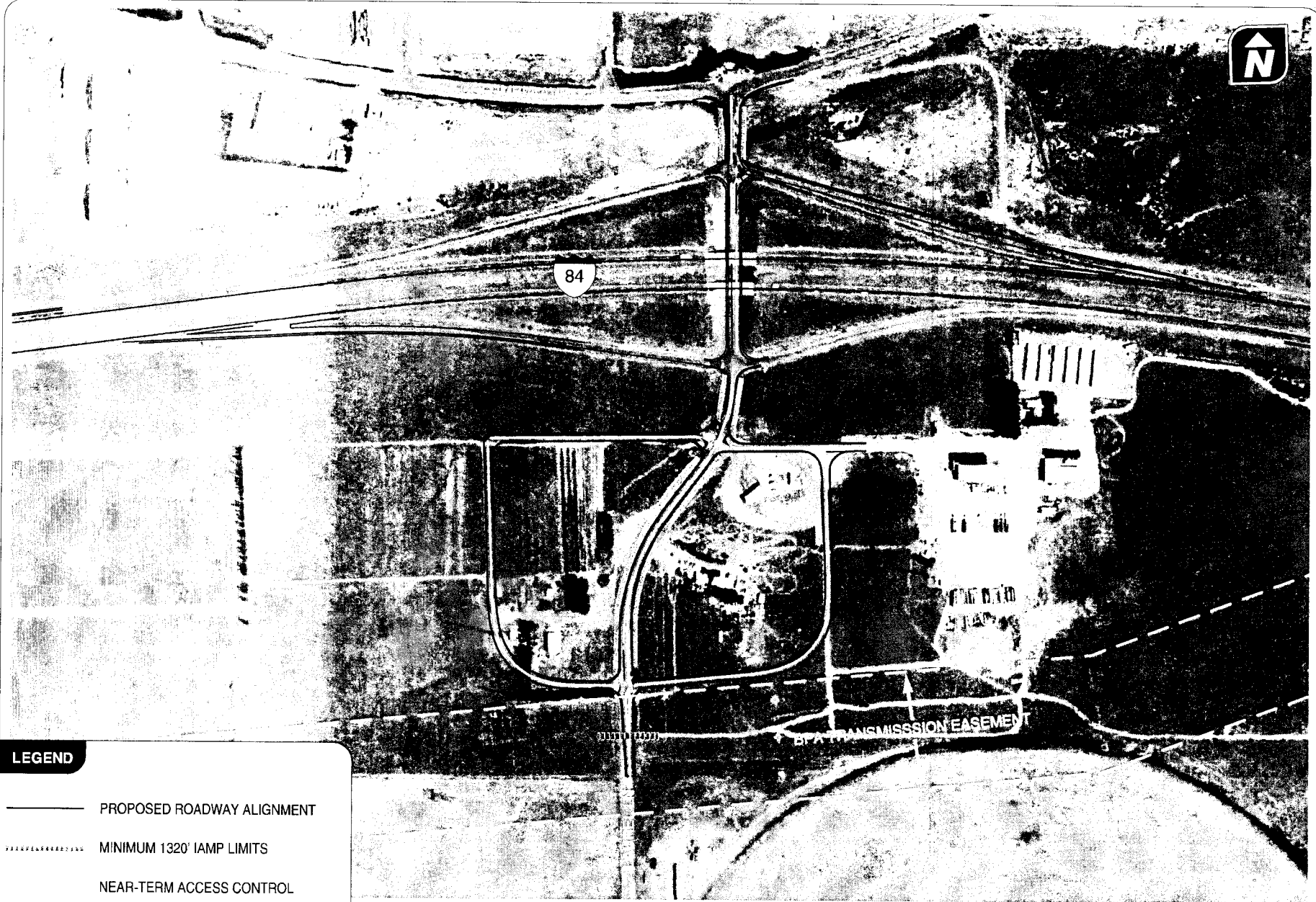
Access Management Plan

Access locations within the IMSA were evaluated based on ODOT's Division 51 Access Management standards and an assessment of traffic operations and safety as described in Action 3C.3 of the 1999 Oregon Highway Plan. Accordingly, the Access Management Plan (AMP) will preserve the operational integrity and safety of the interchange and primary roadways (e.g. Laurel Lane) serving it, while maintaining viable access to all parcels in the IMSA. The AMP contains a plan for actions to be taken on a City of Boardman roadway (i.e., Laurel Lane) and adopted into the City's TSP.





An AMP is identified for near- and long-term timeframes. The overall AMP is illustrated in Figure 7-3. Justification is also provided for locations where deviations from ODOT's access management standards



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LEGEND

-  PROPOSED ROADWAY ALIGNMENT
-  MINIMUM 1320' IAMP LIMITS
-  NEAR-TERM ACCESS CONTROL
-  LONG-TERM ACCESS CONTROL

**PORT OF MORROW IAMP ACCESS MANAGEMENT PLAN
BOARDMAN, OREGON**

**FIGURE
7-3**

are necessary. Access management will be implemented as part of ODOT and City project development and delivery processes or as future land use actions occur.

GENERAL ACCESS MANAGEMENT IMPLEMENTATION

Under ODOT's current access management policy, the 1999 Oregon Highway Plan stipulates that the desired distance between an interchange ramp terminal and the first full approach (public or private) on the crossroad should be a minimum of 1,320 feet (¼-mile). The first right-in/right-out access should be a minimum of 750 feet from the ramp terminal. Currently, there are three (3) private and three (3) public approaches within 1,320 feet of the interchange ramp terminals, as was previously documented in Figure 4-6.

EXISTING PRIVATE APPROACH POLICY

ODOT guarantees Access Permit protection, as allowed within ORS 374.305 & 310, to all existing private accesses. Each will remain a valid access as long as the existing uses remain on property/site and there is no capital improvement project that would trigger review of the access (per OAR 734.051.0285). An access evaluation will be required when any of the following land use actions leads to a peak hour increase in 50 trips or more over the prior use, a daily increase of 500 trips or more over the prior use, or the increase represents a 20 percent or more increase in trips on a typical day/peak hour; if there is an identified safety or operational problem related to the approach; if the approach does not meet sight distance requirements; or if the daily traffic using the approach increases by 10 or more vehicles with a gross vehicle weight equal to or greater than 26,000 pounds:

- Modifications to existing zoning,
- Changes to plan amendment designations;
- Construction of new buildings;
- Increases in floor space of existing buildings;
- Division or consolidation of property boundaries;
- Changes in the character of traffic using the driveway/approach;
- Changes to internal site circulation design or inter-parcel circulation; or
- Reestablishment of a property's use (after discontinuance for four years or more that trigger a Traffic Impact Assessment as defined below) that occurs on the parcels served by the approaches.

In general, the types of improvements identified for accesses within the IMSA include:



- Modifying, mitigating, consolidating, or removing existing approaches pursuant to an access management plan as part of the highway project development and delivery process (OAR 734-051);
- Improving traffic safety and operations by improving the local street network to provide alternate access and reduce conflict points; and,
- Restricting highway access but improving local roadway access by introducing shared access, cross-over easements, and/or consolidated access when separate parcels are assembled for redevelopment, and access via collector or local streets.

The time period over which the following measures will be implemented will depend on the rate of redevelopment within the IMSA and when the transportation improvement plan projects identified previously are constructed. As each parcel redevelops, or upon capital improvement, accesses will be evaluated to determine how they will be modified in order to move in the direction of meeting the access spacing standards and long-term vision of driveway consolidation while still providing access as defined in OAR 734-051.

ACCESS MANAGEMENT

Figure 7-3 illustrates the AMP for the IMSA. The AMP is divided into two timeframes: near-term and long-term. The near-term plan is to not allow new access to Laurel Lane within the ¼-mile limits, except in the southwest quadrant where it may be the only feasible access point for those properties in the near-term. Long-term, the current Yates Lane access will be restricted to right-in/right-out access only, as would any access constructed opposite from it, when the new connections shown in Figure 7-3 are built. As the other properties along this section of Laurel Lane develop, their access will be provided off of either the new Yates Lane collector street or the new southwest quadrant collector street and not on Laurel Lane. The long-term plan would be implemented once the long-term improvements are constructed.

DEVIATIONS TO THE DIVISION 51 ACCESS MANAGEMENT STANDARDS

Six accesses will not meet the applicable OAR Division 51 access spacing standard. A deviation is required under the provisions of OAR 734-51-0135(3) as described below. These deviations will be reviewed by the Region Access Management Engineer. Under the provisions of OAR 734-51-0135(3), the Region Access Management Engineer may approve a deviation if:

- (a) Adherence to spacing standards creates safety or traffic operation problems;*

(b) The applicant provides a joint approach that serves two or more properties and results in a net reduction of approaches to the highway;

(c) The applicant demonstrates that existing development patterns or land holdings make joint use approaches impossible;

(d) Adherence to spacing standards will cause the approach to conflict with a significant natural or historic feature including trees and unique vegetation, a bridge, waterway, park, archaeological area, or cemetery;

(e) The highway segment functions as a service road;

(f) On a couplet with directional traffic separated by a city block or more, the request is for an approach at mid-block with no other existing approaches in the block or the proposal consolidates existing approaches at mid-block; or

(g) Based on the Region Access Management Engineer's determination that:

(A) Safety factors and spacing significantly improve as a result of the approach; and

(B) Approval does not compromise the intent of these rules as set forth in OAR 734-051-0020 (Which states: The purpose of Division 51 rules is to provide a safe and efficient transportation system through the preservation of public safety, the improvement and development of transportation facilities, the protection of highway traffic from the hazards of unrestricted and unregulated entry from adjacent property, and the elimination of hazards due to highway grade intersections.)

The following is a description of the justification for deviation for each of the public accesses requiring a deviation.

Public Access to Columbia Avenue

A deviation to the access spacing requirements identified in OAR Division 51 is required at the Columbia Avenue/Laurel Lane intersection, which is located approximately 275 feet north of the I-84 Westbound ramp terminal, as shown in Figure 7-3. As was mentioned above, a deviation may be approved if:

(a) Adherence to spacing standards creates safety or traffic operation problems

Response: The Columbia Avenue approach cannot be moved further away due to existing development patterns. Removing the connection would force all POM related traffic to utilize the Boardman interchange, which would cause traffic operations issues at that interchange.

Public Access to Yates Lane

A deviation to the access spacing requirements identified in OAR Division 51 is required at the Yates Lane/Laurel Lane intersection, which is located approximately 225 feet south of the I-84 Eastbound ramp terminal, as shown in Figure 7-3. The approach will be restricted to right-in/right-out access only. As was mentioned above, a deviation may be approved if:

(b) The applicant provides a joint approach that serves two or more properties and results in a net reduction of approaches to the highway

Response: Yates Lane and any future road built opposite it will serve multiple properties via the new connections described in Table 7-1. This will allow other access points to be consolidated onto the new connections and utilize this approach.

Public Access to the Yates Lane Collector and the SW Quadrant Collector

A deviation to the access spacing requirements identified in OAR Division 51 is required where the new connecting roadways identified in Table 7-1 and shown in Figure 7-3 access Laurel Lane. This new intersection will be approximately 1,200 feet south of the I-84 Eastbound ramp terminal. As was mentioned above, a deviation may be approved if:

(b) The applicant provides a joint approach that serves two or more properties and results in a net reduction of approaches to the highway

Response: The new connections will allow other access points to be consolidated onto them and utilize this approach and the Yates Lane right-in/right-out access.

(d) Adherence to spacing standards will cause the approach to conflict with a significant natural or historic feature including trees and unique vegetation, a bridge, waterway, park, archaeological area, or cemetery

Response: The new access cannot be placed further south due to the presence of transmission lines.

**Section 8
Implementation**

IMPLEMENTATION

This section describes the IAMP implementation strategy, which includes a POM Interchange Function and Policy Definition and Management Area. The Implementation Plan also includes adoption and monitoring procedures that will ensure transportation improvements are constructed and funded as development occurs and that the improvement plan is updated as needed over time.

To ensure that the IAMP remains dynamic and responsive to changes to the adopted land use and transportation plans, the following actions at the State and local level are recommended:

- Amend the City of Boardman and Morrow County transportation system plans (TSPs), which are the transportation elements of the respective comprehensive plans, to include the recommendations of the IAMP;
- Amend the Oregon Highway Plan (OHP);
- Codify and map an IAMP Management Area that defines the area wherein regulations and requirements associated with protecting the interchange apply (see Figure 8-1);
- Coordinate planning activities pursuant to the Transportation Planning Rule (OAR 660-012);
- Review the IAMP and mobility standards for the interchange prior to adopting local plan amendments.

Plan Elements

In addition to adoption of the IAMP described in Section 7, implementation of the POM IAMP requires adoption of an “Interchange Function and Policy Definition” and IAMP Management Area.




INTERCHANGE FUNCTION AND POLICY DEFINITION

The City of Boardman and Morrow County should adopt a clear definition of the POM Interchange function into their respective comprehensive plan and TSP as a policy to provide direction for management of the interchange area and achieve the objectives and goals of this IAMP. This will help to ensure consistency between future policy decisions with the interchange’s intended function.

The POM interchange provides connections between the I-84, the adjacent POM, and Laurel Lane. I-84 is classified as an Interstate Highway by the OHP and designated as an Expressway and Statewide



LEGEND

- Boardman UGB
-  IAMP Management Area
-  IAMP Overlay District
-  Boardman City Limits

**IAMP MANAGEMENT AREA AND OVERLAY DISTRICT
MORROW COUNTY, OREGON**

**FIGURE
8-1**

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Freight Route. Laurel Lane is an arterial that provides local connectivity between to the POM, eastern portions of Boardman, and rural areas of Morrow County.

Based on this description, the following function and policy definition was developed for the POM Interchange:

“The primary function of the POM interchange is to provide truck and vehicular access to the POM, allowing goods to be transported between the Port and destinations in Oregon, Washington, and Idaho via I-84. A secondary function is to provide access to the residential areas and farm lands on the south side of I-84 and east of the City of Boardman via Laurel Lane, a City arterial.”

INTERCHANGE AREA MANAGEMENT PLAN (IAMP) MANAGEMENT AREA

The City of Boardman is the land use regulatory authority for most of the Interchange Management Study Area (IMSA); for land that is located outside of the City’s UGB, Morrow County is the land use regulatory authority. To ensure the continued operation and safety integrity of the interchange, both the City of Boardman and Morrow County should adopt and map an IAMP Management Area based on the IMSA. Because the City of Boardman already has an adopted and mapped IAMP Overlay District, the can achieve this objective by amending the City’s Comprehensive Plan and Zoning map to include an IAMP Overlay District that encompasses the POM interchange. Future development and land use actions within the IAMP Management Area (the IAMP Overlay District for areas within the City), will be monitored to ensure that volume-to-capacity ratios do not exceed the adopted Oregon Highway Plan mobility standards at the ramp terminals. This can be accomplished through Development Review guidelines included within the proposed amendments to the City and County’s land use and development ordinances as described in the following sections.

Adoption Elements

Implementation of the POM IAMP will occur at several levels of government. Consistent with OAR 734-051, the City of Boardman and Morrow County will identify legislative amendments to adopted transportation system plans and comprehensive plans to incorporate elements of the POM IAMP. In addition, new land use ordinances or amendments to existing ordinances, resolutions, and Inter-Governmental Agreements (IGAs) will be required to ensure that the access management, land use management, and coordination elements of the IAMP are achieved. This adoption process will include Planning Commission/City Council hearings at the City level and Planning Commission/County Court hearings at the County level. Following successful adoption at the City and County levels, the POM IAMP

will be presented to the Oregon Transportation Commission (OTC) for its review and adoption. This should occur prior to transportation improvements as described in this IAMP being constructed.

To implement the POM IAMP, the following actions shall occur:

1. The City of Boardman shall adopt the POM IAMP as part of the City of Boardman Transportation System Plan and Comprehensive Plan. The IAMP, and more specifically the transportation improvements identified in Table 7-1 of Section 7, shall serve as the long range comprehensive management plan for providing the transportation facilities that are specifically addressed in this plan, as well as the Access Management Plan and the planned local street network for the area.
2. Morrow County shall adopt the POM IAMP as part of the Morrow County Transportation System Plan and Comprehensive Plan. The IAMP shall serve as the long range comprehensive management plan for providing the transportation facilities that are specifically addressed in this plan, as well as the Access Management Plan and the planned local street network for the area.
3. The City of Boardman shall amend its Comprehensive Plan and Zoning Map to include the POM IAMP Management Area boundary as part of the City's IAMP Overlay District (see Figure 8-1). In addition, the City shall amend Development Code Chapter 2.5 - Interchange Area Management Plan (IAMP) Overlay District to include the POM IAMP Management Area so that future development in the vicinity of this interchange is subject to requirements pertaining to transportation impact analysis, access management, and agency coordination.
4. Morrow County shall amend its Comprehensive Plan Map and Zoning Map to include the IAMP Management Area boundary. In addition, the County shall amend the Zoning Ordinance and Subdivision Ordinance to include development and land use application requirements pertaining to transportation impact analysis, access management, and agency coordination.
5. The ODOT Regional Access Management Engineer will review and approve the access deviations described in the IAMP.
6. The OTC shall amend the OHP to include the POM IAMP.

TSP AMENDMENTS

The following outline discusses the major Transportation System Plan amendments that will need to occur at the City, County, and State levels to support adoption of the POM IAMP.

City of Boardman

- The City shall adopt the POM Interchange Area Management Plan by reference as an element of the City's Transportation System Plan.
- The following interchange policy statement shall be included in the City of Boardman Transportation System Plan: "The primary function of the POM interchange is to provide truck and vehicular access to the POM, allowing goods to be transported between the Port and destinations in Oregon, Washington, and Idaho via I-84. A secondary function is to provide access to the residential areas and farm lands on the south side of I-84 and east of the City of Boardman via Laurel Lane, a City arterial."
- The IAMP Transportation Improvement Plan, as illustrated in Figure 7-1 and listed in Table 7-1, shall be included in the recommended transportation improvements project list of the Transportation System Plan.

Morrow County

- The County shall adopt the POM Interchange Area Management Plan by reference as an element of the County's Transportation System Plan.
- Upon the County's adoption of the IAMP, parcels within the IMSA and outside the UGB will be subject to the IAMP's Access Management Plan.
- The following interchange policy statement should be included in the Morrow County Transportation System Plan: "The primary function of the POM interchange is to provide truck and vehicular access to the POM, allowing goods to be transported between the Port and destinations in Oregon, Washington, and Idaho via I-84. A secondary function is to provide access to the residential areas and farm lands on the south side of I-84 and east of the City of Boardman via Laurel Lane, a City arterial."
- The IAMP transportation improvement plan elements located on County facilities, as illustrated in Figure 7-1 and listed in Table 7-1, shall be included in the recommended transportation improvements project list of the Morrow County Transportation System Plan.

- The IAMP Access Management Plan elements as illustrated in Figure 7-3 shall be included in the transportation improvement project list of the Transportation System Plan.

Oregon Transportation Commission

- The POM IAMP shall be adopted by the OTC as part of the Oregon Highway Plan.

Monitoring Elements

The purpose of the IAMP is to ensure that capacity at the interchange is preserved for its intended function. While a long-range plan, the IAMP needs to remain dynamic and responsive to development and changes to the adopted land use and transportation plans and may need to be periodically reviewed and updated. To accomplish this goal, a monitoring program is included that identifies triggers for reviewing the IAMP and assessing how development approval within the IAMP Management Area will be reviewed and coordinated.

IAMP REVIEW TRIGGERS

Periodically, the implementation program shall be evaluated by the City, County, and ODOT, to ensure it is accomplishing the goals and objectives of the IAMP. Events that may trigger an IAMP review include:

- Plan map and zone changes that have a “significant affect” pursuant to the Transportation Planning Rule, Section -0060 and impact the POM Interchange, or that are located within the IAMP Management Area.
- Mobility measures at the I-84 ramp terminals exceed the adopted volume-to-capacity ratios.

In addition to the established triggers for IAMP review, the agencies may request a review of the IAMP at any time if, in their determination, specific land use or transportation changes warrant a review of the underlying assumptions and/or recommendations within the IAMP. If the participants in the IAMP review meeting agree that, once the impacts of the “trigger” that necessitated the review are examined, an IAMP amendment is not warranted, a recommendation of “no action” may be documented and submitted in the form of a letter to the City of Boardman City Council, Morrow County Court, and the Oregon Transportation Commission.

If the findings and conclusions from the IAMP review meeting demonstrate the need for an update to the plan, review participants will initiate an IAMP update process. Initial steps in updating the IAMP will include scoping the planning process, identifying funding, and outlining a schedule for plan completion. Once completed, IAMP updates will be required to be legislatively adopted, requiring a City Council public hearing, as an amendment to the City of Boardman Transportation System Plan and

will be adopted by Morrow County Court (if affected) and the Oregon Transportation Commission as an update to the Oregon Highway Plan.

DEVELOPMENT REVIEW WITHIN THE OVERLAY DISTRICT

The following outlines the transportation requirements for development and zone change applications within the POM Interchange Overlay District and describes how The City of Boardman and Morrow County will coordinate with ODOT.

Traffic Impact Analysis

All development applications located within the POM Interchange Overlay District that meet the following conditions are required to prepare and submit a Transportation Impact Analysis (TIA) to demonstrate the level of impact of the proposed development on the surrounding street system:

- a) A change in zoning or plan amendment designation; and
- b) The proposal is projected to cause one or more of the following effects, which can be determined by field counts, site observation, traffic impact analysis or study, field measurements, crash history, Institute of Transportation Engineers Trip Generation manual; and information and studies provided by the local reviewing jurisdiction and/or ODOT:
 - a. An increase in site traffic volume generation by 500 Average Daily Trips (ADT) or more (or as required by the City Engineer). The latest edition of the Trip Generation manual, published by the Institute of Transportation Engineers (ITE) shall be used as standards by which to gauge average daily vehicle trips; or
 - b. An increase in ADT volume of a particular movement to and from the State highway by 20% or more; or
 - c. An increase in use of adjacent streets by vehicles exceeding the 20,000 pound gross vehicle weights by 20 vehicles or more per day; or
 - d. The location of the access driveway does not meet minimum intersection sight distance requirements, or is located where vehicles entering or leaving the property are restricted, or vehicles queue or hesitate, creating a safety hazard; or
 - e. A change in internal traffic patterns that may cause safety problems, such as back up onto the highway or traffic crashes in the approach area; or.

- f. For development in the POM IAMP Management Area, the location of the access driveway is inconsistent with the Access Management Plan in Section 7 of the IAMP.

The determination of impact or effect, and the scope of the TIA, shall be coordinated with the City of Boardman, Morrow County, and ODOT. The developer shall be required to mitigate impacts attributable to the project.

ODOT Coordination

- The City shall consult the Oregon Department of Transportation (ODOT) on TIA requirements when the site of the proposal is adjacent to or otherwise affects a State roadway.
- The City shall provide written notification to ODOT once a land use application within the IAMP Overlay District is deemed complete.
- ODOT shall have at least 20 days, measured from the date notice to agencies was mailed, to provide written comments to the City. If ODOT does not provide written comments during this 20-day period, the City staff report will be issued without consideration of ODOT comments.
- The County shall invite ODOT to participate in a pre-application review for applications within an Interchange Management Area Plan (IAMP) Management Area or within a ¼ mile of any ODOT facility. Notice of actions requiring a public hearing shall be provided to ODOT at least twenty days prior to the date of the hearing.

Section 9
OAR and OHP Compliance

OAR AND OHP COMPLIANCE

The following section discusses the OAR and 1999 OHP policy based compliance issues that pertain to the development of the POM IAMP.

OAR Compliance

The POM IAMP was developed in collaboration with the POM, City of Boardman, Morrow County, and ODOT and was developed in accordance with the guidelines set forth in the State of Oregon's Oregon Administrative Rules for Interchange Access Management Planning and Interchange Area Management Planning. Table 9-1 identifies the required planning elements from OAR 734-051 and documents how the POM IAMP satisfies the requirements.

Table 9-1 OAR 734-051 Issues Addressed

OAR 734-0051-0155 Requirement	How Addressed	Report Reference
Should be developed no later than the time the interchange is being developed or redeveloped -0155(7)(a)	This plan was developed in order to determine the future improvements that would enhance the efficiency and safety of the interchange. The plan was completed before the identified Lewis & Clark Drive extension from the Port of Morrow or any of the identified improvements to the interchange moved into project development phases.	Section 1
Should identify opportunities to improve operations and safety in conjunction with roadway projects and property development or redevelopment and adopt strategies and development standards to capture those opportunities -0155(7)(b)	The access management, transportation improvement plan, and Overlay District (City of Boardman) and IAMP Management Area (Morrow County) identified in this plan will result in operational, safety, and capacity improvements.	Section 7 Section 8
Should include short, medium, and long-term actions to improve operations and safety in the interchange area -0155(7)(c)	The IAMP includes a phasing plan for the transportation system improvements and access management elements that cover the short and long-term time timeframes.	Section 7 Section 8
Should consider current and future traffic volumes and flows, roadway geometry, traffic control devices, current and planned land uses and zoning, and the location of all current and planned approaches -0155(7)(d)	A full analysis of existing and forecast (2030) operational and geometric conditions was conducted for this planning effort. The future volumes were developed based on current zoning and comprehensive plan designations. All approaches, existing and planned, were examined.	Section 4 Section 5 Section 6
Should provide adequate assurance of the safe operation of the facility through the design traffic forecast period, typically 20 years -0155(7)(e)	The forecast analysis shows that safe operations will be achieved for the interchange through 2030.	Section 6

OAR 734-0051-0155 Requirement	How Addressed	Report Reference
Should consider existing and proposed uses of all property in the interchange area consistent with its comprehensive plan designations and zoning -155(7)(f)	A thorough analysis of surrounding land uses and land use potential was performed based on the current comprehensive plan designations and zoning.	Section 4 Section 5 Section 6 Section 7
Is consistent with any applicable Access Management Plan, corridor plan or other facility plan adopted by the Oregon Transportation Commission-0155(7)(g)	The POM Interchange Area Management Plan is consistent with the 1999 OHP. (See following subsection). No other applicable plans adopted by the OTC were identified.	Section 3 Section 8
Includes polices, provisions and standards from local comprehensive plans, transportation system plans, and land use and subdivision codes that are relied upon for consistency and that are relied upon to implement the Interchange Area Management Plan. -155(7)(h)	Implementation of the IAMP is reliant upon the City of Boardman and Morrow County amending their respective Transportation System Plans to incorporate the transportation improvements associated with the IAMP. In addition, implementation of the IAMP will occur through the City of Boardman and Morrow County amending their Land Use and Development Ordinances to include the Overlay District (City of Boardman) and IAMP Management Area (Morrow County). This area contains the submittal requirements and review standards for land use amendment and development proposals within the district; access management standards and local street connectivity requirements will be based on the IAMP. Amendments will ensure that future development and land use actions within the interchange management area do not degrade the interchange terminal volume to capacity ratios below the adopted OHP mobility standards. These amendments include coordination between agencies, traffic impact analysis requirements, monitoring of traffic operations, and access management requirements.	Section 3 Section 7 Section 8

THE PLAN WILL DETERMINE		
OAR 734-051-0155 Requirement	Determination	Report Reference
Driveway and roadway spacing and connections	The operational analysis considered all access points and intersections within approximately ½ mile from the existing POM Interchange, including all key intersections that have potential to affect traffic operations in the interchange area over the planning period. The resulting Access Management element moves toward the ¼ mile spacing requirement.	Section 7
Local street connections to ensure adequate access to properties and off-highway circulation	The IAMP maintains much of the existing local circulation network and includes improvements to it (Figures 7-1 through 7-4).	Section 7
Median treatments	No median treatments are proposed as part of the access management plan.	Section 7
Location and type of traffic control devices needed to ensure safe and efficient operations in the operational area of the interchange	Figures 7-1 and 7-2 show all necessary traffic control within the IMSA.	Section 7

THE PLAN WILL DETERMINE		
OAR 734-051-0155 Requirement	Determination	Report Reference
Location of sidewalks and bicycle lanes	Sidewalks and bicycle lanes will be constructed with roadway improvements where they are part of the standard cross-section.	Section 7
Sidewalk and bicycle lane crossings (highway and ramp crossings)	See above.	See above
Location of potential transit facilities (turnouts, shelters, park and ride areas)	Transit facilities were not considered as part of the IAMP because fixed route transit service does not exist nor is planned within the IMSA.	N/A
Is new policy language needed in the City of Boardman's and Morrow County's Comprehensive Plans to support adequate long-term interchange operations?	Both agencies will amend their respective comprehensive plans, land use and development ordinance to implement the Overlay District (City of Boardman) and IAMP Management Area (Morrow County).	Section 8
Are any land use changes/comprehensive plan (including TSP) amendments needed to implement the Interchange Area Management Plan?	<p>The City of Boardman and Morrow County will amend their respective Transportation System Plans to incorporate the transportation improvements associated with the IAMP.</p> <p>The City and County will amend their Land Use and Development Ordinances to include an Overlay District (City of Boardman) and IAMP Management Area (Morrow County) that contains the submittal requirements and review standards for land use amendment and development proposals within the district.</p> <p>Amendments will ensure that future development and land use actions within the interchange management area do not degrade the interchange terminal volume to capacity ratios below the adopted OHP mobility standards. These amendments include coordination between agencies, traffic impact analysis requirements, monitoring of traffic operations, and access management requirements.</p>	Section 8
Are any deviations from OHP and OAR 731-051 standards and requirements needed	Deviations to the OHP access spacing standards are required, as described in Section 7. The Access Management element describes how each of the necessary deviations meets the requirements of Division 51. The IAMP and Implementation Plan define all the necessary standards and requirements.	Section 7 Section 8

Oregon Highway Plan Compliance

The POM IAMP was developed in accordance with the policies set forth in the Oregon Highway Plan (OHP). The following identifies the OHP policies that pertain to the POM IAMP and how the IAMP satisfies the requirements.

Policy 1A: State Highway Classification System. The state highway classification system includes five classifications: Interstate, Statewide, Regional, District, and Local Interest Roads. In addition, there are four special purpose categories that overlay the basic classifications: special land use areas, statewide freight route, scenic byways, and lifeline routes.

Within the IMSA, there are two ODOT highways. Interstate-84 is an Interstate Highway and is part of the National Highway System (NHS). US 730 is a Regional Highway in the vicinity of I-84. It is also a federally designated truck route.

How Addressed: The POM IAMP recognized the respective functions of each highway. The preferred concept includes extending the I-84 ramps in order to provide more acceleration and deceleration distance for trucks.

Policy 1B: Land Use and Transportation. This policy recognizes the role of both the State and local governments related to the state highway system and calls for a coordinated approach to land use and transportation planning.

How Addressed: The IAMP was developed through a cooperative planning effort between the City of Boardman, Morrow County, POM, ODOT, and DLCD. The IAMP will be implemented by the City of Boardman through an overlay district and Morrow County through IAMP Management Area that will require coordinated agency review on all future development or land use actions within the Area.

Policy 1C: State Highway Freight System. This policy recognizes the need for the efficient movement of freight through the state. Interstate-84 is a designated freight route and US 730 is a designated truck route.

How Addressed: The transportation improvement plan improves traffic operations and safety for vehicles accessing the POM, a major destination for freight activity.

Policy 1F: Highway Mobility Standards Access Management Policy. This policy addresses state highway performance expectations, providing guidance for managing access and traffic control systems related to interchanges.

How Addressed: The POM IAMP demonstrates that the interchange will be able to meet ODOT mobility standards through the 20-year horizon. It also provides an access management element that improves access management within the IMSA.

Policy 1G: Major Improvements. This policy requires maintaining performance and improving safety by improving efficiency and management before adding capacity.

How Addressed: The POM IAMP provides measures to increase efficiency through access management and provides improvements to the local street system.

Policy 2B: Off-System Improvements. This policy recognizes that the state may provide financial assistance to local jurisdictions to make improvements to local transportation systems if the improvements would provide a cost-effective means of improving the operations of the state highway system.

How Addressed: Specific access management responsibilities have been set according to State and City responsibilities.

Policy 2F: Traffic Safety. This policy emphasizes the state's efforts to improve safety of all uses of the highway system. Action 2F.4 addresses the development and implementation of the Safety Management System to target resources to sites with the most significant safety issues.

How Addressed: Safety is a key component of the concept improvements, including providing more deceleration and acceleration space on the I-84 ramps, improving sight distance, and providing a left-turn lane on Laurel Lane. The access management element was also developed to ensure the long-term safety of the interchange area.

Policy 3A: Classification and Spacing Standards. This policy addresses the location, spacing and type of road and street intersections and approach roads on state highways. The adopted standards can be found in Appendix C of the Oregon Highway Plan.

How Addressed: See Policy 3C below.

Policy 3C: Interchange Access Management Areas. This policy addresses management of grade-separated interchange areas to ensure safe and efficient operation between connecting roadways. Action items include developing interchange area management plans to protect the function of the interchange to provide safe and efficient operations between connecting roadways and to minimize the need for major improvements of existing interchanges. The local jurisdiction's role in access management is stated in Policy 3C as follows: "necessary supporting improvements, such as road networks, channelization, medians and access control in the interchange management area must be identified in the local comprehensive plan and committed with an identified funding source, or must be in place (Action 3C.2)."

Access management standards are detailed in Policy 3C and include the distance required between an interchange and approaches and intersections. The most stringent standards apply in interchange areas. Table 17 of the OHP contains the minimum spacing standards applicable to the I-82/US 730 Interchange, a freeway interchange that has a multi-lane crossroad. The spacing standards in an urban area for this type of interchange are:

-
- | | |
|--------------------|--|
| 1 miles (3.2 km) | Distance between the start and end of tapers of adjacent interchanges. |
| 750 feet (230 m) | Distance to the first approach on the right (right in/right out only) |
| 1,320 feet (400 m) | Distance to the first major intersection or approach (left turns allowed). |
| 990 feet (300 m) | Distance between the last right in/right out approach road and the start of the taper for the on-ramp. |

How Addressed: The POM IAMP includes an access management element that consolidates access points and improves access spacing over the existing conditions. Ultimately, upon land redevelopment, access on either side will be improved but it will not meet the standards outlined above. Section 7 outlines where deviations will be necessary and describes how each of the necessary deviations meets the requirements of Division 51.

Policy 4A: Efficiency of Freight Movement. This policy emphasizes the need to maintain and improve the efficiency of freight movement on the state highway system. Interstate-84 is a designated freight route and US 730 is a designated truck route.

How Addressed: The transportation improvement plan improves traffic operations and safety for vehicles accessing the POM, a major destination for freight activity.

Policy 5B: Scenic Resources. This policy applies to all state highways and commits the State to using best management practices to protect and enhance scenic resources in all phases of highway project planning, development, construction, and maintenance.

How Addressed: This policy was considered as part of the plan development.

Section 10
References

REFERENCES

1. Oregon Department of Transportation. *1999 Oregon Highway Plan*. 1999.
2. Kittelson & Associates, Inc. *City of Boardman Transportation System Plan*. 1999. (Updated in 2001 by TriLand Design Group, Inc.).
3. Port of Morrow. *Transportation*. <http://www.portofmorrow.com/transportation.htm>. March 2011.
4. Oregon Department of Transportation. *Analysis Procedures Manual*. 2006.
5. Transportation Research Board. *Highway Capacity Manual*. 2000.
6. AASHTO. *A Policy on Geometric Design of Highways and Streets*. 2004
7. U.S. Fish and Wildlife Service (USFWS). *Federally Listed, Proposed, Candidate Species and Species of Concern under the Jurisdiction of the Fish and Wildlife Service Which May Occur within Morrow County, Oregon*. 2011.
8. StreamNet. *Fish Data for the Northwest*. <http://www.streamnet.org>. 2011.
9. Oregon Natural Heritage Program. Query of ORHNIC database within a 2-mile radius of API conducted January 25, 2011.
10. Cherry, Steve. Personal communication in a phone call with Kristen Currens, MB&G. Wildlife Biologist, Oregon Department of Fish and Wildlife. January 27, 2011.
11. Department of Rangeland Ecology & Management. *Weedmapper 2011*. http://www.weedmapper.org/morrow_maps.html. January 2011.
12. Oregon Department of Agriculture. *Noxious Weed Policy and Classification System*. 2010.
13. Oregon Geospatial Enterprise Office. *Spatial Data Library. Wetlands: OR Wetlands Geodatabase*. <http://www.oregon.gov/DAS/EISPD/GEO/alphalist.shtml#W>. January 2011.
14. Downing, Andrea. Personal communication in an email to Kristen Currens, MB&G. Department of State Lands Wetlands Support Assistant. January 26, 2011.
15. University of Oregon Libraries. *General Land Office Maps*. http://libweb.uoregon.edu/map/GIS/Data/Oregon/GLO/Quadrant_7.htm#4n. 2011.
16. Oregon Department of Environmental Quality. *Water Quality Assessment - 2004/2006 Integrated Report Database*. <http://www.deq.state.or.us/wq/assessment/rpt0406/search.asp>. January 2011.
17. Institute of Transportation Engineers. *Trip Generation* (8th Edition). 2008.



I-84/US 730

INTERCHANGE AREA MANAGEMENT PLAN

Morrow County, Oregon

November 2011



KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING/PLANNING

I-84/US 730 Interchange Area Management Plan

Morrow County, Oregon

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Project No. 11253.0

November 2011



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APPENDICES

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PREFACE

The development of this plan was guided by the Project Management Team (PMT), Technical Advisory Committee (TAC), and Public Advisory Committee (PAC). The members these groups are identified below, along with members of the consultant team. The PMT members were all part of the TAC and PAC. The TAC and PAC members were responsible for reviewing all work products and guiding the planning work. They devoted a substantial amount of time and effort to the development of the I-84/US 730 Interchange Area Management Plan (IAMP) and their participation was instrumental in the development of the recommendations that are presented in this plan.

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ODOT Region 5 Planning

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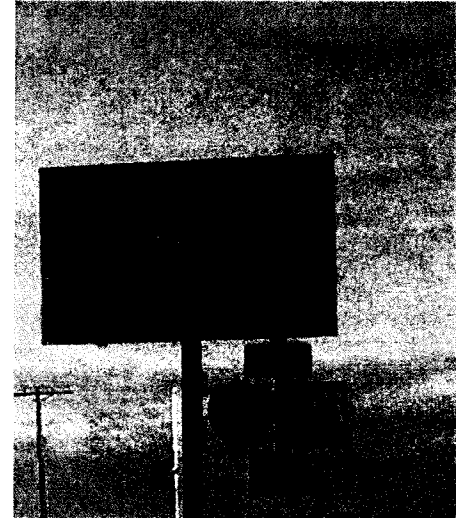
Mason, Bruce, & Girard, Inc.
Kristen Currens



Section 1
Introduction

INTRODUCTION

An Interchange Area Management Plan (IAMP) has been prepared for the Interstate-84 (I-84) / US 730 Interchange in Morrow County, Oregon. The following section provides an overview of the purpose and intent of the IAMP and defines: the interchange function, the project goals and objectives, and the study area. These elements have been defined through a collaborative effort between the project TAC and PAC.



Purpose and Intent

The IAMP is a strategic transportation plan that is designed to protect the long-term function of the I-84/US 730 interchange by preserving the capacity of the interchange while providing safe and efficient operations between connecting roadways. The IAMP will identify land use management strategies, short-term and long-term transportation improvements, access management goals, and strategies to fund identified improvements.

The intent is that the IAMP planning efforts will result in policies, ordinances, and other provisions that will be adopted into the Morrow County's Transportation System Plan (TSP) and Comprehensive Plan. The IAMP will be adopted by the Oregon Transportation Commission (OTC) as an amendment to the Oregon Highway Plan (OHP).

Problem Statement

Under House Bill 2001, the OTC allocated funds to the Port of Morrow (POM) for extending Lewis & Clark Drive to US 730 and constructing Gar Swanson Drive to connect to Lewis & Clark Drive. Special condition of approval for this funding was to complete an IAMP for the I-84/Laurel Lane (POM) and I-84/US 730 interchanges. The IAMP for the POM interchange is contained in a separate plan, *Port of Morrow Interchange Area Management Plan*.

The I-84/US 730 (Exit 168) interchange is located in a rural area of Morrow County approximately three miles east of the POM interchange. This interchange primarily facilitates movements between I-84 and US 730, but also provides access to the local County roadway network. Although movements are adequately facilitated between I-84 and US 730, the Lewis & Clark Drive extension and long-term growth plans at the POM will require a formal access plan along the US 730 corridor located

immediately north of the interchange. In addition, there is a need to identify long-term interchange modifications that would better facilitate movements between I-84 and the POM.

Interchange Function and Classification

The primary function of the I-84 / US 730 interchange is to facilitate statewide and inter-urban and inter-regional travel to/from the I-84 corridor. A secondary function is to provide inter-regional connectivity via the US 730 corridor. US 730 also provides a connection between I-84 and I-82. I-84 classified as an Interstate Highway by the Oregon Highway Plan (OHP) and is also a Federally Designated Truck Route and a Statewide Freight Route. US 730 is a Regional Highway and a Federally Designated Truck Route that provides regional connectivity between numerous local jurisdictions and the I-82/I-84 interstate highways.

Goal and Objectives

The primary goal of the IAMP process is to protect the function of the interchange by anticipating changes in land use and traffic patterns and planning for necessary improvements over a 20-year planning horizon. As stated in Policy 3C of the 1999 Oregon Highway Plan, "*it is the policy of the State of Oregon to plan for and manage grade-separated interchange areas to ensure safe and efficient operation between connecting roadways.*" From this definition, the objectives of the I-84 / US 730 IAMP is to:

- Consider the surrounding contextual land use and roadway network;
- Provide for efficient connectivity, right-of-way, and access control in the analysis area of the interchange;
- Refine and prioritize improvements needed to maintain acceptable traffic operations at the interchange while providing safe access to adjacent land uses;
- Provide plans for improved local street connectivity in the Interchange Management Study Area (IMSA) while limiting cul-de-sacs or other non-connected streets;
- Evaluate existing and potential land use designations, intensities, conditions, and actions that could have favorable effect on the facility or an adverse effect on the facility;
- Include implementation policies to be adopted into the City and County comprehensive plans, transportation system plans, interchange access standards, and zoning ordinances, as appropriate;
- Collaborate throughout the planning process with design professionals, jurisdictional representatives, developers, and local property owners; and

- Comply with the intent of Statewide Planning Goal 1: Public Involvement, 2: Land Use Planning, 5: Natural Resources, 6: Air, Water and Land Resources Quality, 7: Areas Subject to Natural hazards, 8: Recreation Needs, 9: Economic Development, 12: Transportation, and 14: Urban Growth Boundaries.

Evaluation Criteria

Based on the above objectives, the following evaluation criteria were assembled to ensure that each concept developed throughout the project would be evaluated for consistency with the overall intent of the community and the project. These are basic criteria that will guide the development of future alternative concepts. Detailed criteria based on these will be developed later for use in the screening process. The six evaluation criteria categories are outlined below:

- **Transportation Operations:** This category consists of those criteria that assess the ability for all modes to travel through and within the study area. Special considerations within this category include safety, local connectivity and mobility, including freight mobility.
- **Land Use:** This category consists of those criteria that assess right-of-way impacts, consistency with adopted land use and economic development plans, transportation capacity impacts of changes in land use intensity, impacts to utilities, and impacts to existing and proposed developments.
- **Economic Development:** This category consists of those criteria that assess the potential for near-term (1-5 years), mid-term (5-15 years), and long-term growth (15-25 years) for areas within the vicinity of the interchange.
- **Cost:** This category consists of those criteria that assess the practicality of a design concept from a construction cost and feasibility perspective.
- **Environmental, Social, and Equity factors:** This category consists of those criteria that assess the degree to which a concept is compatible with the natural and built environment including environmental (i.e., storm water drainage and hazardous waste) and socio-economic (i.e., stakeholders' needs) impacts.
- **Accessibility:** This category consists of those criteria that assess the ability to access properties and businesses within the IMSA to/from the regional infrastructure network including the balance between local access and roadway function, future access for undeveloped properties, and adherence to the access spacing standards.

Interchange Management Study Area (IMSA)

To provide a comprehensive study and to achieve effective and meaningful results, the IMSA for each interchange need to include an assessment of developable and re-developable properties and major roadways that would significantly affect the interchange function over the next 20 years. Under today's condition, development in the area is likely to primarily affect only one interchange; however, in the future as the POM develops and connects to US 730, growth will affect both interchanges. Therefore, only one IMSA is drawn for both interchanges. At a minimum, the IMSA should include properties within ½-mile from the existing POM and I-84/US 730 interchanges as defined by the IAMP Guidelines. The study areas should also take into account facilities and properties that will impact the operations of the interchange and any natural or cultural resources in the vicinity of the interchange.

An IMSA map is shown in Figure 1-1. This figure identifies key features and boundaries of the area to be included in the IAMP. The following describes the criteria used to create the IMSA map.

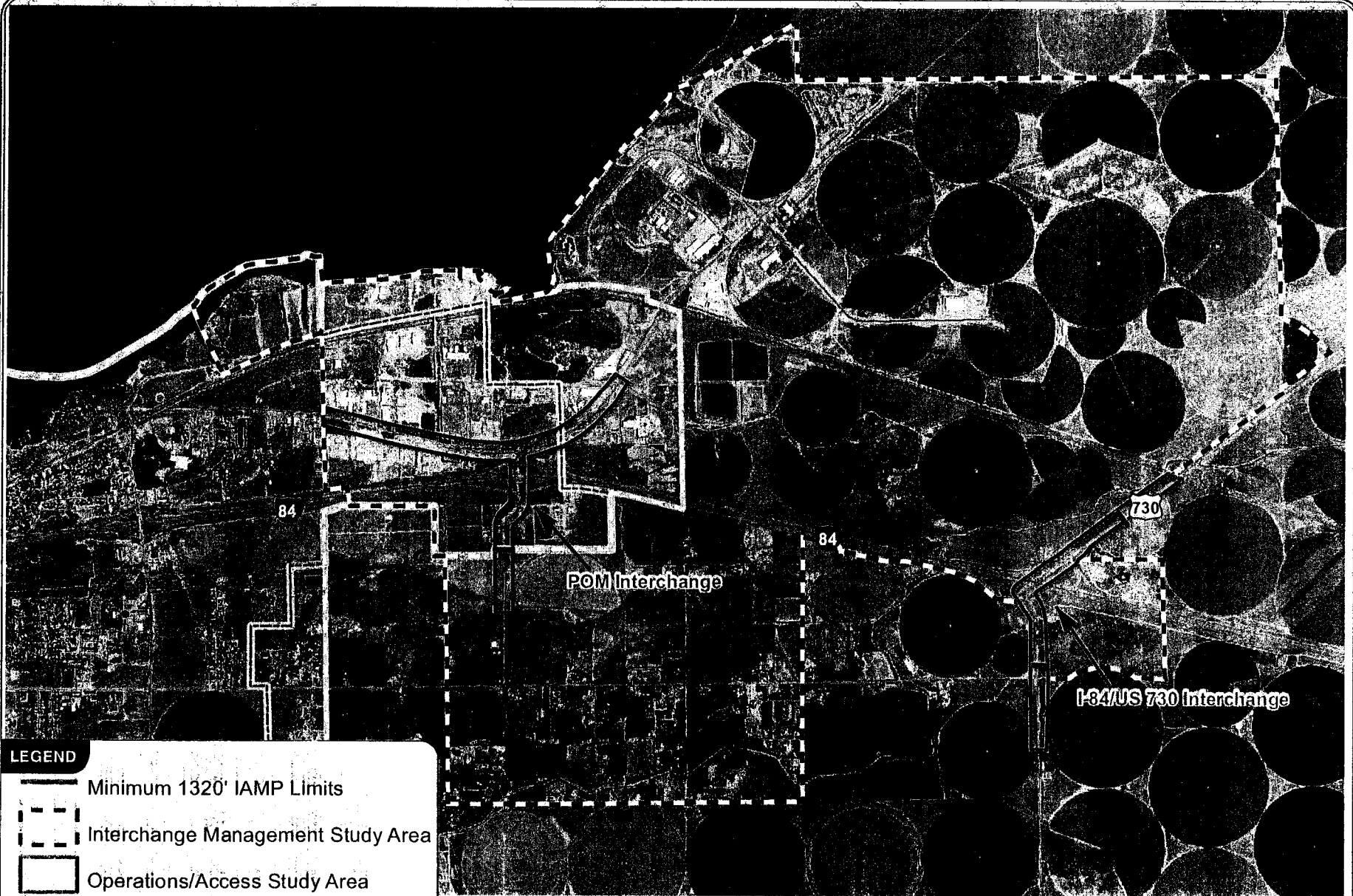
The IMSA includes all properties located roughly within a ½-mile of the existing POM and I-84/US 730 interchanges and encompasses key intersections that have potential to affect traffic operations in the interchange area over the planning period. These study boundaries identify the area for which operational analysis will be completed and the area that will be considered in the Access Management Plan element of the IAMP. From a land use perspective, properties identified with potential to affect the interchange are included in the IMSA boundaries and are those that are expected to utilize either one of the interchanges as their primary connection to I-84 or those that may be necessary to examine to improve local circulation.

The study intersections for the I-84 / US 730 interchange include:






- I-84 Eastbound / US 730 ramp terminal
- I-84 Westbound / US 730 ramp terminal
- Bombing Range Road / Frontage Lane
- Bombing Range Road / Wilson Road

Development of the IAMP

The I-84/US 730 IAMP has been guided by the TAC and PAC, as well as area residents and business owners. TAC and PAC roster lists are provided in the Preface of this document and in Section 2. Regular TAC and PAC meetings held throughout the course of the project have provided opportunities for the



LEGEND

-  Minimum 1320' IAMP Limits
-  Interchange Management Study Area
-  Operations/Access Study Area
-  Boardman UGB
-  Boardman City Limits

**INTERCHANGE MANAGEMENT STUDY AREA
MORROW COUNTY, OREGON**

FIGURE
1-1

two committees to review and guide the technical analysis prepared by the consultant team and the overall project direction. *A summary of the individual TAC and PAC meetings is provided in Appendix "A."*

PUBLIC INVOLVEMENT

In addition to the regular TAC and PAC meetings, local citizens, property owners, and business owners provided their input by participating in three public workshops. The first workshop provided participants with background information on the project and then gave them the opportunity to develop and present their ideas for design concepts. At the second workshop, participants provided their input on the design concepts that had previously been developed. The third workshop was focused on a review of the draft IAMP. Members of the public also submitted comments directly to the project management team either through correspondence or by attending a TAC or PAC meeting. In addition, adoption of the plan will have included public hearings before the Morrow County Planning Commission and County Commission and the Oregon Transportation Commission.

Table of Contents

The development of the I-84/US 730 IAMP began in December 2010 with the first meeting of the consultant team and POM, City, County, and ODOT staff. Work with the TAC and PAC began shortly thereafter in January 2011. Since then these groups participated in an extensive process that involved reviewing existing and future transportation conditions, future land use analyses, interchange design and local access and circulation concepts, and financing options.

Sections 1 through 9 comprise Volume 1 of the IAMP and provide the main substance of the plan. These are supplemented by Technical Appendices in Volume 2 which contains the technical memoranda documenting each step in the process. The organization and description of each element of the IAMP are outlined below:

Section 1 describes the IAMP process, purpose, and goals and outlines the remainder of the document;

Section 2 details the interagency and public involvement program;

Section 3 provides the plan and policy review;

Section 4 outlines the existing land use patterns and transportation facilities within the IMSA;

Section 5 documents the future land use and transportation conditions and how they were addressed by the planning effort;



Section 6 provides a description of the concepts analysis and transportation planning efforts involving the selection of a preferred interchange form, supporting local access and circulation network, access management plan, and land use management plan;

Section 7 is the I-84/US 730 IAMP, including the local circulation and access elements and the transportation improvement projects that are necessary to ensure the continued long-term safety and function of the interchange;

Section 8 provides guidance on IAMP adoption, monitoring, and updates; and,

Section 9 documents how the I-84/US 730 IAMP complies with the Oregon Administrative Rules for the development of an interchange area management plan as well as the Oregon Highway Plan.

Section 2
Interagency and Public Involvement Program

INTERAGENCY AND PUBLIC INVOLVEMENT PROGRAM

As part of the I-84/US 730 IAMP, interagency and public involvement occurred through: a kick-off meeting with agency staff; a TAC and a PAC that had regular meetings; three public workshops involving local citizens, property owners, and business owners; and public adoption hearings in front of the Morrow County Planning Commission and the Oregon Transportation Commission. An overview of the TAC and PAC meetings and public workshops is provided below.

WELCOME

Port of Morrow & I-84/US 730
Interchange Area Management Plans

Open House

Boardman, Oregon

February 17, 2011



Technical Advisory and Public Advisory Committees

The TAC and PAC guided the planning work and were responsible for reviewing all work products, providing input on all planning recommendations, such as the IMSA, goals and objectives, technical analysis, and the proposed concepts. Ultimately the TAC and PAC helped select the preferred interchange form, local circulation/access, land use management, and coordination elements of the IAMP. In addition, the PMT performed a coordination function, planning and executing project management tasks related to project schedule and meeting logistics. The PMT included representation from ODOT, the Port of Morrow, Morrow County, the City of Boardman, and the consultant team. All members of the PMT were also members of the TAC.

Membership on the TAC and PAC was established through input from POM, City, County, and ODOT representatives. A proposed TAC and PAC membership roster was presented and finalized at a project kick-off meeting held December 16, 2010. A list of TAC and PAC members is included in Tables 2-1 and 2-2.

Table 2-1 Technical Advisory Committee

Agency	Name	Position/Title	Role
Port of Morrow	Gary Neal	POM Director	PMT and TAC
	Ron McKinnis	POM Engineer	PMT and TAC
Morrow County	Bob Nairns	Assistant Public Works Director	TAC
	Carla McLane	Planning Director	PMT and TAC
ODOT	Dave Warrick	Interchange Engineer	TAC
	Don Fine	Region 5 Traffic Operations & Analysis	TAC
	Marilyn Holt	District 12	TAC
	Patrick Knight	Region 5 Planning	ODOT Project Manager PMT and TAC
	Rich Lani	District 12	TAC
	Swede Hays	Rail	TAC
	Tom Kuhlman/ Jeff Wise	Region 5 Traffic Section Manager	TAC
Oregon DLCDC	Grant Young	Field Representative	TAC
City of Boardman	Barry Beyeler	Community Development Director	TAC
	Karen Pettigrew	City Manager	TAC

Table 2-2 Public Advisory Committee

Name	Representing
Blair Purcell	ConAgra Foods
Ed Glenn	City Council/Area Property Owner
Jeff Wenholz	Morrow County Commission
Rand Yates/Kevin Taylor	Area Property and Business Owners
Rich Devin	Pacific Pride

The TAC members were selected in order to provide representation from key components of interested government agencies. PAC members were selected in order to provide a good representation of City and County officials, and area property and business owners. In addition to the PAC members, a number of area property and business owners attended PAC meetings and participated in the process. An outline of all of the TAC and PAC meetings is included below.

Section 3
Plan and Policy Review

Public Involvement Plan

To ensure that adequate project coordination and public participation occurred throughout the development of the I-84/US 730 IAMP, a series of TAC and PAC meetings, public workshops, and public joint work sessions were held over the course of the project. Morrow County also conducted public hearings to adopt the plan. A summary of all of the meetings associated with the project, as well as the meeting objectives, are summarized in Table 2-3.

Table 2-3 Meeting Summary

Meeting	Date/Location	Meeting Objectives/Purpose
Kick-off Meeting	December 16, 2010/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review project process and goals - Review TAC and PAC membership - Review project schedule
TAC/PAC Meeting #1	January 18, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review project schedule and approach - Presentation: IAMP 101 - Review Tech Memorandums #1 and #2 (IAMP Definition and Background and Plans and Policy Review) <p>The purpose of Meeting #1 was to introduce the I-84/US 730 and POM IAMP projects and the consultant team; review the project schedule; review the project goals, objectives, and evaluation criteria; familiarize TAC/PAC members with the IAMP process and their roles; confirm the IMSA; confirm the project schedule; and review the project's policy framework.</p>
TAC/PAC Meeting #2	February 17, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review Tech Memorandums #3/4 (Existing Conditions), #5 (Environmental), and #6 (Future Conditions) - Presentation: Interchange Design 101 - Brainstorm design concepts <p>The purpose of Meeting #2 was to review the existing and future land use and traffic operations, the environmental review, and involve the TAC and PAC in a brainstorming exercise to develop interchange design, local circulation, and access management concepts for the existing roadway system.</p>
Public Workshop #1	February 17, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Project Overview - Summary of Existing and Future Conditions - Presentation: Interchange Design 101 - Brainstorm design concepts <p>The purpose of the first public workshop was to present the project goals and objectives and findings to date, educate the public and stakeholders on the IAMP process and interchange design and access management practices, and engage the participants to help develop potential interchange design, local circulation, and access management concepts.</p>
TAC/PAC Meeting #3	April 7, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review Tech Memorandum #7a (Preliminary Concept Development & Analysis) - Screen Concepts <p>The purpose of Meeting #3 was to review the Concepts Analysis and determine the concepts that would move forward for refined analysis.</p>
Public Workshop #2	April 7, 2011/	<ul style="list-style-type: none"> - Review concept evaluation

	Boardman – Port of Morrow	The purpose of the second public workshop was to present the concepts being considered, the results of the concepts analysis, and provide the public with the opportunity to give their feedback on the concepts being considered.
TAC/PAC Meeting #4	June 21, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review Tech Memorandum #7b (Detailed Concept Analysis) - Determine Preferred Concepts The purpose of Meeting #4 was to review the evaluation of the refined concepts developed at the last set of PAC and TAC meetings and determine preferred concepts. Feedback from this meeting resulted in slight refinement of the preferred concepts.
TAC/PAC Meeting #5	October 25, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review Draft IAMP The purpose of Meeting #5 was to review the draft IAMP. The committees provided feedback that has been incorporated into the IAMP.
Public Workshop #3	October 25, 2011/ Boardman – Port of Morrow	<ul style="list-style-type: none"> - Review Draft IAMP The purpose of the third Public Workshop was to review the draft IAMP and provide the public an opportunity to comment on the document.
Planning Commission Hearing #1	TBD	
Planning Commission Hearing #2	TBD	
County Commission Hearing	TBD	
OTC Hearing	TBD	

PLAN AND POLICY REVIEW

One of the project objectives of the IAMP is to ensure that the plan is consistent with local and state transportation policies and standards. To meet this objective, a review and evaluation of existing plans, policies, standards, and laws that are relevant to the IMSA was conducted. A summary of the documents reviewed is provided below. Detailed information from this review can be found in the Technical Appendix.



Morrow County
2005 Transportation System Plan
July 23, 2005

Documents Reviewed

The following transportation and land use plans were reviewed for policies and regulations applicable to the I-84/US 730 Interchange.

STATE/ODOT

- Statewide Planning Goals
- Oregon Transportation Plan (2006)
- Oregon Highway Plan (1999, last amended 2006)
- Oregon Administrative Rule 734, Division 51 (Access Management Rule)
- Highway Design Manual (2003)

LOCAL

- Port of Morrow Agricultural Learning Center Business Plan
- Port of Morrow Rail Plan (2009)
- US Army Umatilla Chemical Depot Redevelopment Plan (2010)
- Morrow County Comprehensive Plan (2010)
- Morrow County Transportation System Plan (2005)
- Morrow County Zoning Ordinance (Revised, 2001)
- Morrow County Subdivision Ordinance (Revised, 2005)
- City of Boardman Comprehensive Plan (2003)



- City of Boardman Transportation System Plan (2001)
- City of Boardman Development Code (Revised, 2009)

Consistency with Existing Plans

The IAMP has been developed to be consistent with local and state transportation policies. The review of local policies and regulations did not reveal conflicts with the primary goal of the IAMP to protect the function of the interchange. At the same time, the existing regulatory tools also do not adequately address the future transportation needs in the area. Additional requirements regarding access management, local street connectivity, and transportation financing must be adopted if the transportation system in this area of Morrow County is going to support future planned growth. See Sections 7 and 8 for proposed amendments to existing plans required to make existing plans consistent with the IAMP.

Section 4
Existing Transportation and Land Use Conditions

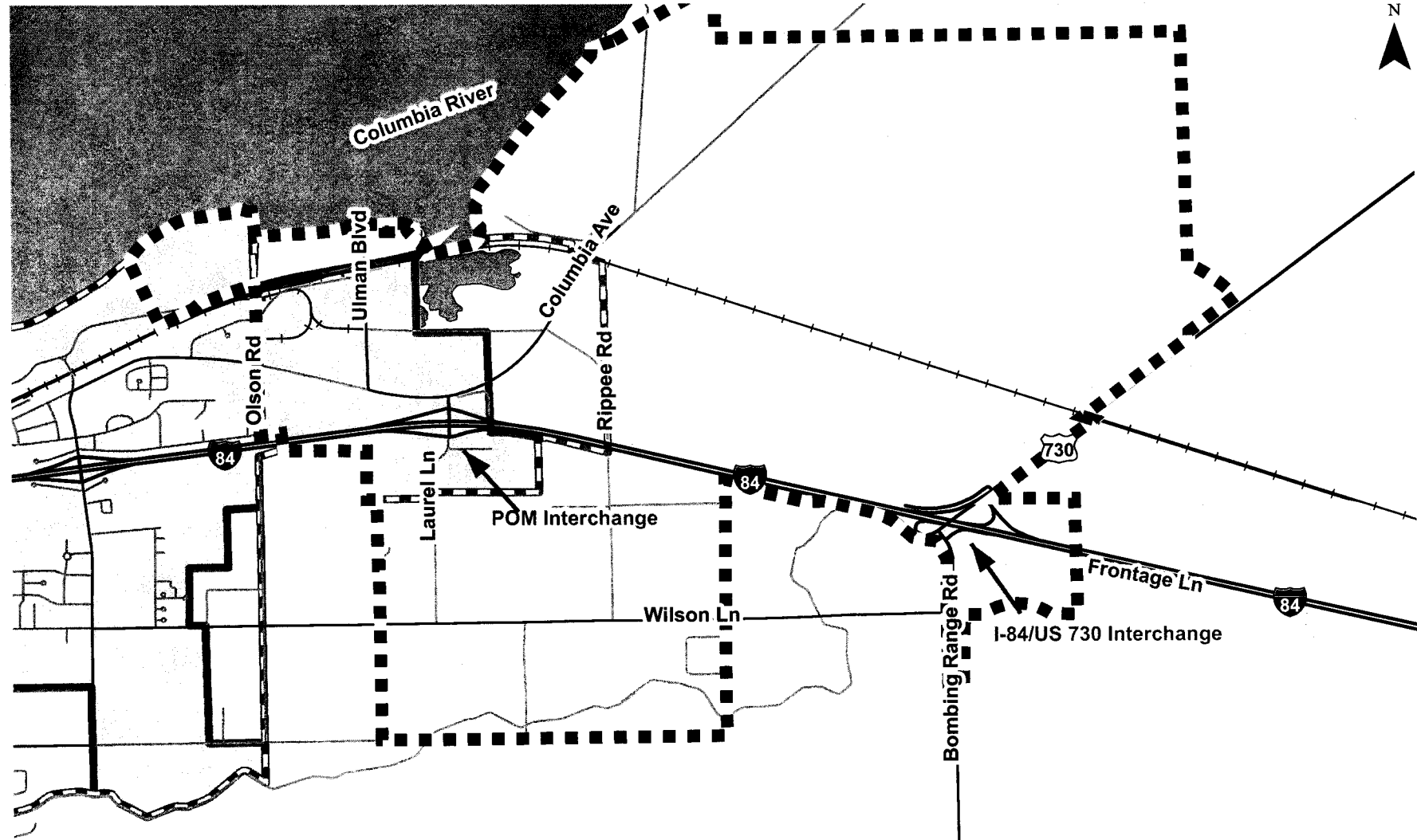
EXISTING TRANSPORTATION AND LAND USE CONDITIONS

This section provides a review of existing land uses and transportation facilities as well as natural and cultural resources within the vicinity of the I-84/US 730 interchange. As shown in Figure 4-1, the interchange is located east of Boardman in rural Morrow County. The information identified in this section provides a basis for identifying opportunities and constraints for meeting the goals and objectives of the IAMP.





Interchange Management Study Area

The Interchange Management Study Area (IMSA), depicted in Figure 4-2, defines the extent of the land use and traffic operations review. Currently development in the IMSA is likely to primarily affect only one interchange; however, in the future as the POM develops and connects to US 730, growth within the overall IMSA will affect both interchanges. At a minimum, the IMSA includes all properties located roughly within a ½-mile of the existing POM and I-84/US 730 interchanges and encompasses key intersections. Beyond the minimum requirements, the IMSA includes properties whose development may have a direct impact on the function of either interchange. Generally, land uses outside of this area are not anticipated to directly impact the function of the interchange. This is because these properties do not directly access the interchange, have other travel route options within Boardman, or have limited potential to generate new trips (e.g., the land is already developed, the land has limited redevelopment potential, or the current zoning or location restricts its development potential). The Operation/Access Study Area boundaries identify the area for which operational analysis will be completed and the area that will be considered in the Access Management Plan element of the IAMP.



LEGEND

-  Boardman Urban Growth Boundary (UGB)
-  Boardman City Limits

STUDY AREA VICINITY
MORROW COUNTY, OREGON

FIGURE
4-1

H:\profile



Existing Land Use

Pursuant to the requirements stated in the Oregon Administrative Rule 734-051-0155 for the preparation of an IAMP, a land use inventory has been prepared for the IMSA. This section provides a description of the existing land-use patterns and zoning regulations that currently exist within the IMSA. The following describes existing zoning and how the land is currently being used within the IMSA. Land use-related information will ultimately be combined with findings about existing transportation system conditions in an overall existing conditions section of the IAMP.

EXISTING ZONING AND DEVELOPMENT STANDARDS

Any development in the IMSA will have some direct impact on the facility, so it is important to review the existing zoning for parcels surrounding the interchange and connecting roads. Permitted land uses and the applicable standards associated with the zone designations are an indicator of the potential for growth in the area. Recommendations for restricting uses or modifying development standards (e.g., restricting uses with high traffic generation rates, developing trip budgets, or limiting building size) are a possible outcome of the IAMP process. Zoning for areas within the IMSA are shown in Figure 4-3. This map includes both city and county zoning, as the IMSA includes unincorporated areas of Morrow County.





Morrow County Zoning

Morrow County zoning designations in the vicinity of the POM interchange include Port Industrial (PI), General Industrial (MG), Small Farm (SF 40), and Farm Residential (FR2). A portion of the PI and MG zoned land in the IMSA to the northeast of the POM interchange is inside the Boardman UGB but outside the Boardman city limits. Pursuant to an intergovernmental agreement that exists between the City and County, the City is included in the County's development review process, but development approval is subject to existing County zoning requirements, as described below. If this land is annexed in the future, the corresponding City zoning that would be applied is General Industrial (GI), which is discussed later in this section.

The I-84/US 730 interchange is adjacent to land zoned General Industrial (MG), Port Industrial (PI), and Exclusive Farm Use (EFU). Uses permitted in the EFU zone are primarily restricted to uses that are associated with farming; consistent with state law, the County has identified certain uses that are permitted outright, while others require a conditional use permit.

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
LEGEND

-  Interchange Management
-  Study Area
-  Boardman UGB
-  Boardman City Limits

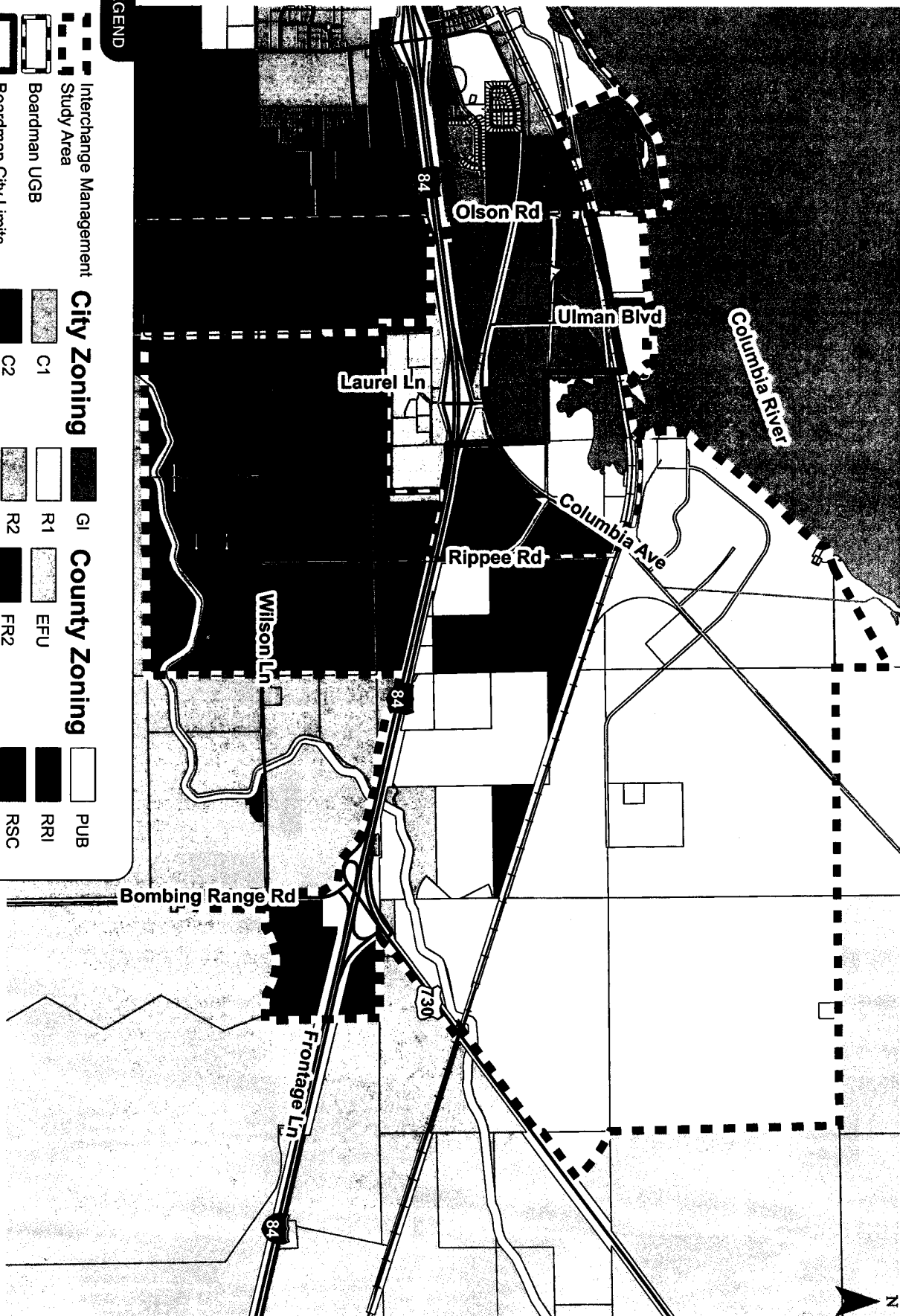
City Zoning

-  C1
-  C2
-  C3
-  CFU

County Zoning

-  GI
-  R1
-  R2
-  R3
-  SC
-  EFU
-  FR2
-  MG
-  PI

-  PUB
-  RRI
-  RSC
-  SF40
-  SR1



KITTELSON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING

STUDY AREA ZONING
MORROW COUNTY, OREGON

FIGURE
4-3

An overview of permitted uses and development requirements of these zones, as regulated by the Morrow County Zoning Ordinance, is provided below.

- Port Industrial (PI) (Section 3.073). The PI zone was established to “provide for port-related industrial uses and aerospace-related industrial uses which are not devoted to research and development. The zone is intended to provide an industrial sanctuary, limiting commercial uses to those appropriate and necessary to serve the needs of the workers employed within the zone.” As stated in its purpose, the zone allows uses that are port-related, especially water-dependent, aerospace, manufacturing, and heavy industrial uses. Commercial and retail uses are allowed conditionally and are limited in floor area so that they are clearly secondary to the primary uses in the zone. There are no restrictions on building height or minimum requirements for lot coverage in this zone.
- General Industrial (MG) (Section 3.070). Retail and wholesale businesses, construction-related businesses, freight hubs, warehouses and distributions centers, machine shops, and food processing are amongst the uses allowed outright in the MG zone. More intensive manufacturing and processing uses, industrial uses entailing outdoor storage, and public and semi-public uses are conditionally permitted in the MG zone. There are no specific minimum lot size or setback standards other than stream setbacks (100 feet) and building setbacks that range from 20 to 50 feet depending on whether the building fronts a local street, collector, or arterial.
- Small Farm (SF40) (Section 3.042). The SF40 zone was created to preserve land for farm use. Agricultural uses, single-family and accessory dwellings (subject to restrictions), farm worker dwellings, replacement buildings, wetland and habitat, specified road improvements, utilities, schools (intended for rural areas only and located at least three miles from the Urban Growth Boundary), churches and cemeteries, solid waste facilities, mining and energy exploration, and wineries are permitted outright. Single-family dwellings not in conjunction with a farm use, a “hardship” dwelling, commercial uses in conjunction with farm uses, more intensive mining uses, private recreation facilities, government- and non-profit-owned parks and community centers, other utilities, private airports, other solid waste and composting facilities, fair and rodeo grounds are amongst the uses that are permitted conditionally. Although initially established with a minimum lot size of 40 acres, state law has since required this minimum to be raised to 80 acres. Income and capability tests are required for residential uses in the zone. Stream setbacks are 100 feet.

- Farm Residential (FR2) (Section 3.041). This zone is a rural residential zone that acknowledges pre-existing homes on small lots outside the Urban Growth Boundary (UGB), although state policy and law discourages the expansion of such development. Single-family housing, farming (with some restriction), utilities, parks, community centers, and other public uses that serve rural residential uses are allowed outright in the FR2 zone. Duplexes, water and sewer facilities, golf courses, stables, and vet clinics are permitted conditionally. Lots in this zone must be at least two acres.
- Exclusive Farm Use (EFU) (Section 3.010). The EFU zone targets the preservation of agricultural land and uses and is designed to only allow uses that are compatible with agricultural uses. Agricultural production and harvesting, buildings associated with agricultural uses, accessory dwellings, farm worker dwellings, restoration of established dwellings and other lawful buildings, improvements to roads, schools not within three miles of the UGB, churches, wineries, and solid waste disposal facilities (with restrictions) are permitted outright in the EFU zone. Certain single-family homes, mining operations, golf courses, private recreation facilities, public- or non-profit-owned parks and community centers, utilities, road expansions, and other solid waste and composting facilities are amongst uses that are permitted conditionally. The lot standard for agricultural units in the zone is 160 acres. Income and capability tests are required for residential uses in the zone. Uses are subject to 100-foot stream setbacks, as in other zones.

A traffic impact analysis is required when a proposed use in any of these zones is projected to generate more than 400 passenger vehicle trips daily (or an equivalent).

City of Boardman Zoning

The POM interchange is surrounded by City of Boardman Service Center (SC) commercial. Further north lies City industrial land, zoned General Industrial (GI).

Chapter 2 of the City of Boardman Zoning Ordinance implements zoning “districts” that establish permitted uses and development standards for residential, commercial, and industrial zones. Below is an overview of these provisions for the zoning districts within the IMSA.

- General Industrial (GI) (Chapter 2.3). The GI district is intended for a range of light and heavy industrial uses and to provide business services close to employment centers, while limiting impacts on adjacent districts and keeping incompatible uses separate. Heavy and light industrial and manufacturing uses, warehouses and distribution centers, offices and commercial uses that serve industrial uses, limited retail uses, government facilities “where

the public is not generally received," vocational schools, open space, and Utilities are among the uses permitted outright in the GI district. Transportation facilities and improvements that are in the TSP, are part of an approved land division, or do not require land use approval are also permitted outright; transportation improvements that are not in the TSP or part of an approved land division are permitted conditionally. The maximum lot coverage in the district is 75% and building height is restricted to three stories or 35 feet. Additional standards apply to uses with significant noise, light/glare, dust, vibration, or traffic impacts, as defined in Section 2.3.160, including possible traffic impact analyses for uses that would increase average daily traffic by 20 percent or more and 100 vehicles per day.

- Service Center (SC) (Section 2.2.200). The Service Center designation is a sub-district of the City's Commercial district. The sub-district was established to accommodate heavy commercial uses and light industrial uses along segments of the I-84 corridor. The development standards of the Commercial district apply to the sub-district, except where modifications are specified. Lot coverage is capped at 85% in the sub-district. Maximum height is four stories or 50 feet. Design and additional standards as well as pedestrian amenity requirements apply to uses in this sub-district.

There are areas of County Port Industrial (PI) and General Industrial (MG) zoning northeast of the interchange on land that is inside the City of Boardman UGB but outside the city limits. The land could develop under current County zoning or could be annexed and, if so, most likely re-zoned with corresponding City General Industrial (GI) zoning. The existing County zoning and potential City zoning generally allow the same types of industrial uses. The City zoning is slightly more prescriptive when it comes to development standards, including maximum lot coverage of 75% and maximum building height of three stories or 35 feet.

LAND USE INVENTORY

For purposes of describing existing zoning and land uses within the IMSA, as well as conducting the transportation analysis, the narrative below will consider the surroundings for each interchange.

POM Interchange

Land uses directly adjacent to the POM interchange lie entirely within Boardman's city limits. Land in the immediate vicinity, both north and south of the highway, is zoned for highway "service" uses (SC). Industrial zoned land lies further north of this commercial land and includes land within the city zoned General Industrial and property within the City's UGB, but outside of city limits, zoned Port Industrial

and General Industrial. Notably, the IMSA encompasses all of the City of Boardman's industrial land (zoned General Industrial) and all of the POM's developable, industrial zoned land ("Port Industrial") north of I-84, in the vicinity of both the POM and the I-84/US 730 Interchange. Currently, there are no developed commercial uses north of the interchange. Industrial development begins further to the north, in proximity to the Columbia River and Columbia Avenue, and near Rippee Road to the east.

South of the interchange, there is only one developed commercial property, the Pacific Pride fueling station. The City's SC zoned land is coterminous with the city limits and UGB in this area. Land further south is in the County, zoned for small farms (SF40) and rural residential (FR2). The County expects some future growth in residential development in the FR2 zoned land.

I-84/US 730 Interchange

The I-84/US 730 interchange lies entirely within Morrow County, with land in the vicinity zoned for agricultural uses (south of I-84 and west of Bombing Range Road and west of US 730), Port Industrial (north of I-84 and west of US 730), and General Industrial immediately to the east.

The IMSA encompasses all of the POM's developable, industrial zoned land ("Port Industrial") north of I-84. The County Court recently approved a significant land use amendment for POM land in the vicinity of the I-84/US 730 interchange. In January 2011, the County Court approved the rezoning of 513.86 acres from EFU to Port Industrial (PI) north of the interchange; in an associated action, the County Court rezoned 515 acres of General Industrial (MG) south of the interchange, west of Bombing Range Road, to EFU. This action included a condition of approval; prior to the County issuing building permits on the recently zoned PI land, an IAMP must be completed that includes an analysis of the traffic implications of development on the 514 acres.

POM tenants include businesses engaged in agricultural products processing and shipping, cold storage, forest products, barge transportation, and trucking. Included in the IMSA boundary is also a hotel and restaurant located along the waterfront. The POM has also developed a business plan and feasibility study for an Agricultural Learning Center that would serve as a visitor's center for POM tenants and would house the local Chamber of Commerce. As will be discussed in depth in Section 5, the POM has a large amount of vacant land available for future industrial users.

Parcels that will have little, if any, future impact on the transportation system are those lands zoned for Exclusive Farm Use (EFU) southwest and northeast of the I-84/US 730 Interchange. Statewide Planning Goal 3, Agricultural Lands, requires that agricultural lands be preserved and maintained for farm use. The Goal is implemented through the County's EFU zoning that limits uses on agricultural lands to "farm uses and those nonfarm uses defined by commission rule that will not have significant

adverse effects on accepted farm or forest practices." Because of the minimal future impacts expected from EFU, the IMSA has been drawn to exclude areas with this zoning.

The Coyote Springs Wildlife Area is also located in the general vicinity, west of the Boardman Irrigation Canal. This approximately 143-acre parcel is shown as "PUB" on Figure 4-3 to recognize the public management of this area by the Oregon Department of Fish and Wildlife (ODFW) for wildlife habitat. Coyote Springs is accessed off of Rippee Road, via Exit 165 (the POM interchange) and Columbia Avenue.

Existing Transportation Inventory

The second major component of the existing conditions evaluation process is to document the transportation system. The existing transportation inventory provides a detailed description of all transportation facilities and travel modes within the study area. In addition, the inventory identifies the current operational, traffic control, and geometric characteristics of roadways and other transportation facilities within the IMSA. A detailed description of these facilities is provided in the following sections.

ROADWAY FACILITIES

The roadways within the IMSAs include state, county, and city roadways. A description of each of the functionally classified roadway facilities is summarized below for the I-84/US 730 interchange in Table 4-1. Figure 4-4 illustrates the existing lane configurations and traffic control devices at each study intersection.

Table 4-1 Existing Transportation Facilities and Roadway Designations

Roadway	Existing Roadway Ownership/ Functional Classification ¹	Cross-section	Posted Speed (mph)	Sidewalks?	Bicycle Lanes?	On-Street Parking?
Interstate-84	ODOT/Interstate Highway	4-lane	65	No	Shoulders	No
US 730	ODOT/Regional Highway	2-lane	55	No	Shoulders	No
Bombing Range Road	US Navy-County/ Major Collector	2-lane	55	No	No	No
Wilson Lane	County/Major Collector	2-lane	45	No	No	No

¹ODOT highway classifications are from the 1999 Oregon Highway Plan (Reference 1) and County roadway classifications are from the Morrow County Transportation System Plan (Reference 2)

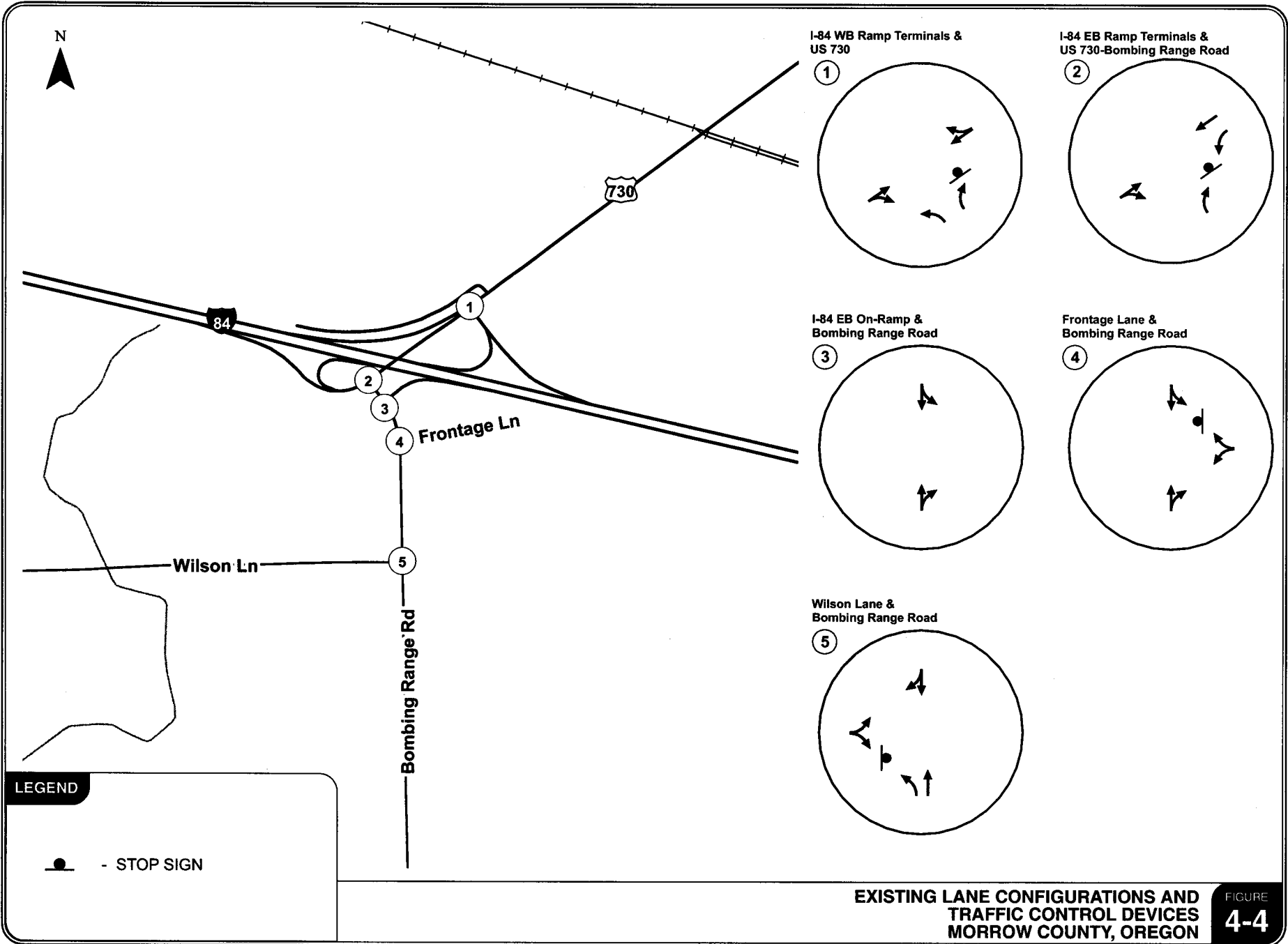


FIGURE 4-4

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Interstate-84

I-84 is a four-lane interstate highway that runs east-west through Morrow County. It is the main east-west travel route within the state of Oregon providing a connection between Portland, Oregon and Boise, Idaho. I-84 is part of the National Highway System and is designated in the 1999 Oregon Highway Plan as an Interstate Highway, Freight Route, and Truck Route.

I-84/US 730 Interchange Ramps

The I-84/US 730 interchange is currently configured in a Parclo-A form. The westbound ramp off-ramp is stop-controlled and the eastbound off-ramp is uncontrolled and becomes US 730 as it splits from I-84. Similarly, the eastbound on-ramp from US 730 is a through movement onto the ramp, as Bombing Range Road is stop-controlled at the ramp. There is a separate on-ramp onto eastbound I-84 for Bombing Range Road traffic that is located south of US 730. Due to the area's topography, I-84 is elevated over US 730. Figure 4-5 provides a view of the Bombing Range Road approach to the I-84/US 730 interchange.

Figure 4-5 Bombing Range Road Approach to I-84/US 730 Interchange (Looking Northwest)



US 730

US 730, the Columbia River Highway, is classified by the Oregon Highway Plan as a Regional Highway in the vicinity of I-84. It is also a federally designated truck route. It travels primarily east-west along the Columbia River from I-84 to US 12 in Washington, passing through Irrigon and Umatilla along the way.

Bombing Range Road

Bombing Range Road is a two-lane roadway with narrow shoulders that are partially paved and partially gravel. It provides the only continuous north-south connection in the County. According to the County TSP, the northern section of the roadway is owned by the US Navy, but it is maintained by the County. Bombing Range Road provides access to the Boardman Bombing Range, which is used for military training.

Wilson Lane

Wilson Lane is a two-lane county roadway with shoulders that are primarily gravel. It provides an east-west route parallel to I-84 south of Boardman between Bombing Range Road and Toms Camp Road (about one-mile east of Tower Road). Wilson Lane provides access to a number of farm properties and residential subdivisions on the south side of Boardman.

PUBLIC TRANSPORTATION FACILITIES

There are no fixed line public transportation facilities that operate within the IMSA. Morrow County Special Transportation provides para-transit services, including dial-a-ride and medical transportation, to senior and disabled Boardman residents. According to the County TSP, there is one bus and three cars available to Boardman residents. The drivers are volunteers. Other users may take advantage of the service so long as they do not displace qualified users. Intercity bus service is provided by Greyhound. Daily service is provided in Boardman on an as-needed basis, meaning passengers waiting along the route must flag-down the bus. The service provides connections to Portland and Pendleton, Oregon, and Boise, Idaho.

PEDESTRIAN AND BICYCLE FACILITIES

Due to the rural and industrial natures of the study areas, exclusive pedestrian and bicycle facilities (e.g. sidewalks and bike lanes) are limited in the study areas. Sidewalks are generally not present on the study roadways. Bike lanes are also not provided; however, many of the study roadways have shoulders that are at least partially paved and provide additional space for autos and bicycles to share on the roadway. Traffic volumes are also relatively low on many of the City and County roadways in the study area, making it more comfortable for non-motorized and motorized users to share the roadways.

While not along any of the study roadways, the Columbia River Heritage Trail is in the vicinity of the POM interchange. The Trail follows the Columbia River in the vicinity of the study area before connecting to Main Street in Boardman. This multi-use path also extends to the northeast to Irrigon, providing a non-motorized connection between the two cities.

MARINE FACILITIES

The Port of Morrow is strategically located along the Columbia River. Goods can be shipped via barge west to Portland and Seattle or upriver to the Tri-Cities in Washington and Lewiston, Idaho. Goods barged from the Port can reach oceangoing freighters in Portland within 24 hours, accessing markets through the Pacific Ocean. According to the Port, Tidewater Terminal is the largest container terminal upriver of Portland (Reference 3).

RAIL FACILITIES

The Union Pacific Mainline passes through the IMSA. Businesses in the Port of Morrow are able to ship their goods across the country via rail due to the nearby location of the Hinkle Railyard, which is the largest hump yard in the West. Connections at Hinkle provide shippers the ability to send goods north and south via rail.

EXISTING TRAFFIC VOLUMES AND PEAK HOUR OPERATIONS

Manual intersection turning movement counts were obtained from ODOT at each of the study intersections to assess the operational performance and characteristics within the study area. These counts were conducted on mid-week days in April 2010. A description of the analysis conducted with this data is summarized in the following sections.

Intersection Volumes

Turning movement counts at each intersection were recorded from 6:00 a.m. to 10:00 p.m. Separate peak hours for each interchange area are identified due to their different natures (e.g. the POM interchange serves primarily industrial traffic and the I-84/US 730 interchange serves regional commuter and through traffic) and the distance between them. The weekday p.m. peak hour in the I-84/US 730 interchange area occurs from 4:00-5:00 p.m. The turning movement volumes at each study intersection are balanced where appropriate during this hour to account for the differences in data collection. The existing unadjusted turning movement traffic counts are provided in the *Technical Appendix*.

Seasonal Adjustments

Following the methodology outlined by ODOT's Analysis Procedures Manual (APM, Reference 4), a seasonal adjustment factor was applied to the traffic counts collected for the existing conditions analysis in order to estimate 30th highest hour volumes. The exception to this is I-84, since its volumes are taken from automatic traffic recorder (ATR) #25-008, which is located nearby on I-84 west of US 730, during the peak month (July). In consultation with ODOT staff, ATR #30-002, located on US 730 northeast of the study area and east of Umatilla at milepost 193.70, was determined to have the most similar characteristics to US 730 within the study area. The seasonal adjustment factor for counts conducted on US 730 and local roadways within the study area during April is 1.21.

Figure 4-6 illustrates the 16-hour volume peaking characteristics of the I-84 through traffic. Figures 4-7 through 4-9 illustrate the 16-hour volume peaking characteristics of the I-84 ramps at the US 730

interchange. Figure 4-10 shows the same for US 730. The volumes shown in these figures have been seasonally adjusted.

Figure 4-6 16-Hour Volume Profile for I-84 West of US 730

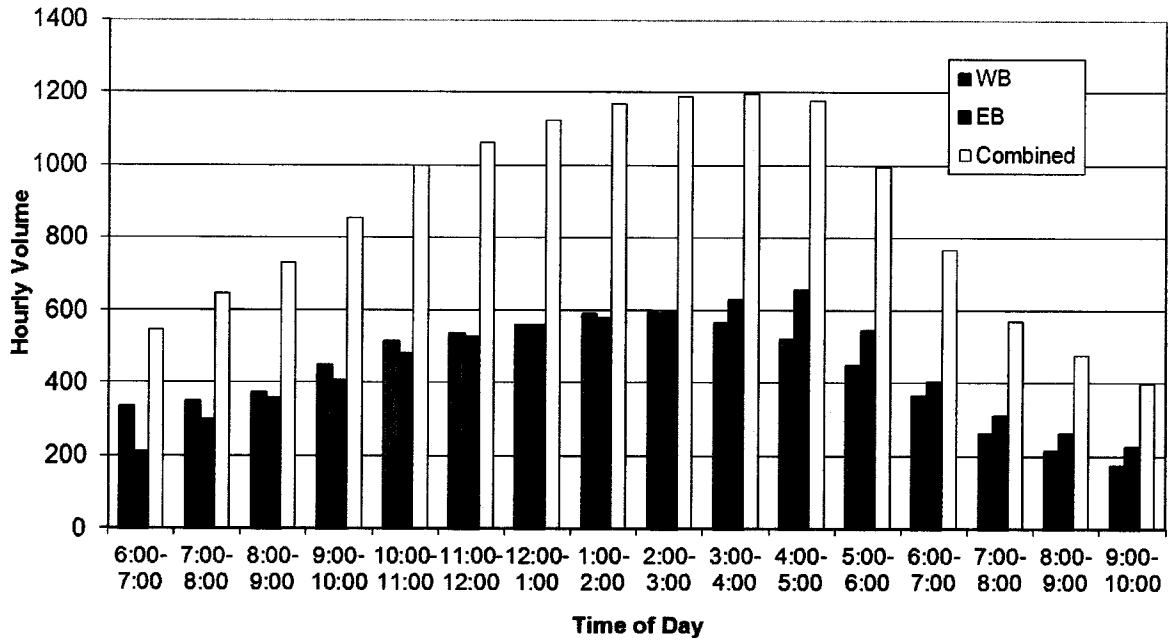


Figure 4-7 16-Hour Volume Profile for I-84 WB Ramps at US 730

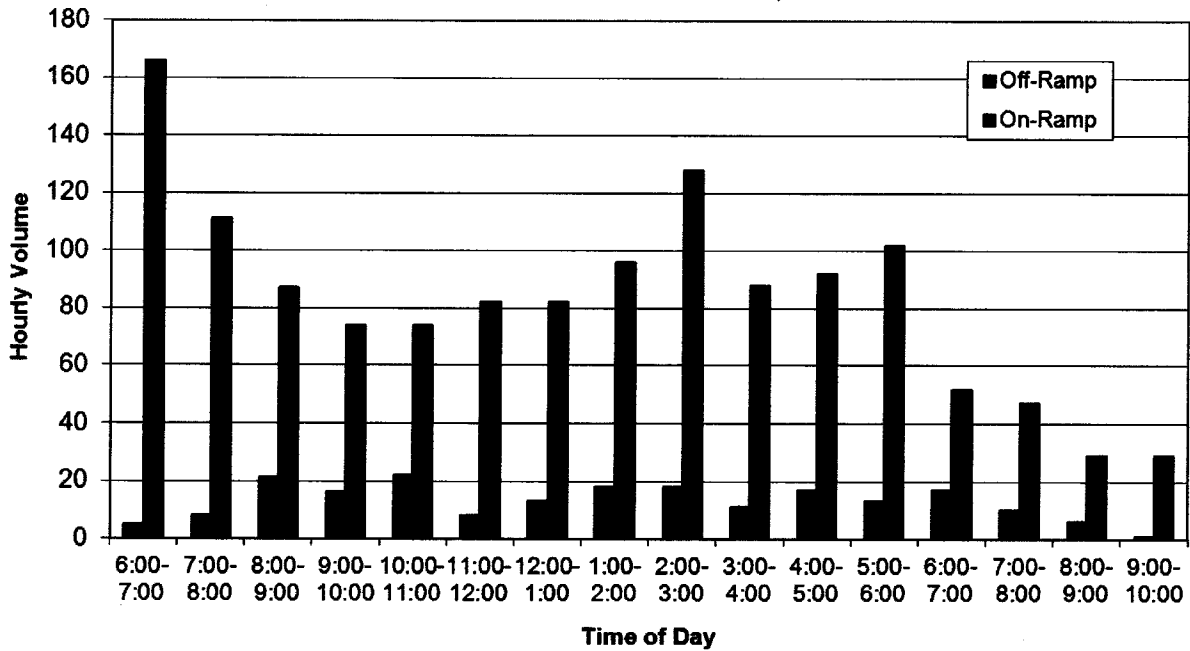


Figure 4-8 16-Hour Traffic Volume Profile for I-84 EB Ramps at US 730

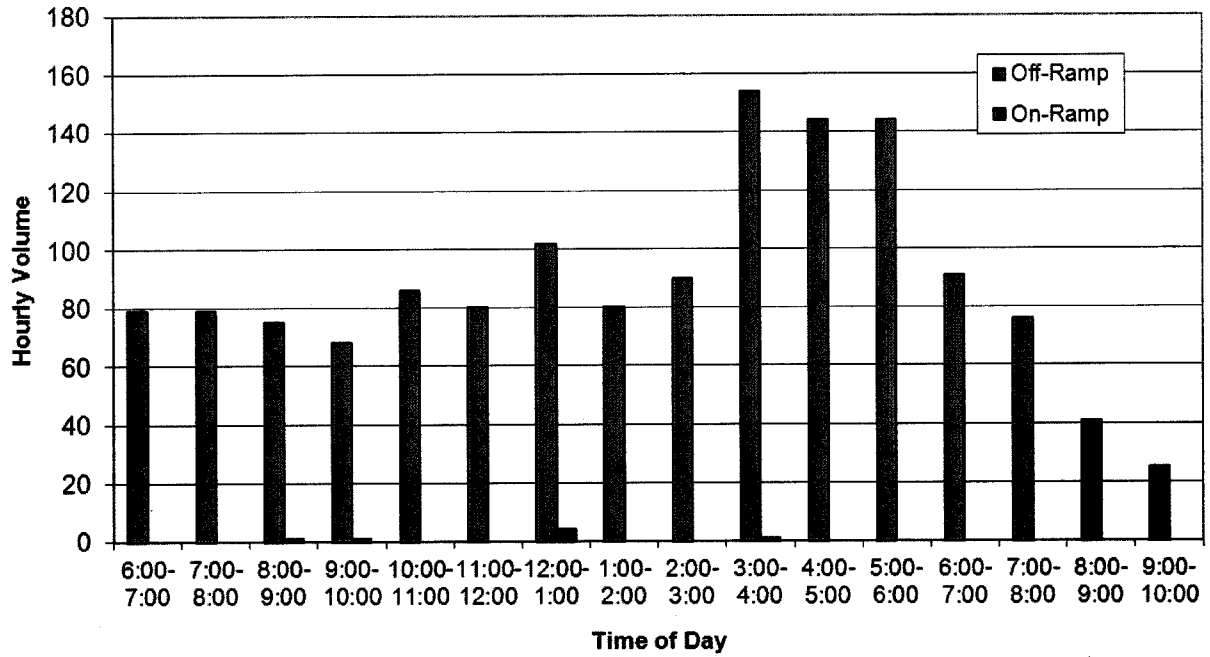


Figure 4-9 16-Hour Traffic Volume Profile for I-84 EB On-Ramp at Bombing Range Road

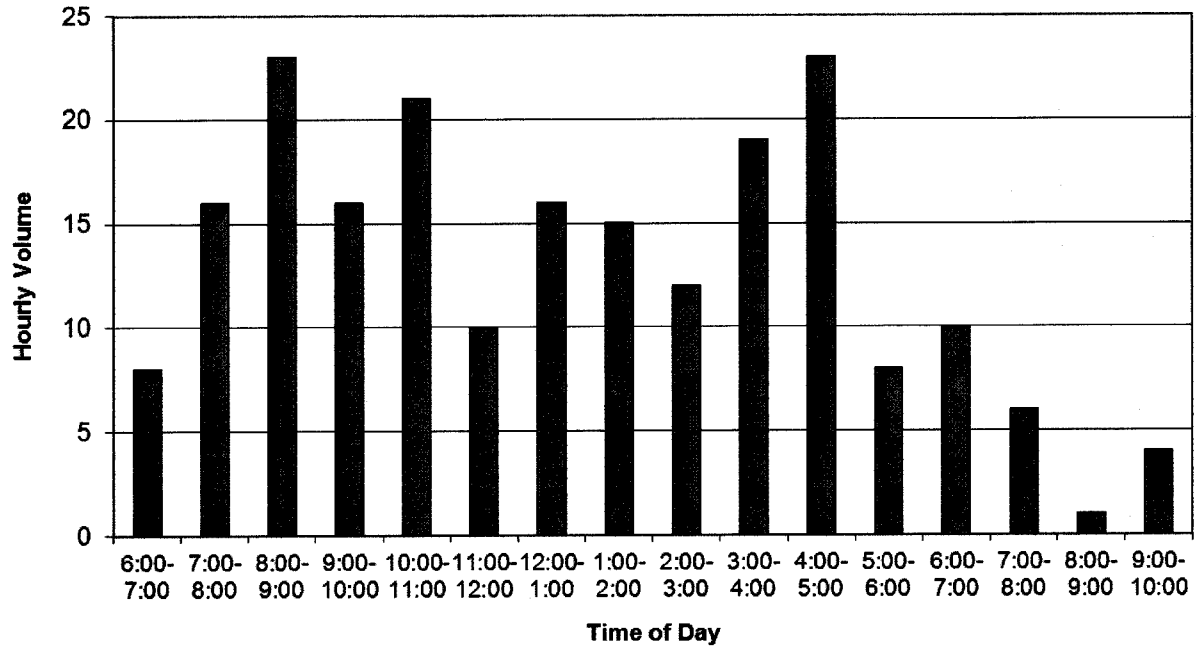
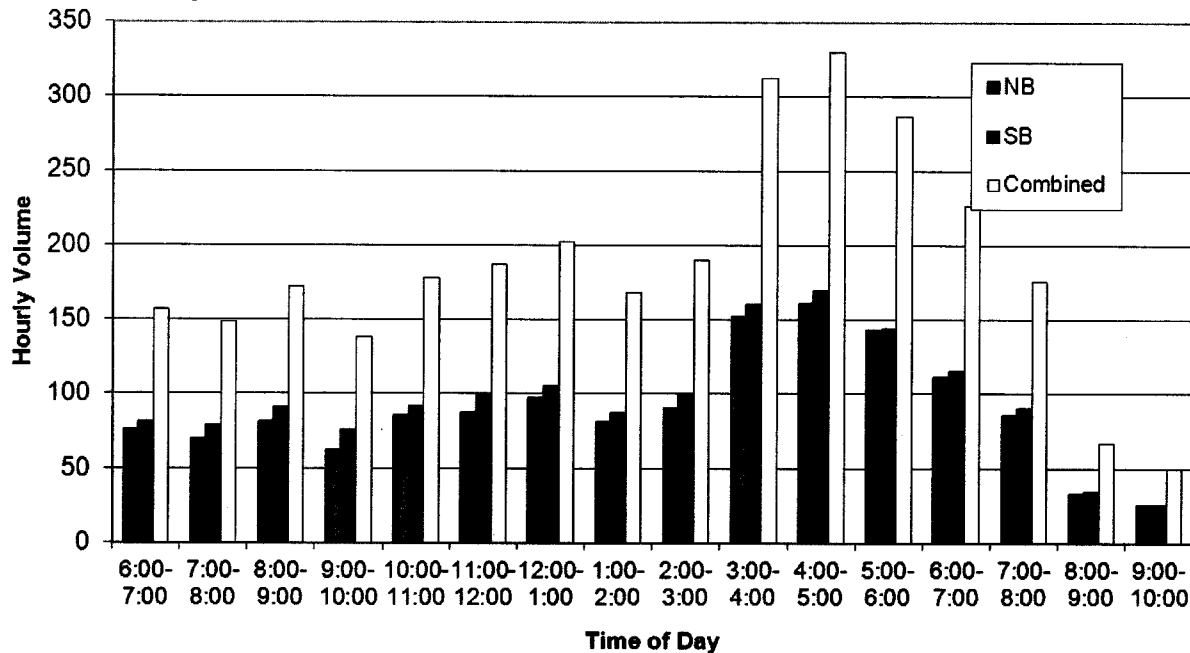


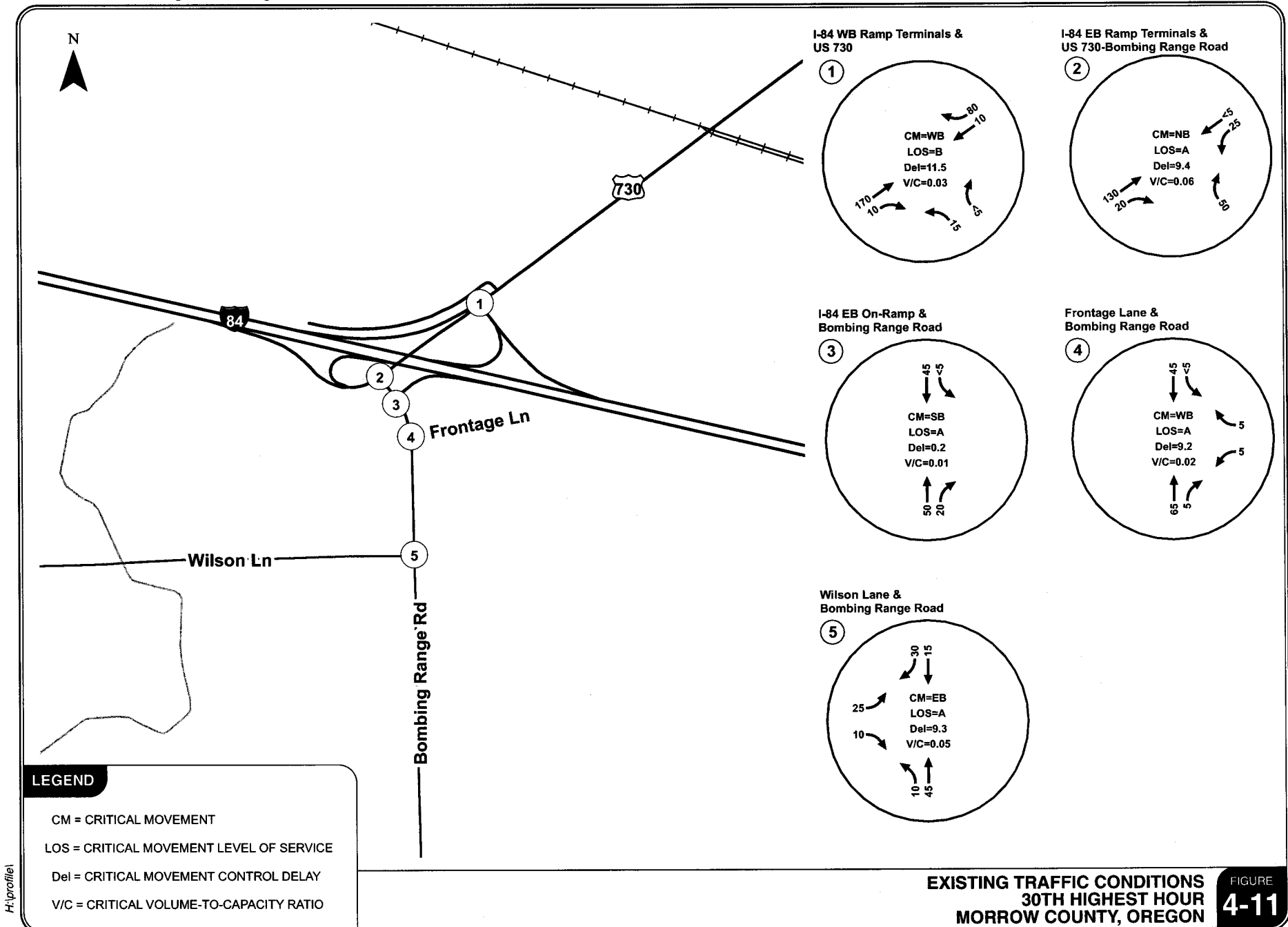
Figure 4-10 16-Hour Traffic Volume Profile for US 730 North of I-84



Traffic traveling to and from I-84 significantly influences traffic volumes on US 730. As the figures show, the peak hour volumes on each of the I-84 ramps are approximately 80% of the volumes on US 730 during that same period. Essentially, most of the traffic on US 730 in the proximity of I-84 is traveling to or from the interstate.

Figures 4-7 through 4-9 show that the I-84 ramps at the US 730 interchange each have a dominant traffic pattern that lasts throughout the day. Traffic volumes on the I-84 westbound on-ramp are significantly higher than volumes on the westbound off-ramp throughout the 16-hour period that counts were conducted. The exact reverse pattern occurs on the eastbound ramps, where the on-ramp has significantly lower volumes than the off-ramp. This indicates that much of the traffic utilizing this interchange is coming from and going to the west on I-84. This is not necessarily surprising given that I-82 is a faster connection to I-84 to the east of US 730 for traffic coming from or going to Washington or many of the destinations along US 730.

The weekday 30th highest hour intersection turning movement counts used for the existing conditions analysis are shown in Figure 4-11.



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Existing Intersection Operations

All operations analyses described in this report were performed in accordance with the procedures stated in the *Highway Capacity Manual 2000* (Reference 5). The OHP sets operational standards based on volume-to-capacity (v/c) ratios for the interchange ramp terminals (v/c of 0.70 for the US 730 ramp terminals) and intersections of US 730 (v/c of 0.70). These standards apply to the overall v/c ratio at signalized intersections and to the state highway approaches at unsignalized intersections. The minor street approaches that are stop-controlled at unsignalized intersections have a standard of a v/c ratio of 0.90.

The operational standard for intersections involving only County roadways is based on level-of-service (LOS). The County's standard is LOS "C" or better for unincorporated areas (i.e., intersections along Bombing Range Road).

As shown in Figure 4-11, all study intersections currently meet applicable operation standards. The existing conditions operations worksheets are provided in the *Technical Appendix*.

TRAFFIC SAFETY

The crash histories at the study area intersections and along the study area highways (i.e. I-84 and US 730) were reviewed in an effort to identify potential safety issues. Crash records were obtained from ODOT for the five-year period from January 1, 2005 through December 31, 2009. Table 4-2 contains the summary of reported crashes at the intersections and Table 4-3 contains the summary of reported crashes along the highways.

Table 4-2 Intersection Crash Histories (January 1, 2005 through December 31, 2009)

Intersection	# of Crashes	Crash Rate ¹	Angle	Crash Type			Severity		
				Rear-End	Turning	Other	PDO	Injury	Fatality
I-84 WB Ramp Terminal/US 730	1	0.16	0	1	0	0	1	0	0
I-84 EB Ramp Terminal/US 730	2	0.46	0	0	1	1	0	1	1
I-84 EB Ramp Terminal/Bombing Range Rd	No Crashes Reported								
Wilson Ln/Bombing Range Rd	1	0.39	0	0	0	1	1	0	0

¹Crash rate is expressed in terms of crashes per million entering vehicles

Table 4-3 Highway Segment Crash Histories (January 1, 2005 through December 31, 2009)

Roadway	# of Crashes	Crash Rate ¹	Crash Type					Severity		
			Angle/ Turning	Rear- End	Sideswipe	Fixed Object	Other	PDO	Injury	Fatality
I-84: Boardman – East of US 730	29	0.20	1	3	7	8	10	14	14	1
US 730: I-84 EB – Canal Rd	7	0.94	0	0	0	3	4	3	3	1

¹Crash rate is expressed in terms of crashes per million vehicle miles

Table 4-2 shows that only a few crashes have been reported at study intersections. There was however, one fatality near the I-84 eastbound ramp terminal/US 730-Bombing Range Road intersection. This crash involved a passenger car making a turn without yielding the right-of-way to a motorcycle traveling straight. The crash occurred in the daylight on a dry road. There are no distinct crash patterns at the intersections, however.

As Table 4-3 shows, just over half of all the crashes on I-84 and US 730 result in an injury or fatality. Both fatalities on these highways were the result of a vehicle running off the road and overturning. The fatal crashes occurred during daylight on dry roads. No other vehicles were involved in either crash. ODOT crash data summary sheets are provided in the *Technical Appendix*.

EXISTING ROADWAY ACCESS CONDITIONS

Existing roadway access conditions have been inventoried. This inventory was conducted along US 730 and Bombing Range Road. The inventory along US 730 north of the I-84 Westbound ramp terminal was provided by ODOT, which maintains detailed records regarding access to state highways. The remainder of the inventory was conducted by the project team and is more cursory. The following is a summary of these inventories.

There are currently 11 public and private access points (excluding the interchange ramp terminals) on US 730 and Bombing Range Road located within the Operations and Access Study Area (roughly ½ mile north and south of the existing I-84 interchange). Of these access points, 6 are located on US 730 and the remaining 5 are located on Bombing Range Road south of US 730. Figure 4-12 illustrates the location and type (public or private) of each of the access locations along US 730 and Bombing Range Road within the Operations and Access Study Area. Table 4-4 summarizes the tax lots and existing businesses served by each of the access points as well as other miscellaneous descriptive information such as driveway width, mile point location, and permit number (if applicable).



LEGEND

- # Private Access
- # Public Access
- Minimum 1320' IAMP Limits
- ▭ Operations/Access Study Area

**ACCESS INVENTORY
BOARDMAN, OREGON** FIGURE
4-12

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Table 4-4 Public/Private Approach Inventory

Figure 4-12 ID	Roadway	Approach Type	Side of Roadway	Serves Tax Lot Number	Property Owner/ Business Name	Mile Point	Approach Width	Permitted/ Permit #	Date of Permit
1	US 730	Public	North	300	Canal Road	168.23	33'	Unknown	
2	US 730	Public	North	200, 201, 202, & 300	Port of Morrow	168.279	21'	Unknown	
3	US 730	Public	North	200, 201, 202, & 300	Port of Morrow	168.44	22'	Unknown	
4	US 730	Private	South	200, 201, 202, & 203	Tera Poma Land, LLC	168.458	22'	Unknown	
5	US 730	Public	South	200, 201, 202, & 203	Port of Morrow	168.299	56'	12A35033	10/01/1993
6	US 730	Public	South	-	I-84 WB Ramp Terminal (off/on-ramp)	-	-	-	-
7	US 730	Public	South	-	Bombing Range Road	-	-	-	-
8	Bombing Range Road	Public	West	-	Canal Road	-	-	-	-
9	Bombing Range Road	Public	East	-	I-84 EB Ramp Terminal (on-ramp)	-	-	-	-
10	Bombing Range Road	Public	East	-	Frontage Lane	-	-	-	-
11	Bombing Range Road	Private	West	-	Farm	-	-	-	-
12	Bombing Range Road	Private	East	-	Farm	-	-	-	-
13	Bombing Range Road	Public	West	-	Wilson Lane	-	-	-	-

Oregon Administrative Rule 734, Division 51 and the Oregon Highway Plan (OHP) identify ODOT's access management standards within the vicinity of interchanges. Based on an outright application of the standards, no full public or private access is allowed within 1,320 feet (¼ mile) from the ramp terminals. Figure 4-12 shows the 1,320 feet access control area as measured from the Interstate-84 ramp terminal intersections. As shown, 2 private and 7 public accesses are located within the 1,320-foot control area on either side of the I-84/US 730 interchange.

EXISTING ROADWAY DEFICIENCIES

No significant existing roadway deficiencies were identified within the study area along the paved sections of roadway.

Environmental

The existing environmental conditions and potential issues were identified. The following is a summary of potential environmental issues, permits, and additional actions that may be required as the project moves forward. A more detailed description of these items and the baseline conditions may be found in the Technical Appendix.

WILDLIFE-HABITAT COMMUNITIES

The Area of Potential Impact (API) contains five general wildlife-habitat communities: urban & mixed environs; agriculture, pasture & mixed environs; shrub-steppe; herbaceous wetlands; and eastside (interior) riparian-wetlands, shown in Figure 4-13. These communities are described below:

- **Urban and mixed environs wildlife-habitat community** comprises approximately 102 acres within the I-84/US 730 Interchange area. Vegetation within this community is almost entirely non-native. This community contains moderate road density and approximately 30% impervious surface cover.
- **The agriculture, pastures and mixed environs wildlife-habitat community** is located adjacent to road ROWs. This community comprises approximately 347 acres within the I-84/US 730 Interchange area. Areas utilized for agriculture within the API are irrigated for cultivated crops and are also used for cattle grazing.
- **The shrub-steppe wildlife-habitat community** is located in the northwest quadrant of the I-84/US 730 Interchange area between US 730 and the Boardman Canal. This community comprises approximately 65 acres in the area. This community contains 100% herbaceous ground cover, dominated by non-native cheat grass (*Bromus tectorum*) and approximately 30% shrub cover. This area appears to have been undisturbed for at least 20 years, based on shrub growth. This community supports an active rodent community, based on burrows observed. Black-billed magpies (*Pica pica*) and western meadowlarks (*Sturnella neglecta*) were also observed in this area during the site investigation.
- **The eastside (interior) riparian-wetlands wildlife-habitat community** is scattered throughout the API. This community comprises approximately 55 acres within the I-84/US 730 Interchange area. This community is associated with a large wetland in the

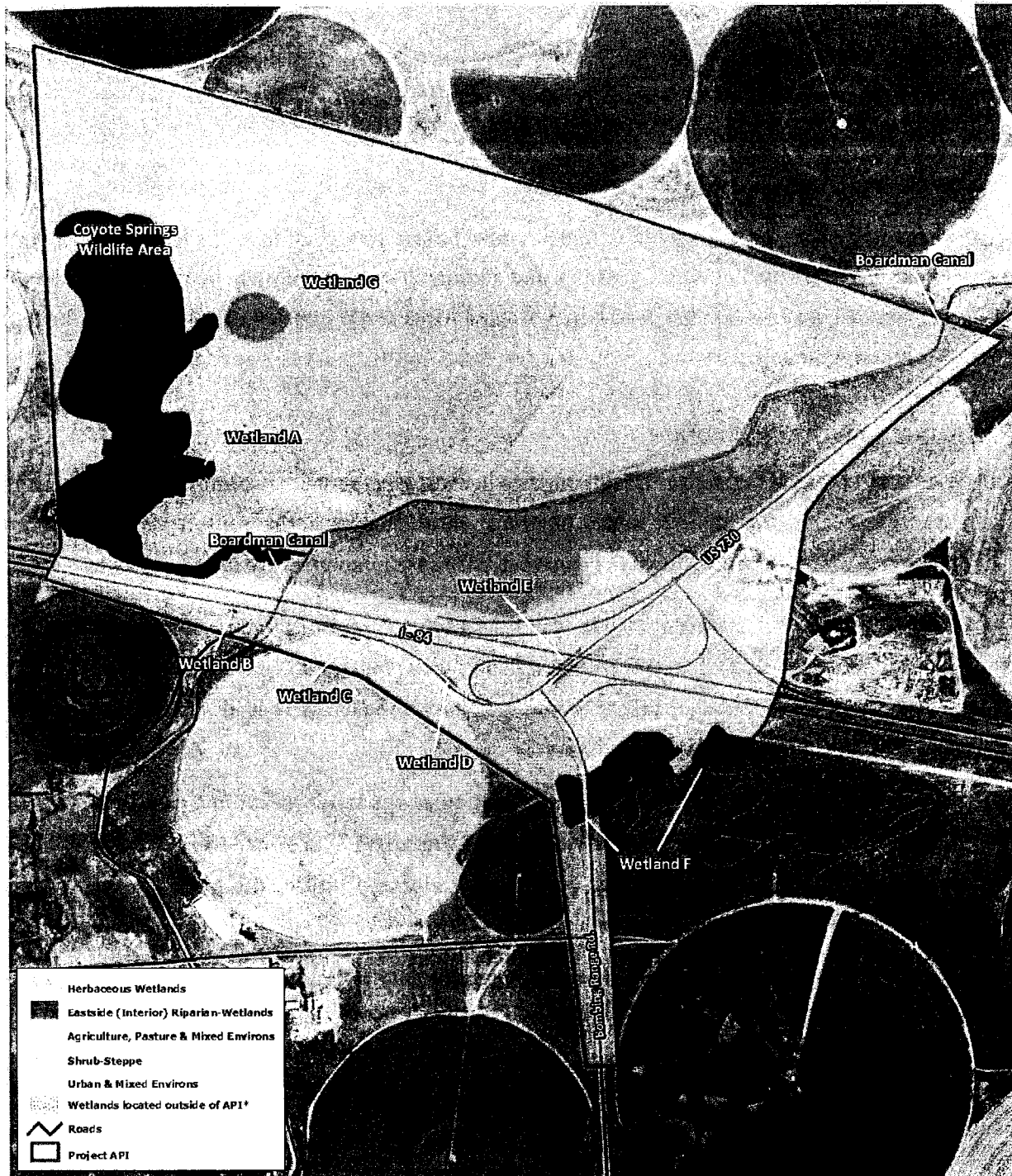


Figure 4-13 Natural Resources Map¹

¹Figure provided by Mason, Bruce & Girard, Inc.

northeast quadrant of the Port of Morrow Interchange, with the Coyote Springs Wildlife Area, and with a large wetland located on either side of Boardman Bombing Range Road within the US 730 Interchange area. Within the API, this habitat type is primarily composed of willow (*Salix sp.*), and broad-leaf cattail (*Typha latifolia*).

- **The herbaceous wetlands wildlife-habitat community** is located mainly in swales adjacent to roadways within the API. This community comprises approximately 6 acres (including the Boardman Canal) within the I-84/US 730 Interchange area. This habitat type is a mix of emergent herbaceous plants with grasses. Within the API, this habitat type is scattered, and is composed primarily of broad-leaf cattail.

THREATENED AND ENDANGERED SPECIES

Data from the US Fish and Wildlife Service (USFWS), StreamNet, and Oregon Natural Heritage Program (ONHP) focused on a 2-mile radius of the API indicated that two wildlife and fisheries species that are listed as threatened or endangered under the federal and state Endangered Species Acts (ESA) have the potential to occur within the vicinity of the API (References 6-8). A listing of these species, including their federal and state status and whether critical habitat is designated, is shown in Table 4-5. No listed plant species were identified during the records review or site investigation.

Table 4-5 Threatened and Endangered Species with the Potential to Occur within the API

Scientific Name	Common Name	Federal Status	State Status	Critical Habitat?	Habitat
<i>Oncorhynchus mykiss</i>	Steelhead (Middle Columbia River DPS, spring run)	Threatened	Sensitive Vulnerable	Yes, within the Columbia River north of the project API	Columbia River and tributaries
<i>Uroditellus washingtoni</i>	Washington ground squirrel	Species of Concern	Endangered	No	Sagebrush grassland in silty loam soils, particularly soils in the Warden series

Although habitat for steelhead does not exist within the API, this species is known to inhabit the Columbia River, located north of the API. Steelhead is included due to the potential for indirect impacts to this species from contaminants contained in stormwater runoff flowing from the proposed interchange improvements.

The API contains an area of shrub-steppe habitat, which is the preferred habitat for Washington ground squirrels. However, Washington ground squirrels also require silty loam soil types, particularly within the Warden soil series (Reference 9), which are not mapped within the API (Reference 10). Mapped

soils within the API contain loamy fine sand textures. As Washington ground squirrels are more closely associated with silty loam soils than with vegetation types (Reference 9), and are rarely known to occur between the Columbia River and the Boardman Bombing Range (Reference 11), it is unlikely that this species inhabits the API. However, discussions with ODFW wildlife biologists indicate that if shrub-steppe habitat is present, further investigations should be conducted to positively rule out the presence of Washington ground squirrels. In addition, rodent burrows were observed throughout the shrub-steppe habitat during the December 16, 2010 site investigation. These burrows have the potential to belong to Washington ground squirrels, which further supports the potential need for additional research or surveys. No Washington ground squirrel habitat was observed within API in the Port of Morrow Interchange area.

NOXIOUS WEEDS

Twenty-one weed species listed by the Oregon Department of Agriculture (ODA) occur within Morrow County (Reference 12). During the December 16, 2011 site investigation, project team biologists observed an unidentified knapweed species (*Centaurea sp.*), which is likely listed on the ODA noxious weed list (Reference 13). Due to the timing of the site investigation outside the optimal blooming period for noxious weeds, not all weed species or populations may have been identified. In addition, only small portions of the API were traversed on foot, which likely further limited identification of weed species or populations. A complete noxious weed survey within the project footprint would be required during later design phases of the project to comply with ODOT requirements.

WETLANDS AND WATER RESOURCES

Six potential wetlands are mapped within the API based on data obtained from the Oregon Geospatial Enterprise Data Library (Reference 14). The approximate size and location of these wetlands was confirmed during the site investigation. In addition, two small potential wetlands were identified during the site investigation. Five herbaceous wetlands and two scrub-shrub wetlands, totaling 58.23 acres and one waters feature (Boardman Canal) totaling 2.33 acres are located within the I-84/US 730 Interchange area. Due to the wetlands' proximity to agricultural fields, it is possible that the wetlands have increased in size or have been created by irrigation practices in the Boardman area.

No previous wetland delineations have been conducted within the API (Reference 15). The Boardman Canal does not appear on the 1870 General Land Office (GLO) survey, but is shown as an irrigation canal on the 1940 GLO survey (Reference 16). No historic streams are mapped on the GLO surveys within the API.

WATER QUALITY RESOURCES

Water quality parameters and standards have been established by the Department of Environmental Quality (DEQ) to protect the beneficial uses of Oregon's waterways. Development, agricultural activities, and industrial and commercial uses have affected the water quality within the Columbia River, the receiving waterbody for runoff from the API. As such, DEQ has listed the segment of the Columbia River located north of the API as a 303(d) water quality-limited waterbody because it does not meet water quality standards for pH and temperature. In addition, the segment of the Columbia River located north of the API has an approved total maximum daily load (TMDL) for dioxin and total dissolved gas. There are no water-quality-limited waterbodies located within the API (Reference 17).

DEQ declared the Lower Umatilla Basin a Groundwater Management Area (GMA) in 1990 due to elevated nitrate levels detected in groundwater samples. An action plan was published in 1997 that identifies point-source pollutants and plans to reduce groundwater contamination. The major point-source nitrate-nitrogen pollutants in the GMA include irrigated agriculture; food processing water; confined animal feeding operations, domestic sewage where septic systems occur in high densities, and Umatilla Chemical Depot's washout lagoons (Reference 18).

The Oregon Water Resources Department has designated the Ordinance Basalt Critical Groundwater Allocation area east of Boardman Bombing Range Road north to the Columbia River. New groundwater withdrawals are not permitted in this area (Reference 19).

REGULATORY SUMMARY

Table 4-6 provides details regarding the applicable permits, approvals, and clearances likely needed for potential projects in the API.

Table 4-6 Summary of Potential Applicable Permits, Approvals, and Clearances

Type of Permit / Approval / Clearance	Issuing Agency	Permit / Approval / Clearance	Estimated Timeline (after submittal)
ESA Consultation for federally-listed fish species	NMFS	SLOPES Approval or Biological Opinion	30 days (SLOPES) 45 days (NLAA) 135 days (LAA)
ESA Consultation for state-listed wildlife species	ODFW	ODFW Project Approval	90 days
Migratory Bird Treaty Act Compliance for tree clearing	ODOT	None (if trees and shrubs are removed outside MBTA nesting period of March 1 – September 1)	N/A
Noxious Weed Clearance	ODOT	Botanical Clearance Report	N/A
Letter of Concurrence	DSL	Wetland/Waters Delineation Report approval	120 days
Jurisdictional Determination	ACOE	Wetland/Waters Delineation Report approval	60 days
Removal/Fill Permit	DSL	Joint Permit Application approval	GP: 40 days after Wetland/Waters Delineation Report concurrence Individual Permit: 120 days
Section 404 Clean Water Act Permit	ACOE	Joint Permit Application approval	Nationwide permit: 75 days, Individual permit: 120 days
Section 401 Clean Water Act Certification	DEQ	401 Water Quality Certification	Up to 1 year
Section 402 Clean Water Act Certification	DEQ	1200-C	30 days
Dewatering disposal approval	DEQ	Special letter permit or letter from DEQ	Several weeks to several months
Water rights	WRD	Limited license or water right	30 days to 1 year

Summary

- The primary roadways within the Interchange Management Study Area (IMSA) include Interstate-84, US 730, and Bombing Range Road.
- All of the study intersections meet their respective ODOT or County mobility standard.
- There are no identified safety issues within the study area based on a review of the most recent five years of available crash data.
- Due to its rural nature, pedestrian and bicycle facilities are limited in the study area.

- There are currently 11 access points located on US 730 and Bombing Range Road within the Operations and Access Study Area. The existing access points are a combination of public and private approaches.
- ODOT's access spacing standard within the vicinity of the interchange is 1,320 feet (¼-mile) from the ramp terminals to any type of access (partial or full). Within this ¼-mile control area there are 2 private and 7 public accesses on US 730 and Bombing Range Road.
- Up to twelve Environmental permits, approvals, and clearances will be required for projects within the vicinity of the interchange.
- Two threatened and endangered species may be present within or near the API.
- There are seven wetlands within or near the API.

Section 5
2030 Future Conditions

2030 FUTURE CONDITIONS

This section documents the future land use as well as the forecast traffic operations in the vicinity of the I-84/US 730 interchange. The future traffic projections are based on anticipated future land uses. Future land use information was determined through working with the City, County, and POM.



Future Land Uses

The analysis of future land uses in the vicinity of the POM and I-84 / US 730 interchanges was focused on areas that are expected to have development or redevelopment potential that would generate traffic in the Interchange Management Study Area (IMSA). The IMSA defined in Figure 5-1 includes land both inside and outside the City of Boardman and its urban growth boundary (UGB) and contains a variety of zones, including commercial, rural residential, industrial, farm use, and exclusive farm use zones.

Based on conversations with Morrow County and POM staff, development is anticipated to occur within the IMSA in the POM properties, south of I-84 in the City and unincorporated Morrow County, and at the Naval Weapons System Testing Facility (NWSTF).

UNINCORPORATED MORROW COUNTY

Through consultation with Morrow County staff, new residential development is anticipated to occur in the IMSA south of I-84. This development would occur under the FR2 zoning, which requires a minimum lot size of two acres. The specific areas identified as likely to develop in the next 20 years are identified in Figure 5-2. This is expected to equate to about 81 additional single family homes, assuming these areas develop with according to approvals or minimum lot sizes.

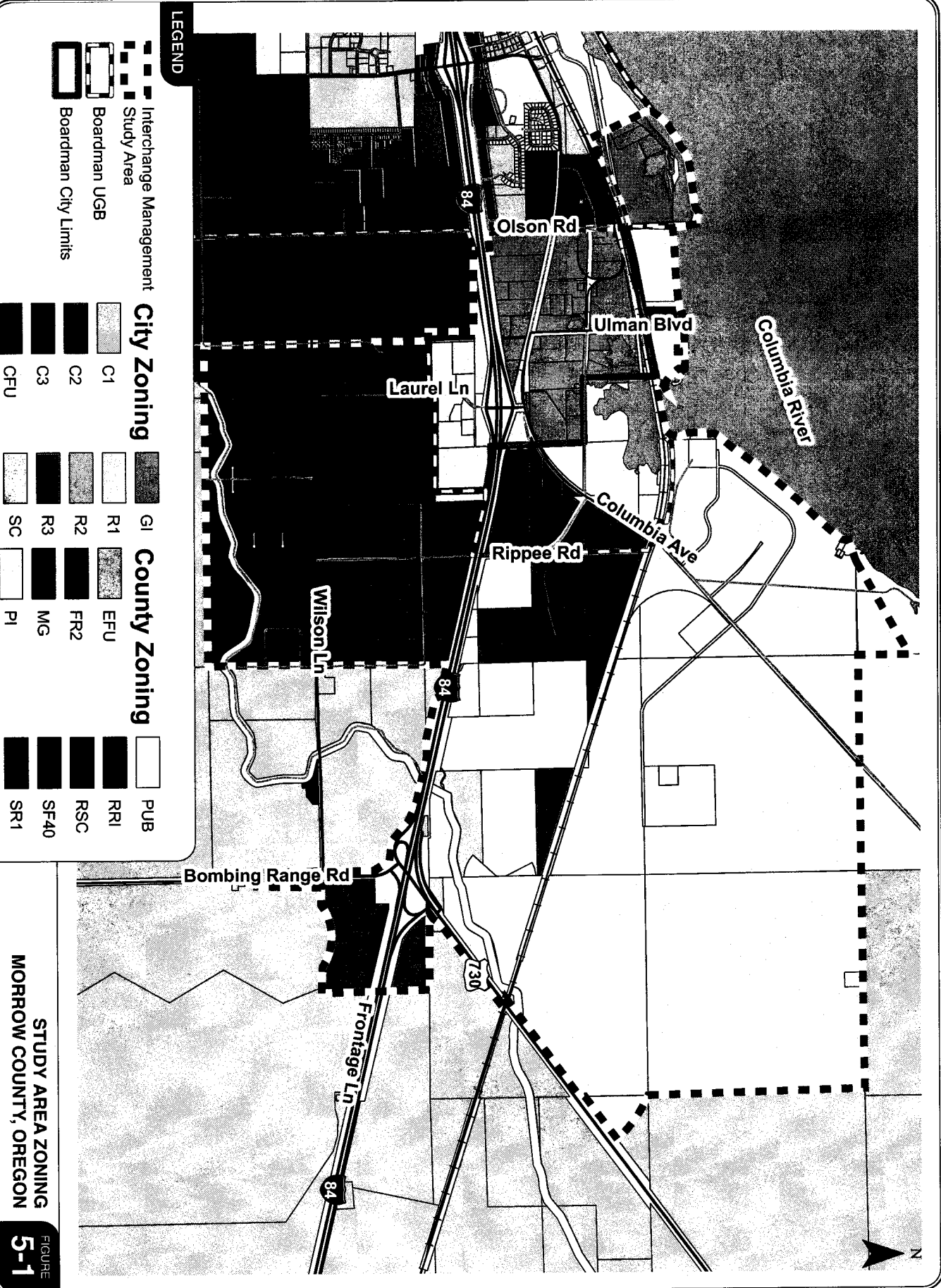
CITY OF BOARDMAN

The area immediately south of I-84 adjacent to the POM interchange is located within Boardman City limits and is zoned as Service Center (SC), which is a sub-district of the Commercial district. This zone allows for highway-oriented commercial uses along the I-84 corridor. In order to be conservative, it was assumed that the area served by Yates Lane in the southeast quadrant of the POM interchange redeveloped under this zone (shown in Figure 5-2). Specifically, it was assumed that a full truck stop replaces the existing card-lock fueling station, given the location's proximity to the POM and uses

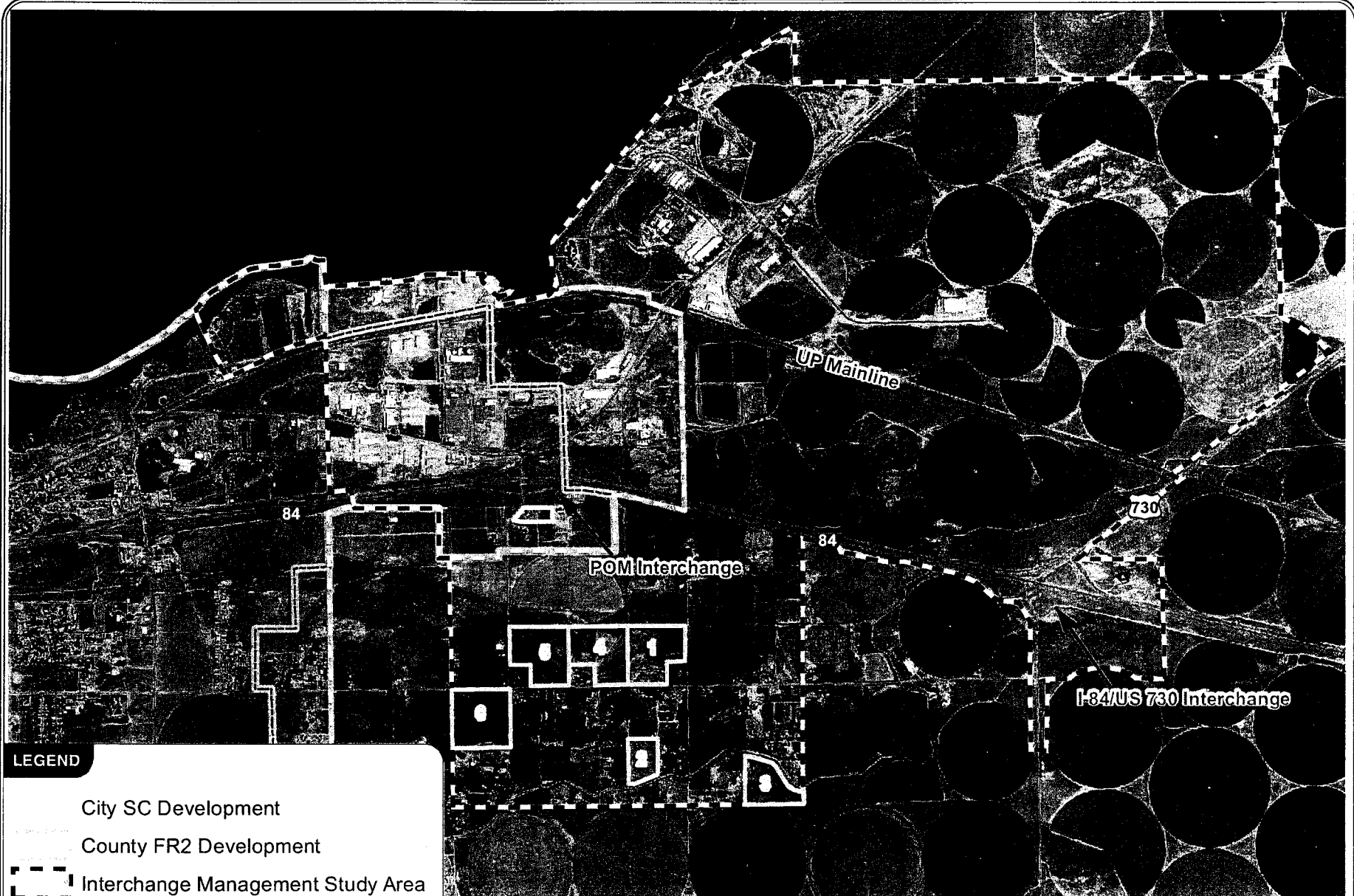
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KITTELSTON & ASSOCIATES, INC.
TRANSPORTATION ENGINEERING / PLANNING



STUDY AREA ZONING
MORROW COUNTY, OREGON
FIGURE 5-1



LEGEND

- City SC Development
- County FR2 Development
- Interchange Management Study Area
- Boardman UGB
- Boardman City Limits

PROBABLE 20-YEAR DEVELOPMENT AREAS
MORROW COUNTY, OREGON **FIGURE 5-2**

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allowed in the SC sub-district.

PORT OF MORROW

The POM industrial area is essentially split into two areas by the Union Pacific (UP) mainline railroad. Most of the existing development in the industrial park is located south of the UP mainline and much of this area is built out. Consequently, POM staff expects that this area will likely only experience a 15% increase in the amount of industrial related development over the next 20 years. The area north of the UP mainline is known as the East Beach area and is largely undeveloped. POM staff anticipates that most future development in the industrial park will occur in this area and that there could be a five-fold increase in the amount of industrial uses over the next 20 years.

NWSTF BOARDMAN

The US Navy is considering expanding its operations at its NWSTF Boardman site. This facility is located south of the IMSA between Bombing Range Road and Tower Road. Increased operations at the site would have an effect on operations at the I-84/US 730 interchange. The US Navy recently began the process of preparing an Environmental Impact Statement (EIS) for expanded operations. Currently this process is at the beginning stages and the potential traffic related impacts of the increased operations cannot be accurately assessed.

Future Traffic Conditions

Based on the potential levels of development and redevelopment in the IMSA, and factoring in regional growth from outside the IMSA, future year 2030 traffic conditions were estimated along the study area roadways and intersections.

YEAR 2030 NO-BUILD TRAFFIC VOLUMES FORECAST METHODOLOGY

Year 2030 "No-Build" traffic volume forecasts for intersection turning movements and street segments were developed in order to analyze the effects of traffic growth on the POM and I-84 / US 730 interchanges and the surrounding transportation system. The year 2030 No-Build scenario was developed based on the currently adopted City of Boardman and Morrow County Comprehensive Plans and anticipated development within the POM. The remainder of this section describes the methodology and assumptions used to develop year 2030 forecasts.

Future year 2030 no-build traffic volumes were developed by considering the following traffic growth through year 2030:

- Future traffic related to regional growth within the larger context of the City of Boardman, Morrow County, and along the I-84 and US 730 corridors.
- Future traffic growth related to development and redevelopment of land in the IMSA.

The specific assumptions used in each of these traffic growth components are summarized below.

Background Traffic Growth

The proposed annual growth rates were determined based on a review of ODOT’s Future Year Volume Tables, historical average daily traffic (ADT) counts, future development assumptions within the study area, and the City of Boardman’s and Morrow County’s Transportation System Plans (TSPs).

US 730

An annual growth rate was applied to the existing through volumes along US 730 and all turning movements at the I-84 ramp terminals at US 730. Based on a review of ODOT’s Future Volume Tables (which are based on historic traffic volumes), a growth rate was estimated for these movements. Table 5-1 shows the most applicable data point to the I-84/US 730 IMSA.

Table 5-1 Background Growth Rate Calculations on US 730

Mile Point	Location	Average Annual Daily Traffic		R ² Value	Annual Growth Rate (2008-2029) ¹
		2008	2029		
168.54	0.96 mile northeast of I-84	2,900	3,000	0.61	0.2%

¹Annual Growth Rate – [(2029 AADT / 2008 AADT) ^ (1 / (2029-2008))] – 1

Based on the data shown in Table 5-1, an annual growth rate of 0.2% was applied to all through movements on US 730 and all turning movements at the I-84 ramp terminals at US 730.

Local Roadways

Background growth rates were applied to local roadways with a regional reach beyond the IMSA. These roadways were determined to be Bombing Range Road and Wilson Lane. The other local roadways on the north side of the IMSA almost exclusively serve traffic related to the POM. Growth on these roadways was accounted for in the consideration of development in the POM in the manner described later in this section. The City and County’s TSPs contain growth rates for local roadways in the IMSA. While slightly different, both documents assumed an annual growth rate of approximately 3%. This rate was applied to Bombing Range Road and Wilson Lane.

Development and Redevelopment Traffic

As was previously mentioned, development and redevelopment is anticipated to occur within the IMSA in the POM industrial area and in unincorporated Morrow County south of I-84. The traffic estimated from the specific development areas identified by the County and from growth in the POM industrial area was added on top of the background growth rates described above.

Unincorporated Morrow County

In order to be conservative, it was estimated that the areas shown in Figure 5-2 would develop under the minimum two-acre lot size allowed by the FR2 zone if developments of a certain size had not been approved yet. This estimation was applied to Areas 3 through 6. Table 5-2 summarizes the development potential of each area under the existing FR2 zoning.

Table 5-2 Development Potential of Unincorporated Morrow County Areas

Figure 6-2 Area #	Size (Acres)	# of Homes
1	33.5	14
2	13.8	5
3	21.7	10
4	38.7	19
5	34.2	17
6	33.1	16
Total	175	81

Using the information in Table 5-2, the trip generation potential for each area was calculated for the weekday p.m. peak hour using the 8th Edition of *Trip Generation*, published by the Institute of Transportation Engineers (ITE, Reference 20). Table 5-3 summarizes the estimated size and trip generation potential the areas identified in Figure 5-2 (all trip generation numbers in Table 5-3 have been rounded up to the nearest five).

Table 5-3 Trip Generation Potential of Unincorporated Morrow County Development

Size (Acres)	# of Homes	Weekday PM Peak Hour Trips		
		Total	In	Out
175	81	85	55	30

Table 5-3 shows that this development is estimated to generate approximately 85 trips during the weekday p.m. peak hour (55 in and 30 out). The assumed distribution patterns of trips generated within each area were based on the existing zoning, existing travel patterns, and relative attractions within the overall IMSA.

City of Boardman

The ITE *Trip Generation* manual does not contain information for truck stops. Therefore, the trip generation of a potential truck stop located on Yates Lane was calculated using site-specific data collected at other truck stops in the Northwest and California. Table 5-4 summarizes the estimated trip generation potential of a truck stop replacing the existing Pacific Pride fueling station in the location shown on Figure 5-2 (all trip generation numbers in Table 5-4 have been rounded to the nearest five).

Table 5-4 Trip Generation Potential of a Truck Stop

Use	Size	PM Peak Hour Trips		
		Total	In	Out
Truck Stop	6 Truck Fueling Positions	65	30	35
	8 Auto Fueling Positions	140	60	80
Total Trip Generation Potential		205	90	115
<i>Existing Trips to Pacific Pride</i>		45	25	20
Net New Driveway Trips		160	65	95
<i>Pass-By Trips</i>		30	15	15
Net New Trips		130	50	80

The table shows that the development of a truck stop with six truck fueling positions and eight passenger automobile fueling stations is anticipated to generate approximately 130 (50 in and 80 out) new trips to the area. Based on existing traffic patterns and the nature of traffic to and from the surveyed stops, many of these new trips will be from vehicles passing by on I-84 Eastbound and diverted POM traffic.

Port of Morrow

As was previously discussed, POM staff expects that development in POM properties south of the UP mainline will increase by approximately 15% over existing levels in the next 20 years. The East Beach area is expected to grow by about 500% over its existing level of development during this time. Recognizing that existing traffic volumes in the study area along Columbia Avenue and Laurel Lane are primarily related to activity on POM properties, it assumed that growth in development of POM

properties will result in a proportional increase in traffic on these roadways. Therefore a total growth rate of 500% is applied to traffic volumes related to the East Beach area (i.e., northbound and southbound traffic on Columbia Avenue at Rippee Road) and a total growth rate of 15% is applied to traffic volumes related to the POM properties south of the UP mainline (i.e., all other movements on Columbia Avenue, Laurel Lane, and intersecting side streets).

YEAR 2030 NO-BUILD TRAFFIC CONDITIONS

Future year 2030 No-Build weekday p.m. peak hour traffic volumes were determined by applying the previously discussed growth rates and trip generation estimates to the existing traffic network. The resulting year 2030 No-Build weekday p.m. peak hour traffic volumes are shown in Figure 5-3.

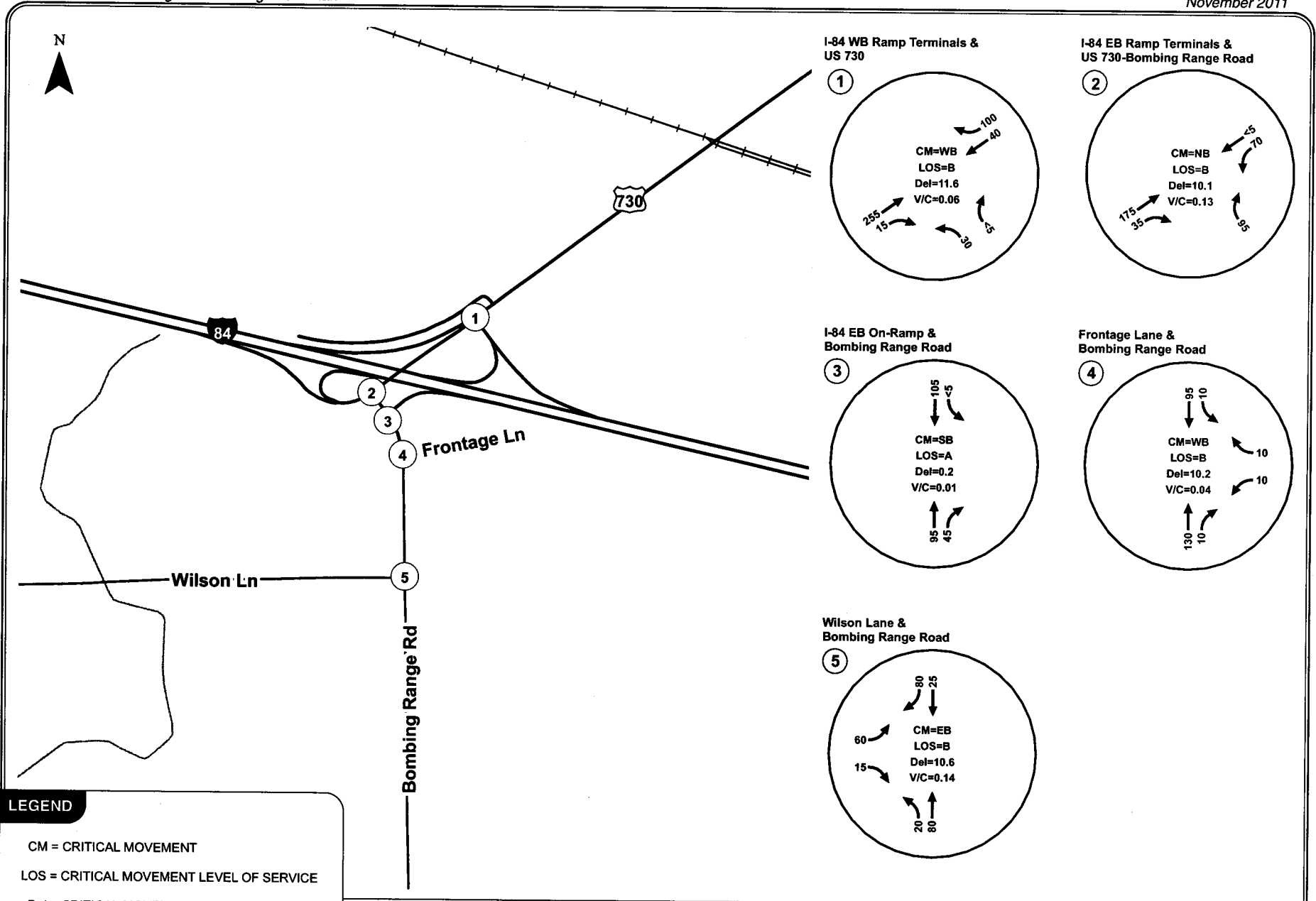
The transportation operations analysis was performed according to the methodologies and standards previously outlined in Section 4.

Traffic operations analyses were performed for the study intersections using the forecast year 2030 "No-Build" weekday p.m. peak hour traffic volumes shown in Figure 5-3. This No-Build analysis assumes that no improvements have been made to the existing transportation system. The results of these analyses are also shown in the figure. As the figure shows, all intersections are forecast to meet their applicable operational standard under year 2030 No-Build conditions. More detailed information on this analysis can be found in the *Technical Appendix*.

PLANNED TRANSPORTATION IMPROVEMENTS

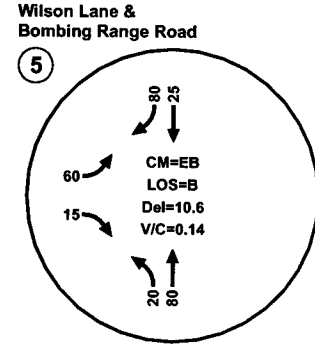
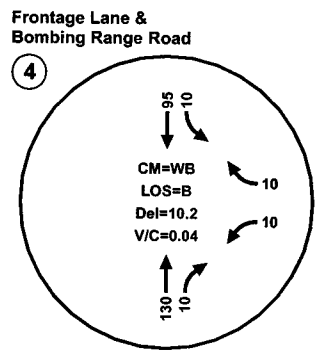
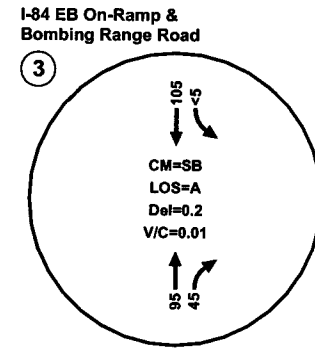
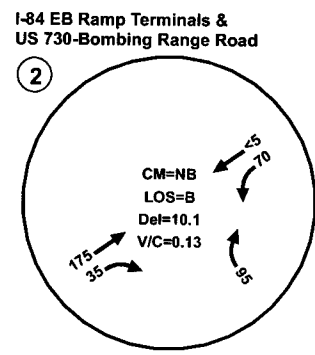
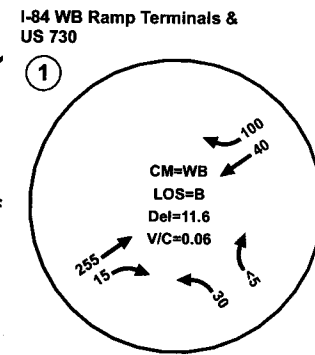
Morrow County's TSP identifies a few planned transportation improvements within the IMSA. Of these improvements, the one that is expected to occur within the next 20 years is a connection from the POM's East Beach area to US 730. This road will be called Lewis & Clark Drive and a segment of it has already been constructed from Columbia Avenue toward US 730. A potential alignment of the extension of Lewis & Clark Drive is shown in Figure 5-4. Another possible alignment for the extension would be a direct connection to the I-84/US 730 interchange.

For comparison purposes, an operations analysis has been conducted assuming this connection and subsequent re-routing of traffic volumes to and from the East Beach area. The results of the year 2030 traffic operations analysis assuming that Lewis & Clark Drive is extended to US 730 are shown in Figure 5-5. As the figure shows, the extension of Lewis & Clark Drive is anticipated to serve the majority of traffic traveling to and from the East Beach area. The *Technical Appendix* includes a summary of the 2030 operational analyses with the Lewis & Clark Drive extension.



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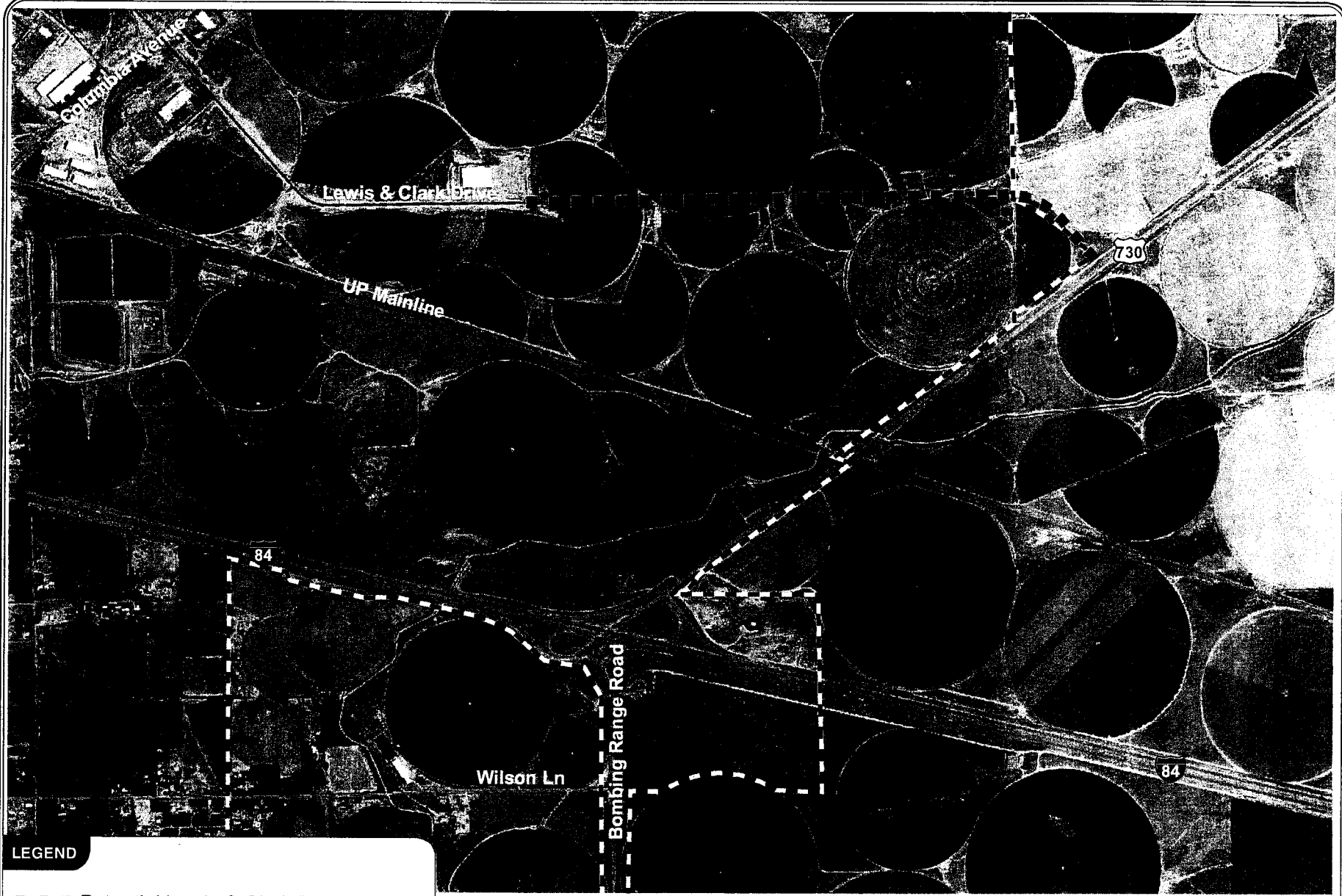
CM = CRITICAL MOVEMENT
 LOS = CRITICAL MOVEMENT LEVEL OF SERVICE
 Del = CRITICAL MOVEMENT CONTROL DELAY
 V/C = CRITICAL VOLUME-TO-CAPACITY RATIO



**YEAR 2030 NO-BUILD TRAFFIC CONDITIONS
 30TH HIGHEST HOUR
 MORROW COUNTY, OREGON**

**FIGURE
 5-3**

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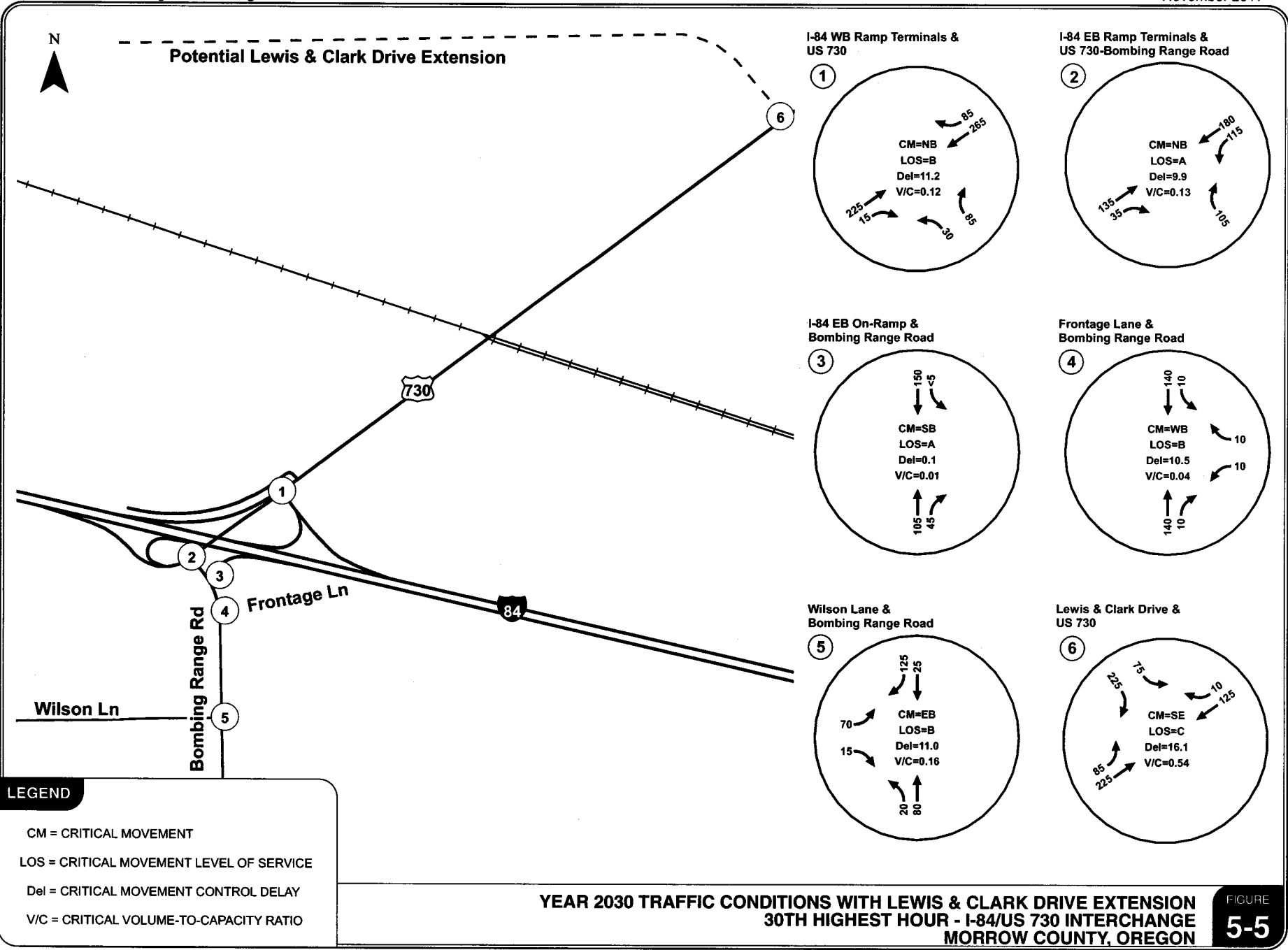
LEGEND

- ■ ■ Potential Lewis & Clark Dr Extension
- - - Interchange Management Study Area

POTENTIAL ALIGNMENT OF LEWIS & CLARK DRIVE EXTENSION MORROW COUNTY, OREGON

FIGURE 5-4

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FIGURE

5-5

Lewis & Clark Drive / US 730 Intersection

A final configuration for the Lewis & Clark Drive/US 730 intersection has not been determined. The analysis shown in Figure 5-5 assumes a three-leg intersection with the Lewis & Clark Drive approach being stop-controlled and US 730 traffic allowed to flow freely. Per the ODOT Analysis Procedure Manual (APM, Reference 4), left-turn and right-turn lane warrants would be met on US 730 given the volumes shown in the figure. Therefore, this analysis assumes that US 730 has a northeast-bound left-turn lane and southwest-bound right-turn lane at this intersection.

THRESHOLD ANALYSIS

A rough sensitivity analysis was run in order to determine when, in terms of level of growth in the POM East Beach area, the at-grade Lewis & Clark Drive/US 730 intersection described above would no longer operate acceptably. This analysis showed that the Lewis & Clark Drive approach will fail to meet the applicable OHP mobility standard during the p.m. peak hour when development in the east beach area is approximately 1200% of, or 12 times greater than, what it is today. The northbound left-turn from US 730 into Lewis & Clark Drive is estimated to fail to meet its mobility standard during the a.m. peak hour when development reaches a level of 1400% of today. Grade separated interchanges would provide additional life for the connection. Due to the forecasted directionality of the traffic volumes, a diamond interchange's utility beyond an at-grade intersection would be limited. A Parclo-B loop ramp configuration for northbound US 730 would extend the functionality of the interchange until traffic volumes reached saturation levels, projected to be when development is nearing levels 30 times greater than existing conditions. Such levels of development are not anticipated to occur within the 2030 horizon year of this plan. Therefore any concepts developed to address such growth will be considered part of the long-term vision for the area and not part of the 20-year plan.

SUMMARY OF YEAR 2030 FUTURE YEAR CONDITIONS

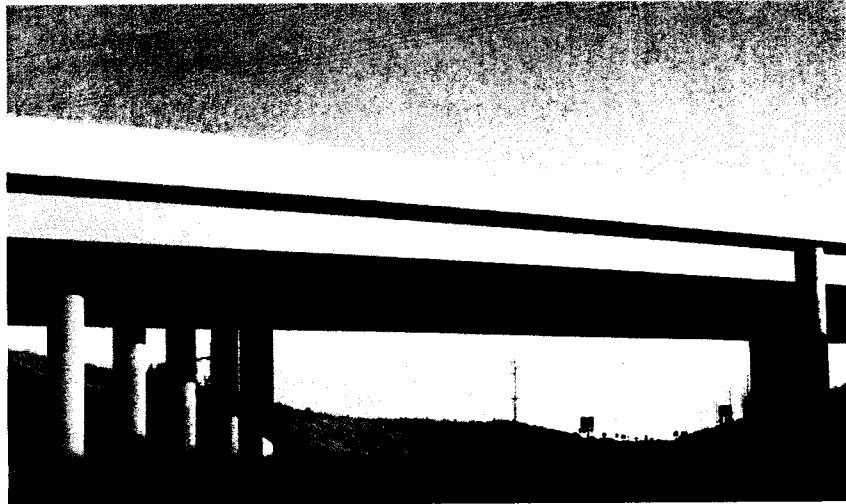
The forecasts and analysis for the year 2030 No-Build conditions, with and without the Lewis & Clark Drive extension, resulted in the following findings:

- The Lewis & Clark Drive connection to US 730 could operate acceptably as a minor-street stop-controlled intersection.
 - Turn lanes would be warranted on US 730.

Section 6
Concept Development and Analysis

CONCEPT DEVELOPMENT AND ANALYSIS

This section documents the development and evaluation of the local circulation and access concepts for the IAMP. Fourteen unique concepts were developed and taken through a thorough screening process that included input from the TAC, PAC, local property and business owners, and the public at-large. Based on results of the initial screening, a



refined analysis was conducted that resulted in the identification of the preferred transportation improvement plan. The following subsections document the concepts that were evaluated and the results of the screening process.

Concept Development Process

The development of the initial interchange concepts for the IAMP began with three separate design workshops. The first two workshops were held for members of the TAC and PAC committees, while the third workshop was held for interested citizens, business owners, and landowners in a public open house setting. All three workshops were held on February 17th, 2011.

Within each workshop, participants were presented with an overview of applicable interchange design forms and basic design parameters. Following these presentation overviews, participants were asked to sketch their ideas for improving circulation at the interchange and within the immediate interchange study area. Additionally, participants were asked to draw their ideas for the extension of Lewis & Clark Drive in the vicinity of, or directly to, the I-84/US 730 interchange.

Following the completion of the TAC, PAC, and public workshops, the project team took all of the individual design ideas and grouped them into common themes. After the initial grouping, each set was further sorted into common and unique interchange concepts. Based on this process, a representative concept diagram was developed from the common and unique interchange form concepts. As part of this process, the project team made some technical refinements to the interchange form concepts to

ensure basic design parameters were being met. This process resulted in 14 different concepts for the I-84/US 730 interchange area.

Concept Summaries

Each of the concepts developed for the I-84/US 730 Interchange and their key design components are described below. Access management improvements around the interchange are essentially the same between most concepts and are described in greater detail in Section 7. Detailed double-line drawings of concepts that passed the initial screening and moved forward for more detailed analysis can be found later in this section. Single-line illustrations of the other concepts can be found in the *Technical Appendix*.

CONCEPTS #1A AND #1B

These concepts would involve the following changes/improvements:

- Lewis & Clark Drive would be extended to connect with US 730 approximately 1 ½ miles north of the I-84 Westbound ramp terminal (Concept #1A) or it would connect with US 730 approximately ¼-mile north of the ramp-terminal (Concept #1B). Both would be at-grade intersections of US 730.
- Turn lanes and acceleration lanes on US 730 would be constructed under both concepts at the new connections to US 730
- The connection to US 730 under Concept #1B would require bridges over the irrigation canal and the Union Pacific railroad.

CONCEPT #2

This concept would involve the following changes/improvements:

- Lewis & Clark Drive would be extended to connect with US 730 approximately 1 ½ miles north of the I-84 Westbound ramp terminal.
- The Lewis & Clark Drive connection to US 730 would be constructed as a grade-separated diamond interchange with acceleration and deceleration lanes on US 730.

CONCEPT #3

This concept would involve the following changes/improvements:

- Lewis & Clark Drive would be extended to connect with US 730 approximately 1-½ miles north of the I-84 Westbound ramp terminal.
- The Lewis & Clark Drive connection to US 730 would be constructed as a jughandle style intersection where vehicles exiting/entering northbound US 730 would make a right-turn onto/from the jug-handle roadway on the east side of US 730. This roadway would travel underneath the US 730 railroad and irrigation canal overpass and connect to the main alignment of Lewis & Clark Drive.

CONCEPT #4

This concept would involve the following changes/improvements:

- Lewis & Clark Drive would be extended to connect with US 730 directly across from the I-84 Westbound ramp terminal.
- Turn lanes and acceleration lanes on US 730 would be constructed for the new connection.
- The I-84 Westbound on-ramp from southbound US 730 would potentially need to be reconfigured to accommodate the acceleration lane for traffic entering southbound US 730 from Lewis & Clark Drive, thereby requiring all traffic entering I-84 Westbound to use the entering loop ramp on the east side of US 730.
- The Lewis & Clark Drive extension would require bridges over the irrigation canal and railroad.

CONCEPT #5

This concept would involve the following changes/improvements:

- The I-84/US 730 interchange would be reconstructed as a split diamond interchange with a connection to Lewis & Clark Drive being extended to connect with the interchange west of US 730.
- Frontage Lane would be realigned to connect with Bombing Range Road approximately ¼-mile south of the interchange.
- The Lewis & Clark Drive extension would connect to US 730 approximately 1 ½ miles north of the interchange as an at-grade intersection.
- The connection to Lewis & Clark Drive would require bridges over the irrigation canal and railroad.

CONCEPT #6

This concept would involve the following changes/improvements:

- The I-84/US 730 interchange would be reconstructed as a diamond interchange.
- Frontage Lane would be realigned to connect with Bombing Range Road approximately ¼-mile south of the interchange.
- The Lewis & Clark Drive extension would connect to US 730 approximately 1 ½ miles north of the interchange as either an at-grade or grade-separated intersection.

CONCEPT #7

This concept would involve the following changes/improvements:

- The existing I-84 Westbound off-ramp would be extended back further and a second off-ramp from it would be constructed that would provide a direct connection to the POM area via Lewis & Clark Drive.
- A loop ramp would be constructed from northbound US 730 onto Lewis & Clark Drive.
- Southbound US 730 traffic would access Lewis & Clark Drive via a ramp.
- Eastbound Lewis & Clark Drive would access US 730 via an at-grade intersection across from the existing I-84 Westbound ramp terminal.
- The I-84 Westbound on-ramp from southbound US 730 would potentially need to be removed to accommodate the acceleration lane for traffic entering southbound US 730 from Lewis & Clark Drive, thereby requiring all traffic entering I-84 Westbound to use the entering loop ramp on the east side of US 730.
- The Lewis & Clark Drive extension would connect to US 730 approximately 1 ½ miles north of the interchange as an at-grade intersection.
- The connection to Lewis & Clark Drive would require bridges over the irrigation canal and railroad.

CONCEPT #8

This concept would involve the following changes/improvements:

- The I-84/US 730 interchange would be reconstructed as a split diamond interchange with a new POM connection forming the other half of the split diamond.



- Frontage Lane would be realigned to connect with Bombing Range Road approximately ¼-mile south of the interchange.
- The new POM connection would extend south of the interchange to connect with Bombing Range Road across from the realigned Frontage Lane.
- The Lewis & Clark Drive extension would connect to US 730 approximately 1 ½ miles north of the interchange as an at-grade intersection.
- The new POM connection would require bridges over the irrigation canal and railroad.

CONCEPT #9

This concept would involve the following changes/improvements:

- The I-84/US 730 interchange would be reconstructed with two sets of on- and off-ramps.
- One set of ramps would maintain the existing free-flowing connections between I-84 and US 730 (i.e., eastbound I-84 to northbound US 730 and southbound US 730 to I-84 in either direction) and add one more free-flowing connection (eastbound I-84 to northbound US 730).
- The other set of ramps would be set up as a diamond interchange with the cross-street being a realignment and extension of Bombing Range Road to a new POM connection.
- The new diamond interchange would be elevated over I-84, US 730, and the ramp from southbound US 730 onto eastbound I-84.
- Frontage Lane would be realigned to connect with Bombing Range Road approximately ¼-mile south of the interchange.
- The Lewis & Clark Drive extension would connect to US 730 approximately 1 ½ miles north of the interchange as an at-grade intersection.
- The new POM connection would require bridges over the irrigation canal and railroad.

CONCEPT #10

This concept would involve the following changes/improvements:

- The I-84/US 730 interchange would be reconstructed with two sets of on- and off-ramps.
- One set of ramps would maintain the existing free-flowing connections between I-84 and US 730 using the existing ramps (i.e., eastbound I-84 to northbound US 730 and southbound US

730 to I-84 in either direction) and add one more free-flowing connection (eastbound I-84 to northbound US 730).

- The other set of ramps would be set up as a diamond interchange with the cross-street west of the current interchange and being a realignment and extension of Bombing Range Road to Lewis & Clark Drive (Bombing Range Road would no longer connect to US 730).
- The diamond interchange would require bridges over I-84, US 730, and the irrigation canal.
- Frontage Lane would be extended to connect with the realigned Bombing Range Road approximately ¼-mile south of the interchange.
- Wilson Lane would be realigned to connect to the realigned Bombing Range Road across from the extension of Frontage Lane
- The Lewis & Clark Drive extension would connect to US 730 approximately 1 ½ miles north of the interchange as an at-grade intersection.
- The new POM connection would require bridges over the irrigation canal and railroad.

CONCEPT #11

This concept would involve the following changes/improvements:

- The I-84/US 730 interchange would be reconstructed as a split diamond interchange with a new POM connection forming the other half of the split diamond.
- The existing free-flow connections from southbound US 730 onto I-84 would be retained, as would the existing entering loop ramp from northbound US 730 onto westbound I-84.
- Frontage Lane would be realigned to connect with Bombing Range Road approximately ¼-mile south of the interchange.
- Wilson Lane would be realigned to connect to the realigned Bombing Range Road across from the extension of Frontage Lane
- The Lewis & Clark Drive extension would connect to US 730 approximately 1 ½ miles north of the interchange as an at-grade intersection.
- The new POM connection would require bridges over the irrigation canal and railroad.

CONCEPT #12

This concept would involve the following changes/improvements:



- A new POM connection would span I-84 west of the I-84/US 730 interchange and connect into a realigned Bombing Range Road.
- The south side of the I-84/US 730 interchange would be modified such that the eastbound off-ramp would connect to a new roadway that directly links Wilson Lane and US 730.
- Frontage Lane would be realigned using some of the old Bombing Range Road alignment in order to connect to the realigned Bombing Range Road.
- The Lewis & Clark Drive extension would connect to US 730 approximately 1 ½ miles north of the interchange as an at-grade intersection.
- The new POM connection to Lewis & Clark Drive would require bridges over the irrigation canal and railroad.

CONCEPT #13

This concept would involve the following changes/improvements:

- Bombing Range Road would be realigned and extended over the I-84/US 730 interchange to connect to Lewis & Clark Drive (Bombing Range Road would no longer connect to US 730).
- A new set of on- and off-ramps connecting the extension of Bombing Range Road to I-84 requiring several structures over existing and proposed roadways would be constructed.
- The I-84 westbound off-ramp to US 730 would be reconstructed as a free-flow merge onto northbound US 730 (it would no longer connect to southbound US 730).
- Frontage Lane would be realigned to connect with Bombing Range Road approximately ¼-mile south of the interchange.
- The Lewis & Clark Drive extension would connect to US 730 approximately 1 ½ miles north of the interchange as an at-grade intersection.
- The new POM connection would require bridges over the irrigation canal and railroad.

LONG-TERM VISION CONCEPTS

The POM has a stated desire to one day have a direct connection from Lewis & Clark Drive to the I-84/US 730 interchange in order to accommodate long-term growth. As was discussed in Section 5, such a connection is not currently forecast to be warranted under the 20-year horizon of this plan. However, in order to plan for the contingency that growth in the POM area may someday warrant more than an at-grade connection to US 730, the POM requested that a long-term vision element be added to the plan

to address a direction connection from Lewis & Clark Drive to the I-84/US 730 interchange. This element is an appendix to this IAMP. In response to this desire, members of the project team developed concepts #5 and #7-13. These concepts were taken through the same screening process as the others. Additionally, they were reviewed with ODOT and Federal Highway Administration (FHWA) staff at a meeting on May 2nd, 2011 to better determine whether or not they conformed to their respective policies.

Concept Screening

In order to arrive at the preferred transportation improvement plan, the concepts went through three levels of screening. The first level was a high-level screening to determine if any of the concepts did not meet the basic purpose of the project. After this, a second level was applied to the concepts involving a qualitative assessment of each concept based on the project's adopted evaluation criteria. Following this screening, the remaining concepts were examined quantitatively to determine the final preferred concepts.

The following section provides detailed explanation of this screening process and identifies which concept was selected by the TAC and PAC as the preferred transportation improvement plan. The *Technical Appendix* contains more details about the screening process.

PRELIMINARY PROBLEM STATEMENT SCREENING

The project team first performed a preliminary assessment to determine if any of the concepts were not meeting the basic intent of the project purpose and problem statement. The official Purpose and Problem Statement, as approved by the TAC and PAC is outlined below:

Purpose of the Project:

The IAMP is a strategic transportation plan that is designed to protect the long-term function of the Interstate 84 (I-84) / Laurel Lane (Exit 165, aka POM interchange) and the I-84 / US 730 interchanges by preserving the capacity of the interchange while providing safe and efficient operations between connecting roadways. The IAMP will identify land use management strategies, short-term and long-term transportation improvements, access management goals, and strategies to fund identified improvements.

Problem Statement:

Located in the eastern portion of the City of Boardman, the Port of Morrow (POM) is an intermodal transport hub for commodities throughout Oregon, Washington, and Idaho. The POM



takes full advantage of its location at the crossroads of I-84, US 730, the Columbia River, and the Union Pacific Railroad.

Under House Bill 2001, the OTC allocated funds to the POM for extending Lewis & Clark Drive to US 730 and constructing Gar Swanson Drive to connect to Lewis & Clark Drive. Special condition of approval for this funding was to complete an IAMP for the I-84/Laurel Lane (POM) and I-84/US 730 interchanges².

The I-84/US 730 (Exit 168) interchange is located in a rural area of Morrow County approximately three miles east of the POM interchange. This interchange primarily facilitates movements between I-84 and US 730, but also provides access to the local County roadway network. Although movements are adequately facilitated between I-84 and US 730, the Lewis & Clark Drive extension and long-term growth plans at the POM will require a formal access plan along the US 730 corridor located immediately north of the interchange. In addition, there is a need to identify long-term interchange modifications that would better facilitate movements between I-84 and the POM.

It was generally concluded that all of the interchange concepts met the basic intent of the project purpose and problem statement as reproduced above.

BASIC QUALITATIVE CONCEPT SCREENING

To assist in the evaluation process, the project team reviewed the adopted evaluation criteria and developed a screening level evaluation process by which each of the concepts could be evaluated at a high level qualitative perspective. As a part of this process, it was recognized that at this particular level of evaluation, certain evaluation criteria could not be applied to each concept because the criterion was determined to be too specific, required a higher level of detailed information, or was a non-differentiating factor. In these instances, a screening level evaluation was not applied to the concepts. The following outline lists the five screening level categories and the selected evaluation criteria within each category that were investigated as part of this process for each of the interchange areas.

Category #1 - Transportation

Evaluation Criteria - Conflicts with free-flowing US 730 traffic

²The IAMP for the POM interchange is contained in a separate plan, *Port of Morrow Interchange Area Management Plan*.

Category #2 - Land Use

Evaluation Criteria - Level of right-of-way (ROW) impacts

Category #3 - Cost/Implementation

Evaluation Criteria - Level of construction costs

Evaluation Criteria - Construction challenges

Category #4 - Environmental

Evaluation Criteria - Level of environmental impacts

Category #5 - Accessibility

Evaluation Criteria - Meets or moves in the direction of the access spacing standards

Based on the criteria outlined above, an evaluation matrix for each concept was created. These matrices are contained within Attachment "B." A summary of the qualitative screening process is provided in Table 6-1 below. (Note: In general, a "+" indicates the interchange concept is positively meeting the basic parameters of the evaluation criterion, a "-" indicates the interchange concept is not meeting the basic parameters of the evaluation criterion, and a "0" indicates the interchange concept is neither positively nor negatively meeting the basic intent of the evaluation criterion. See the Technical Appendix for a detailed explanation of the screening level scoring definitions).

Table 6-1 Summary of Qualitative Screening Process

Evaluation Criteria	Concept													
	#1A	#1B	#2	#3	#4	#5	#6	#7	#8	#9	#10	#11	#12	#13
Operations	0	0	+	+	-	0	0	0	0	+	+	+	+	+
ROW Impacts	+	+	0	-	+	+	+	-	-	0	-	-	-	-
Cost	+	-	-	-	-	-	-	-	-	-	-	-	-	-
Construction Feasibility	+	-	+	-	-	-	-	-	-	-	-	-	-	-
Environmental Impacts	+	0	+	+	0	-	-	0	-	-	0	-	-	0
Access Spacing	+	+	+	+	-	+	+	0	+	+	+	+	+	+

TRAFFIC OPERATIONS SCREENING

Section 5 includes a threshold analysis to determine when, in terms of level of growth in the POM East Beach area, the at-grade Lewis & Clark Drive/US 730 intersection from Concept #1A would no longer operate acceptably. This analysis shows that East Beach area development would need to reach levels approximately 1,200-1,400% greater than what exists. Such levels of development are not anticipated to occur within the 2030 horizon year of this plan. Therefore any concepts developed to address such growth will be considered part of the long-term vision for the area and not part of the 20-year plan. These concepts are Concepts #4, #5, and #7-#13.

INITIAL SCREENING RESULTS

At a meeting on April 7, 2011, the TAC and PAC were presented with general descriptions, graphical layout illustrations, and a qualitative assessment of the various advantages/disadvantages of the concepts. Upon reviewing the preliminary interchange layouts and advantages and disadvantages of each, both the TAC and PAC committee members assisted in the screening of concepts that would move forward for a more detailed quantitative evaluation.

After going through the screening process, the TAC and PAC committees determined that a number of concepts either did not adequately address current and future operational issues, had significant impacts, or posed significant cost/constructability/policy problems. Those concepts and the main issues behind their elimination for further study are detailed in the *Technical Appendix*. For summary purposes, they are briefly outlined in Table 6-2 below.

Table 6-2 Recommended List of Concepts to Move Forward in the Evaluation Process

Concepts	Recommended for Further Evaluation by the TAC and PAC	Final Selection/ Primary Disadvantages to Concept
1a	Yes	Yes
1b	No	No – Cost
2	Yes	Yes
3	No	No – Cost, Land Use Impacts
4	No	No – Cost, Policy Issues, Operations
5 ¹	No	No – Cost, Constructability, Operations
6	No	No – Cost, Operations
7 ¹	No	No – Cost, Policy Issues
8 ¹	No	No – Cost, Constructability
9 ¹	No	No – Cost, Constructability
10 ¹	No	No – Cost, Constructability
11 ¹	No	No – Cost, Constructability
12 ¹	No	No – Cost, Constructability
13 ¹	No	No – Cost, Constructability

¹Concepts 5 and 7-13 provide direct access from the I-84/US 730 interchange to the POM East Beach Area and are recommended for long-term vision consideration.

Based on these findings and feedback from the PAC and TAC, Concepts 1a and 2 were moved forward for detailed evaluation. These concepts are shown in Figures 6-1 and 6-2.

DETAILED QUANTITATIVE EVALUATION

A more detailed evaluation was performed of the concepts remaining after the basic qualitative screening process was completed. This analysis consisted of quantitative operational and cost evaluations. A more detailed description of this evaluation process may be found in the *Technical Appendix*.

Transportation Operations

A transportation operations analysis was performed on the remaining concepts according to the methodologies and standards previously outlined in Section 4. The following sections highlight the operational analysis of each concept.

Concept 1a

Figure 6-3 illustrates the assumed lane configurations and traffic control devices for Concept 1a. As was described previously, the new Lewis & Clark Drive intersection with US 730 will require exclusive left-turn and right-turn lanes on US 730, as well as acceleration lanes on US 730 for traffic coming from Lewis & Clark Drive. Figure 6-4 shows that all intersections are expected to operate acceptably with Concept 1a improvements in place.

Concept 2

The assumed lane configurations and traffic control devices and the operations analysis results for Concept 2 are shown in Figures 6-5 and 6-6, respectively. All intersections are forecast to operate acceptably with Concept 2 improvements in place.

Preliminary Cost Estimates

Preliminary cost estimates were prepared for each concept. These estimates are preliminary and subject to change as the concepts move into more detailed development. Table 6-3 summarizes the preliminary construction and ROW cost estimates for the concepts. The *Technical Appendix* contains the detailed cost estimate sheets.

Table 6-1 Preliminary Cost Estimates

		Preliminary Cost Estimate		
	Concept	Construction	ROW ¹	Total
1a	Lewis & Clark Extension Only	\$5,200,000	\$0 ²	\$5,200,000
	US 730 Intersection	\$2,000,000	\$0 ²	\$2,000,000
	Total Concept 1A costs	\$7,200,000	\$0²	\$7,200,000
2	Lewis & Clark Extension Only	\$5,200,000	\$0 ²	\$5,200,000
	US 730 Interchange	\$14,700,000	\$530,000	\$15,230,000
	Total Concept 2 costs	\$19,900,000	\$530,000	\$20,430,000

¹ROW costs are estimated by the project team based on area property values and are unofficial

²The identified improvements are anticipated to occur within existing ODOT and POM Right-of-Way

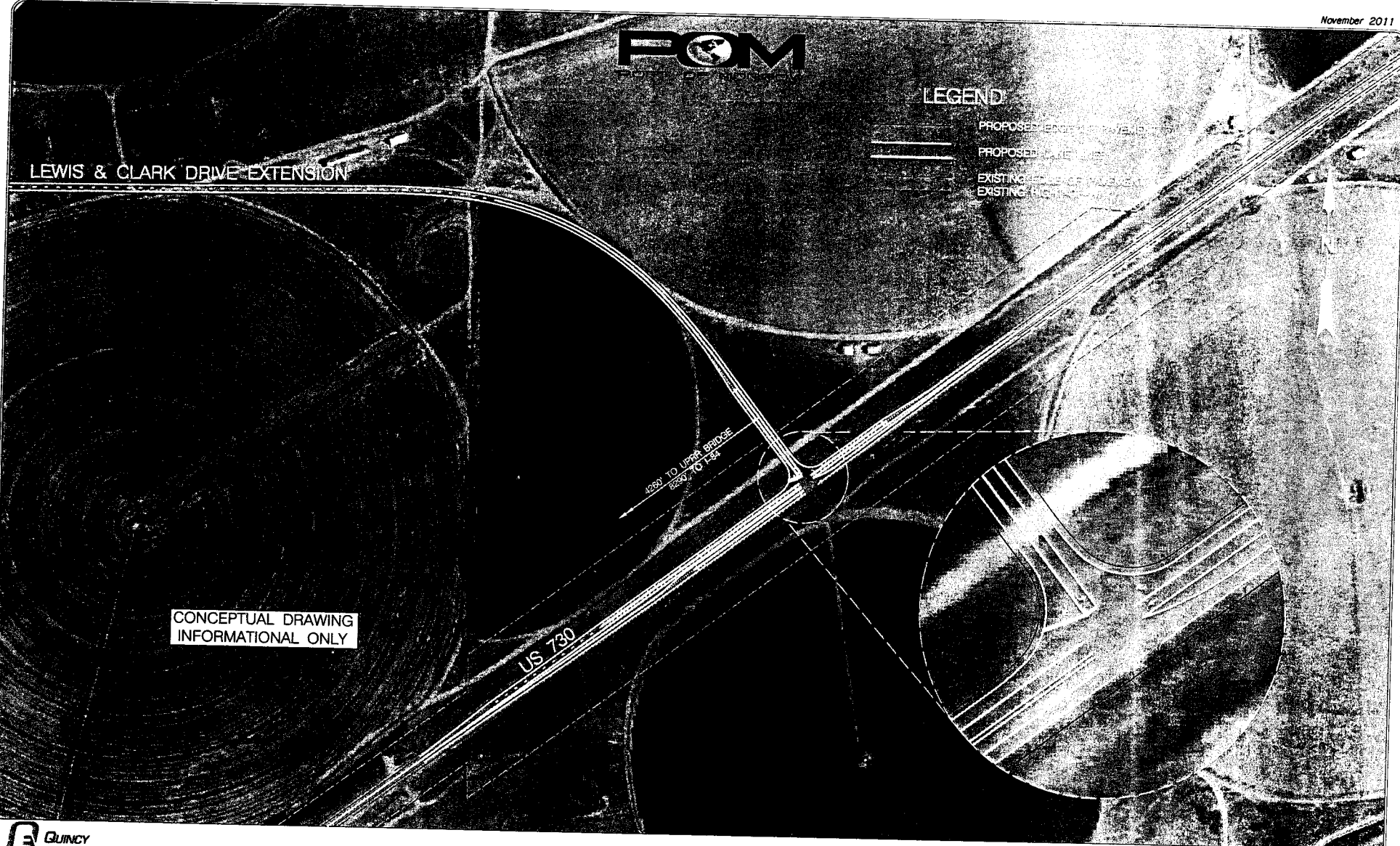
Concept 1a is estimated to cost approximately \$7.2 million. The majority of this cost, approximately \$5.2 million, is attributable to the extension of Lewis & Clark Drive. The remaining estimated \$2.0 million is for constructing a new at-grade intersection of US 730, including the necessary widening on US 730 for turn lanes. It is assumed that these improvements would take place on ODOT and POM property, so there are no right-of-way costs for Concept 1a.



LEGEND

-  PROPOSED INTERCHANGE
-  PROPOSED LANE
-  EXISTING LANE
-  EXISTING RIGHT-OF-WAY

LEWIS & CLARK DRIVE EXTENSION

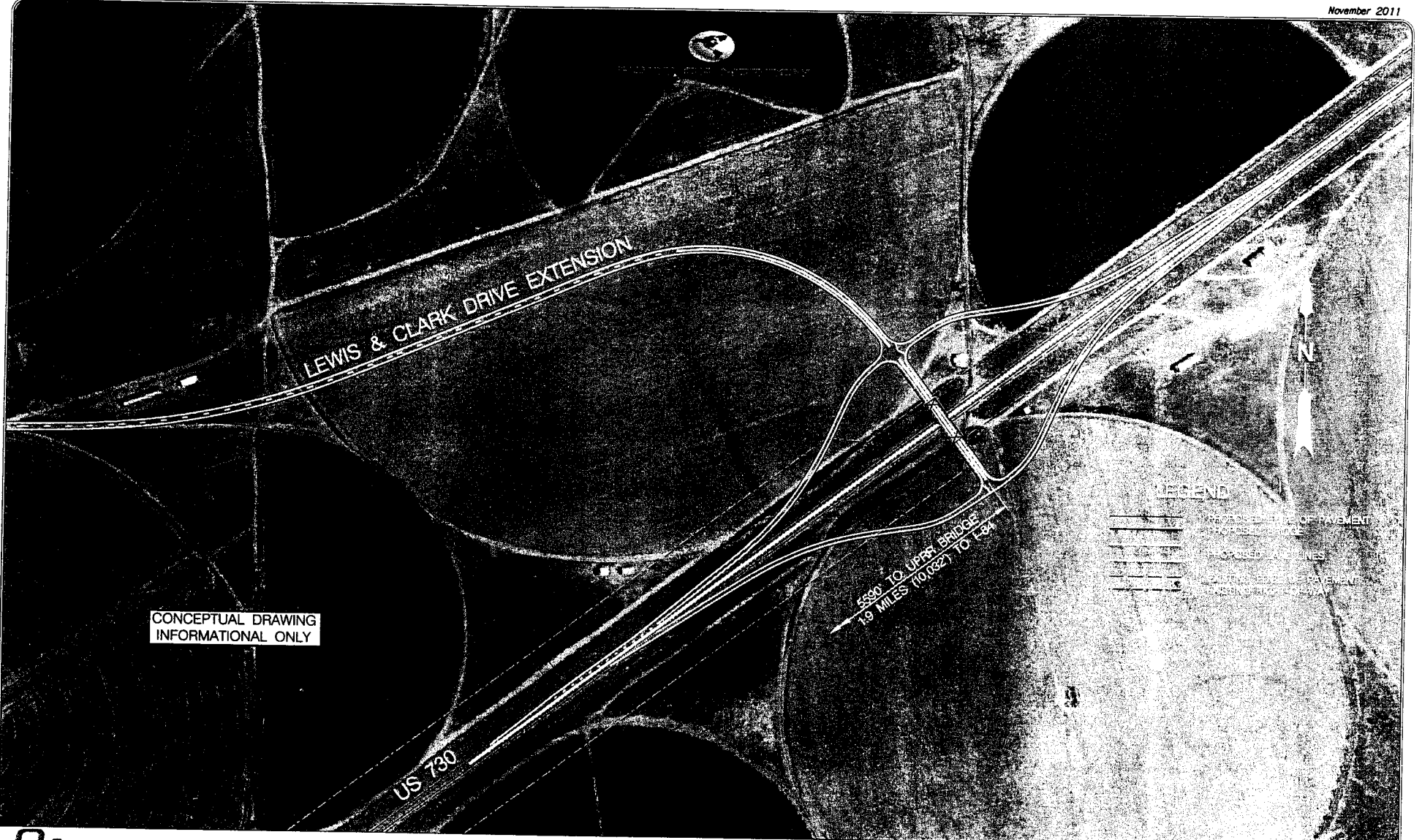


CONCEPTUAL DRAWING
INFORMATIONAL ONLY

Q QUINCY
ENGINEERING, INC.

K Kittelson & Associates, Inc.
TRANSPORTATION ENGINEERING / PLANNING

MORROW COUNTY, OREGON **CONCEPT 1A** **FIGURE 6-1**



CONCEPTUAL DRAWING
INFORMATIONAL ONLY

LEGEND

[Symbol]	PROPOSED DRIVE PAVEMENT
[Symbol]	PROPOSED DRIVE
[Symbol]	PROPOSED DRIVE LINES
[Symbol]	EXISTING DRIVE PAVEMENT
[Symbol]	EXISTING DRIVE

Q QUINCY
ENGINEERING, Inc.

K Kittelson & Associates, Inc.
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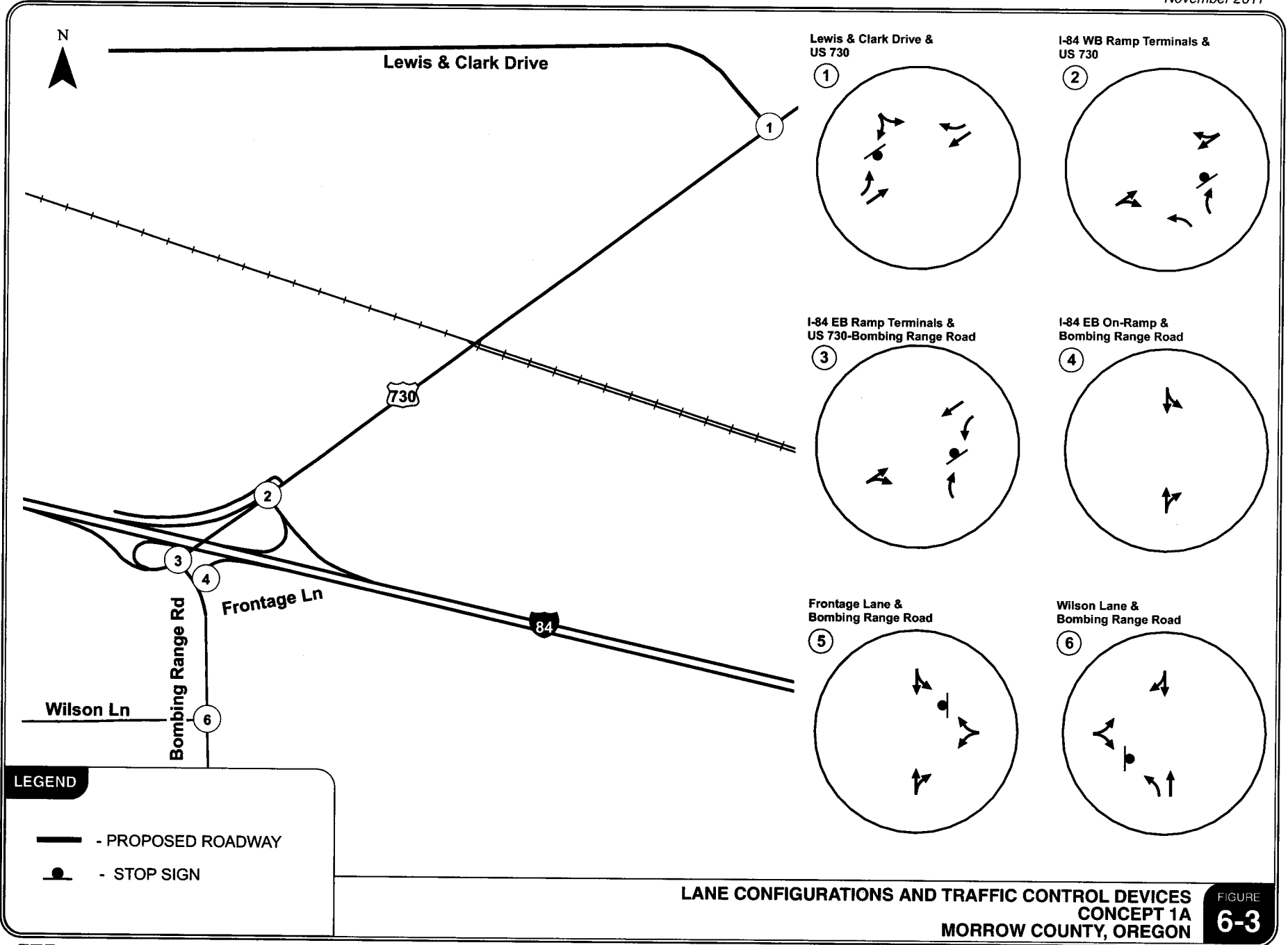


FIGURE 6-3

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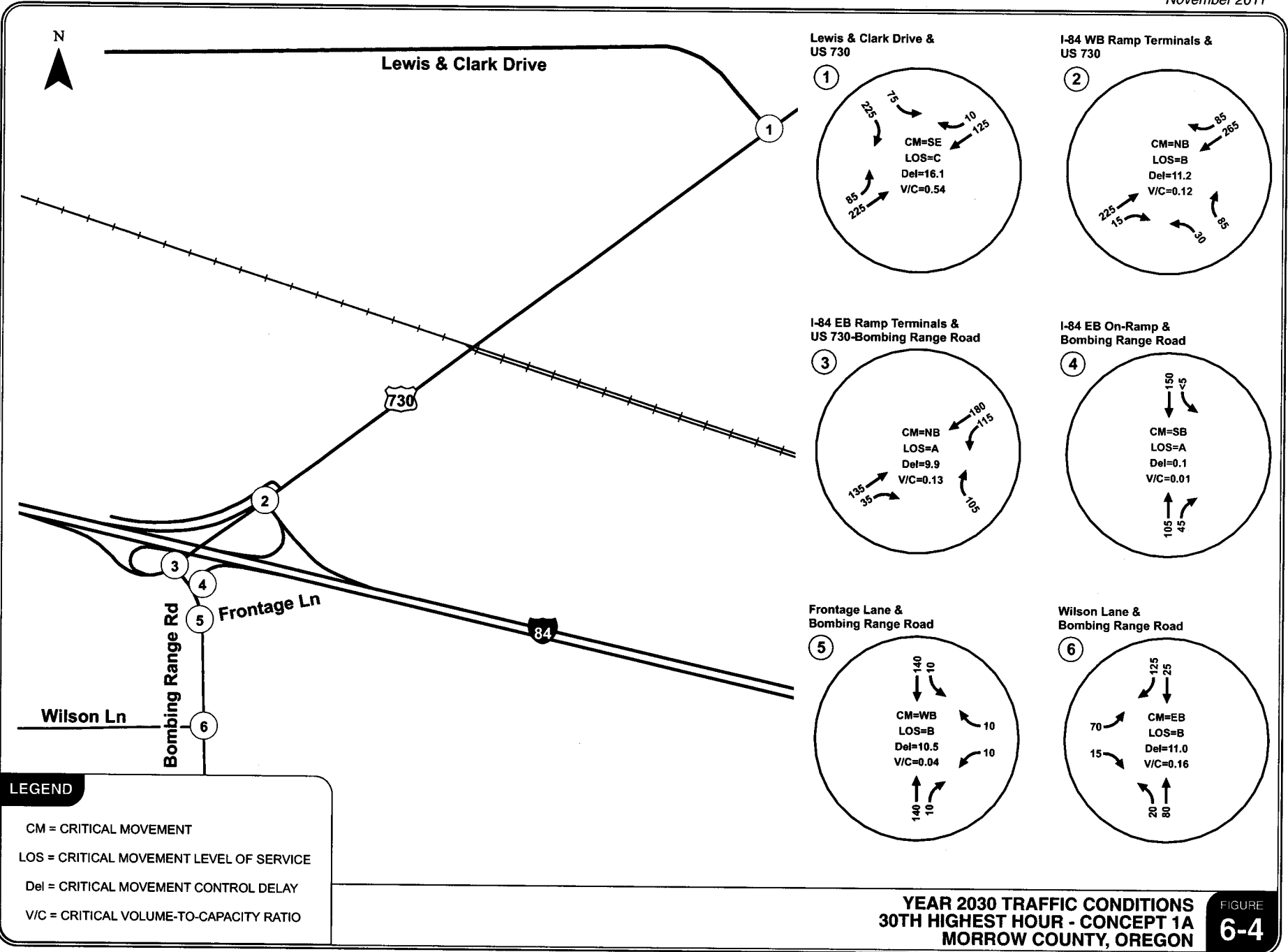


FIGURE 6-4

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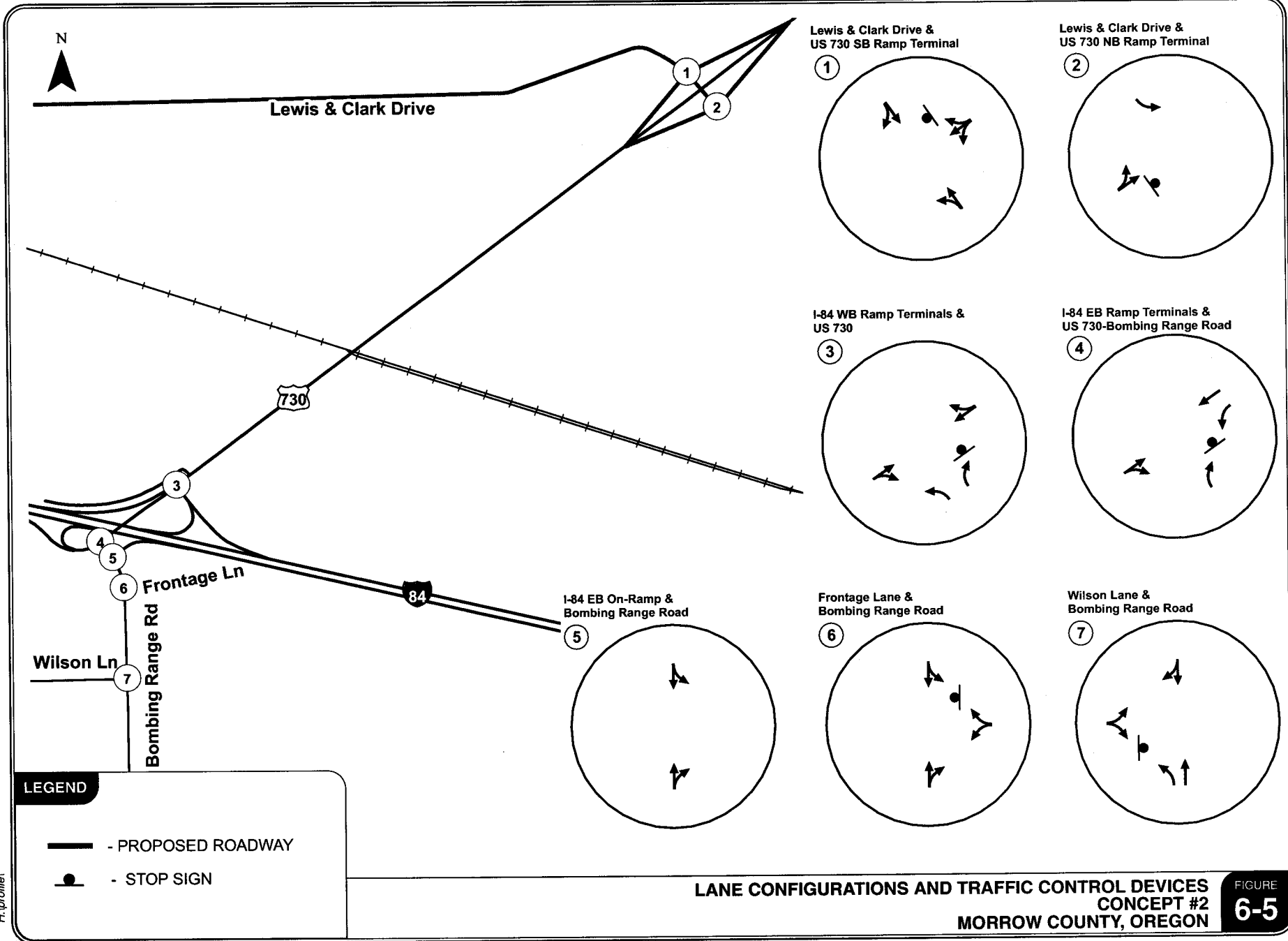
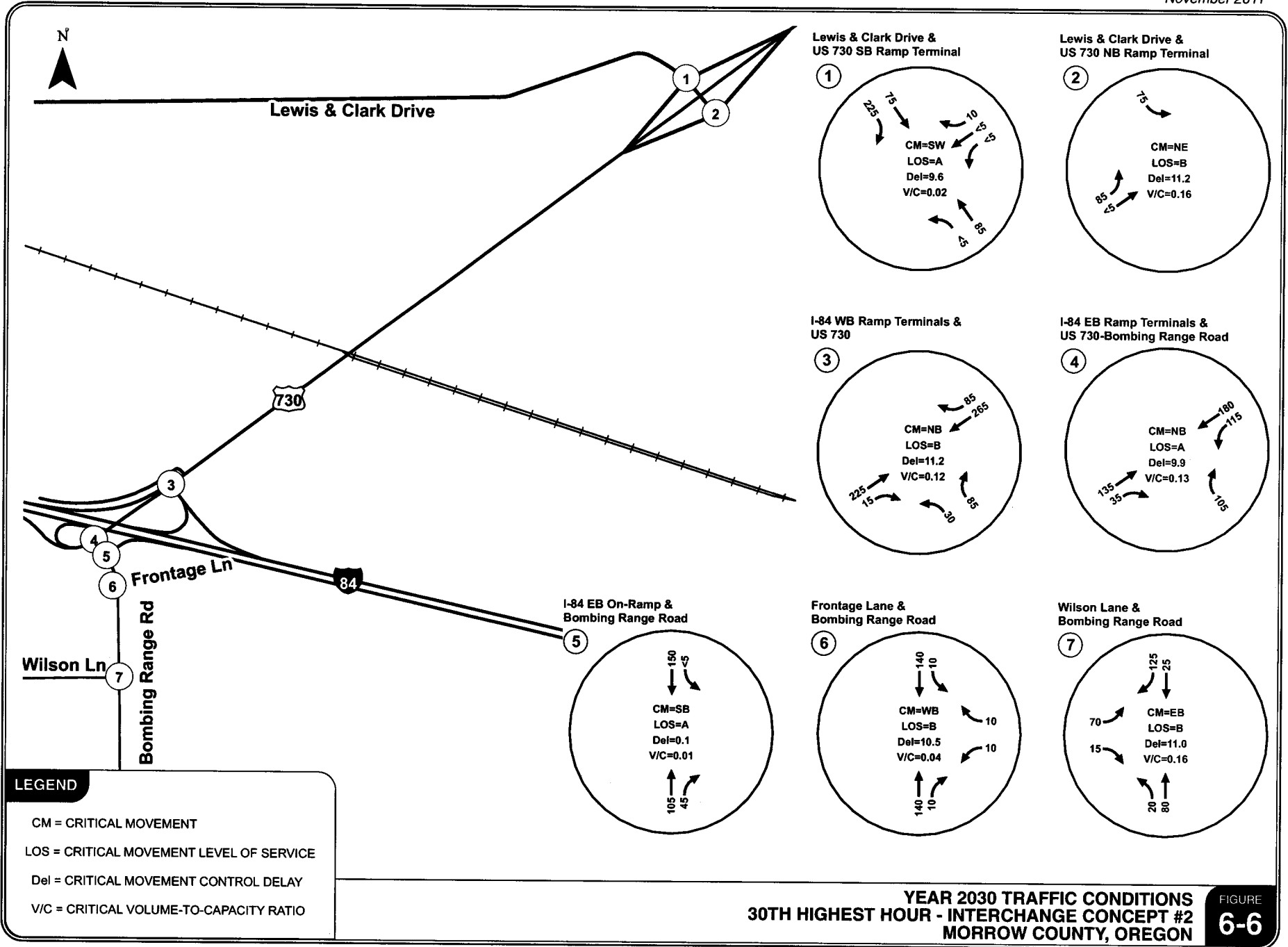


FIGURE 6-5

H:\profile1



YEAR 2030 TRAFFIC CONDITIONS
 30TH HIGHEST HOUR - INTERCHANGE CONCEPT #2
 MORROW COUNTY, OREGON

FIGURE
6-6

To construct the US 730/Lewis & Clark Drive intersection as a diamond interchange would cost approximately \$13.2 million more, including estimated right-of-way expenses.

After reviewing this analysis the TAC and PAC concluded that Concept 1a should be moved forward as the preferred improvement plan. Concept 2 costs a significant amount more than Concept 1a and its extra capacity is not projected to be needed within the 20-year horizon of this plan. Both committees also agreed that the direct connection concepts should be included in this IAMP as an appendix to preserve the work that went into creating them.

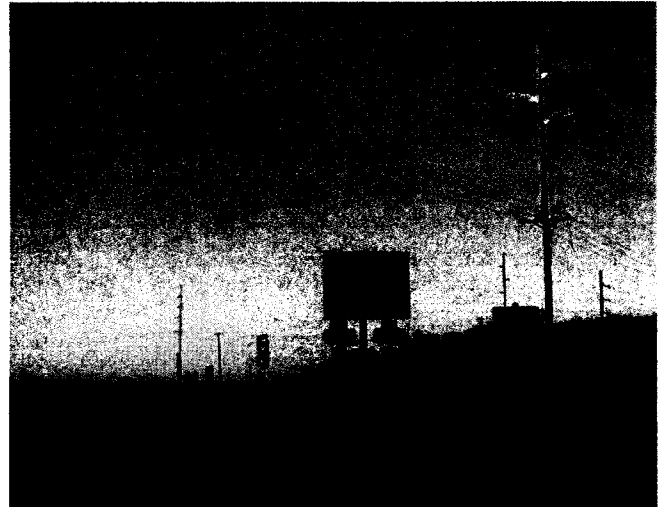
Interchange Area Access Management Improvements

All of the concepts would involve improvements within the vicinity of the interchange to improve access spacing. These improvements involve relocating accesses when future development occurs. More information on these improvements and their respective costs can be found in Section 7.

Section 7
Interchange Area Management Plan

INTERCHANGE AREA MANAGEMENT PLAN

The I-84/US 730 IAMP provides a transportation improvement plan and an Access Management Plan (AMP). The transportation improvement plan includes interchange and local circulation improvements, right-of-way requirements, as well as a phasing schedule. The AMP documents the justification for the necessary deviations to ODOT's access management standards.

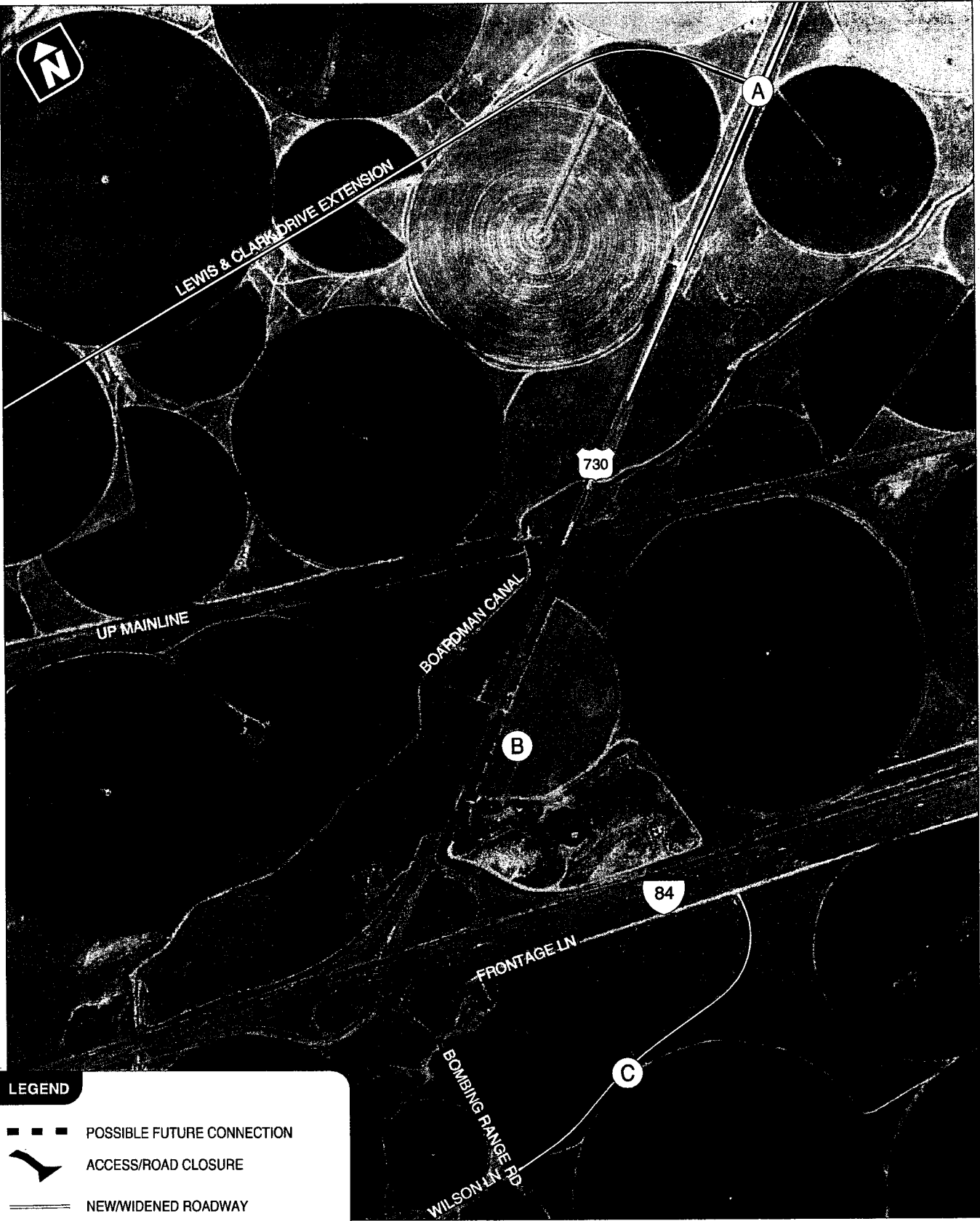


Through adoption by Morrow County and ODOT, future development located within the Interchange Management Study Area (IMSA) will be required to make circulation and access improvements, as identified in this plan. Implementation of the IAMP is expected to preserve the functional integrity of the interchange over time and ensure viable access to existing and future land uses. Finally, the action items contained within the implementation plan (Section 8) will ensure that proper plan amendments and coordination between the various stakeholders occur to allow the IAMP to serve as a long-term dynamic planning tool.





TRANSPORTATION IMPROVEMENT PLAN OVERVIEW

A comprehensive transportation improvement plan including a local circulation and access plan within the IMSA was developed based on the concept screening and evaluations outlined in Section 6. Figure 7-1 illustrates the overall transportation improvement plans, while Figures 7-2 through 7-4 provide detailed drawings of the improvements. This plan includes extending Lewis & Clark Drive to US 730 and modifying existing roadways and intersections within the vicinity of the I-84/US 730 interchange. Each transportation improvement identified in the figures is described in Table 7-1.

The following section provides details on the major improvements identified in the Transportation Improvement Plan, including possible deviations from standards that may be required.



LEGEND

-  POSSIBLE FUTURE CONNECTION
-  ACCESS/ROAD CLOSURE
-  NEW/WIDENED ROADWAY
-  IMPROVEMENT (SEE TABLE 7-1 FOR DESCRIPTION & COST ESTIMATE)

OVERALL IAMP TRANSPORTATION IMPROVEMENT PLAN MORROW COUNTY, OREGON

FIGURE 7-1

H:\projfile\1253 - Port of Morrow IAMP\dwg\figs\IAMP\Fig7-1.dwg Nov 01, 2011 - 10:22am - nfoster Layout Tab: 7-1

POM

LEGEND

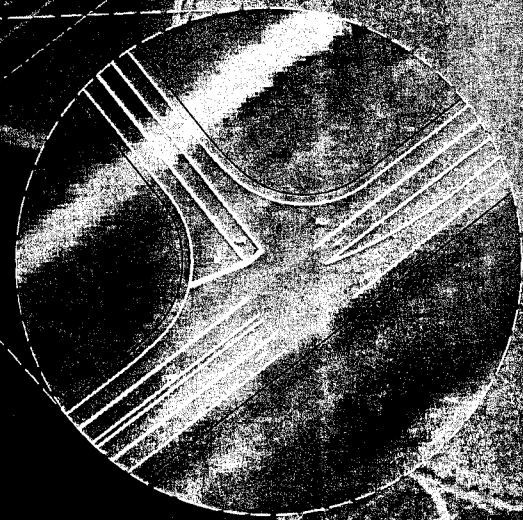
- PROPOSED LEGION INTERCHANGE
- PROPOSED RAMP LINES
- EXISTING LEGION INTERCHANGE
- EXISTING RAMP LINES

LEWIS & CLARK DRIVE EXTENSION

W60 TO UPRAID BRIDGE
8300 TO I-84

US 730

CONCEPTUAL DRAWING
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TRANSPORTATION IMPROVEMENT PLAN
LEWIS & CLARK DRIVE EXTENSION
MORROW COUNTY, OREGON

FIGURE
7-2

LEGEND

- POSSIBLE FUTURE CONNECTION
- EXISTING RIGHT-OF-WAY
- EXISTING EDGE OF PAVEMENT
- EXISTING EDGE OF GRAVEL ROAD

CONCEPTUAL DRAWING
INFORMATIONAL ONLY

SEVER
CONNECTIONS

SEVER
CONNECTIONS

CONSOLIDATE
ACCESSES

1320' (1/4 MILE)



BOMBING
RANGE ROAD

FRONTAGE LANE

I-84 EB

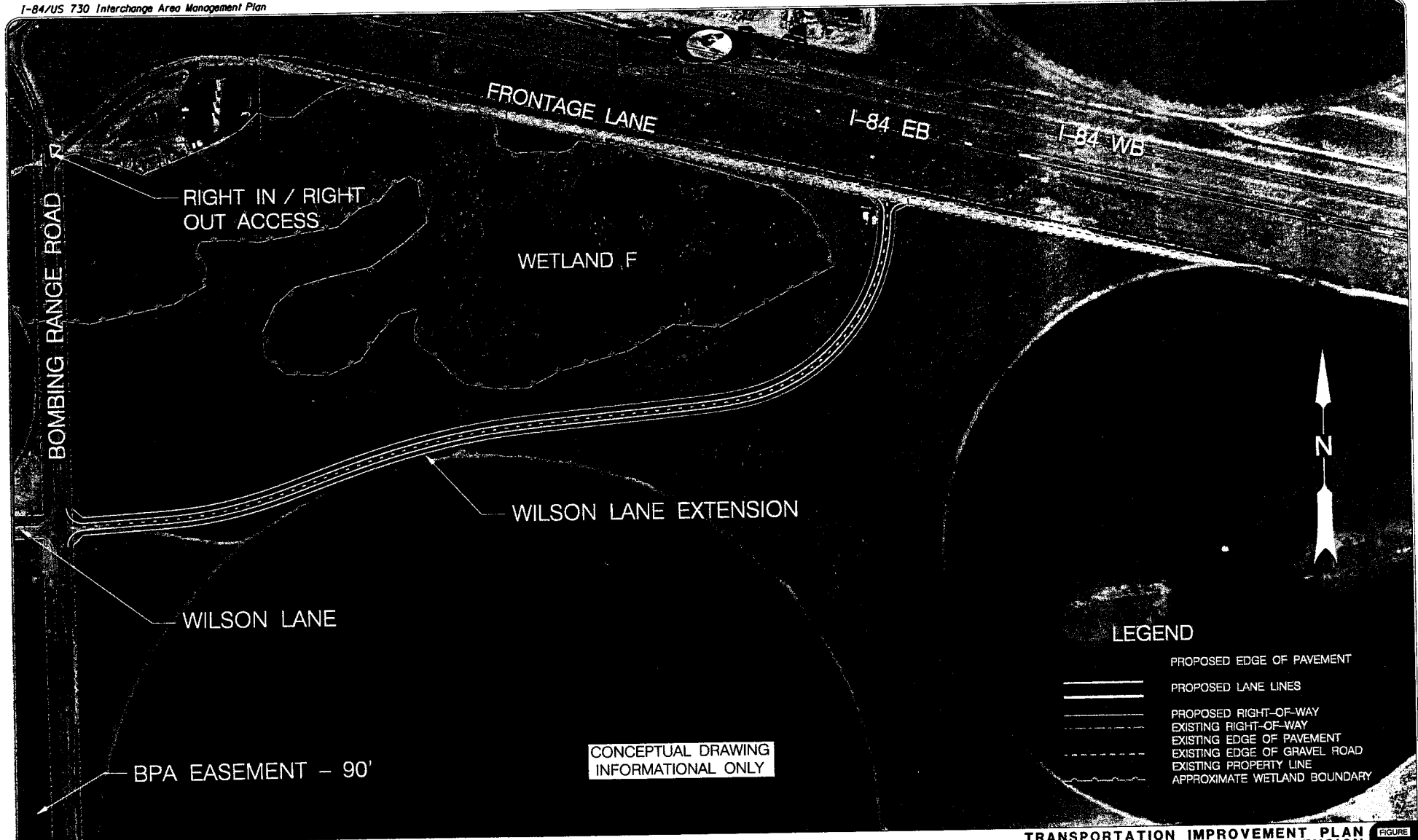
I-84 WB



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TRANSPORTATION IMPROVEMENT PLAN
NORTH SIDE ACCESS CONSOLIDATION
MORROW COUNTY, OREGON

FIGURE
7-3



LEGEND

- PROPOSED EDGE OF PAVEMENT
- PROPOSED LANE LINES
- PROPOSED RIGHT-OF-WAY
- EXISTING RIGHT-OF-WAY
- EXISTING EDGE OF PAVEMENT
- EXISTING EDGE OF GRAVEL ROAD
- EXISTING PROPERTY LINE
- APPROXIMATE WETLAND BOUNDARY

CONCEPTUAL DRAWING
INFORMATIONAL ONLY



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TRANSPORTATION IMPROVEMENT PLAN
WILSON LANE EXTENSION
MORROW COUNTY, OREGON

FIGURE
7-4

Table 7-1 IAMP Transportation Improvements

Figure 7-1 Label	Near-Term Improvement	Trigger for Improvement	Estimated Cost	Potential Funding Source
A	<ul style="list-style-type: none"> Lewis & Clark Drive is extended to connect with US 730 approximately 1 ½ miles north of the I-84 Westbound ramp terminal. 	*	\$7.2M	House Bill 2001
	<ul style="list-style-type: none"> Turn lanes and a southbound acceleration lane would be constructed on US 730. 	Implemented as part of the Lewis & Clark Drive connection to US 730		
Figure 7-1 Label	Long-Term Improvement	Trigger for Improvement	Estimated Cost	Potential Funding Source
B	<ul style="list-style-type: none"> A new access to US 730 located approximately ¼-mile north of the I-84 Westbound ramp terminal. The existing access road serving the utility station would connect to this new US 730 access point. 	Redevelopment of parcels located west of US 730, north of I-84, and south/east of the irrigation canal	\$0.1M	Private Development Funds
	<ul style="list-style-type: none"> The driveways on the east side of US 730 are rerouted along a frontage road that accesses US 730 approximately ¼-mile north of the I-84 westbound ramp terminal. 	Redevelopment of parcels located east of US 730, north of I-84, and south of the rail line.	\$0.1M	Private Development Funds
C	<ul style="list-style-type: none"> Wilson Lane is extended to the east of Bombing Range Road south of the wetlands and connects with Frontage Lane on the east side of the wetlands. 	As part of new development along Frontage Road and when a traffic study shows that the southbound left-turn queue is projected to extend back to the eastbound I-84 ramp terminal.	\$2.9M	Private Development Funds
	<ul style="list-style-type: none"> The Frontage Lane connection to Bombing Range Road is restricted to right-in/right-out. 			

*There is no trigger for this improvement as it is part of the project that will extend Lewis & Clark Drive to US 730 via House Bill 2001 funds.

NEAR-TERM IMPROVEMENTS

A. Lewis & Clark Drive Extension

Lewis & Clark Drive will be extended from its current terminus to US 730 in the near-term. This connection will provide access from US 730 to the POM's East Beach area, thereby providing the system capacity necessary to serve future growth at the POM without requiring a major reconfiguration of the current POM interchange. Lewis & Clark Drive will be extended as a two-lane road, expanding to include exclusive left-turn and right-turn lanes at its intersection of US 730. A northbound left-turn lane, a southbound right-turn lane, and a southbound acceleration lane will be constructed on US 730 to serve traffic turning onto and off of Lewis & Clark Drive.

LONG-TERM IMPROVEMENTS

Long-term improvements to the transportation system are identified for the area immediately surrounding the I-84/US 730 interchange and are focused on increasing access spacing.

B. North Side Improvements

As part of new development to those parcels that front US 730 between I-84 and the UP Mainline railroad, access on both sides of US 730 will be consolidated to a single intersection located approximately ¼-mile north of the I-84 Westbound ramp terminal. On the west side, this will involve rerouting the road to the utility station further north to this point. A frontage road will be required on the east side of US 730 to provide access to those parcels located north of I-84.

It should be noted that any new development proposals on EFU land not associated with farm uses or those allowed under ORS 215 will need a Goal exception to Statewide Planning Goal 3 (pursuant to Statewide Planning Goal 2 and OAR 660, Division 4). New access onto US 730, in the approximate vicinity of the consolidated accesses shown on Figure 7-3 and in association with the closure of existing access points that are currently too close to the interchange ramps, will be required for consistency with the IAMP upon development of properties in the immediate vicinity of the interchange. The new consolidated access point on US 730 will only be necessary if and when future development occurs, development that will require a Goal exception (to allow uses otherwise prohibited in EFU), or a legislative land use amendment and zone change consistent with Statewide Planning Goal 14.

C. South Side Improvements

The current Frontage Lane intersection of Bombing Range Road is located approximately 250 feet south of the I-84 eastbound on-ramp. This spacing does not meet ODOT's ¼-mile access spacing standards to an interchange. Given the close spacing, there is a potential that southbound left-turn movements at the Bombing Range Road/Frontage Lane intersection could spill back and block the westbound ramp terminals. As such, a long-term improvement involves limiting access to Frontage Lane and establishing a new roadway connection to Bombing Range Road across from Wilson Lane. This realignment would involve a new roadway extending south of the identified wetlands and connecting back to the existing Frontage Lane east of the wetlands. When this connection is made, the existing Frontage Lane intersection with Bombing Range Road would be converted to right-in/right-out access.

POSSIBLE EXCEPTIONS/DEVIATIONS FROM STANDARDS

The deviations that will be required for the improvements are related to the access spacing standards outlined under Oregon Administrative Rule 734, Division 51 and the *Oregon Highway Plan* (OHP). These deviations are discussed in the access management subsection below.

ACCESS MANAGEMENT PLAN

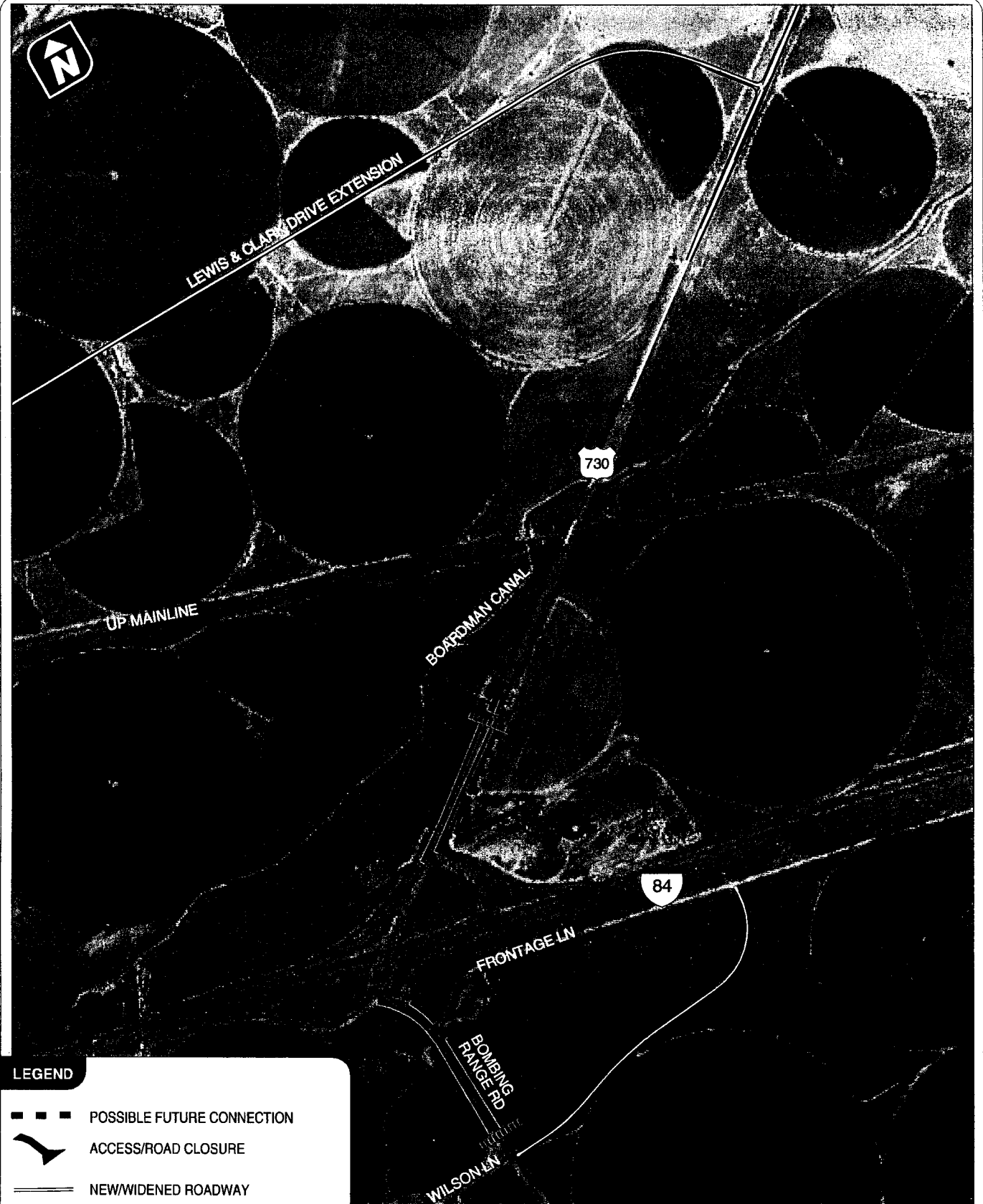
Access locations within the IMSA were evaluated based on ODOT's Division 51 Access Management standards and an assessment of traffic operations and safety as described in Action 3C.3 of the 1999 OHP. Accordingly, the Access Management Plan (AMP) will preserve the operational integrity and safety of the interchange and primary roadways (e.g. US 730) serving it, while maintaining viable access to all parcels in the IMSA. The AMP contains both a plan for actions to be taken on a Morrow County roadway (i.e., Bombing Range Road) and adopted into the County's TSP, and a plan that is implemented by ODOT on state highway facilities (i.e., US 730) and adopted into the OHP as part of the facility plan.

An AMP is identified for near- and long-term timeframes. The overall AMP is illustrated in Figure 7-5. Justification is also provided for locations where deviations from ODOT's access management standards are necessary. Access management will be implemented as part of ODOT and County project development and delivery processes or as future land use actions occur.







GENERAL ACCESS MANAGEMENT IMPLEMENTATION

Under ODOT's current access management policy, the 1999 OHP stipulates that the desired distance between an interchange ramp terminal and the first full approach (public or private) on the crossroad should be a minimum of 1,320 feet ($\frac{1}{4}$ -mile). The first right-in/right-out access should be a minimum of 750 feet from the ramp terminal. Currently there are four (4) public approaches and one (1) private approach on the north side of the interchange and 1 private and 1 public approach on the south side within 1,320 feet of the interchange ramp terminals, as was previously documented in Figure 4-6.

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LEGEND

-  POSSIBLE FUTURE CONNECTION
-  ACCESS/ROAD CLOSURE
-  NEW/WIDENED ROADWAY
-  MINIMUM 1320' IAMP LIMITS
-  NEAR-TERM ACCESS CONTROL
-  LONG-TERM ACCESS CONTROL

**ACCESS MANAGEMENT PLAN
MORROW COUNTY, OREGON**

**FIGURE
7-5**

EXISTING PRIVATE APPROACH POLICY

ODOT guarantees Access Permit protection, as allowed within ORS 374.305 & 310, to all existing private accesses. Each will remain a valid access as long as the existing uses remain on property/site and there is no capital improvement project that would trigger review of the access (per OAR 734.051.0285). An access evaluation will be required when any of the following land use actions leads to a peak hour increase in 50 trips or more over the prior use, a daily increase of 500 trips or more over the prior use, or the increase represents a 20 percent or more increase in trips on a typical day/peak hour; if there is an identified safety or operational problem related to the approach; if the approach does not meet sight distance requirements; or if the daily traffic using the approach increases by 10 or more vehicles with a gross vehicle weight equal to or greater than 26,000 pounds:

- Modifications to existing zoning,
- Changes to plan amendment designations;
- Construction of new buildings;
- Increases in floor space of existing buildings;
- Division or consolidation of property boundaries;
- Changes in the character of traffic using the driveway/approach;
- Changes to internal site circulation design or inter-parcel circulation; or
- Reestablishment of a property's use (after discontinuance for four years or more that trigger a Traffic Impact Assessment as defined below) that occurs on the parcels served by the approaches.

In general, the types of improvements identified for accesses within the IMSA include:

- Modifying, mitigating, consolidating, or removing existing approaches pursuant to an access management plan as part of the highway project development and delivery process (OAR 734-051);
- Improving traffic safety and operations by improving the local street network to provide alternate access and reduce conflict points; and,
- Restricting highway access but improving local roadway access by introducing shared access, cross-over easements, and/or consolidated access when separate parcels are assembled for redevelopment, and access via collector or local streets.

The time period over which the following measures will be implemented will depend on the rate of redevelopment within the IMSA and when the transportation improvement plan projects identified previously are constructed. As each parcel redevelops, or upon capital improvement, accesses will be evaluated to determine how they will be modified in order to move in the direction of meeting the access spacing standards and long-term vision of driveway consolidation while still providing access as defined in OAR 734-051.

ACCESS MANAGEMENT

Figure 7-5 illustrates the AMP for the IMSA. The AMP is divided into two timeframes: near-term and long-term. The near-term plan is to not allow new access to the roadways within the ¼-mile limits. The long-term plan would be implemented once the long-term improvements are constructed. The following is a description of the AMP for each major roadway.

US 730

The near-term AMP for US 730 is primarily focused on not allowing new accesses to the highway within ¼-mile of the interchange ramps. The long-term plan for the east side is to construct a frontage road that allows for the consolidation of existing accesses to the frontage road intersection. A similar approach is planned for the west side, where the extension of the current road providing access to the utility station would be extended north to consolidate approaches to a single intersection at the ¼-mile mark across from the frontage road intersection on the east side.

Bombing Range Road

The near-term AMP for Bombing Range Road is to not allow new accesses within ¼-mile of the interchange ramps. Longer-term, Wilson Lane will be extended east across Bombing Range Road south of the identified wetlands connecting in with Frontage Lane east of the wetlands. When this occurs, the current Frontage Lane approach to Bombing Range Road will be converted to right-in/right-out access. The current private access to Bombing Range Road across from Frontage Lane will also be moved to Wilson Lane when the property redevelops.

DEVIATIONS TO THE DIVISION 51 ACCESS MANAGEMENT STANDARDS

One access will not meet the applicable OAR Division 51 access spacing standard. A deviation is required under the provisions of OAR 734-51-0135(3) as described below. These deviations will be reviewed by the Region Access Management Engineer. Under the provisions of OAR 734-51-0135(3), the Region Access Management Engineer may approve a deviation if:

- (a) Adherence to spacing standards creates safety or traffic operation problems;*
- (b) The applicant provides a joint approach that serves two or more properties and results in a net reduction of approaches to the highway;*
- (c) The applicant demonstrates that existing development patterns or land holdings make joint use approaches impossible;*
- (d) Adherence to spacing standards will cause the approach to conflict with a significant natural or historic feature including trees and unique vegetation, a bridge, waterway, park, archaeological area, or cemetery;*
- (e) The highway segment functions as a service road;*
- (f) On a couplet with directional traffic separated by a city block or more, the request is for an approach at mid-block with no other existing approaches in the block or the proposal consolidates existing approaches at mid-block; or*
- (g) Based on the Region Access Management Engineer's determination that:*
 - (A) Safety factors and spacing significantly improve as a result of the approach; and*
 - (B) Approval does not compromise the intent of these rules as set forth in OAR 734-051-0020 (Which states: The purpose of Division 51 rules is to provide a safe and efficient transportation system through the preservation of public safety, the improvement and development of transportation facilities, the protection of highway traffic from the hazards of unrestricted and unregulated entry from adjacent property, and the elimination of hazards due to highway grade intersections.)*

The following is a description of the justification for deviation for each of the public accesses requiring a deviation.

Public Access to Frontage Lane

A deviation to the access spacing requirements identified in OAR Division 51 is required at the Bombing Range Road/Frontage Lane intersection, which is located approximately 250 feet south of the I-84 Eastbound on-ramp terminal. The approach will be restricted to right-in/right-out access only. As was mentioned above, a deviation may be approved if:

- (g) Based on the Region Access Management Engineer's determination that:*



(A) Safety factors and spacing significantly improve as a result of the approach; and





(B) Approval does not compromise the intent of these rules as set forth in OAR 734-051-0020 (Which states: The purpose of Division 51 rules is to provide a safe and efficient transportation system through the preservation of public safety, the improvement and development of transportation facilities, the protection of highway traffic from the hazards of unrestricted and unregulated entry from adjacent property, and the elimination of hazards due to highway grade intersections.)

Response: Frontage Lane in the long-term will be reduced to a right-in/right-out access at Bombing Range Road once Wilson Lane is extended east of Bombing Range Road. These improvements will significantly improve the safety of the existing Bombing Range Road/Frontage Lane intersection by eliminating the potential for southbound left-turn queues to spill back to the eastbound I-84 on-ramp terminal. Since Frontage Lane currently functions as a service road, keeping its connection to Bombing Range Road as a right-in/right-out access will significantly reduce out-of-direction travel for those land uses that rely upon it for access to the regional transportation network.

**Section 8
Implementation**



LEGEND

-  Boardman UGB
-  IAMP Management Area
-  POM IAMP Overlay District
-  Boardman City Limits

Hi:profile

**IAMP MANAGEMENT AREA
MORROW COUNTY, OREGON**

**FIGURE
8-1**

IMPLEMENTATION

This section describes the IAMP implementation strategy, which includes an I-84/US 730 Interchange Function and Policy Definition and Management Area. The Implementation Plan also includes adoption and monitoring procedures that will ensure transportation improvements are constructed and funded as development occurs and that the improvement plan is updated as needed over time.

To ensure that the IAMP remains dynamic and responsive to changes to the adopted land use and transportation plans, Morrow County and ODOT should, at a minimum:

- Amend the Morrow County Transportation System Plan and Comprehensive Plan;
- Amend the *Oregon Highway Plan (OHP)*;
- Codify and map an IAMP Management Area that defines the area wherein regulations and requirements associated with protecting the interchange apply (see Figure 8-1);
- Coordinate planning activities pursuant to the Transportation Planning Rule (OAR 660-012);
- Review the IAMP and mobility standards for the interchange prior to adopting local plan amendments.

Plan Elements

In addition to adoption of the IAMP described in Section 7, implementation of the I-84/US 730 IAMP requires adoption of an “Interchange Function and Policy Definition” and IAMP Management Area.

INTERCHANGE FUNCTION AND POLICY DEFINITION

Morrow County should adopt a clear definition of the I-84/US 730 Interchange function into its comprehensive plan and TSP as a policy to provide direction for management of the interchange area and achieve the objectives and goals of this IAMP. This will help to ensure consistency between future policy decisions with the interchange’s intended function.

The I-84/US 730 interchange provides connections between the I-84 and US 730 corridors. I-84 is a major east-west interstate highway that connects the state of Oregon to the state of Idaho. I-84 is classified as an Interstate Highway by the OHP and designated as an Expressway and Statewide Freight

Route. US 730 is a Regional Highway that provides regional connectivity between numerous local jurisdictions and the I-82/I-84 interstate highways.

Based on this description, the following function and policy definition was developed for the I-84/US 730 Interchange:

“The primary function of the I-84 / US 730 interchange is to facilitate statewide and inter-urban and inter-regional travel to/from the I-84 corridor. A secondary function is to provide interregional connectivity via the US 730 corridor. A Regional Highway and a Federally Designated Truck Route, US 730 provides regional connectivity between numerous local jurisdictions and the I-82/I-84 interstate highways.”

INTERCHANGE AREA MANAGEMENT PLAN (IAMP) MANAGEMENT AREA

Morrow County is the land use regulatory authority for the portion of the Interchange Management Study Area (IMSA). To ensure the continued operation and safety integrity of the interchange, Morrow County should adopt an IAMP Management Area. Future development and land use actions within the IAMP Management Area will be monitored to ensure that volume-to-capacity ratios do not exceed the adopted *Oregon Highway Plan* mobility standards at the ramp terminals. This can be accomplished through Development Review guidelines included within the proposed amendments to the County's Zoning and Subdivision Ordinances as described in the following sections.

Adoption Elements

Implementation of the I-84/US 730 IAMP will occur at several levels of government. As required by OAR 734-051, Morrow County will be required to legislatively amend their Transportation System Plan and Comprehensive Plan to incorporate elements of the I-84/US 730 IAMP. In addition, new ordinances or amendments to existing ordinances will be required to ensure that the access management, land use management, and coordination elements of the IAMP are achieved. This adoption process will include Planning Commission/County Court hearings. Following successful adoption, the I-84/US 730 IAMP will be presented to the Oregon Transportation Commission (OTC) for its review and adoption. This should occur prior to transportation improvements as described in this IAMP being constructed.

To implement the I-84/US 730 IAMP, the following actions shall occur:

1. Morrow County shall adopt the I-84/US 730 IAMP as part of the Morrow County Transportation System Plan and Comprehensive Plan. The IAMP, and more specifically the transportation improvements identified in Table 7-1 of Section 7, shall serve as the long

range comprehensive management plan for providing the transportation facilities that are specifically addressed in this plan, as well as the Access Management Plan and the planned local roadway network for the area.

2. Morrow County shall amend its Comprehensive Plan Map and Zoning Map to include the IAMP Management Area boundary. In addition, the County shall amend the Zoning Ordinance and Subdivision Ordinance to include development and land use application requirements pertaining to transportation impact analysis, access management, and agency coordination.
3. ODOT Regional Access Management Engineer will review and approve the access deviations described in the IAMP.
4. The Oregon Transportation Commission shall amend the *Oregon Highway Plan* to include the I-84/US 730 IAMP.

TSP AMENDMENTS

The following outline discusses the major Transportation System Plan amendments that will need to occur at the county and state levels to support adoption of the I-84/US 730 IAMP.

Morrow County

- The County shall adopt the I-84/US 730 Interchange Area Management Plan by reference as an element of the County's Transportation System Plan.
- Upon the County's adoption of the IAMP, parcels within the IAMP Management Area will be subject to the IAMP's Access Management Plan.
- The following interchange policy statement should be included in the Morrow County Transportation System Plan: "The primary function of the I-84 / US 730 interchange is to facilitate statewide and inter-urban and inter-regional travel to/from the I-84 corridor. A secondary function is to provide interregional connectivity via the US 730 corridor. A Regional Highway and a Federally Designated Truck Route, US 730 provides regional connectivity between numerous local jurisdictions and the I-82/I-84 interstate highways."
- The IAMP transportation improvement plan elements located on County facilities, as illustrated in Figure 7-1 and listed in Table 7-1, shall be included in the recommended transportation improvements project list of the Morrow County Transportation System Plan.

- The IAMP Access Management Plan elements as illustrated in Figure 7-5 Shall be included in the transportation improvement project list of the Transportation System Plan.

Oregon Transportation Commission

- The I-84/US 730 IAMP shall be adopted by the Oregon Transportation Commission as part of the *Oregon Highway Plan*.

Monitoring Elements

The purpose of the IAMP is to ensure that capacity at the interchange is preserved for its intended function. While a long-range plan, the IAMP needs to remain dynamic and responsive to development and changes to the adopted land use and transportation plans and may need to be periodically reviewed and updated. To accomplish this goal, a monitoring program is included that identifies triggers for reviewing the IAMP and assessing how development approval within the IAMP Management Area will be reviewed and coordinated.

IAMP REVIEW TRIGGERS

Periodically, the implementation program shall be evaluated by ODOT and Morrow County to ensure it is accomplishing the goals and objectives of the IAMP. Events that may trigger an IAMP review include:

- Plan map and zone changes that have a “significant affect” pursuant to the Transportation Planning Rule, Section -0060 and impact the I-84/US 730 Interchange, or that are located within the IAMP Management Area.
- Mobility measures at the I-84 ramp terminals exceed the adopted volume-to-capacity ratios.

In addition to the established triggers for IAMP review, the agencies may request a review of the IAMP at any time if, in their determination, specific land use or transportation changes warrant a review of the underlying assumptions and/or recommendations within the IAMP. If the participants in the IAMP review meeting agree that, once the impacts of the “trigger” that necessitated the review are examined, an IAMP amendment is not warranted, a recommendation of “no action” may be documented and submitted in the form of a letter to the Morrow County Court and the Oregon Transportation Commission.

If the findings and conclusions from the IAMP review meeting demonstrate the need for an update to the plan, review participants will initiate an IAMP update process. Initial steps in updating the IAMP will include scoping the planning process, identifying funding, and outlining a schedule for plan completion. Resulting changes to the IAMP will need to be adopted by the OTC as an amendment to the

OHP. Once completed, IAMP updates may also necessitate amendments to the Morrow County TSP. Adoption of an amended or updated TSP is a County Court decision, one that is made through a legislative, local public hearing adoption process.

DEVELOPMENT REVIEW WITHIN THE MANAGEMENT AREA

The following outlines the transportation requirements for development and zone change applications within the I-84/US 730 Interchange Management Area and describes how Morrow County will coordinate with ODOT.

Traffic Impact Analysis

All development applications located within the I-84/US 730 Interchange Management Area that meet the following conditions are required to prepare and submit a Transportation Impact Analysis (TIA) to demonstrate the level of impact of the proposed development on the surrounding street system:

- a) A change in zoning or plan amendment designation; and
- b) The proposal is projected to cause one or more of the following effects, which can be determined by field counts, site observation, traffic impact analysis or study, field measurements, crash history, Institute of Transportation Engineers Trip Generation manual; and information and studies provided by the local reviewing jurisdiction and/or ODOT:
 - a. An increase in site traffic volume generation by 500 Average Daily Trips (ADT) or more (or as required by the County Engineer). The latest edition of the Trip Generation manual, published by the Institute of Transportation Engineers (ITE) shall be used as standards by which to gauge average daily vehicle trips; or
 - b. An increase in ADT volume of a particular movement to and from the State highway by 20% or more
 - c. An increase in use of adjacent streets by vehicles exceeding the 20,000 pound gross vehicle weights by 20 vehicles or more per day; or
 - d. The location of the access driveway does not meet minimum intersection sight distance requirements, or is located where vehicles entering or leaving the property are restricted, or vehicles queue or hesitate, creating a safety hazard; or

- e. A change in internal traffic patterns that may cause safety problems, such as back up onto the highway or traffic crashes in the approach area; or.
- f. For development in the I-84/US 730 Interchange Area Management Plan (IAMP) Management Area, the location of the access driveway is inconsistent with the Access Management Plan in Section 7 of the IAMP.

The determination of impact or effect, and the scope of the TIA, shall be coordinated with Morrow County and ODOT. The developer shall be required to mitigate impacts attributable to the project.

ODOT Coordination

- Morrow County shall consult the Oregon Department of Transportation (ODOT) on TIA requirements when the site of the proposal is adjacent to or otherwise affects a State roadway.
- Morrow County shall provide written notification to ODOT once the application is deemed complete.
- ODOT shall have at least 20 days, measured from the date notice to agencies was mailed, to provide written comments to the County. If ODOT does not provide written comments during this 20-day period, the County staff report will be issued without consideration of ODOT comments.
- The County shall invite ODOT to participate in a pre-filing conference for applications within an Interchange Management Area Plan (IAMP) Management Area or within a ¼ mile of any ODOT facility

Section 9
OAR and OHP Compliance

OAR AND OHP COMPLIANCE

The following section discusses the OAR and 1999 OHP policy based compliance issues that pertain to the development of the I-84/US 730 IAMP.

OAR Compliance

The I-84/US 730 IAMP was developed in collaboration with the POM, City of Boardman, Morrow County, and ODOT and was developed in accordance with the guidelines set forth in the State of Oregon's Oregon Administrative Rules for Interchange Access Management Planning and Interchange Area Management Planning. Table 9-1 identifies the required planning elements from OAR 734-051 and documents how the I-84/US 730 IAMP satisfies the requirements.

Table 9-1 OAR 734-051 Issues Addressed

OAR 734-0051-0155 Requirement	How Addressed	Report Reference
Should be developed no later than the time the interchange is being developed or redeveloped -0155(7)(a)	This plan was developed in order to determine the future improvements that would enhance the efficiency and safety of the interchange. The plan was completed before the identified Lewis & Clark Drive extension from the Port of Morrow or any of the identified improvements to the interchange moved into project development phases.	Section 1
Should identify opportunities to improve operations and safety in conjunction with roadway projects and property development or redevelopment and adopt strategies and development standards to capture those opportunities -0155(7)(b)	The access management, transportation improvement plan, and Interchange Management Area elements identified in this plan will result in operational, safety, and capacity improvements.	Section 7 Section 8
Should include short, medium, and long-term actions to improve operations and safety in the interchange area -0155(7)(c)	The IAMP includes a phasing plan for the transportation system improvements and access management elements that cover the short and long-term time timeframes.	Section 7 Section 8
Should consider current and future traffic volumes and flows, roadway geometry, traffic control devices, current and planned land uses and zoning, and the location of all current and planned approaches -0155(7)(d)	A full analysis of existing and forecast (2030) operational and geometric conditions was conducted for this planning effort. The future volumes were developed based on current zoning and comprehensive plan designations. All approaches, existing and planned, were examined.	Section 4 Section 5 Section 6
Should provide adequate assurance of the safe operation of the facility through the design traffic forecast period, typically 20 years -0155(7)(e)	The forecast analysis shows that safe operations will be achieved for the interchange through 2030.	Section 6

THE PLAN WILL DETERMINE		
OAR 734-051-0155 Requirement	Determination	Report Reference
Sidewalk and bicycle lane crossings (highway and ramp crossings)	See above.	See above
Location of potential transit facilities (turnouts, shelters, park and ride areas)	Transit facilities were not considered as part of the IAMP because fixed route transit service does not exist nor is planned within the IMSA.	N/A
Is new policy language needed in Morrow County's Comprehensive Plan to support adequate long-term interchange operations?	Morrow County will amend its comprehensive plan, land use and development ordinance to implement the Interchange Management Area.	Section 8
Are any land use changes/comprehensive plan (including TSP) amendments needed to implement the Interchange Area Management Plan?	Morrow County will amend its Transportation System Plan to incorporate the transportation improvements associated with the IAMP. Morrow County will amend its Land Use and Development Ordinances to include an Interchange Management Area that contains the submittal requirements and review standards for land use amendment and development proposals within the district. Amendments will ensure that future development and land use actions within the interchange management area do not degrade the interchange terminal volume to capacity ratios below the adopted OHP mobility standards. These amendments include coordination between agencies, traffic impact analysis requirements, monitoring of traffic operations, and access management requirements.	Section 8
Are any deviations from OHP and OAR 731-051 standards and requirements needed	Deviations to the OHP access spacing standards are required, as described in Section 7. The Access Management element describes how each of the necessary deviations meets the requirements of Division 51. The IAMP and Implementation Plan define all the necessary standards and requirements.	Section 7 Section 8

Oregon Highway Plan Compliance

The I-84/US 730 IAMP was developed in accordance with the policies set forth in the Oregon Highway Plan (OHP). The following identifies the OHP policies that pertain to the I-84/US 730 IAMP and how the IAMP satisfies the requirements.

Policy 1A: State Highway Classification System. The state highway classification system includes five classifications: Interstate, Statewide, Regional, District, and Local Interest Roads. In addition, there are four special purpose categories that overlay the basic classifications: special land use areas, statewide freight route, scenic byways, and lifeline routes.

Within the IMSA, there are two ODOT highways. Interstate-84 is an Interstate Highway and is part of the National Highway System (NHS). US 730 is a Regional Highway in the vicinity of I-84. It is also a federally designated truck route.

How Addressed: Specific access management responsibilities have been set according to State and City responsibilities.

Policy 2F: Traffic Safety. This policy emphasizes the state's efforts to improve safety of all uses of the highway system. Action 2F.4 addresses the development and implementation of the Safety Management System to target resources to sites with the most significant safety issues.

How Addressed: The US 730/Lewis & Clark Drive intersection will be constructed with turning and acceleration lanes on US 730. The access management element was also developed to ensure the long-term safety of the interchange area.

Policy 3A: Classification and Spacing Standards. This policy addresses the location, spacing and type of road and street intersections and approach roads on state highways. The adopted standards can be found in Appendix C of the Oregon Highway Plan.

How Addressed: See Policy 3C below.

Policy 3C: Interchange Access Management Areas. This policy addresses management of grade-separated interchange areas to ensure safe and efficient operation between connecting roadways. Action items include developing interchange area management plans to protect the function of the interchange to provide safe and efficient operations between connecting roadways and to minimize the need for major improvements of existing interchanges. The local jurisdiction's role in access management is stated in Policy 3C as follows: "necessary supporting improvements, such as road networks, channelization, medians and access control in the interchange management area must be identified in the local comprehensive plan and committed with an identified funding source, or must be in place (Action 3C.2)."

Access management standards are detailed in Policy 3C and include the distance required between an interchange and approaches and intersections. The most stringent standards apply in interchange areas. Table 17 of the OHP contains the minimum spacing standards applicable to the I-82/US 730 Interchange, a freeway interchange that has a multi-lane crossroad. The spacing standards in an urban area for this type of interchange are:

- | | |
|--------------------|--|
| 1 miles (3.2 km) | Distance between the start and end of tapers of adjacent interchanges. |
| 750 feet (230 m) | Distance to the first approach on the right (right in/right out only) |
| 1,320 feet (400 m) | Distance to the first major intersection or approach (left turns allowed). |

**Section 10
References**

REFERENCES

1. Oregon Department of Transportation. *1999 Oregon Highway Plan*. 1999.
2. CTS Engineers. *Morrow County 2005 Transportation System Plan*. 2005.
3. Port of Morrow. *Transportation*. <http://www.portofmorrow.com/transportation.htm>. March 2011.
4. Oregon Department of Transportation. *Analysis Procedures Manual*. 2006.
5. Transportation Research Board. *Highway Capacity Manual*. 2000.
6. U.S. Fish and Wildlife Service (USFWS). *Federally Listed, Proposed, Candidate Species and Species of Concern under the Jurisdiction of the Fish and Wildlife Service Which May Occur within Morrow County, Oregon*. 2011.
7. StreamNet. *Fish Data for the Northwest*. <http://www.streamnet.org>. 2011.
8. Oregon Natural Heritage Program. Query of ORHNIC database within a 2-mile radius of API conducted January 25, 2011.
9. Oregon Department of Fish and Wildlife. Species Fact Sheet for Washington ground squirrel. <http://www.fws.gov/oregonfwo/Species/Data/WashingtonGroundSquirrel/>. January 2011.
10. Holser, Richard E. *Soil Survey of Morrow County Area, Oregon*. 1983.
11. Cherry, Steve. Personal communication in a phone call with Kristen Currens, MB&G. Wildlife Biologist, Oregon Department of Fish and Wildlife. January 27, 2011.
12. Department of Rangeland Ecology & Management. *Weedmapper 2011*. http://www.weedmapper.org/morrow_maps.html. January 2011.
13. Oregon Department of Agriculture. *Noxious Weed Policy and Classification System*. 2010.
14. Oregon Geospatial Enterprise Office. *Spatial Data Library. Wetlands: OR Wetlands Geodatabase*. <http://www.oregon.gov/DAS/EISPD/GEO/alphalist.shtml#W>. January 2011.
15. Downing, Andrea. Personal communication in an email to Kristen Currens, MB&G. Department of State Lands Wetlands Support Assistant. January 26, 2011.
16. University of Oregon Libraries. *General Land Office Maps*. <http://libweb.uoregon.edu/map/GIS/Data/Oregon/GLO/Quadrant 7.htm#4n>. 2011.
17. Oregon Department of Environmental Quality. *Water Quality Assessment - 2004/2006 Integrated Report Database*. <http://www.deq.state.or.us/wq/assessment/rpt0406/search.asp>. January 2011.

18. Oregon Department of Environmental Quality. *Lower Umatilla Basin Groundwater Management Area Action Plan*. <http://www.deq.state.or.us/wq/groundwater/docs/lubgwma/actionplan.pdf>. February 2011.
19. Oregon Department of Environmental Quality. *Critical Groundwater Allocations*. February 2011.
20. Institute of Transportation Engineers. *Trip Generation* (8th Edition). 2008.



INTERCHANGE MANAGEMENT STUDY AREA
MORROW COUNTY, OREGON

FIGURE
1-1

CHAPTER 2 GOALS AND POLICIES

INTRODUCTION

Morrow County recognizes the importance of its transportation system to the long-term health and vitality of the County. Well-designed roadways contribute to the ability of an area to accommodate additional growth and development. Deficiencies in the system affect user safety and their perception of a community's character and livability. As part of this Transportation System Plan (TSP), a series of goals and policies were designed to guide the development of the transportation system over the next 20 years.

The goals and policies included in this plan have been developed by several technical advisory committees (TAC), working under the requirements of the 1991 Oregon Transportation Planning Rule (TPR), during various plan amendments. The goals and policies developed for this process reflect both the required elements of the TPR and the interests of the County.

Goals are general in nature. Each goal focuses on a particular aspect of the transportation system or the relationship between transportation and the viability of the County. The first nine goals of this TSP are coordination/process, land use, economic development, quality of life, transportation modes available in the County, and finance. A tenth goal focuses on the proposed speedway project.

Because they are general in nature, goals are difficult to implement and, therefore, make gauging plan success difficult. To assist in plan implementation, a series of policies has been developed for each goal. Policies are specific steps to be taken in plan implementation to ensure that the goals are met. Policies are directive and often outline plan requirements.

The following section presents the goals and policies of Morrow County. These goals and policies will assist in prioritizing individual transportation projects to ensure that limited transportation funding is expended efficiently to promote the development of a healthy transportation system.

GOALS AND POLICIES

Goal 1 Coordination/Process

Ensure that the Morrow County TSP is coordinated with other transportation providers, meets applicable regulations, and considers the needs of all transportation system users.

- Policy 1.1.** Coordinate the preparation of the TSP with transportation providers in Morrow County, including the cities of Boardman, Irrigon, Lone, Heppner, and Lexington, and the Oregon Department of Transportation (ODOT).
- Policy 1.2.** Coordinate design standards with the cities within the county.
- Policy 1.3.** Coordinate transportation planning with the Port of Morrow.
- Policy 1.4.** Coordinate with ODOT for improvements on state facilities that could affect county facilities, through a ministerial or similar staff-level review

process to allow the County Public Works Department the opportunity to review improvement plans prior to final design.

- Policy 1.5.** Coordinate transportation planning with adjacent counties.
- Policy 1.6.** Fulfill the transportation planning requirements of ODOT and the Department of Land Conservation and Development (DLCD).
- Policy 1.7.** Participate actively in the North East Area Commission on Transportation (NEACT) to promote inclusion of transportation improvement projects in Morrow County in the Statewide Transportation Improvement Program (STIP).
- Policy 1.8.** Use a 20-year time horizon for all transportation planning.
- Policy 1.9.** Review annually and update the capital improvement program. Update the plan elements periodically, in conjunction with the periodic update of the county comprehensive plan, or every 5 years.
- Policy 1.10.** Evaluate the needs of all of the county's population groups, including transportation disadvantaged groups, such as older adults, young, physically challenged, and low-income residents.
- Policy 1.11.** Evaluate the needs of commercial users, including manufacturing, timber, agricultural, and recreational users.
- Policy 1.12.** Include consideration of urban issues, as appropriate, and rural issues in the TSP.
- Policy 1.13.** Provide extensive opportunities for public input throughout the transportation planning process.
- Policy 1.14** The primary function of the I-84/US 730 interchange is to facilitate statewide and inter-urban and inter-regional travel to/from the I-84 corridor. A secondary function is to provide interregional connectivity via the US 730 corridor. A Regional Highway and a Federally Designated Truck Route, US 730 provides regional connectivity between numerous local jurisdictions and the I-82/I-84 interstate highways.
- Policy 1.15** The primary function of the POM interchange is to provide truck and vehicular access to the POM, allowing goods to be transported between the Port and destinations in Oregon, Washington, and Idaho via I-84. A secondary function is to provide access to the residential areas and farm lands on the south side of I-84 and east of the City of Boardman via Laurel Lane, a City arterial.

Goal 2 Land Use

Support land-use planning with appropriate transportation improvements.

- Policy 2.1.** Design all new roadways to meet county and state adopted road design standards, as a minimum.
- Policy 2.2.** Identify and reserve future road corridors.

- Policy 2.3.** Require new development proposals, plan amendments, and zone changes to conform to the TSP as required of the TPR.
- Policy 2.4.** Require new development to provide appropriate access to the transportation system.
- Policy 2.5.** Require new development to identify transportation impacts and provide appropriate mitigation.
- Policy 2.6.** Require new development to dedicate right-of-way for transportation system improvements where appropriate. Establish procedures for the dedication of right of way necessary for the transportation system.
- Policy 2.7.** Use current state statute and rule to acquire right of way necessary for the transportation system.
- Policy 2.8.** Use current state statute and rule to abandon right of way no longer needed for the transportation system.
- Policy 2.9.** Use adopted ODOT access management standards for state facilities and proposed access management standards in this TSP for county facilities.
- Policy 2.10.** Request an exception to any statewide goal before the construction of roads, highways, and other transportation facilities and improvements not otherwise allowed outright on resource lands (EFU and FU zones).

Goal 3 Economic Development

Enhance economic development through transportation improvements.

- Policy 3.1.** Support transportation system improvements that contribute to economic development opportunities.
- Policy 3.2.** Pursue opportunities to improve access to business and employment centers for all modes of travel.
- Policy 3.3.** Pursue opportunities to improve access to tourist and recreation sites, such as the Columbia River Heritage Trail and the County Off-Highway Vehicle (OHV) Park, for all modes of travel.

Goal 4 Quality of Life

Promote a high quality of life in Morrow County by providing a well-developed transportation system that is appropriate to its surroundings.

- Policy 4.1.** Consider community character when providing transportation system improvements in the urban growth areas.
- Policy 4.2.** Maintain the rural character of the county in the areas outside the designated urban areas.
- Policy 4.3.** Promote and maintain the Blue Mountain Scenic Byway corridor through the Blue Mountains of Morrow County.

Goal 5 Roadway System

Provide and maintain a safe, efficient roadway system to provide mobility throughout the county.

- Policy 5.1.** Design and construct all new roadways to the county's adopted road design standards, as a minimum.
- Policy 5.2.** Preserve the transportation system through regular maintenance.
- Policy 5.3.** Use the county's established procedure to set speed limits.
- Policy 5.4.** Provide roadway channelization (striping, turn lanes) where needed, using American Association of State Highway Officials standards.
- Policy 5.5.** Use the *Manual on Uniform Traffic Control Devices* for traffic signal and signing standards.
- Policy 5.6.** Establish criteria for the design of surface water retention for transportation facilities.
- Policy 5.7.** Improve connectivity within the County by identifying and working to improve additional road corridors.
- Policy 5.8.** Improve emergency vehicle access to the transportation system.
- Policy 5.9.** Emphasize work zone safety for all workers.
- Policy 5.10.** Identify emergency routes for priority in snow plowing or other circumstances where access is restricted.
- Policy 5.11.** Use the County Road Committee to identify and prioritize modernization, preservation, and construction projects.
- Policy 5.12.** Use the *Highway 730 Corridor Refinement Plan* and the Interchange Area Management Plans for the Port of Morrow and I-84/U.S. 730 interchanges to further guide roadway system improvements.

Goal 6 Bicycle, Pedestrian, Equestrian, and Transit Modes

Support the use of other modes of transportation (bicycles, pedestrians, equestrians, and transit) through effective transportation improvements.

- Policy 6.1.** Include design features, such as widened shoulder areas, to accommodate bicycles, pedestrians, and equestrians in the county roadway design standards.
- Policy 6.2.** Include design features, such as pullout areas and turnarounds, to accommodate school bus use in the county roadway design standards, in coordination with school bus providers.
- Policy 6.3.** Continue development of the Columbia River Heritage Trail, and other similar facilities, for recreational uses.
- Policy 6.4.** Support the efforts of private transit systems within the county, such as transporters for older adults.

- Policy 6.5.** Encourage the development of additional transit opportunities for transportation-disadvantaged groups within the county.
- Policy 6.6.** Coordinate with ODOT and the cities to construct bicycle and pedestrian improvements in unincorporated areas within urban growth boundaries.
- Policy 6.7.** Encourage and support development of van pool opportunities to move workers from population centers both within and outside of the county to job centers within the county.

Goal 7 Air Transportation

Support the local and regional air transportation needs of Morrow County.

- Policy 7.1.** Provide and maintain airport facilities to serve general aviation needs.
- Policy 7.2.** Expand airport facilities as necessary to support future service needs.
- Policy 7.3.** Coordinate with the Oregon Department of Aviation when preparing airport planning documents and reviewing proposed land use development in the vicinity of the airport.
- Policy 7.4.** Encourage the establishment of passenger and freight air service in the future.
- Policy 7.5.** Maintain minimum operating standards for the county's airports as required by the Federal Aviation Authority.
- Policy 7.6.** Establish appropriate land uses near airports that are compatible with airport noise levels and support airport operations.

Goal 8 Freight and Goods Movement

Promote efficient movement of freight and goods throughout the county.

- Policy 8.1.** Develop a freight and goods mobility strategy in conjunction with the Port of Morrow and others interested in freight and goods movement.
- Policy 8.2.** Evaluate roads with weight restrictions and develop an improvement strategy for those that adversely affect freight and goods mobility.
- Policy 8.3.** Encourage improvements to rail freight facilities by encouraging improved intermodal connections.
- Policy 8.4.** Establish rail crossing standards for county roads.
- Policy 8.5.** Support the development of passenger rail service.
- Policy 8.6.** Support rail development at the Port of Morrow through the TSP and the zoning ordinance.

Goal 9 Finance

Use a fiscally sound approach to financing transportation system improvements.

- Policy 9.1.** Develop a financial strategy for funding transportation system improvements.

- Policy 9.2.** Explore innovative funding methods, such as system development charges, to finance transportation system improvements.
- Policy 9.3.** Coordinate with other transportation users and providers to seek joint funding opportunities for transportation system improvements.
- Policy 9.4.** Actively seek available funding sources for transportation system improvements.

Goal 10 Oregon Motor Speedway

The following policies are incorporated based on the adoption of Ordinance MC-C-2-02 on July 10, 2002, which amended the *Morrow County Comprehensive Plan*, the *Morrow County Transportation System Plan*, and the *Morrow County Zoning Ordinance* to allow for the siting of a speedway and related facilities adjacent to the Boardman Airport.

- Policy 10.1.** As required by the *National Environmental Policy Act*, the Port of Morrow, in coordination with the Oregon Department of Transportation and the Federal Highways Administration, shall examine and analyze transportation network alternatives that might reasonably accommodate traffic generated by the speedway during peak events. The study shall determine whether reasonable transportation alternatives exist that are feasible to develop and meet ODOT's needs better than the transportation improvements authorized by this plan. If such alternatives exist and are desired by ODOT, the Port shall apply to Morrow County for TSP amendments, including goal exceptions if necessary, to substitute those transportation improvements for authorized improvements that would no longer be required.
- Policy 10.2.** Required transportation improvements may be developed in stages as authorized by ODOT.
- Policy 10.3.** As part of the site development review process for the Oregon Motor Speedway, the speedway owner or operator shall prepare and submit to Morrow County detailed traffic management and event management plans identifying traffic management measures, including access, circulation, and parking management measures, and event management measures to be employed during mid-sized and peak Speedway events. Those measures shall be designed to ensure reasonable roadway access, circulation, and movement for non-speedway-generated traffic traveling within or through the Boardman area before and after Speedway events. The traffic management plan shall be prepared by a licensed traffic engineering firm in coordination with ODOT, the City of Boardman, Morrow County, and the Port of Morrow.
- Policy 10.4.** Unless otherwise agreed to by federal, state or local transportation providers, the Oregon Motor Speedway operator or any successors in interest shall be responsible for payment of all expenses associated with implementing the speedway's traffic management plan.
- Policy 10.5.** Unless otherwise agreed to by federal, state or local transportation providers, the Oregon Motor Speedway operator or any successors in interest shall be responsible for payment of all expenses associated with

implementing the specific transportation improvements required for compliance with the Transportation Planning Rule.

- Policy 10.6.** Implementation of the Speedway's traffic management plan shall be an ongoing condition of approval for the speedway. Failure to substantially comply with the traffic management plan or to pay the expenses associated with implementation of that plan shall be a basis for enjoining operation of the speedway.
- Policy 10.7.** The Oregon Motor Speedway operator or any successor in interest shall work cooperatively with emergency service providers and affected state and local governments and agencies to develop one or more interagency agreements to prepare and implement a traffic management plan.

ARTICLE 4. SUPPLEMENTARY PROVISIONS

SECTION 4.010. ACCESS. Intent and Purpose: The intent of this ordinance is to manage access to land development while preserving the flow of traffic in terms of safety, capacity, functional classification, and level of service.

Major roadways, including highways, arterials, and collectors serve as the primary network for moving people and goods. These transportation corridors also provide access to businesses and homes and have served as the focus for commercial and residential development. If access points are not properly designed, these roadways will be unable to accommodate the needs of development and retain their primary transportation function. This ordinance balances the right of reasonable access to private property with the right of the citizens of Morrow County and the State of Oregon to safe and efficient travel.

This ordinance shall apply to all public roadways under the jurisdiction of Morrow County and to application for development for any property that abuts these roadways.

This ordinance is adopted to implement the land access and access management policies of Morrow County as set forth in the Transportation System Plan. Access shall be provided based upon the requirements below:

A. Minimum Lot Frontage Requirement. Every lot shall abut a street, other than an alley, for at least 50 feet, except on cul-de-sacs where the frontage may be reduced to 30 feet.

B. Access Permit Requirement. Where access to or construction on a county road is needed, an access permit or right-of-way permit from Morrow County Public Works department is required subject to the requirements in this Ordinance. Where access to a state highway is needed, an access permit from ODOT is required as part of the land use application. Where access is needed to a road managed by the Forest Service or other entity, an access permit or other authorization from the appropriate entity shall be required as part of the land use application.

C. Emergency Vehicle Access. It is the responsibility of the landowner to provide appropriate access for emergency vehicles at the time of development. A dead-end private street exceeding one hundred-fifty (150) feet in length shall have an adequate turn around facility approved by the appropriate Fire Marshal or, if the Fire Marshal fails to review the private street, approval by the Building Official or his designee.

D. Easements and Legal Access: All lots must have access onto a public right of way. This may be provided via direct frontage onto an existing public road, a private roadway, or an easement. Minimum easement requirements to provide legal access shall be as follows:

1. 1000' or less, a minimum easement width of 20'
2. More than 1000', a minimum easement width of 40'
3. Parcels where 3 or more lots share an access (current or potential), a minimum easement of 60'.

E. Access Spacing Requirements for Development Accessing State Highways. Applications for development with access onto state highways shall be provided to ODOT for review, to

ensure consistency with adopted ODOT Access Management Standards shown in Table 4.010-1. These standards apply only to unsignalized access points. Where a right of access exists, a property shall be allowed to have access onto a state highway at less than adopted access spacing requirements only if all the following conditions are met:

1. The property does not have reasonable access via an alternative to the state highway;
2. There are no other possible access options along the parcel's highway frontage; and
3. The access spacing standards cannot be accomplished.

When a proposed access onto a state highway does not meet the access spacing standards in Table 4.010-1, a deviation from standard will be considered by the ODOT Region Manager, subject to requirements in OAR 734-051-0135.

**TABLE 4.010-1
ACCESS MANAGEMENT STANDARDS FOR MORROW COUNTY
NON-INTERSTATE HIGHWAYS**

Highway	Classification	Access Spacing Standards for Public or Private Unsignalized Access (ft) for Posted Speed Indicated (mph)				
		>55	50	40 & 45	30 & 35	<25
US 730, OR 74	Regional	990	830	750	600	450
OR 206, OR 207	District	700	550	500	400	400

REFERENCE: OREGON ADMINISTRATIVE RULES SECTION 734-051 (2004)

F. Access within the Influence Area of an Interchange

1. Access within the influence area of existing or proposed state highway interchanges for which there is no adopted Interchange Area Management Plan (IAMP) is regulated by standards in OAR 734-051. The State standards are included as Appendix F of the 2005 Morrow County Transportation System Plan Update. These standards do not retroactively apply to interchanges existing prior to adoption of the 1999 Oregon Highway Plan, except or until any redevelopment, change of use, or highway construction, reconstruction or modernization project affecting these existing interchanges occurs. It is the goal at that time to meet the appropriate spacing standards, if possible, but, at the very least, to improve the current conditions by moving in the direction of the spacing standard.
2. Access within a mapped and adopted IAMP Management Area of an existing or proposed state highway interchange is regulated by the adopted plan associated with that interchange. In an IAMP Management Area, proposed access shall be consistent with the associated Access Management Plan.

G. Signalized Intersection Spacing on State Facilities. New traffic signals proposed for state facilities, whether the intersecting facility is a public or private road, shall meet the requirements for installation of a traffic signal on a state highway in OAR 734-020-0400.

New traffic signals on state facilities must be approved by the State Traffic Engineer. For approval of a new traffic signal on a County facility as part of a condition of development approval, the applicant shall be required to show, through analysis prepared by a qualified professional engineer registered in the State of Oregon, that the signal is warranted to improve traffic operations, address safety deficiencies, or a combination, based upon traffic signal warrants in the current version of the *Manual on Uniform Traffic Control Devices*.

H. Access Spacing Requirements for Development Accessing County Facilities. All developments shall have legal access to a County or public road. Except for interim access as provided in Section 4.010 H [Interim Access], access onto any County road in the unincorporated or incorporated urban area shall be permitted only upon issuance of an access permit upon demonstration of compliance with the provisions of the County road standards and the standards of Section 4.010.

For County roadways designated as major collector or arterial in the Transportation System Plan, the standards in Table 4.010-2 apply for intersections created by a new public roadway, new private roadway or new private driveway. For County roadways designated as minor collectors or local access roads, intersections created by a new public roadway, new private roadway or new private driveway shall meet minimum County traffic safety and operational requirements, including sight distance, as determined by the County Engineer.

**TABLE 4.010-2
ACCESS MANAGEMENT STANDARDS FOR MORROW COUNTY ROADWAYS**

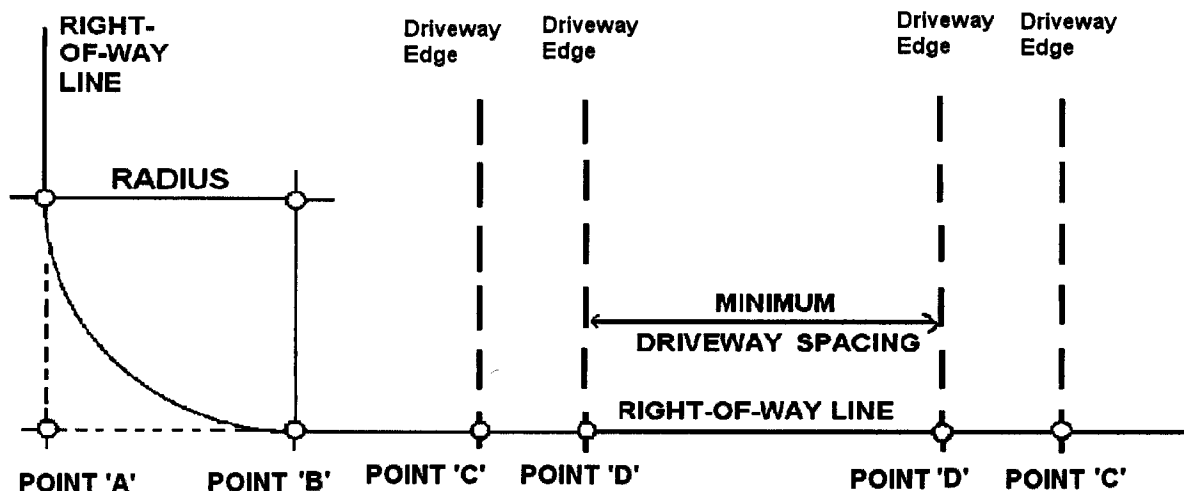
Classification	Access Spacing Standards for Public or Private Access (ft)		
	Public Roadway	Private Roadway	Private Driveway ^a
Arterial	600	600	300
Collector	300	300	100
Local	200	200	Access to each lot

a. For most roadways, at-grade crossings are appropriate. Also, allowed moves and spacing requirements may be more restrictive than those shown to optimize capacity and safety. Any access to a state highway requires a permit from the district office of ODOT and is subject to the access spacing standards in Table 4.010-1 in this section.

No use will be permitted to have direct access to a street or road except as specified below, or as provided in Section 4.010.H (Interim Access). Access spacing shall be measured from existing or approved accesses on either side of a street or road. Measurements shall be made from easement or right-of-way line to easement or right-of-way line. (See following access diagram where R/W = Right-of-Way; P.I. = Point-of-Intersection where P.I. shall be located based upon a 90 degree angle of intersection between ultimate right-of-way lines, and 'C' and 'D' = each side of adjacent accesses to private property.

1. All minimum distances stated in the following sections shall be governed by sight distance requirements according to this Ordinance and applicable County Road Standards.
2. All minimum distances stated in the following sections shall be measured to the nearest easement line of the access or edge of travel lane of the access on both sides of the road.

3. The minimum curb radius shown in the diagram below (i.e., distance from Point "A" to Point "B") shall be 15 feet. In areas zoned for industrial uses, the minimum curb radius shall be 30 feet. At intersections between facilities classified as major collector, arterial or highway, any new or modified intersection shall be designed to accommodate a WB-50 Semitrailer Design Vehicle. If either route is designated by the County as a truck route, the intersection shall be designed to accommodate a WB-65 Interstate Semitrailer Design Vehicle. The curb alignment shall be designed so that the design vehicle can complete a right turn without entering a lane used by opposing traffic.
4. All minimum distances between accesses shall be measured from existing or approved accesses on both sides of the road.
5. Minimum spacing between driveways shall be measured from Point "D" to Point "D" as shown below (i.e., the edges of adjacent driveways closest to each other).
6. In all instances, access points near an intersection with a Collector or Arterial shall be located beyond the influence of standing queues of the intersection in accordance with AASHTO standards. Additionally, access shall be located beyond the back of any left turn refuge either existing on the affected road or required to accommodate the proposed development. This requirement may result in an access spacing greater than one hundred (100) feet in the case of a collector, or 300 feet in the case of an arterial.
7. Access onto local roads will not be permitted within ten (10) feet of Point "B" as shown below. If no radius exists, access will not be permitted within twenty-five (25) feet of Point "A".
8. Access onto collector roads will not be permitted within fifty (50) feet of Point "B" as shown below. If no radius exists, access will not be permitted within sixty-five (65) feet of Point "A". Where a common or shared access is available it shall be used, provided that such use will not result in operational or safety problems. Minimum spacing between driveways shall be one-hundred (100) feet.
9. Direct access to an arterial will be permitted provided that Point 'C' of such access is more than three hundred (300) feet from any intersection Point 'A' or other access to that minor arterial.



I. Interim Access onto County Facilities. No development with sole access onto a County arterial or major collector shall be denied based only on an inability to provide an access that meets applicable access spacing standards. In such an event, the use may be issued an interim access permit which shall expire when access as required under this Ordinance becomes available. An interim access permit may be granted based upon the following:

1. The site is situated such that adequate access cannot otherwise be provided in accord with the access spacing requirements of this Code.
2. The interim access shall meet minimum County traffic safety and operational requirements, including sight distance.
3. Alternate access shall *not* be deemed adequate and connections to alternate access shall *not* be required if the resulting route of access would require a trip in excess of one (1) block or five-hundred (500) feet out of direction (whichever is less).
4. The property owner signs a consent to participate agreement for the formation of a Local Improvement District or similar financing mechanism for the primary purpose of constructing a public road or right-of-way providing access to the arterial or collector road; such access shall meet the minimum applicable County standard.
5. The property owner records an agreement to participate in any project that would consolidate access points where such project would not result in new or more severe traffic operation or safety problems.
6. The property owner records an agreement to abandon use of the existing private access way when an adequate alternative access becomes available.

SECTION 4.020. SIGHT DISTANCE. In all zones, adequate sight distance shall be maintained at the intersection of two roads (public or private), a road intersecting a private driveway, or a road crossing a railroad.

A. Sight Distance Requirements for New Accesses. It is the intent of this section to ensure that each new access point or each new lot or parcel created or development in the County will have a safe access to a public road, with the exception of development actions listed in Section 4.020.B. but are subject to improvements to maximize sight distance to the extent practicable by the County Operations Division through an Access Permit or Right-of-way Permit:

1. Existing access points that do not satisfy the sight distance standards and are on property included with a development action which will not add any additional vehicle trips to that access, are exempt from this Section. Improvements at these existing access points may be required of the applicant to maximize sight distance to the extent practicable through an Access Permit application.
2. The minimum intersectional sight distance shall be based on the vehicular speeds of the road. The vehicular speeds for the purpose of determining intersectional sight distance shall be the greater of the following, to be selected by the County Engineer or designee.

- a. Design Speed - A speed selected by a registered engineer (Oregon) for purposes of design and correlation of those features of a road, such as curvature, superelevation, and sight distance, upon which the safe operation of vehicles is dependent.
 - b. Posted Speed - That speed which has been established by the Oregon State Speed Control Board and is posted by the County.
 - c. Eighty-fifth Percentile Speed - That speed as certified by a registered engineer (Oregon) below which 85 percent of all traffic units travel, and above which 15 percent travel. The eighty-fifth percentile speed shall be measured at the point where the sight restriction occurs.
3. The intersectional sight distance shall:
- a. Be based on an eye height of 3.5 feet and an object height of 4.25 feet above the road; and
 - b. Be assumed to be 10 feet from the near edge of pavement or the extended curb line or the near edge of the graveled surface of a gravel road to the front of a stopped vehicle.
4. Minimum intersectional sight distance shall be equal to ten (10) times the vehicular speed of the road such as in the table below.

INTERSECTIONAL SIGHT DISTANCE	
MPH	DISTANCE ALONG CROSSROAD (FT)
25	250
30	300
35	350
40	400
45	450
50	500
55	550

5. Intersectional sight distance values shall conform to (3) above. For significant road improvement projects, the above intersectional standards shall be met in addition to the applicable AASHTO roadway sight distance standards.
6. In those instances where there are no access locations available to the site that meet or can meet the sight distance requirements, a written request for modification may be submitted to the County Engineer or designee. The request for modification of the sight distance requirements shall be subject to the following requirements:
- a. Submitted and certified by a registered engineer (Oregon);

- b. Nationally accepted specifications or standards are documented and referenced;
- c. Certification that the modification will not compromise safety or the intent of the County's transportation standards;
- d. Agreement that the cost of any modifications agreed to must be borne by the applicant; and
- e. Statement that there is no location available to provide an alternative access location which currently meets the sight distance requirements, or which can be altered to meet the sight distance requirements. Alterations needed to provide adequate sight distance include but are not limited to grading and the removal of vegetation. For the purpose of this subsection alternative access location means:
 - i. Any location on the proposed development site which meets or can meet the sight distance requirements; or
 - ii. Any location off the proposed development site which can provide access to the site by an existing access easement or through an access easement which will be provided to the site as part of the development application. Such an off-site access must be shown to meet or be able to meet sight distance requirements.

B. Accesses Exempt from Sight Distance Requirements. Accesses for the following development actions are exempt from the Sight Distance standards (Section 4.020.A), but are subject to improvements to maximize sight distance to the extent practicable by the County Operations Division through an Access Permit or Right-of-way Permit:

- 1. Replacement dwellings;
- 2. Nonbuildable parcels;
- 3. Applications for one dwelling on an existing vacant parcel;
- 4. Home Occupation applications in the EFU, FU, SF-40, FR-2 and RR-1 zones; or
- 5. Applications which will not add additional vehicle trips to an existing access which does not meet the sight distance standards.

SECTION 4.035 PERMIT REQUIREMENTS FOR LAND USE DEVELOPMENT. Except where otherwise noted, all proposed projects should meet the following Plot Plan Requirements as described in Table 4.035-1 below. A common threshold for a TIA (traffic impact analysis) applying to all types of development is 400 daily trips (e.g., 40 houses). Trip generation should be estimated using the current edition of *Trip Generation* by the Institute of Transportation Engineers, other similar published resources, or actual driveway counts of similar land uses. The County Planning Commission, County Planning Director or County Public Works Director or designee may require a TIA for any level of development. TIA requirements are described in the Appendix.

TABLE 4.035-1
 PERMIT REQUIREMENTS BY TYPE OF LAND USE DEVELOPMENT

Permit Type	Plot Plan Requirements		Conditions				Review/Approval Type	
	<u>Footprint (setbacks)</u>	<u>Access*</u>	<u>Transportation Improvements</u>	<u>DEQ Site Suitability</u>	<u>Parking</u>	<u>Sign</u>	<u>Review</u>	<u>Action</u>
Zoning Permit								
Residential	Yes	Designated access.	Frontage improvements.	Yes	N/A	N/A	Staff	Bldg. permits Road approach permit
Commercial	Yes	Legal access via r/w or easement.	Under 400 trips: Frontage improvements. Over 400 trips: TIA.		Yes	Yes	Staff	Bldg. permits Road approach permit
Industrial	Yes	Legal access via r/w or easement.	Under 400 trips: Frontage improvements. Over 400 trips: TIA.		Yes	Yes	Staff	Bldg. permits Road approach permit
Farm Exempt	Yes	Yes	N/A	N/A	N/A	N/A	Staff	County issues a Farm Agriculture Bldg Exemption Certificate
Land Partition								
1 to 3 Lots		Legal access via r/w or easement.	Frontage improvements.				Planning Comm.	Approval Road Approach permit
Subdivision								
4 to 39 lots		Legal access via r/w.	Frontage improvements.				Planning Comm.	Approval Road Approach Permit
40 or more lots		Legal access via r/w.	Frontage improvements, TIA.				Planning Comm.	Approval Road Approach Permit
Conditional Use Permit								
	Yes	Legal access via r/w or easement.	Under 400 trips: frontage improvements. Over 400 trips: TIA.		Review	Review	Planning Comm.	Approval, Bldg. permit Road Approach

*1000' or less, 20' easement; 1000' or more 40' easement;. 3 or more lots (current or potential), 60' easement.
 r/w = Right-of-way.
 TIA = Traffic Impact Analysis.
 N/A = not applicable.

A. Consent to Participate Agreement Required. For those Local roads which are not improved in accordance with Morrow County Road Standards or maintained by the County, and which abut the property owner's proposed development or which do not abut the development but provide direct access to the development, the property owner shall sign a consent to participate agreement for the potential formation of a local improvement district or

other mechanism to improve and maintain these roads to County standards, per the Morrow County standard Consent to Participate Agreement. Applications for property line adjustments, nonbuildable parcels, temporary housing permits, land partitions in resource zones, and one dwelling on an existing vacant parcel, are not subject to this requirement.

For those Arterial and Collector roads which are not improved in accordance with Morrow County Road Standards and which abut the development site or those roads which do not abut the development site but provide access to the site, the property owner shall sign a consent to participate agreement for the potential formation of a local improvement district or other mechanism to improve the base facility of this road(s) to County standards, per the Morrow County standard Consent to Participate Agreement. Applications for property line adjustments, nonbuildable parcels, temporary housing permits, land partitions in resource zones, and one dwelling on an existing vacant parcel, are not subject to this requirement.

SECTION 4.040. OFF-STREET VEHICLE PARKING REQUIREMENTS. Because vehicle parking facilities can occupy large amounts of land, they must be planned and designed carefully to use the land efficiently while maintaining the visual character of the community. At the time of construction, reconstruction, or enlargement of a structure, or at the time a use is changed in any zone, off-street parking space shall be provided as follows unless greater requirements are otherwise established. When the requirements are based on the number of employees, the number counted shall be those working on the premises during the largest shift at peak season. Fractional space requirements shall be counted as a whole space. Off-street parking spaces may include spaces in garages, carports, parking lots, and/or driveways if vehicles are not parked in a vehicle travel lane (including emergency or fire access lanes), public right-of-way, pathway or landscape area. The County may allow credit for "on-street parking", as provided in Section 4.050. For uses not specified in Table 4.040-1, parking requirements shall be determined by the use in Table 4.040-1 found to be most similar in terms of parking needs.

TABLE 4.040-1

MINIMUM PARKING REQUIREMENTS

USE	MINIMUM VEHICLE PARKING REQUIREMENTS
A. Residential 1. One, two, and three family dwelling 2. Residential use containing four or more dwelling units 3. Rooming or boarding house	Two spaces per dwelling unit One and one-half spaces per dwelling unit One space per guest room
B. Commercial Residential 1. Hotel or Motel	One space per guest room, plus one space for the manager
C. Public and Institutional Uses 1. Welfare or correctional institution 2. Convalescent hospital, nursing home, sanitarium, rest home, home for the aged 3. Hospital 4. Church	One space per six beds One space per four beds Two spaces per bed One space per four seats at maximum occupancy
5. Library, reading room	One space per 400 gross square feet
6. Daycare, pre-school or kindergarten	Two spaces per FTE staff

MINIMUM PARKING REQUIREMENTS

USE	MINIMUM VEHICLE PARKING REQUIREMENTS
7. Elementary or junior high school	One and one-half spaces per classroom or one space per four seats or eight feet of bench length in the auditorium or assembly room whichever is greater.
8. High school, college, commercial school for adults	One and one-half spaces per classroom plus one space for each 10 students the school is designed to accommodate, or one space for four seats or eight feet of bench length in the main auditorium or assembly room, whichever is greater.
9. Other auditorium or meeting room	One space per six seats or 12 feet of bench length, whichever is greater, or one space for each 75 gross square feet of assembly room not containing fixed seats.
D. Commercial Amusement	
1. Stadium, arena, theater	One space per four seats or eight feet of bench length, whichever is greater.
2. Bowling Alley	Five spaces per alley
3. Dance hall, skating rink	One space per 100 gross square feet
E. Commercial	
1. Retail store except as provided in subsection (f)(2) of this section	One space per 350 gross square feet
2. Service or repair shop, retail store handling exclusively bulky merchandise, such as automobiles and furniture	One space per 750 gross square feet
3. Bank, office (except medical and dental)	One space per 350 gross square feet
4. Medical and dental clinic	One space per 300 gross square feet
5. Eating or drinking establishment	One space per 100 gross square feet or one space per four seats, whichever is less.
6. Mortuaries	One space per six seats or eight feet of bench length in chapels
F. Industrial	
1. Storage warehouse, manufacturing establishment, rail or trucking freight terminal	One space per employee on the largest shift.
2. Wholesale establishment	One space per employee on the largest shift plus one space per 700 square feet of patron-serving area.

SECTION 4.045. BICYCLE PARKING REQUIREMENT.

This chapter also provides standards for bicycle parking, because children as well as adults need safe and adequate spaces to park their bicycles throughout the community. All uses subject to Design Review that are located within an Urban Growth Boundary shall provide bicycle parking in conformance with the following guidelines. Uses outside an Urban Growth Boundary are encouraged to provide bicycle parking based on these guidelines.

A. Number of Parking Spaces. A minimum of two bicycle parking spaces is recommended for each use with greater than 10 vehicle parking spaces. The following additional standards apply to uses within an Urban Growth Boundary, and are recommended for other areas of the County:

1. Multi-family residences: At least one sheltered bicycle space per four dwelling units, for uses of four or more units. Bicycle spaces may be located within a garage, storage shed, basement, utility room, or other similar area. If a residential development use has no such protected areas, bicycle parking spaces can be located under an eave, overhang or similar cover to be protected from rain and sun.
 2. Parking Lots: At least one bicycle parking space for every ten vehicle spaces at commercial and public parking lots.
 3. Schools: One bicycle parking space for every 10 vehicle spaces, at public or private elementary and middle schools. High schools should provide one bicycle space for every five students.
 4. Colleges and trade schools: One bicycle space for every 10 motor vehicle spaces. At least half of the spaces should be sheltered under an eave, overhang or similar cover.
 5. Multiple Uses: For buildings with multiple uses, such as a commercial building or mixed use development, one bicycle space for every 10 motor vehicle spaces is recommended.
- B. Exemptions. This Section does not apply to single family, two-family, and three-family housing (attached, detached or manufactured housing), home occupations, agriculture and livestock uses, or other developments with fewer than 10 vehicle parking spaces.
- C. Location and Design. Bicycle parking should be conveniently located no farther away than the closest parking space.
- D. Visibility and Security. Bicycle parking should be visible to cyclists from street sidewalks or building entrances, so that it provides sufficient security from theft and damage.
- E. Options for Storage. Bicycle parking requirements for long-term and employee parking can be met by providing a bicycle storage room, bicycle lockers, racks, or other secure storage space inside or outside of the building.
- F. Lighting. Bicycle parking should be least as well lit as vehicle parking for security.
- G. Hazards. Bicycle parking shall not impede or create a hazard to pedestrians. Parking areas shall be located so as to not conflict with vision clearance standards in Section 4.020.

SECTION 4.050. OFF-STREET PARKING AND LOADING. Buildings or structures to be built or substantially altered which receive and distribute materials and merchandise by trucks shall provide and maintain off-street loading berths in sufficient number and size to handle adequately the needs of the particular use. Off-street parking areas used to fulfill the requirements of this Ordinance shall not be used for loading and unloading operations except during periods of the day when not required to care for parking needs. General provisions are as follows:

- A. The provisions and maintenance of off-street parking and loading space is a continuing obligation of the property owner. Should the owner or occupant of any lot or building change the use to which the lot or building is put, thereby increasing off-street parking and loading requirements, it shall be a violation of this Ordinance to begin or maintain such altered use until such time as the increased off-street parking or loading requirements are complied with.

B. Requirements for types of buildings and uses not specifically listed in this Ordinance shall be determined by the Planning Commission based upon the requirements for comparable use listed.

C. In the event multiple uses occupy a single structure or parcel of land, the total requirements for off-street parking shall be the sum of the requirements of each use computed separately.

D. Owners of two or more uses, or parcels of land may agree to utilize jointly the same parking and loading spaces when the hours of operation do not overlap, provided that satisfactory legal evidence is presented to the County in the form of deeds, leases, or contracts to establish the joint use.

E. Off-street parking spaces for dwellings shall be located on the same parcel with the dwelling. Other required parking spaces for residential uses shall be located not farther than 500 feet from the building or use they are required to serve, measured in a straight line from the building.

F. Required parking spaces shall be available for the parking of passenger automobiles of residents, customers, patrons, and employees only, and shall not be used for storage of vehicles or materials or for the parking of trucks used in conducting the business or use.

G. Parking designated exclusively for people with disabilities shall be provided in conformance with the Americans with Disabilities Act.

H. The Director may, upon request, allow a reduction in the number of required off-street parking spaces in housing developments for elderly or disabled persons if such reduction is deemed appropriate after analysis of the size and location of the development, resident auto ownership, number of employees, possible future conversion to other residential uses and other similar relevant factors.

SECTION 4.060. DESIGN AND IMPROVEMENT STANDARDS - Parking Lots

A. Except for single-family and duplex dwellings, areas used for parking for more than two vehicles shall have durable and dustless surfaces adequately maintained.

B. Except for parking in connection with single-family and duplex dwellings, parking and loading areas adjacent to or within a residential zone or adjacent to a dwelling shall be designed to minimize disturbance to residents by the erection between the uses of a sight-obscuring fence or planted screen of not less than six (6) feet in height except where vision clearance is required.

C. Parking spaces along the outer boundaries of a parking lot shall maintain a minimum setback from the property line of five feet, unless a greater setback is specified for a structure in the zoning district, and shall be contained by a bumper rail or by a curb which is at least four inches high.

D. Artificial lighting which may be provided shall not shine or create glare in any residential zone or on any adjacent dwelling.

E. Access aisles shall be a minimum of 24 feet wide for two-way traffic. The minimum aisle width for emergency vehicle access (with one-way traffic) is 20 feet.

F. Except for single-family and duplex dwellings, groups of more than two parking spaces shall be so located and served by a driveway that their use will require no backing movements or other maneuvering within a street right-of-way other than an alley.

G. Service drives to off-street parking areas shall be a minimum of 24 feet wide for two-way traffic flow, and 20 feet wide for one-way traffic flow. The number of service drives shall be limited to the minimum that will accommodate anticipated traffic.

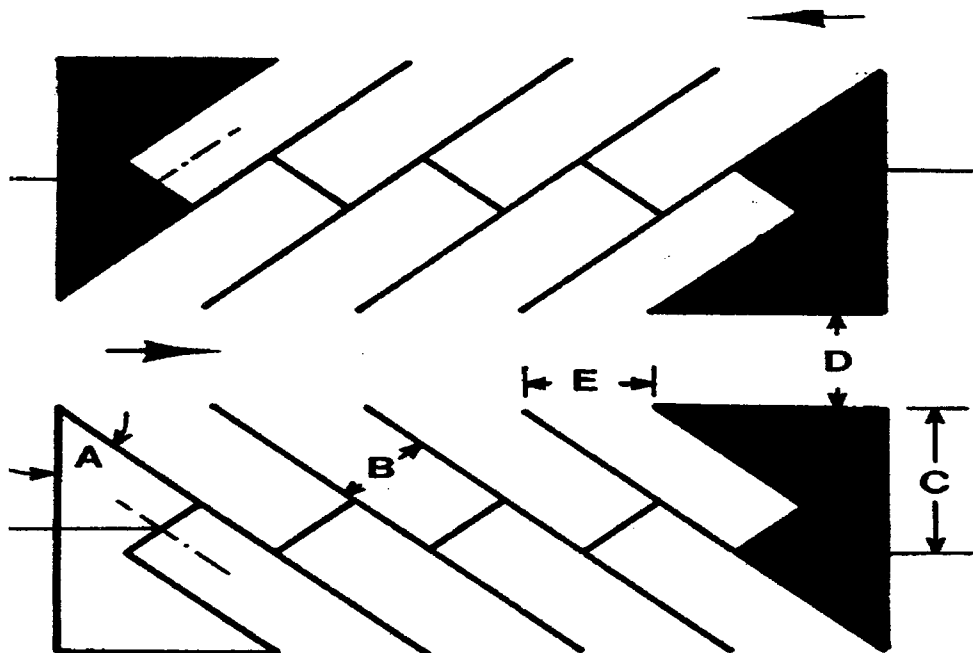
H. Driveways shall maintain minimum sight distance per the standards of Section 4.020 of this Ordinance.

I. The standards set forth in the table below shall be the minimum for parking lots approved under this Ordinance (all figures are in feet except as noted). The letters in the first row of the table correspond to the letters in the following diagram.

TABLE 4.060-1
OFF-STREET PARKING DESIGN STANDARDS

A	B	C	D	E
parking angle degree	stall width	stall to curb (19' long stall)	aisle width	curb length per car
0	8.5	8.5	12.0	23.0
45	8.5	19.4	12.0	12.0
60	8.5	20.0	15.0	9.8
75	8.5	19.6	24.0*	8.8
90	8.5	19.0	24.0*	8.5

*Two-way circulation



SECTION 4.070. SIGN LIMITATIONS AND REGULATIONS. In addition to sign limitations and regulations set forth in a specific zone, the following limitations and regulations shall apply to any sign hereafter erected, moved or structurally altered within the jurisdiction of the County. In addition to the standards and limitations set forth in this Ordinance, signs shall be installed in accordance with applicable regulations of state and federal agencies. No sign will hereafter be erected, moved or structurally altered without being in conformity with the provisions of this Ordinance. Official traffic control signs and instruments of the state, county or municipality are exempt from all provisions of this Ordinance.

A. All outdoor advertising signs shall be in compliance with the provisions of this Ordinance and the provisions of ORS Chapter 377 when applicable.

B. No outdoor advertising sign permitted by ORS Chapter 377 shall be erected within 300 feet of a residential dwelling without written consent of the owner and/or occupant of said dwelling.

C. No sign shall be placed so as to interfere with visibility or effectiveness of any permanent traffic control device.

D. No sign shall be placed so as to impede the sight distance triangle at any access point or intersection as specified in Section 4.020 of this Ordinance.

E. No sign shall cause glare, distraction or other driving hazards within a street or road right-of-way.

F. No sign shall shine directly upon a residential dwelling or otherwise create a nuisance.

G. In addition to the limitations on signs as provided by (1) through (5) above, additional sign restrictions may be required as determined by the Planning Commission in approving conditional uses, as provided by Article 6.

H. Signs erected along Scenic Byways or other roads with similar designations must meet applicable criteria for sign placement.

I. Residents may request specific cautionary signage for individual resident(s) to be installed within County right-of-way. All costs including materials, installation, maintenance, and removal, shall be borne by the requestor, and shall otherwise conform with Morrow County Policy M-43674.

J. Installation of Regulatory Signs in Public Right-of-Way. Developers are to install street name, posted speed, and other traffic control signage required for private developments, per applicable standards from Morrow County and the Manual on Uniform Traffic Control Devices (MUTCD).

SECTION 4.080. AUTHORIZATION OF SIMILAR USES. A use that is similar to a use provided for in a zone may be allowed in that zone with Planning Commission Approval unless:

A. It is specifically provided for in another zone, or

B. It is more similar to uses provided for in another zone.

SECTION 4.090. GENERAL PROVISIONS REGARDING ACCESSORY USES.

An accessory use shall comply with all requirements for a principal use, except as this ordinance specifically allows to the contrary, and shall comply with the following limitations:

A. A side yard or rear yard may be reduced to three feet for an accessory structure erected more than 65 feet from a front lot line, provided the structure is detached from other buildings by five feet or more and does not exceed a height of one story nor an area of 450 square feet.

B. Boats, trailers, Recreational Vehicles and similar recreational equipment may be stored on a lot but not used as an accessory use in any zone provided that:

1. In a residential zone, parking or storage in a front yard or in a side yard abutting a street other than an alley shall be permitted only on a driveway.

2. Parking or storage shall be at least three feet from an interior side lot line.

SECTION 4.100. PROJECTIONS FROM BUILDINGS. Architectural features such as cornices, eaves, canopies, sunshades, gutters, chimneys and flues shall not project more than three (3) feet into a required yard, provided that the projection is not closer than three (3) feet to a property line.

SECTION 4.110. MINIMUM STANDARDS FOR A MANUFACTURED HOME ON INDIVIDUAL LOTS OR PARCELS AS A SINGLE-FAMILY DWELLING. (Amended 10/28/06 MC-05-2006)

A. Manufactured Homes in a Farm or Forest Use Zone: A manufactured home permitted to be sited as a single-family dwelling on an individual lot or parcel in farm and forest use zones shall be in compliance with the following standards and regulations as a minimum. If the manufactured home is placed within one half mile of a residential zone (Rural Residential, Farm Residential or Suburban Residential) the standards of subsection B of this section shall apply. The distance of one-half mile will be measured from the site of the home to the boundary of the residential zone in a direct line and not specifically along roads or streets.

1. The manufactured home shall be a 14-foot single-wide, at a minimum, or a multi-sectional unit and shall contain at least 745 square feet of space as determined by measurement of the exterior dimensions of the unit exclusive of any trailer hitch device.

2. The manufactured home unit shall be manufactured no more than ten years before the receipt date of the siting request application by the Planning Department and bear the Oregon Department of Commerce 'Insignia of Compliance.' All pre-owned and pre-occupied units (i.e. used) shall be inspected by a certified Building Official prior to installation and occupancy to insure compliance with applicable standards required for the 'Insignia of Compliance' and to insure that such units are in such a condition as to not be detrimental to the public health, safety and general welfare or to adjoining properties.

3. The manufactured home shall be installed according to the specifications outlined in the Oregon Manufactured Dwelling and Park Specialty Code in effect at the time of

installation and as utilized by the Morrow County Building Official. (See ORS 446 and OAR 918 Division 500.)

4. All manufactured home accessory buildings and structures shall comply with state and local construction and installation standards. Roofing and siding materials shall be of similar material and color and complementary to the existing manufactured home unit. Manufactured home accessory structures include porches and steps, awnings, cabanas, or any other structure or addition that depends in part on the manufactured home for its structural support, or in any manner is immediately adjacent to or attached to the manufactured home. Such structures or additions shall not total more than 40 % of the total living space of the manufactured home. Garages and carports, either attached or detached, are not counted in this percentage. Ramadas, as defined in ORS 446, shall not be permitted.

5. When removing a manufactured home the owner of the property shall remove the foundation and all accessory structures and additions to the manufactured home and permanently disconnect sewer, water and other utilities if the manufactured home is removed from its foundation unless otherwise authorized by the County. In the event the owner fails to accomplish said work within 30-days from the day on which the manufactured home is moved from its foundation, the County may perform such work and place a lien against the property for the cost of such work. This condition shall not apply in the event that the manufactured home is replaced on the original foundation, or on the original foundation as modified, or by another approved manufactured home within 30-days of the original unit's removal. Said lien may be initiated by the County Court.

B. Manufactured Homes in a Rural Residential Zone: A manufactured home permitted as a single-family dwelling on an individual lot or parcel in a residential zone (Rural Residential, Farm Residential or Suburban Residential) shall be in compliance with the following standards and regulations as a minimum.

1. Be multi-sectional (double-wide or larger); be a minimum of 1000 square feet; and be manufactured no more than ten years before the receipt date of the siting request application by the Planning Department.
2. Placed on an excavated and back-filled foundation and enclosed at the perimeter such that the manufactured home is located not more than 12 inches above grade.
3. Have a pitched roof with a nominal slope of at least three feet in height for each 12 feet in width.
4. Certified by the manufacturer to have an exterior thermal envelope meeting performance standards which reduce levels equivalent to the performance standards required of single-family dwellings constructed under the state building code.
5. Have exterior siding and roofing materials which in color, material and appearance is similar to the exterior siding and roofing material commonly used on residential dwellings within the community or which is comparable to the predominant materials used on surrounding dwellings as determined by the Planning Department.

6. Have a garage or carport sited on the same lot or parcel of at least 180 square feet in size of like materials constructed before occupancy.

7. All manufactured home accessory buildings and structures shall comply with state and local construction and installation standards. Roofing and siding materials shall be of similar material and color and complementary to the existing manufactured home unit. Manufactured home accessory structures include porches and steps, awnings, cabanas, or any other structure or addition that depends in part on the manufactured home for its structural support, or in any manner is immediately adjacent to or attached to the manufactured home. Such structures or additions shall not total more than 40% of the total living space of the manufactured home. Garages or carports, either attached or detached, are not counted in this percentage. Ramadas, as defined in ORS 446, shall not be permitted.

8. When removing a manufactured home the owner of the property shall remove the foundation and all accessory structures and additions to the manufactured home and permanently disconnect sewer, water and other utilities if the manufactured home is removed from its foundation unless otherwise authorized by the County. In the event the owner fails to accomplish said work within 30-days from the day on which the manufactured home is moved from its foundation, the County may perform such work and place a lien against the property for the cost of such work. This condition shall not apply in the event that the manufactured home is replaced on the original foundation, or on the original foundation as modified, or by another approved manufactured home within 30-days of the original unit's removal. Said lien may be initiated by the County Court.

C. Manufactured Homes and other uses: Manufactured homes are to only be used as single-family dwellings as stated in ORS 446.245. Any changes to a use of a manufactured home requires approval of the Planning Commission and compliance with ORS 446.245.

SECTION 4.130 Hardship Dwellings

A. A hardship dwelling is a temporary use of a manufactured home, recreational vehicle or an existing building necessary for a relative or other designated caregiver to care for or provide custody for an elderly, mentally handicapped, or infirm person whom a medical professional certifies needs this kind of care or custody. This certification will be on the medical professional's stationery or stamped by the medical professional's office, and will indicate that the patient is not physically or mentally capable of maintaining himself/herself in a residence on a separate property and is dependent on someone being close by for assistance. As an alternative, the medical professional can stamp and sign the application form available through the Planning Department for a medical hardship. Financial hardship conditions, child care, and other convenience arrangements not relating to physical and/or mental impairment are not considered an infirm condition.

The provisions of this section are to apply when the proposed use does not qualify as a continuation of a nonconforming use, not permitted by right, nor permitted through the operations of other more pertinent procedures and provisions of this zoning ordinance. Temporary use permits for hardship dwellings are not to be construed, permitted nor utilized as a means to abrogate the intent, purpose or procedures of the County's Comprehensive Plan or Zoning Ordinance regulations.

No temporary permit shall be granted that would have the effect of creating a permanent zoning or result in a hardship when the use is not permitted to continue at the expiration of the permit periods. Further, no temporary permit will be granted which has the effect of conferring a special privilege for which other property within the same zone would not be equally eligible.

B. As a temporary use in a residential zone, the Commission may allow as a variance one manufactured home, recreational vehicle, or temporary use of an existing building complying with the standards of Section 4.110, as applicable, and providing that no additions, except approaches or handicapped ramps, to the temporary residence shall be permitted in conjunction with a primary dwelling with the following findings:

1. That an accessory dwelling is necessary to care for or provide custody of an elderly, mentally handicapped, or infirm person who a medical professional certifies needs this kind of care or custody as required in A. above.
2. Electric, water and sewer utility connections shall be made to the temporary residence. If the hardship dwelling will not use a public sanitary sewer system, the dwelling shall use the same subsurface sewage disposal system used by the existing dwelling if that disposal system is adequate to accommodate the additional dwelling or as otherwise allowed and conditioned by the Planning Commission.
3. Within 90 days of the end of the hardship, the manufactured dwelling or recreational vehicle shall be removed or, in the case of an existing building, the building shall be removed, demolished, or returned to an allowed non-residential use.

C. As a temporary use in a resource zone, the Commission may allow under a Conditional Use Permit, one manufactured home, recreational vehicle, or temporary use of an existing building complying with the standards of Section 4.110(A) as applicable, and providing that no additions, excepting approaches or handicapped ramps, to the temporary residence shall be permitted in conjunction with a primary dwelling with the following findings:

1. That the hardship dwelling use will not force a significant change in accepted farm or forest practices on surrounding lands devoted to farm or forest use;
2. The hardship dwelling use will not significantly increase the cost of accepted farm or forest practices on lands devoted to farm or forest use.
3. The manufactured dwelling, or recreational vehicle, or the temporary residential use of an existing building allowed as a hardship dwelling shall be connected to electricity, domestic water, and use the same subsurface sewage disposal system used by the existing dwelling if that disposal system is adequate to accommodate the additional dwelling. If the manufactured home will use a public sanitary sewer system such condition will not be required.
4. The landowner for the hardship dwelling shall sign and record in the deed records for the County a Right-to-Farm or a Right-to-Forest Statement binding the landowner and the landowner's successors in interest, prohibiting them from pursuing a claim for relief or cause of action alleging injury from customary farm or forest practices.
5. Within 90 days of the end of the hardship, the manufactured dwelling or recreational vehicle shall be removed or, in the case of an existing building, the building shall be removed, demolished, or returned to an allowed non-residential use.

D. A temporary use permit granted under this section is void when the elderly, mentally handicapped, or infirm existing resident or other person who is the subject of the permit no longer needs care, moves to another residence, is absent from the residence for more than 120 days or leaves the residence with no likelihood of returning for continued residency of at least 30 days. Exception to the 120-day limit can be provided for in the case of extraordinary circumstances such as extended hospitalization. These extensions can be approved by the Planning Director for up to an additional 60 days without Planning Commission approval. Additional extensions will require Planning Commission review and approval.

E. The County Planning Director or designee may review permits issued under this section at any time and may revoke permits when they are found to be out of compliance. After the initial approval by the Planning Commission any required renewal shall be applied for as a hardship dwelling extension. The decision to approve a hardship dwelling extension shall be an administrative decision of the Planning Director.

F. Any accessory dwelling placed under a permit authorized by this section must be located as close as possible to the primary dwelling. Unless there are physical limitations of the land this should be within 100 feet of the primary dwelling.

G. County Zoning and Building Permits will be required. A Rural Address will also be required to facilitate emergency response.

H. A temporary medical hardship permit is valid for up to 2 years from the date of initial issuance, i.e., permits issued in an odd-numbered year will expire in the next odd-numbered year. All permits will have an expiration date of January 31. The County will process all temporary medical hardship permit renewal requests once per year in January. The County will give permittees not less than 30 calendar days written notice of the pending expiration of their permits, advising that a renewal will be required. Failure to receive notification of pending expiration does not constitute an extension of time for the permit. The Planning Director shall not renew the hardship permit until the permittee has shown compliance with the conditions for issuance specified in this Section at the time of renewal and the County has received evidence of the continued validity of the medical hardship.

SECTION 4.140. MANUFACTURED HOME AS A SECONDARY ACCESSORY FARM DWELLING.

(Amended 10/28/06 MC-05-2006) A manufactured home permitted as a secondary accessory farm dwelling shall only be permitted in accordance with the following requirements:

A. The dwelling may only be occupied as a secondary farm accessory dwelling; i.e., there must exist on the subject property an owner-occupied primary conventional dwelling or a manufactured home complying with the conditions set forth in Section 4.110 of this ordinance, and there shall not be more than one such unit permitted for each 160 acres in the farm unit, and in the case of 4 or more dwellings manufactured home park standards shall apply, except as approved by the Commission.

B. The occupant of the manufactured home shall be an employee of the owner or an immediate family member engaged in the farm operation.

C. The manufactured home shall further meet the requirements for the siting of a manufactured home in a farm use zone as defined in Section 4.110A.

D. The dwelling shall be considered a temporary installation. If the need for an accessory dwelling ends the dwelling shall be removed. The dwelling can not be converted to other uses or used as a rental.

4.145 TEMPORARY STORAGE OF A MANUFACTURED HOME. (Amended 10/28/06 MC-05-2006) A manufactured or mobile home may be stored on an individual bare lot or parcel for not more than six months. Authorization for the storage of a manufactured home shall be obtained through application for a Zoning Permit and must meet the following conditions:

- A. It will not be used for residential or other purposes.
- B. There will be no electrical, plumbing or sewer connections to the stored manufactured or mobile dwelling.
- C. All normal setback standards of the zone will be met.
- D. The manufactured dwelling will not be located in a Floodplain or other natural hazard area.
- E. Only one manufactured dwelling storage permit may be issued to a property owner for a specific lot or parcel within any five-year period.

4.150 TEMPORARY USE OF A RECREATIONAL VEHICLE. (Amended 10/28/06 MC-05-2006) Recreational vehicles are not designed for residential purposes according to standards and specifications of the Uniform Building Code which has been established to protect public health, safety and welfare. Recreational vehicles shall not be used for housing or residential purposes except:

- A. When the recreational vehicle is located on an individual lot or parcel during the construction of a dwelling and meets the requirements of Section 4.120.
- B. When the recreational vehicle is located on an individual lot or parcel for use in the temporary care of a relative and meets the requirements of Section 4.130.
- C. For temporary housing to accommodate visitors of the primary residence in a residential or farm use zone not to exceed 30 days in any 12 month period.
- D. For seasonal recreational (i.e. summer camping or hunting season) use by the land owner or lessee in the Forest Use Zone after obtaining a Zoning Permit and Rural Address.

SECTION 4.160 STANDARDS FOR TRANSPORTATION IMPROVEMENTS. The intent of these provisions is to provide clear directions and guidelines when considering installation of transportation facilities in Morrow County. Although some zone designations may address certain uses listed below, these provisions generally apply to all zones in the County. Thus, except where otherwise specifically regulated by this ordinance, the following improvements are permitted outright:

1. Normal operation, maintenance, repair, and preservation of existing transportation facilities (roadways, bridges, etc.).

2. Installation of culverts, pathways, medians, fencing, guardrails, lighting, and similar types of improvements within the existing right-of-way.
3. Projects specifically identified in the Transportation System Plan as not requiring further land use regulation.
4. Landscaping as part of a transportation facility.
5. Emergency measures necessary for the safety and protection of property.
6. Acquisition of the right-of-way for public roads, highways, and other transportation improvements designated in the Transportation System Plan except those that are located in exclusive farm use or forest zones.
7. Construction of a street or road as part of an approved subdivision or land partition approved consistent with the applicable land division ordinance.
8. Establishment or continuation of no spray zones on private property.
9. Cattle guards to be installed per Morrow County Court Policy M-43673.
10. Pavement aprons to be installed at intersections of gravel roads or driveways with paved roads per Morrow County Court Resolution R-29-2000.
11. Any excavation within Morrow County right-of-way shall conform to Morrow County Ordinance MC-PW-1-81, the Road and Street Excavation Ordinance.

B. Uses Permitted by Conditional Use Permit.

1. Construction, major reconstruction, or widening of highways, roads, bridges, or other transportation projects that are not designed and constructed as part of a subdivision or planned development shall comply with the Transportation System Plan and applicable standards, and shall address the following criteria. For State projects that require an Environmental Impact Statement (EIS) or Environmental Assessment (EA), the draft EIS or EA shall be reviewed and used as the basis for findings to comply with the following criteria:
 - a. The project is designed to be compatible with existing land use patterns, noise generation, safety, and zoning.
 - b. The project is designed to minimize avoidable environmental impacts to identified wetlands, wildlife habitat, air and water quality, cultural resources, and scenic qualities.
 - c. The project preserves or improves the safety and function of the facility through access management, traffic calming, or other design features.
 - d. The project includes provision for bicycle and pedestrian circulation as consistent with the Transportation Element of the Comprehensive Plan and other requirements of this Ordinance.

2. Construction of rest areas, weigh stations, temporary aggregate storage, and aggregate processing sites.
3. If review under this Section indicates that the use or activity is inconsistent with the Transportation Element of the Comprehensive Plan, the procedure for a plan amendment shall be undertaken prior to or in conjunction with the conditional use permit review.

C. Time Limitation on Transportation-Related Conditional Use Permits. Authorization of a conditional use permit shall be void after a period specified by the applicant as reasonable and necessary based on season, right-of-way acquisition, and other pertinent factors. This period shall not exceed three years. (MC-C-8-98)

D. Private Streets Outside an Urban Growth Boundary. All private streets providing access from a public roadway to a proposed land division shall meet the following standards:

1. Have a minimum sight distance in compliance with adopted County Standards at any intersection with a public road. Additional sight distance or advance warning signage or other devices may be required where known safety hazards exist.
2. For each private street, there shall be a legal recorded document which includes:
 - a. A legal description of the proposed easement;
 - b. Ownership of the street;
 - c. Use rights; and
 - d. A maintenance and construction agreement which includes Fire Marshal approved street specifications and turn around area (if required) and the allocation and/or method of determining liability for maintenance.
3. Where drainage conditions require it, a private street shall be ditched in conformance with the County Road Standards.
4. Private streets which access public or County roads shall be located, designed and constructed (within the public right-of-way) in accordance with adopted standards for County roads.
5. Prior to establishing a private driveway or a private street, the owner shall obtain an access permit for access to the intersecting public road. As a condition of granting access to a public road, the County may require the applicant to clean the ditch serving the parcel and remove sight obstructing vegetation in the vicinity of the access.

SECTION 4.165 SITE PLAN REVIEW

Site Plan Review is a non-discretionary or "ministerial" review conducted without a public hearing by the County Planning Director or designee. Site Plan Review is for less complex developments and land uses that do not require site development or conditional use review and approval through a public hearing.

A. Purpose. The purpose of Site Plan Review (ministerial review) is based on clear and objective standards and ensures compliance with the basic development standards of the land use district, such as building setbacks, lot coverage, maximum building height, and similar provisions. Site Plan review also addresses conformity to floodplain regulations, consistency with the Transportation System Plan, and other standards identified below.

B. Pre-application review. Prior to filing its application for site plan review, the applicant shall confer with the County Planning Director or designee, who shall identify and explain the relevant review procedures and standards. ODOT shall be invited to participate in the pre-application review for proposals within an Interchange Area Management Plan (IAMP) Management Area or within a ¼ mile of an ODOT facility.

C. Applicability. Site Plan Review shall be required for all land use actions requiring a Zoning Permit as defined in Section 1.050 of this Ordinance. The approval shall lapse, and a new application shall be required, if a building permit has not been issued within one year of Site Review approval, or if development of the site is in violation of the approved plan or other applicable codes.

D. Review Criteria.

1. The lot area shall be adequate to meet the needs of the establishment.
2. The proposed land use is permitted by the underlying land use district.
3. The land use, building/yard setback, lot area, lot dimension, density, lot coverage, building height and other applicable standards of the underlying land use district and any sub-district(s) are met.
4. Development in flood plains shall comply with Section 3.100 Flood Hazard Overlay Zone of the Ordinance.
5. Development in hazard areas identified in the Morrow County Comprehensive Plan shall safely accommodate and not exacerbate the hazard and shall not create new hazards.
6. Off-street parking and loading-unloading facilities shall be provided as required in Section 4.040 and 4.050 of the Morrow County Zoning Ordinance. Safe and convenient pedestrian access to off-street parking areas also shall be provided as applicable.
7. County transportation facilities shall be located, designed and constructed in accordance with the design and access standards in the Morrow County Transportation System Plan.
8. Site planning, including the siting of structures, roadways and utility easements, shall provide, wherever practicable, for the protection of trees eight inch caliper or greater measured four feet from ground level, with the exception of noxious or invasive species, such as Russian olive trees.
9. Development shall comply with Section 3.200 Significant Resources Overlay Zone or 3.300 Historic Buildings and Sites protecting inventoried significant natural and historic resources.

10. The applicant shall determine if compliance is required with Oregon Water Resources Department water quantity and/or Oregon Department of Environmental Quality water quality designations.
11. The applicant shall determine if previous Code Enforcement violations have been cleared as applicable.
12. The applicant shall determine the method of disposal for solid waste, with staff providing information to the applicant about recycling opportunities.
13. The applicant shall obtain the necessary access permit through the Public Works Department as required by Morrow County Resolution R-29-2000.

E. Submittal Requirements. A site plan shall be submitted including all of the following information except for specific items determined at the pre-application review not to be applicable. All site plans shall have dimensions clearly indicated. An applicant may provide the information on separate sheets, if necessary or desirable for clarity.

1. North arrow and scale.
2. Location of property boundaries, including adjacent public or private streets and rights of way.
3. Location of existing structures and natural features.
4. Areas affected by the proposed development with slopes in excess of 10 percent.
5. Location of utilities and facilities, or proposed locations (sewer, water, fire hydrants, septic system, storm water facilities, etc.).
6. Proposed landscaping.
7. Exterior lighting.
8. Circulation plan for vehicles, pedestrians, and bicyclists, including existing and proposed points of access and sidewalks.
9. Parking lot layout, with circulation plan and striping details.
10. Sign location and details.

F. Application Completeness/Request for Additional Information. The County Planning Director or designee shall determine the application to be complete based on the above standard criteria within 14 days of the application submittal. If the application is found to be incomplete or additional information is needed it may be requested from the applicant. A request for additional information beyond the standard review criteria cannot be used to rule an application incomplete.

G. Minimum Standards for Roadway Design Plans Submitted for County Review. Any transportation facility or transportation improvement to be constructed as part of a private

development and subsequently dedicated to the County must first receive design approval by the Morrow County Public Works Department, based on applicable design criteria and the rationale for establishing the criteria to be provided by the County. Design approval shall also include all other pertinent issues related to roadway construction and operations, including but not limited to drainage, maintenance, serviceability, and pavement design. Street design plans submitted for County approval shall be stamped by a registered professional engineer with appropriate experience.

H. Conditions Requiring Variance Application. In the case of transportation improvement plans that do not meet the above minimum standards, the Morrow County Public Works Department may work with the applicant to determine whether an alternate design standard is appropriate (design modification). Design modifications are reviewed and approved by Morrow County Public Works Department staff. If upon mutual agreement it is determined that an alternate design standard cannot be met, an application for a design variance will be required, subject to review and approval by the Morrow County Planning Commission.

SECTION 4.170 SITE DEVELOPMENT REVIEW (MC-C-1-02)

A. Purpose. The purposes of site development review are to encourage site planning in advance of development that is permitted under Morrow County's Comprehensive Plan and land use regulations; assure that development is supported with appropriate types and levels of transportation improvements and public facilities and services; and implement the Morrow County Comprehensive Plan and land use regulations with respect to development standards and policies.

B. Preapplication review. Prior to filing its application for site development review, the applicant shall confer with the Planning Director, who shall identify and explain the relevant review procedures and standards. ODOT shall be invited to participate in the pre-application review for proposals within an Interchange Area Management Plan (IAMP) Management Area or within a ¼ mile of any ODOT facility.

C. When required.

1. Site development review shall be required for all major developments in industrial and commercial zones. As used in this Section, a "major development" is an industrial development utilizing 100 or more acres of real property. When development is proposed in phases, site development review shall apply to each phase of the development, whether or not the phase meets the site development review threshold.

2. Site development review also shall apply when required by the Planning Commission as a condition of approval of a land use decision not otherwise subject to site development review; provided that, in a condition imposing such a requirement, the Planning Commission may waive one or more site development review information requirements and/or approval standards that the Planning Commission finds the application already has fulfilled or are not relevant or otherwise are not warranted.

3. No building permit shall be issued prior to site development review approval whenever site development review is required by this section. Site development review shall not alter the type and category of uses permitted in affected zoning districts.

4. As used in this Section, "development" means any man-made change to improved or unimproved real property in the County, including but not limited to construction or installation of a building or other structure; major site alterations such as those due to grading; paving; and improvements for use as parking. However, site development review shall not apply to any interior remodeling of any existing building or structure or any modification to an existing building or structure that does not substantially change its exterior appearance.

D. Plans required. A complete application for site development review shall be submitted. The application shall include the following plans and information:

1. A site plan or plans, drawn to scale, containing the following information:
 - a. A vicinity map covering an area 250 feet from the boundary of the development site and showing general information about the location, dimensions and names of all existing and proposed streets, County roadways and state highways, access points on both sides of the road when applicable, sidewalks, bicycle routes, and easements and utility locations. The map also shall indicate distances to neighboring constructed access points, median openings (where applicable), traffic signals (where applicable), intersections, and other transportation features on all sides of the property.
 - b. The site size, dimensions, and zoning, including dimensions and gross area of the lot(s) or parcel(s) and tax map and tax lot number(s) for the development site.
 - c. Contour lines at two foot contour intervals for grades 0 to 10 percent, and five-foot intervals for grades over 10 percent.
 - d. The location of the following hazard areas on and within 100 feet of the boundaries of the site:
 - i. Areas indicated on National Flood Insurance Rate maps as being within the 100-year floodplain;
 - ii. Areas subject to erosion as identified in the Morrow County Comprehensive Plan.
 - iii. Other hazard areas identified in the Morrow County Comprehensive Plan.
 - e. The location of inventoried significant natural resource areas on and within 100 feet of the boundaries of the site, including big game habitat areas, fish and riparian habitat areas, mineral and aggregate resource areas, significant natural areas, wetlands, water resources, and historic resources. As used in this Section, "significant inventoried" means a resource area identified as significant in Morrow County's acknowledged inventory of Goal 5 resource sites.
 - f. The location, dimensions, and setback distances of all existing permanent structures, improvements and utilities on or within 25 feet of the site, and the current and proposed uses of the structures.
 - g. The location, dimensions, square footage and setback distances of proposed structures, improvements, and utilities, and the proposed uses of the structures by square footage.

- h. The location, dimension and names, as appropriate, of all existing and proposed streets, other public ways, sidewalks and easements on and within the development site.
 - i. All motor vehicle parking, circulation, loading and servicing areas.
 - j. Site access points for automobiles and pedestrians.
 - k. On-site pedestrian circulation.
 - l. Outdoor areas proposed as open space.
2. A landscaping plan, drawn to scale, showing the location and types of existing trees (eight inches or greater in caliper measured four feet above ground level) and vegetation proposed to be removed and to be retained on the site, the location and design of landscaped areas, the varieties, sizes and spacing of trees and plant materials to be planted on the site, the proposed types and locations of irrigation systems to maintain plant materials, and other pertinent landscape features.
 3. Architectural elevations and floor plans for all proposed structures, drawn to scale, with elevations accurately reflected to grade.
 4. A description of materials, referenced to UBC class codes, to be used on proposed structures.
 5. An erosion control and grading plan.
 6. A drainage plan, developed in accordance with County standards or with Oregon Department of Environmental Quality standards if no County standards have been adopted. The drainage plan shall identify the location of drainage patterns and drainage courses on and within 100 feet of the boundaries of the site.
 7. An exterior lighting plan, drawn to scale, showing type, height, and lighting levels on and at the edge of the site.
 8. A written statement identifying:
 - a. The nature of the proposed use(s).
 - b. Plans for the treatment and disposal of sewage and industrial wastes and any on-site disposal of wastes.
 - c. Plans for handling traffic, noise, glare, air pollution, fire, or safety hazard.
 9. The following technical reports:
 - a. For developments expected to generate 400 or more vehicle trips on a single day, a traffic report, prepared by a licensed traffic engineer, demonstrating the ability of affected transportation facilities including highways, roads and intersections to accommodate the anticipated amount of traffic that would be generated by the

proposed development over 20 years. The report shall identify existing traffic conditions and the safety and capacity improvements that are needed to accommodate the anticipated traffic, including facility reconstructions, modifications or widenings, additional travel or passing lanes, intersection or interchange improvements, realignments, channelization improvements, or other needed facility improvements, including possible new transportation facilities. The analysis shall demonstrate consistency with the applicable performance standards of the affected facilities. The Morrow County Transportation System Plan provides the applicable standards for county transportation facilities. The Oregon Highway Plan provides the applicable standards for state transportation facilities.

When a traffic management plan is required by the Morrow County Transportation System Plan, the application shall not be deemed complete until the applicant has filed with the Planning Director a traffic management plan (TMP) including transportation system management (TSM) and transportation demand management (TDM) measures that have been coordinated with and address the reasonable concerns of affected transportation providers (e.g., Morrow County, affected cities, Oregon Department of Transportation, Federal Highway Administration) and traffic safety and emergency service providers (e.g. County sheriff, State Police, fire district, ambulance). The TMP shall be prepared by a licensed traffic engineer with established experience in the type of event for which the TMP is being developed. Unless otherwise agreed to by affected local governments or agencies, the costs of paying for necessary transportation improvements and implementation of the TMP shall be borne by the developer or its successors.

The TMP shall include, but not be limited to: ingress and egress from parking areas; deployment of personnel at ramps, intersections and highway locations; plans for rerouting of traffic in the event of accident or other cause of traffic delay; coordination with state police, County sheriff and emergency service providers; use of temporary signage, reader boards and similar visual aids; estimates of numbers and types of personnel to be employed; and other appropriate information.

b. If located within 5000 feet of a runway or approach surface of a public use airport, a technical report explaining how the development is compatible with customary aviation-related activities, including airport takeoffs and landings. The report shall explain how the proposed uses, including measures to minimize conflicts, do not: cause emissions of smoke, dust or steam that would obscure visibility within airport approach surfaces; project light directly onto existing airport runways or taxiways; or interfere with airport radio, radiotelephone, television and electrical transmissions.

10. Within 14 working days following receipt of a site development review application, the Planning Director may waive the submission of information for specific provisions of this Section or may require information in addition to that required by a specific provision of this Section, as follows:

a. The Planning Director may waive the submission of information for a specific requirement upon determination either that specific information is not necessary to evaluate the application properly, or that a specific approval standard is not applicable to the application. If submission of information is waived, the Planning Director shall, in the staff recommendation, identify the waived requirement and briefly explain the reasons for the waiver.

b. The Planning Director may require information in addition to that required by a specific provision of this Section upon determination that the information is needed to evaluate the application properly and that the need can be justified on the basis of a special or unforeseen circumstance. If additional information is required, the Planning Director shall, in the decision, briefly explain the reasons for requiring the additional information.

E. Standards.

1. All development shall comply with the following standards:

a. Retaining walls shall be provided and designed consistent with Uniform Building Code requirements. Grading and contouring shall take place with particular attention to minimizing the possible adverse effects of grading and contouring on the natural vegetation and physical appearance of the site.

b. Development in flood plains shall not increase the flood plain elevation unless the area in which the rise will occur contains no structures and the owner of such property signs a written acceptance of any increase in the flood plain elevation. Development in hazard areas identified in the Morrow County Comprehensive Plan shall safely accommodate and not exacerbate the hazard and shall not create new hazards.

c. Drainage shall be provided in accordance with Oregon Department of Environmental Quality standards. The Planning Commission may impose conditions to ensure that waters are drained from the development so as to limit degradation of water quality.

d. Off-street parking and loading-unloading facilities shall be provided as required in Article IV of the Morrow County Zoning Ordinance. Safe and convenient pedestrian access to off-street parking areas also shall be provided.

e. County transportation facilities shall be located, designed and constructed in accordance with the design and access standards in the Morrow County Transportation System Plan.

f. Circulation provided by public streets and by private streets, accessways and maneuvering areas within the boundary of the site shall facilitate safe and convenient motor vehicle and pedestrian access. Access for emergency services (fire, ambulance and police) shall be provided consistent with the requirements of the Fire Marshal and emergency service providers.

g. Illumination resulting from outdoor lighting shall not exceed one foot-candle at the property line.

h. Site planning, including the siting of structures, roadways and utility easements, shall provide, wherever practicable, for the protection of trees eight inch caliper or greater measured four feet from ground level.

i. Development shall comply with applicable County regulations protecting inventoried significant natural and historic resources.

j. Development shall maintain continuous compliance with applicable federal, state and County air and water quality standards. Prior to issuance of a building permit, the Building Official may require submission of evidence of compliance with such standards from the applicable federal or state agencies or the receipt of the necessary permits for the development from these agencies.

k. Development shall be designed to comply with applicable Oregon Department of Environmental Quality noise standards.

l. Sewer, water and storm drainage facilities shall be adequate to serve the proposed or permitted level of development. For uses like a speedway that engage in activities that on occasion attract unusually large numbers of people to the site, the development may rely on temporary sewer (e.g., portapotties, lagoon storage) and water facilities to accommodate the excess demand. The applicant shall demonstrate that adequate facilities and services are presently available or can be made available concurrent with development. All facilities shall be designed to comply with applicable state and local standards.

m. Law enforcement, public safety and security measures shall be adequate to serve the proposed or permitted level of development. For land uses involving activities that may attract many thousands of visitors to a site at one time on an occasional or episodic basis, adequate safety, law enforcement and security measures may include, but are not limited to, the use of on-site security service personnel and availability of police, fire and emergency medical services. For such uses, the Planning Commission may require the applicant to develop a public safety and security plan, which shall be coordinated with appropriate local and state public safety providers.

n. The transportation system shall be adequate to accommodate the proposed or permitted level of development.

i. Rights-of-way and roadway and sidewalk improvements shall be provided consistent with applicable County or State design, access management and highway performance standards, including applicable Oregon Highway Plan standards. Access points to County roadways and state highways shall be properly placed in relation to sight distance, driveway spacing and other related considerations including opportunities for joint and cross access. Any application that involves access to or significantly impacts the state highway system shall be reviewed by the Oregon Department of Transportation. Such applications shall demonstrate compliance with the Oregon Highway Plan and shall be conditioned on state issuance of access permits where required.

ii. In determining the adequacy of the transportation system to accommodate the proposed development, consideration shall be given to the need for roadway reconstructions, modifications or widenings, additional travel or passing lanes, intersection or interchange improvements, road realignments, channelization improvements, or other needed roadway improvements, including possible new roads. Consideration also shall be given to the need for right-of-way improvements such as installation of lighting, signalization, turn lanes, median and parking strips, traffic islands, paving, curbs and gutters, sidewalks, bikeways, street drainage facilities and other facilities needed because of anticipated vehicular and pedestrian traffic generation. For uses necessitating preparation of

a transportation management plan, a decision approving a site development review application shall include a condition requiring implementation of the transportation system management measures and transportation demand management measures that are determined to be needed to accommodate the traffic generated by the development and to comply with the Oregon Highway Plan. Unless otherwise agreed to by affected local governments or agencies or limited by constitutional constraints, the costs of paying for necessary transportation improvements and implementation of the traffic management plan shall be borne by the developer or its successors.

iii. Nothing in this or any other provision of this Chapter shall be construed to replace, alter or otherwise affect the applicability of the Transportation Planning Rule, OAR 660, Division 12, to any development or action that would otherwise be subject to that Rule.

o. Access and facilities for physically handicapped people shall be incorporated into the site and building design, consistent with applicable federal and state requirements.

p. Development located within 5000 feet of a runway or approach surface of a public use airport shall not cause emissions of smoke, dust or steam that would obscure visibility within airport approach surfaces; project light directly onto existing airport runways or taxiways; or interfere with airport radio, radiotelephone, television or electrical transmissions.

q. Uses and improvements, including all land uses and improvements, including but not limited to traffic management plans, proposed on exception lands shall be consistent with the acknowledged goal exceptions taken for those lands.

2. The Planning Commission may impose such conditions as deemed necessary to ensure compliance with these standards.

a. When a transportation management plan is required, the Planning Commission may impose conditions providing for monitoring and reporting on the effectiveness of the traffic management measures and providing opportunity for a hearing to consider modifications to the TMP if deemed appropriate by the Planning Commission following its implementation. Any hearing that is held to consider TMP modifications shall be noticed and processed in the manner set out in Section VI.A of this Chapter and shall include notice to the Oregon Department of Transportation and Federal Highway Administration.

b. Required road dedications and other exactions shall comply with constitutional limitations.

c. To ensure compliance with this Section, the Planning Commission may require an applicant to sign or accept a legal and enforceable covenant, contract, dedication, easement, performance guarantee, or other document, which shall be approved in form by the County's legal counsel.

F. Review and Enforcement.

1. Applications for site development review shall be reviewed by the Planning Commission in the manner provided by ORS Chapter 197 for land use decisions following review and recommendation by the Planning Director. Public notice and an opportunity for hearing shall be provided in the manner provided by ORS Chapter 197 for land use decisions.

a. In addition to the public notice described above, timely notice of public hearing also shall be mailed to ODOT and the Federal Highway Administration if the Planning Director determines that the use may impact state or federal transportation facilities, and to the Oregon Department of Aviation and Federal Aviation Administration if the use is located within 5000 feet of a runway or approach surface of a public use airport.

b. The decision of the Planning Commission may be appealed to the County Court in the manner provided in Article 9, Section 9.030 of the Morrow County Zoning Ordinance.

2. The County building official may issue a certificate of occupancy only after the Planning Director has determined that the improvements required by site development review approval have been completed, or a schedule for completion and a bond or other financial guarantee have been accepted by the County and by ODOT for required improvements to the state highway system.

a. Implementation of traffic management, public safety and/or security plans, when required, shall be made ongoing conditions of approval of the use, and failure to substantially comply with those plans may be a basis for the Planning Director or Building Official to suspend or revoke the occupancy permit and for the County, DLCD or ODOT (when a state Transportation Facility is affected) to petition a court of competent jurisdiction to issue a temporary restraining order and permanent injunction against further use of the property for the purposes approved in the site development review.

b. Prior to or concurrent with the suspension of any site development review permit, the County shall provide the permittee with notice and an opportunity to be heard in accordance with the process set out in Morrow County Ordinance No. MC-C-7-92.

G. Expiration and Extension of Permit.

1. A site development review permit shall expire automatically two (2) years from the date of issuance unless one of the following occurs first:

a. The development has commenced; or

b. An application for an extension is filed as provided in this section; or

c. The permit is appealed to a body of competent jurisdiction following final approval by the County, in which case the two-year period shall be tolled until a final, unappealed or unappealable decision is made by a court or other body of competent jurisdiction.

2. As used in subsection 1 of this Section, a development has "commenced" when:

- a. The permit holder has physically altered the land or structure or changed the use thereof through actions such as preliminary grading for roads, driveways or building sites, installation of utilities, construction of required off-site improvements or construction of buildings, and
 - b. The alteration or change is directed toward completion of the development; and
 - c. The permit holder has spent at least \$50,000 in expenditures related to completion of the development. Expenditures that could apply to various other uses of the land or structure shall be excluded including the cost of purchasing land.
 - d. The provisions of subsection 1 of this Section shall apply independently to each discrete phase of a phased development. The commencement requirement for a subsequent phase cannot be satisfied by commencement activities conducted under an approval for an earlier phase of the development.
3. If an extension is desired, the holder of the site development review permit must file an application for an extension prior to the expiration of the permit. The application shall be filed in writing with the Planning Director. A maximum of two extensions are permitted. Unless approved, the extension does not extend the expiration date. The Planning Director shall grant an initial two year extension upon the timely filing of the extension application. Following notice and hearing, the Planning Commission shall grant a second two-year extension only upon demonstration by the permit holder that:
- a. In terms of time, labor or money the permit holder has been making a good faith effort to commence the development or has been precluded from doing so for reasons beyond the permit holder's reasonable control;
 - b. Commencement of the development is likely during the second two year extension; and
 - c. There has been no change in circumstance or the law likely to necessitate significant modification of the development approval or conditions of approval. (MC-C-1-02)

ARTICLE 9. ADMINISTRATIVE PROVISIONS

SECTION 9.010. ADMINISTRATION. The Secretary of the Planning Commission and the County Planning Director have the power and the duty to enforce the provisions of this Ordinance. The County Court may appoint agents to issue zoning permits and to otherwise assist the Secretary or Planning Director in the processing of applications.

SECTION 9.020. Approval or denial of an application for a use permitted by this Ordinance shall be based upon and accompanied by a brief statement that explains the criteria and standards considered relevant to the decision, states the facts relied upon in rendering the decision and explains the justification for the decision based on the criteria, standards and facts set forth.

SECTION 9.030. APPEALS. A person may appeal to the County Court from a decision or requirement made by the Planning Commission. A person may appeal to the Planning Commission from a decision or requirement made pursuant to this Ordinance by the Commission Secretary, Planning Director or other county official. Written notice of the appeal must be filed with the county within 15 days after the decision or requirement is made. The notice of appeal shall state the nature of the decision or requirement and the grounds for appeal.

A. The County Court or Planning Commission shall hold a hearing on the appeal within 30 days from the time the appeal is filed. The County Court or Commission may continue the hearing for good cause.

B. The County Court or Planning Commission may review a lower decision upon its own motion after giving twenty (20) days notice to the parties involved in the decision, and if such review is within 15 days of receipt of notices of said initiated lower decision.

C. An appeal or review proceeding shall be based upon, but not limited to, the record of the decision being appealed or reviewed.

D. Following the hearing, the County Court or Commission may overrule or modify any decision or requirement and shall set forth findings for such decision.

E. The procedure, public notice and type of hearing for an appeal or review shall be in the same manner as for any application under this Ordinance.

SECTION 9.040. FORM OF PETITIONS, APPLICATIONS AND APPEALS. Petitions, application, and appeals provided for in this Ordinance shall be made on forms prescribed by the county. Applications shall be accompanied by plans and specifications, drawn to scale, showing the information listed in this Section

and such other information as is needed to determine conformance with this Ordinance.

A. One copy of a completed application form that includes the following information:

1. An accurate legal description, tax account number(s), map and location of all properties that are the subject of the application.
2. Name, address, telephone number and authorization signature of all record property owners or contract owners, and the name, address and telephone number of the applicant, if different from the property owner(s).

B. A complete list of the permit approvals sought by the applicant.

C. A current preliminary title report for the subject property(ies).

D. A complete and detailed narrative description of the proposed development that describes existing site conditions, existing buildings, public facilities and services, presence of wetlands, steep slopes and other natural features, a discussion of the approval criteria for all permits required for approval of the development proposal that explains how the criteria are or can be met, and any other information indicated by the City as being required.

E. Up to 20 copies of all reports, plans, site plans and other documents required by the section of the code corresponding to the specific approval(s) sought. At least one copy of the site plan and all related drawings shall be in a readable/legible 8-1/2 by 11 inch format for inclusion into the city's bound record of the application.

F. A site plan shall include the following information. All site plans shall have dimensions clearly indicated. An applicant may provide the information on separate sheets, if necessary or desirable for clarity.

1. North arrow and scale
2. Location of property boundaries, including adjacent public or private streets and rights of way
3. Location of existing structures and natural features
4. Topography, with contours at no greater than 10 foot intervals, preferably less
5. Location of utilities and facilities, or proposed locations (sewer, water, fire hydrants, septic system, storm water facilities, etc.)

6. Proposed landscaping

7. Exterior lighting.

8. Circulation plan for vehicles, pedestrians, and bicyclists, including existing and proposed points of access and sidewalks.

9. Parking lot layout, with circulation plan and striping details.

10. Sign location and details

G. All required application fees, including a deposit for costs of consultant review when required.

SECTION 9.045. COMPLETENESS REVIEW.

A. Upon submission, the County Planning Department shall date stamp the application form and verify that the appropriate application fee has been submitted. The Planning Director shall review the application and all information submitted with it and evaluate whether the application is complete enough to process. Within 30 days of receipt of the application, the Planning Director shall complete this initial review and issue to the applicant a written statement indicating whether the application is complete enough to process, and, if not, what information must be submitted to make the application complete.

B. Upon receipt of a letter indicating the application is incomplete, the applicant has 180 days from the date the application was filed within which to submit the missing information or the application shall be rejected and all materials and the unused portion of the application fee returned to the applicant. If the applicant submits the requested information within the 180-day period, the County shall again verify whether the application, as augmented, is complete. An application shall be rejected if it has not been made complete within the 180 day time period, unless the applicant refuses in writing to submit additional information.

C. Once the County determines the application is complete enough to process, or the applicant refuses to submit any more information, the County shall declare the application complete and take final action on the application within 120 days of that date unless the applicant waives or extends the 120-day period. The 120-day period, however, does not apply in the following situations:

1. Any hearing continuance or other process delay requested by the applicant shall be deemed an extension or waiver, as appropriate, of the 120-day period.
 2. The 120-day period does not apply to any application for a permit that is not wholly within the County's authority and control.
 3. The 120-day period does not apply to any application for an amendment to the County's comprehensive plan or land use regulations nor to any application for a permit, the approval of which depends upon a plan amendment
- D. The approval standards which control the County's review and decision on a complete application are those which were in effect on the date the application was first submitted.

SECTION 9.050. PUBLIC HEARINGS.

A. Each notice of hearing authorized by this Ordinance shall be published in a newspaper of general circulation in the County at least 20 days prior to the date of hearing, except that a notice for a hearing before the Planning Commission on an amendment that requires two public hearings as specified in Article 8, may be given no less than 10 days in advance of the first public hearing.

B. In addition:

1. A notice of hearing on a conditional use, appeal to a variance, or an amendment to the zoning map shall be mailed to all owners of property within 250 feet of the property for which the appeal, variance, conditional use, or zoning map amendment has been requested. The notice of hearing shall be mailed at least twenty (20) days prior to the date of hearing.

2. When a proposal includes a parcel or parcels in an Interchange Area Management Plan (IAMP) Management Area, the County shall provide written notification to ODOT at least twenty (20) days prior to the date of hearing.

C. Failure of a person to receive the notice prescribed in this section shall not impair the validity of the hearing.

D. The notice provisions of this section shall not restrict the giving of notice by other means, including mail, the posting of property, or the use of radio and television.

E. The notice shall include the following information:

1. The time, date and location of the public hearing;
2. Street address or other easily understood location of the subject property and County-assigned planning file number;
3. A description of the applicant's proposal, along with a list of citations of the approval criteria that the County will use to evaluate the proposal;
4. A statement that any interested party may testify at the hearing or submit written comments on the proposal at or prior to the hearing, and that a staff report will be prepared and made available to the public at least 7 days prior to the hearing;
5. A statement that any issue which is intended to provide a basis for an appeal to the Land Use Board of Appeals must be raised before the close of the public record. Issues must be raised and accompanied by statements or evidence sufficient to afford the County and all parties to respond to the issue;
6. A statement that the application and all supporting materials and evidence submitted in support of the application may be inspected at no charge, and that copies may be obtained at cost, at the Planning Department during normal business hours; and
7. The name and telephone number of the planning staff person responsible for the application or is otherwise available to answer questions about the application.

F. The Planning Commission and the County Court may recess a hearing in order to obtain additional information or to serve further notice upon other property owners or persons it decides may be interested in the proposal being considered. Upon recessing, the time and date when the hearing is to be resumed shall be announced.

G. General rules for hearing.

1. The Hearing Body conducts the hearing in a quasi-judicial capacity; there shall be no audience demonstration or other conduct which would disrupt the hearing.
2. Persons may speak only after being recognized by the Chair and must state their full name and address for the record.

3. The Hearing Body considers only testimony and information that is relevant to the issue of the requested change, and will not allow immaterial or repetitious testimony.

H. Order of Procedure.

1. Call for abstentions.
2. Staff report and summary.
3. Proponent's case. The proponent and those favoring the proposal will be heard first.
4. Cross-examination of each proponent by the Hearing Body.
5. Opponent's case. Those opposed shall be heard next. Groups who are represented by a spokesman or who were entitled to receive notice of the hearing are requested to proceed first. Opponents may submit questions of the proponent to the Chair.
6. Cross-examination of each opponent by the Hearing Body.
7. Rebuttal. Both the proponents and opponents may submit rebuttal testimony; the proponent shall have final opportunity.
8. Close the hearing.

I. Decision of the Hearing Body. Upon closing the hearing, the Hearing body will deliberate the question and reach a decision or continue the matter for further study or decision, to a time and place then announced.

J. Recess of Hearing. The Hearing Body may recess a hearing in order to obtain additional information or to serve further notice upon other property owners or persons it decides may be interested in the proposal being considered. Upon recessing, the time and date when the hearing is to be resumed shall be announced.

K. Notice of Decision. The County shall send, by first class mail, a notice of all decisions rendered under this Ordinance to all persons with standing, i.e., the applicant, all others who participated either orally or in writing before the close of the public record and those who specifically requested notice of the decision. The notice of decision shall include the following information:

1. The file number and date of decision;
2. The name of the applicant, owner and appellant (if different);

3. The street address or other easily understood location of the subject property;
4. A brief summary of the decision, and if an approval, a description of the permit authorized or approval granted;
5. A statement that the decision is final unless appealed, and description of the requirements for perfecting an appeal;
6. The contact person, address and a telephone number whereby a copy of the final decision may be inspected or copies obtained.

SECTION 9.060. SEWAGE DISPOSAL APPROVAL. No zoning permit shall be issued for any use or structure which will have an individual sanitary subsurface disposal system until written approval is obtained by the applicant for said system.

SECTION 9.070. FILING FEES. An application required by this Ordinance shall be accompanied by a filing fee in the amount as set forth by the County Court in a County Fee ordinance. Said permit fees may be amended by County Court order after conducting a hearing thereon.

A. Payment. All fees shall be due and payable at the time the application or appeal is submitted. No application or appeal shall be accepted without the proper fee being paid.

B. At its sole discretion, the County may contract for review of an application by appropriate professionals, including but not limited to a civil engineer, planner, traffic engineer, wildlife biologist, or other specialist, and may require an applicant to reimburse the County for costs of such services. The County may require a deposit from the applicant, to cover estimated costs of consulting services.

SECTION 9.080. REVOCATION. The Commission may revoke or modify any permit granted under the provisions of this Ordinance on any one or more of the following grounds:

A. A permit may be revoked on the basis of fraud, concealment, or misrepresentation or on the basis of wrong information supplied on the application, or wrong information given to the Commission at a public hearing.

B. A permit may be revoked on the basis that the use for which such permit was granted is not being exercised within the time limit set forth by the Commission or this Ordinance.

C. A permit may be revoked on the basis that the use for which such permit was granted has ceased to exist or has been suspended for one year or more.

D. A permit may be revoked or modified on the basis that the permit granted is being, or recently has been exercised contrary to the terms or conditions of such approval, or in violation of any statute, code, resolution, law or regulation.

E. A permit may be revoked or modified on the basis that the use for which the permit was granted was so exercised as to be detrimental to the public health, safety or welfare, or in such a manner to constitute a nuisance.

F. Any permit granted pursuant to this Ordinance shall become null and void if not exercised within the time period specified in such permit, or if no time period is specified in the permit, within one year from the date of approval of said permit.

G. The Commission shall hold a public hearing on any proposed revocation after giving written notice to the permittee and other affected persons as set forth in this Ordinance. The Commission shall render its decision within 45 days after the conclusion of the hearing. In the case where the permittee is not satisfied with the action of the Commission, he may appeal the Commission's decision to the County Court in the manner provided in section 9.030 of this Ordinance.

MORROW COUNTY SUBDIVISION ORDINANCE

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COUNTY ORDINANCE NO. MC-02-05 REPEALED AND REPLACED BY
ORDINANCE NO. MC-04-05

MORROW COUNTY, OREGON

AN ORDINANCE PROVIDING SUBDIVISION, PARTITIONING, AND OTHER LAND
DEVELOPMENT STANDARDS AND PROCEDURES WITHIN THE COUNTY OF
MORROW, STATE OF OREGON.

THE COUNTY OF MORROW, OREGON, ORDAINS AS FOLLOWS:

ARTICLE I. INTRODUCTORY PROVISIONS

Chapters 92 and 215, this ordinance sets forth the minimum standards governing the approval of land development, including subdivision and partitionings, as necessary to carry out the County Comprehensive Plan and to promote the public health, safety and general welfare. The purpose of these provisions and regulations are to:

- A. Encourage well-planned subdivision and partition development to the end that good livable neighborhoods with all needed amenities and community facilities may be created.
- B. Encourage development in harmony with the natural environment and within resource carrying capacities.
- C. Safeguard the interest of the public, the applicant and the future lot owner.
- D. Improve land records and boundary monumentation.
- E. Ensure equitable processing of subdivision plats and partitioning plans, and accomplish to the greatest extent possible the goals and objectives of the Comprehensive Plan for Morrow County.
- F. Provide for orderly and efficient urban development, and to coordinate development with public facilities and service plans and capabilities.
- G. Provide for preservation of farm and forest lands, and the resource based economy of the County.

No person may subdivide or partition land within Morrow County except in accordance with ORS Chapter 92 and the provisions of this ordinance.

SECTION 1.020. INTERPRETATION. The provisions of this ordinance shall be construed to effect the purposes set forth in Section 1.010 of this ordinance. These provisions are declared to be the minimum requirements fulfilling such objectives, and the county may impose additional requirements deemed necessary to promote the health, safety

and general welfare, and to carry out the Comprehensive Plan of the area. Where conditions set forth herein are less restrictive than comparative condition imposed by any other provision of this ordinance, by provisions of any other local ordinance, resolution or regulation, or by provisions of state statute or administrative regulation, the more restrictive shall govern.

SECTION 1.030. REPEALER. The following ordinance is applicable to said urban area, together with all amendments thereto, is hereby repealed: County Ordinance No. MC-05-02

SECTION 1.040. REPEAL OF ORDINANCES AS AFFECTING EXISTING LIABILITIES. The repeal of any ordinance by this ordinance shall not have the effect to release or extinguish any penalty, forfeiture, or liability incurred under such ordinance repealed shall be treated as still remaining in force for the purpose of sustaining any proper action or prosecution for the enforcement of such penalty, forfeiture, or liability, and for the purpose of authorizing the accusation, prosecution, conviction and punishment of a person or a part thereof prior to the effect date of this ordinance.

SECTION 1.060. CONSTRUCTION AND TERMINOLOGY.

A. Construction. Words used in the present tense include the future tense, words used in the singular include the plural, and words used in the plural include the singular; the word "shall" is mandatory, the word "may" permissive; and the masculine word shall include the feminine and neuter.

B. Terminology. The word "County" shall mean the County of Morrow, State of Oregon. The words "County Court" and "Court" shall mean the County Court of Morrow County. The words "Planning Commission" and "Commission" shall mean the County Planning Commission of the County of Morrow duly appointed by the County Court. The words "Planning Director", "County Roadmaster", "Assessor", "County Sanitarian", "County Surveyor", "County Clerk", and "Tax Collector" as applicable shall mean the Planning Director, Roadmaster, Sanitarian, Surveyor, County Clerk, Tax Collector, and Assessor of the County of Morrow, as applicable.

SECTION 1.070. DEFINITIONS. As used in this ordinance the following words and phrases shall mean:

A. Access. The right to cross between public and private property allowing pedestrians and vehicles to enter and leave property.

B. Access Management. The provision of improvements, signals, and/or the regulation of access to adjacent property while preserving the flow of traffic in terms of safety, capacity, and speed.

C. Accessway. A walkway that provides the pedestrian and bicycle passage either between streets or from a street to a building or other destination such as a school, park, or transit stop. Accessways generally include a walkway and land on either side of the

walkway, often in the form of an easement or right-of-way, to provide clearance and separation between the walkway and adjacent uses.

D. Bicycle Facilities. A general term denoting improvements and provisions made to accommodate or encourage bicycling, including parking facilities and all bikeways.

E. Bikeways. Any road, path, or way that is in some manner specifically open to bicycle travel, regardless of whether such facilities are designated for the exclusive use of bicycles or are shared with other modes. The five types of bikeways are:

1. Multi-use path: A paved 10 to 12 foot wide way that is physically separated from motorized traffic; typically shared with pedestrians, skaters, and other non-motorized users.
2. Bike Lane: A 4 to 6 foot wide portion of the roadway that has been designated by permanent striping and pavement markings for the exclusive use of bicycles.
3. Shoulder Bikeway: The paved shoulder of a roadway that is 4 feet or wider, typically shared with pedestrians in rural areas.
4. Shared Roadway: A travel lane that is shared by bicyclists and motor vehicles.
5. Multi-use trails: An unpaved path that accommodates all-terrain bicycles, typically shared with pedestrians.

F. Block. An area of land within a subdivision which area may be entirely bounded on all sides by streets or highways (except alleyways), railroad right-of-way, unsubdivided land or water courses.

G. Community Water Supply System. A domestic water supply source or distribution system which serves more than three single residences or other users for the purpose of supplying water for household uses, but is neither a municipal water supply system nor a public utility water supply system.

H. Contiguous Land. Parcels of land under the same ownership which abut each other.

I. Corner Clearance. The distance from an intersection of a public or private road to the nearest public or private access connection, measured from the closest edge of the pavement of the intersecting road to the closest edge of the pavement of the connection along the traveled way.

J. Cross-Section. A profile of the ground surface perpendicular to the center line of a street, stream, or valley bottom.

K. Developer. Means any person, corporation, partnership or other legal entity who creates or proposes to create a land development, and includes any agent of a developer so duly authorized.

L. Driveways. A private vehicle access way or point of entry from a public or private road.

M. Easement. A grant of the right to use a parcel of land for specific purposes, where ownership of the land is not transferred.

N. Fire Break. A break in the ground cover fuels as specified by the Fire Protection Agency involved or Commission.

O. Flood Hazard Area. The relatively flat area or low-lands adjoining the channel of a river stream or watercourse, or lake reservoir, which has been or may be covered by a Base Flood.

P. Frontage. All property fronting on one side of a street and measured along the street line, between intersecting and intercepting streets or between a street and right-of-way, waterway, end of a dead-end or city boundary.

Q. Functional Area (Intersection). That area beyond the physical intersection of two roads that comprises decision and maneuver distance, plus any required vehicle storage length.

R. Functional Classification. A system used to group public roadways into classes according to their purpose in moving vehicles and providing access.

S. Interest. Includes a lot or parcel, and a share, undivided interest or a membership which includes the right to occupy the land overnight, the lessee's interest may be renewed under the terms of the lease for a total period more than three years. "Interest" does not include any interest in a condominium as that term is denied in ORS Chapter 91 or any security interest under a land sales contract, trust deed or mortgage.

T. Joint Access. A driveway connecting two or more contiguous sites to the public street system.

U. Lot. A unit of land that is created by a subdivision of land, and is intended as a unit for disposition, transfer or ownership or interest, or for development.

1. Lot Area. The total horizontal net area within the lot lines of a lot to mean that square footage of a lot that is free from public and private road right-of-ways or easements.

2. Lot, Corner. A lot abutting on two or more streets, other than alleyways, at their intersection; provided the angle of intersection does not exceed 135 degrees.

3. Lot Depth. The average horizontal distance between the front and rear lot lines.
 4. Lot, Flag. A lot not meeting minimum frontage requirements and where access to the public road is by a narrow, private right-of-way.
 5. Lot Line. The property line bounding a lot.
 6. Lot Line, Front. The lot line separating the lot from a street other than an alley, and in the case of a corner lot, the shortest lot line along a street other than an alley.
 7. Lot Line, Rear. The lot line which is opposite and most distant from the front lot line. In the case of an irregular, triangular or other odd-shaped lot, a line 10 feet in length within the lot, parallel to, and at a maximum distance from the front lot line.
 8. Lot Line, Side. Any lot other than that of a front or rear lot line bounding a lot.
 9. Lot, Through or Double Frontage. A lot having frontage on two parallel or approximately parallel streets other than alleys.
 10. Lot Width. The average horizontal distance between the side lot lines, measured at right angles to the lot depth at a point midway between the front and rear lot lines.
- V. Map. A final diagram, drawing, or other writing concerning a major partition.
- W. Municipal Water Supply System. A domestic water supply source and distribution system owned and operated by a city or a county or owned and operated by a special district or other public corporation which has independent tax levying powers to support the system.
- X. Owner. The owner of the title to real property or the authorized agent thereof, or the contract purchaser of real property, of record as shown on the last available complete county tax assessment roll or county recorder's records.
- Y. Parcel. A unit of land that is created by partitioning of land.
- Z. Partition Land. To divide an area or tract of land into two or three parcels within a calendar year when such area or tract of land exists as a unit or contiguous units of land under single ownership at the beginning of such year. "Partition land" does not include any adjustment of a lot line by the relocation of a common boundary where an additional parcel is not reduced below the minimum lot size established by any applicable zoning ordinance. "Partition land" does not include the sale of a lot in a recorded subdivision, even though the lot may have been acquired prior to the sale with other contiguous lots or property by a single owner; "partition land" does not include divisions of land resulting from lien foreclosures, foreclosure of recorded contracts for the sale of real property and divisions of land resulting from the creation of cemetery lots.

1. Major Partition. A partition which includes the creation of a road or street. A private road or way exceeding 100-feet in length shall be defined as a street.

2. Minor Partition. A partition where each parcel created has frontage on and access immediately to an existing road or street, i.e. a partition that does not include the creation of a street.

AA. Pedestrian Facilities. A general term denoting improvements made to accommodate or encourage walking, including sidewalks, accessways, crosswalks, ramps, paths, and trails.

BB. Person. A natural person, firm, partnership, association, social or fraternal organization, corporation, trust, estate, receiver, syndicate, branch of government, or any group or combination acting as a unit.

CC. Plat. A final map, diagram, drawing, replat or other writing containing all the descriptions, locations, specifications, dedications, provisions and information concerning a subdivision.

DD. Right-of-Way. The area between the boundary lines of a street, road or other easement.

EE. Road or Street. A public or private way that is created to provide ingress or egress for persons to one or more lots, parcels, area or tracts of land, excluding a private way that is created to provide ingress or egress to such land for forestry, mining or agricultural purposes.

1. Alley. A narrow street through a block primarily for vehicular service access to the back or side properties abutting on another street.

2. Arterial. A street of considerable continuity which is primarily a traffic artery for intercommunication among large areas, as identified in the County's Transportation System Plan.

3. Bicycle Route. A right-of-way for bicycle traffic.

4. Collector. A street supplementary to the arterial street and a means of intercommunication between this system and smaller areas; used to some extent for through traffic and to some extent for access to abutting properties. Collector streets are identified in the County's Transportation System Plan

5. Cul-de-sac (dead end street). A short street having one end open to traffic and being terminated by a vehicle turn-around.

6. Half Street. A portion of the width of a street, usually along the edge of a subdivision, where the remaining portion of the street could be provided in another subdivision.
7. Marginal Access Street. A minor street parallel and adjacent to a major arterial street providing access to abutting properties, but protected from through traffic.
8. Local Street. A street intended primarily for access to abutting properties, and identified in the County's Transportation System Plan.
9. Stubbed Street. A street having only one outlet for vehicular traffic and which is intended to be extended or continued to serve future subdivisions or developments on adjacent lands.
- FF. Roadway. That portion of a street or road right-of-way developed for vehicular traffic.
- GG. Rural/Commercial Activity Center. A Rural/Commercial Activity Center consists primarily of commercial or industrial uses providing goods and services to surrounding rural area or to persons traveling through the area, but also includes some dwellings.
- HH. Subdivided Lands and Subdivision. Improved or unimproved land or lands divided, or created into interests or sold under an agreement to be subsequently divided or created into interests, for the purpose of sale or lease, whether immediate or future, into 11 or more undivided interests or four or more interests. "Subdivided land" does not include the sale of a lot in a recorded subdivision or an approved partition even though the seller of the lot may have owned other contiguous lots or property prior to the sale; said lot however must be sold as platted and recorded.
- II. Subdivider. Any person who causes land to be subdivided into a subdivision for himself or for others, or who undertakes to develop a subdivision, but does not include a public agency or officer authorized by law to make subdivisions.
- JJ. Use. The purpose for which land or a structure is designed, arranged, or intended, or for which it is occupied or maintained.
- KK. Walkway. A hard surfaced area intended and suitable for pedestrians, including sidewalks and the surfaced portions of accessways.

ARTICLE 2 SUBDIVISION REQUIREMENTS AND SUBDIVISION REVIEW COMMITTEE

SECTION 2.010. SCOPE OF REGULATION. Before a plat of any subdivision or the map of any partition may be made and recorded, the person proposing the subdivision or the partition or his authorized agent or representative shall make an application in writing to the county for approval of the proposed subdivision or the proposed partition in accordance with the requirements and procedures established by this ordinance.

SECTION 2.020. MINIMUM STANDARDS. No proposed subdivision or partition shall be approved unless said subdivision or partition complies with the Comprehensive Plan for Morrow County and an affected city, the applicable zoning, and the requirements and standards set forth in this ordinance and ORS Chapter 92.

SECTION 2.030. SUBDIVISION REVIEW COMMITTEE. There is hereby established a Subdivision Review Committee to review all tentative subdivision and partition plans and make recommendations to the Planning Commission. The Committee shall consist of the following members as applicable to the County and an affected City.

- A. County Planning Director (who will be chairman)
- B. Affected City Representative
- C. County Surveyor
- D. County Roadmaster and affected City Street Supt.
- E. Police – County and affected City
- F. Fire Protection Representative
- G. County Extension Agent
- H. Public Utility Representative(s)
- I. Irrigation District Representative or Watermaster
- J. Affected School District Representative
- K. Oregon State Department of Transportation District 12 (optional and ex-officio)
- L. Postal Department (optional and ex-officio)
- M. Other State and Federal Agencies (optional and ex-officio)

SECTION 2.040. DUTIES OF COMMITTEE. It shall be the duty of the Committee to examine all tentative subdivision and partition plans and make recommendations to the Planning Commission.

SECTION 2.050. SUBDIVISION CONFERENCE. The Planning Director shall schedule a meeting with the Subdivision Review Committee and the subdivider or his authorized agent and surveyor.

SECTION 2.060. COMMITTEE REVIEW FACTORS. In review of proposed subdivisions and partitions, the committee shall consider the following factors:

- A. Preliminary plat requirements.
- B. Conformance to Zoning and Comprehensive Plan.
- C. Possible adverse effects on the development by natural hazards.
- D. Quantity and quality of existing or proposed water supply.
- E. Adequacy of the existing or proposed sewage disposal system to support the projected population.
- F. Adequacy of public services to serve the increase in population to be created by the development; including schools, police and fire protection, health facilities, highway and arterial and collector road networks, parks, etc.
- G. Possible conflicts with adjoining property.
- H. Protective covenants, deeds or restrictions.
- I. Conformance with policies and provisions of local and State regulations.
- J. Marketable title or other interest contracted.
- K. Agreement or by-laws to provide for management, construction, maintenance or services proposed.
- L. Effects of the subdivision for continuity of public services and access to adjoining lands.

ARTICLE 3. TENTATIVE PLAN

SECTION 3.010. APPLICATION SUBMISSION. Any person proposing a subdivision, or his authorized agent or representative, shall include with an application for a subdivision a Tentative Plan as set forth in Sections 3.040 through 3.080 for the proposed subdivision, together with improvement plans and other supplementary material as may be required, and shall submit 10 copies of said plan together with all required accompanying material to the Planning Department. A Tentative Plan for a subdivision shall be accompanied by an application for a subdivision as provided by the Planning Department, together with the appropriate filing fee, required supplemental material and subdivision application form, and thereof officially received by the Planning Department.

SECTION 3.015. REVIEW FOR COMPLETENESS. The Planning Department shall determine whether the application is complete and shall inform the applicant within 30 days of the application date whether additional information is required. The applicant has 180 days within which to submit the requested information or the applicant may, in writing, refuse to submit additional information, whereupon the application shall be considered complete for review. The Planning Department shall arrange for a meeting of the Subdivision Review Committee and Planning Commission for review of the tentative plan when the application has been found to be complete.

SECTION 3.020. REQUIRED FINDINGS FOR APPROVAL. The Commission shall not approve a Tentative Plan for a proposed subdivision unless the Commission finds, in addition to other requirements and standards set forth in this ordinance, that the subdivision as proposed or modifies will satisfy the intent of this ordinance relating to subdivision development, the intent and requirements of the applicable zoning regulations, will be in compliance with the Comprehensive Plan, and the standards set forth in this Article; such findings shall include the following:

- A. The subdivision is an effective, efficient and unified treatment of the development possibilities on the project site while remaining consistent with the Comprehensive Plan relative to orderly development and land use patterns in the area, and provides for the preservation of natural features and resources such as natural vegetation, and special terrain feature.
- B. The subdivision will be compatible with the area surrounding the project site, and will not create an excessive demand on public facilities and services required to serve the development.
- C. That there will not be any adverse impact on natural resource quality and public service and facilities.

SECTION 3.040. TENTATIVE PLAN REQUIRED. The Tentative Plan for a subdivision shall be prepared and submitted in compliance with the provision of Sections 3.050 through 3.080 of this Article.

SECTION 3.050. SCALE OF TENTATIVE PLAN. The Tentative Plan of a proposed subdivision shall be drawn on a sheet of 18 by 24 inches in size or a multiple thereof at a scale of one (1) inch equals 50 feet for subdivision up to 10 acre size, one (1) inch equals 100 feet for subdivisions up to 50 acre size, one (1) inch equals 200 feet for subdivision up to 100 acre in size, and for subdivision of more than 100 acres in size a scale not greater than one (1) inch equals 400 feet; or multiples thereof as approved by the Planning Department.

SECTION 3.060. INFORMATION REQUIREMENTS. The following information shall be shown on the Tentative Subdivision Plan or provided in accompanying materials. No Tentative Plan submittal shall be considered "complete" unless all such information is provided.

A. General Information Required

1. Proposed name of the subdivision
2. Names, addresses and phone numbers of the owner of record and subdivider, authorized agents or representatives, surveyor, and any assumed business names filed or to be filed with the Corporation Commissioner by the owner or subdivider which will be used in connection with the subdivision.
3. Date of preparation, north point, scale and gross area of the proposed subdivision.
4. Appropriate identification of the drawing as a Tentative Plan for a subdivision.
5. Location and tract designation sufficient to define its location and boundaries, and a legal description of the tract boundaries in relation to existing plats and streets.

B. Information Concerning Existing Conditions.

1. Location, names and widths of existing improved and unimproved streets and roads within and adjacent to the proposed subdivision.
2. Location of any existing features such as section lines, section corners, city and special district boundary lines and survey monuments.
3. Location of existing structures, irrigation canals and ditches, pipelines, waterways, and railroads, and natural features such as rock outcroppings, marshes, wooded areas and natural hazards.
4. Location and direction of watercourses, and the location of area subject to erosion, high water tables and flood hazards.
5. Location, width and use or purpose of any existing easement or right-of-way within and adjacent to the proposed subdivision.

6. Existing sewer lines, water mains, culverts, and underground and overhead utilities within and adjacent to the proposed subdivision, together with pipe sizes, grades and locations.

7. Contour lines related to some established bench mark or other engineering acceptable datum and having minimum intervals of two feet for slopes of less than five percent, five feet for slopes of five to fifteen percent, ten feet for slopes of fifteen percent, and twenty feet for slopes greater than twenty percent.

C. Information Concerning Proposed Subdivisions.

1. Location, names, width, typical improvements, cross sections, approximate grades, curve radii and length of all proposed streets, and the relationship to all existing and projected streets.

2. Location, width and purpose of all proposed easements or right-of-ways and relationship to all existing easements or right-of-ways.

3. Location of at least one temporary bench mark within proposed subdivision boundary.

4. Location, approximate area and dimension of each lot, and proposed lot and block numbers.

5. Location, approximate area and dimensions of any lot or area proposed for public use, the use proposed and plans for improvements or development thereof.

6. Proposed use, location, approximate area and dimensions of any lot which is intended for non-residential use.

7. An outline of the area proposed for partial recording of a final plat if phased development and recording is contemplated or proposed. If the proposed subdivision pertains to only a portion of the tract owned or controlled by the subdivider, the Planning Commission may require a tentative plan for streets and utilities in the unsubdivided portion.

8. Source, method, and preliminary plans for domestic and other water supplies, sewage disposal, solid waste disposal and all utilities.

9. Description and location of any proposed community facilities.

10. Storm water and other drainage facility plans.

11. Solar protection statement.

SECTION 3.070. MASTER DEVELOPMENT PLAN. An overall “Master Development Plan” shall be submitted for all developments of more than 100 parcels or for all developments planning to utilize phase or unit development. The Master Development Plan shall include, but not be limited to, the following elements:

- A. Overall development plan, including phase or unit sequences.
- B. Schedule of improvements initiation and completion.
- C. Overall transportation and traffic pattern Plan, including a Traffic Impact Analysis (TIA) completed by a certified engineer. If the property frontage includes a state highway, the TIA must meet ODOT Traffic Impact Study requirements.
- D. Sales program timetable projection.
- E. Development plans of any common elements or facilities.
- F. Financing plan for all improvements.
- G. If the proposed subdivision is determined to have a possible impact upon adjacent lands or lands within the general vicinity, the Planning Commission may require a potential street development pattern for adjoining lands to be submitted together with the Tentative Plan as part of the Master Development Plan for the subject subdivision.

SECTION 3.080. SUPPLEMENTAL INFORMATION REQUIRED. The following information shall be submitted with the Tentative Plan for a subdivision. If such information cannot be shown practically on the Tentative Plan of a proposed subdivision, it shall be submitted on separate documents accompanying the plan at the time of filing.

- A. Proposed deed restriction or protective covenants, if such is proposed to be utilized for the proposed subdivision.
- B. Certified statement from each serving utility company proposed to serve the proposed subdivision as set forth in the Tentative Plan, and the conditions of such service shall be set forth.
- C. Proposed fire protection system for the proposed subdivision and written review thereof by the appropriate serving fire protection agency.
- D. Title or Subdivision Guarantee Report from a licensed title company stating the record owner(s) of the land proposed to be subdivided and setting forth all encumbrances relative to the subject property.
- E. Reasons and justifications for any variances requested to the provisions of this ordinance or any other applicable ordinance or regulation.

SECTION 3.090. APPROVAL OF TENTATIVE SUBDIVISION PLAN.

A. Tentative Plan Review. The Planning Commission shall, within 45 days from the first regular Commission meeting following the determination that a Tentative Subdivision Plan is complete, review the Tentative Plan and all reports and recommendations of appropriate officials and agencies. The Commission may approve, modify, or disapprove the Tentative Plan for the proposed subdivision, and shall set forth Findings for said decision. The Planning Commission shall make its decision at a public hearing with notice and procedures as specified in Article 9 of the Development Ordinance.

B. Tentative Plan Approval. Approval or disapproval of the Tentative Plan by the Commission shall be final unless the decision is appealed to the County Court. The County Court may review the Planning Commission's decision on its own motion. County Court review shall be conducted in accordance with Article 12 of this ordinance, and failure to do so within the required time limit shall be deemed to indicate acceptance of the Planning Commission's decision.

C. Tentative Plan Approval Relative to Final Plat. Approval of the Tentative Plan shall not constitute final acceptance of the plat of the proposed subdivision for recording; however, approval of such Tentative Plan shall be binding upon the County for preparation of the plat.

D. Commission Report. The decision of the Planning Commission shall be set forth in writing in a formal report and, in the case of approval, be noted on three copies of the Tentative Plan, including references to any attached documents describing conditions of approval. One copy of the appropriate material shall be sent to the subdivider, one copy sent to the affected city or the County Court, and one copy shall be retained by the Planning Commission. Such action shall be completed within ten days of Commission decision.

SECTION 3.100. SPECIFIC APPROVAL REQUIREMENTS. In addition to the requirements set forth by the provision of this ordinance and applicable local and State regulations, specific requirements for preliminary plat approval are as follows:

A. No Tentative Plan of a subdivision shall be approved which bears a name using a word which is the same as, similar to or pronounced the same as a word in the name of any other subdivision in the same county, except for the words "town", "city", "place", "court", "addition", or similar words, unless the land platted is contiguous to and platted by the same party that platted the subdivision bearing that name or unless the party that platted the subdivision bearing that name. All plats must continue the Lot and Block numbers of the plat of the same name, last filed.

B. No Tentative Plan for a proposed subdivision shall be approved unless:

1. The streets and roads are laid out so as to conform to the plats of subdivisions and maps of partitions already approved for adjoining property as to width, improvements, general direction and in all other respects, unless the Planning Commission determines it is in the public interest to modify the street or road pattern.

2. Streets and roads to be held for private use are approved by the Commission and are clearly indicated to the Tentative Plan and all reservations or restrictions relating to such private streets and roads are set forth thereon; such as ownership and maintenance responsibilities.

3. The Tentative Plan complies with the Comprehensive Plan and zoning.

C. Approval or denial shall take into consideration the Subdivision Review Committees' recommendations and the factors listed in 2.060 of this ordinance.

D. A review and formal recommendation has been provided for by the affected city if located within the Urban Growth Boundary thereof, or as otherwise set for by the applicable Urban Growth Boundary management agreement.

SECTION 3.110. RESUBMISSION OF DENIED TENTATIVE PLANS. If the Tentative Plan for a subdivision is denied, resubmittal thereof shall not be accepted by the County for a period of six months after the date of the final action denying said plan. Re-submission shall require the applicant to consider all items for which the prior denial was based, and the resubmission shall be accompanied by a new filing fee.

ARTICLE 4. FINAL PLAT

SECTION 4.010. SUBMISSION OF FINAL PLAT.

A. **Filing Time Period Requirements.** Within twelve (12) months after the date of approval of the Tentative Plan for a subdivision, the subdivider shall prepare and submit a final plat that is in conformance with the Tentative Plan as approved. The subdivider shall submit the original drawing, five prints, and any supplementary information required by this ordinance and the Planning Commission and the "check list" provided by the Planning Department. If the subdivider fails to proceed with the subdivision before the expiration of the twelve (12) month period following the approval of the Tentative Plan, the plan approval shall be declared void and the subdivider must submit a new plan together with the appropriate filing fee if he wishes to proceed with the development.

B. **Time Period Extension.** The Planning Commission may, upon submittal of a formal request for a time extension and justification therefor by the subdivider, grant a 90-day extension to the twelve (12) month time period set forth in Section 4.010 (1) of this ordinance.

SECTION 4.020. FORM OF FINAL PLAT. The final plat shall be submitted in the form prescribed by the State Statute and this ordinance.

A. All plats subdividing any tracts of land in the County, and dedications of streets or roads or public parks and squares and other writings made part of such plats offered for record shall be made in black India ink, upon material that is 18 inches by 24 inches in size, that is suitable for binding and copying purposes, and that has such characteristics of strength and permanency as may be required by the County. The plat shall be of such a scale, and the lettering of the approvals thereof, and of the dedication and affidavit of the surveyor, shall be of such a size or type as will be clearly legible, but no part shall come nearer any edge of the sheet than one inch. The plat may be placed on as many sheets as necessary, but a face sheet and an index page shall be included for plats placed upon two or more sheets. Plat material may be placed on both sides of a sheet.

SECTION 4.030. REQUIREMENTS OF SURVEY AND PLAT OF SUBDIVISION.

No subdivider shall submit a plat of a subdivision for record, until all the requirements for the survey and the plat of the subdivision have been met.

A. The survey of the plat of the subdivision shall be of such accuracy that the error of closure shall not exceed one foot in 4,000 feet.

B. The survey and plat of the subdivision shall be made by a surveyor who is a licensed land surveyor.

C. The plat of a subdivision shall be of such scale that all survey and mathematical information, and all other details may be clearly and legibly shown thereon. Each lot

shall be numbered and each block shall be lettered or numbered. The length of all boundaries of each lot shall be shown, each street shall be named.

D. The locations of descriptions of all monuments shall be clearly recorded upon all plats and the proper course and distances of all boundary lines shall be shown.

SECTION 4.040. MONUMENTATION REQUIREMENTS.

A. The initial point of all subdivision plats shall be marked with a monument conforming to the following specifications. This monument shall be a galvanized iron pipe, two inch inside diameter, not less than thirty inches long, with a brass cap no less than 2 inches in diameter, solidly and permanently secured in position either with a substantial, non-corrosive rivet or a solid-metal weld. The bottom of the pipe shall end in a welded footplate or be split and flared to a minimum holding width of six inches to anchor the monument when set in the ground. Any galvanization destroyed during threading, cutting, flaring or welding must be retreated against rust. The monument shall be set with the top at finished grade elevation and the subdivision name, year of establishment, and registration number of the registered engineer or registered number of the registered land surveyor, establishing same, clearly marked with steel dyes on the brass cap. The location of the monument shall be noted with reference to a known corner established by the United States survey.

B. The intersection of all streets and roads and all points on the exterior boundary where the boundary line changes direction shall be marked with monuments either of stone, concrete, galvanized iron pipe, or iron or steel rods.

C. All lot corners except lot corners of cemetery lots shall be marked with monuments of either galvanized iron pipe not less than one-half inch in diameter or iron steel rods not less than one-half inch in least dimension and two feet long.

D. Points shall be plainly and permanently marked upon monuments so that measurements may be taken to them within one-tenth of a foot.

E. All monuments for the exterior boundaries of a subdivision shall be marked and such monuments shall be referenced on the plat of the subdivision before the plat of the subdivision is offered for approval by the county and for recording. However, interior monuments for the subdivision need not be set prior to the approval and recording of the plat of the subdivision if the engineer or land surveyor performing the survey work certifies that the interior monuments will be set on or before a specified date as provided in Subsection (2) of Section 4.050 of this ordinance.

SECTION 4.050. MARKING INTERIOR MONUMENTS AFTER RECORDING.

A. If the interior monuments for a subdivision are to be marked on or before a specified date after the approval and recording of the plate of the subdivision, the person subdividing the land shall furnish, prior to approval and recording of the plat, to the

governing body of the county, a bond or cash deposit in an amount equal to 110 percent of the estimated cost of performing the work for the interior monumentation.

B. If the person subdividing any land within the county has complied with subsection A of this Section, the surveyor may prepare the plat of the monuments referenced thereof as submitted for recording. There shall be attached to any such plat the affidavit of the surveyor that the interior monuments for the subdivision will be marked on or before a specified date in accordance with Section 4.040 of this ordinance and applicable State Statutes and referenced on the plat for the subdivision as approved by the county.

C. After the interior monuments for a subdivision have been marked as provided in an affidavit submitted under subsection B of this Section, the surveyor performing such work shall:

1. Within five days after completion of such work, notify the person subdividing the land involved an the County; and
2. Reference such monuments on an exact copy of the subdivision plat as previously approved and recorded; and
3. Upon approval of such plat copy under ORS Chapter 92.100, file such plat copy with the county recording officer and the city recording officer with whom the plat of the subdivision was previously recorded.

D. At the time the person subdividing the land described in subsection (1) of this Section pays the surveyor for performing the interior monumentation work and notifies the county of such payment, the county, within three months after such notice, shall release the bond or return the cash deposit upon finding that such payment has been made.

SECTION 4.060. INFORMATION ON PLAT. In addition to that required for the Tentative Plan or otherwise specified by law, the following information shall be shown on the plat.

A. Survey Reference. Reference points of existing surveys identified, related to the plat by distances and bearing and referenced to a filed book or map as follows:

1. Stakes, monuments or other evidence found on the ground and used to determine the boundaries of the subdivision.
2. Adjoining corners of adjoining subdivision.
3. Other monuments found or established in making the survey of the subdivision or required to be installed by provisions of the ordinance.

B. Boundary Street. The exact location and width of the street easements intercepting the boundary of the tract.

C. Boundary Lines. Tract, block, and lot boundary lines and street right-of-way and center lines, with dimensions, bearings, or deflection angles, water lines for any creek or other body of water. Tract boundaries and street bearings shall be shown to the nearest 30 seconds with basis of bearings. Distances shall be shown to the nearest 0.01 feet. No ditto marks shall be used.

D. Streets. The width of the portion of streets being dedicated and with the width of existing right-of-way. For streets on curvature, curve data shall be based on the street center line. In addition to the center line dimensions, the radius and central angle shall be indicated together with the long chord distance and bearing.

E. Easements. Easements denoted by fine dotted lines, clearly identified and, if already of record, their recorded reference. If an easement is not definitely located of record, a statement of the easement shall be given. The width of the easement, its length and bearing, and sufficient ties to locate the easement with respect to the map, it shall be properly referenced in the owner's certificates of dedications.

F. Lot Numbers. Lot numbers beginning with the number "1" and numbered consecutively in each block. Pursuant to the applicable county or affected city addressing system, the address of each lot shall be shown on the plat.

G. Block numbers. Block numbers beginning with the omission or duplication throughout the subdivision. The numbers shall be solid, or of sufficient size and thickness to stand out and so placed as not to obliterate and disfigure. Block numbers in an addition to a subdivision of the same name shall be a continuation of the numbering in the original subdivision.

H. Public Lands. Identification of land to be dedicated for any purpose, public or private, to distinguish it from lots intended for sale.

I. Building Setback Lines. Building setback lines, if any, are to be made a part of the subdivision restrictions.

J. Certificates. The following certificates are required and shall be combined where appropriate:

1. A certificate signed and acknowledged as above, all parties having record title interest in the land consenting to the preparation and recording of the plat.
2. A certificate signed and acknowledged as above, dedicating all land intended for public use, except land which is intended for the exclusive use of lot owners in the subdivision, their licenses, visitors, tenants and servants.
3. A certificate with the seal of and signed by the surveyor responsible for the survey and final map.

4. A certificate for execution by the affected City Public Works Superintendent or other City Representative and/or County Roadmaster.

5. A certificate for execution by the chairman of the Planning Commission.

6. A certificate for the execution by the County Planning Director.

7. A certificate for execution by the County Tax Collector.

8. A certificate for execution by the County Assessor.

9. A certificate for execution by the Irrigation District where applicable.

10. A certificate for approval for execution by the County Court.

11. All plans, plats or replats of subdivisions located within the boundaries of an irrigation district, drainage district, water control district, district improvement company, or similar service district shall be submitted to the board of directors of the district or company and its approval thereof shall be endorsed thereon by the board before approval of such plan, plat, or replat of any subdivision by the governing body of the county. Except, that if a subdivider is unable to obtain action or approval of any district or company within 45 days, the subdivider shall notify the governing body in writing and thereafter the governing body shall serve notice on that district or company by certified mail advising the district or company that any objections to the plan, plat, or replat must be filed with the governing body in writing within 20 days and failure of the district or company to respond shall be considered by the governing body as approval of such plan, plat or replat and the governing body shall endorse, act and the body may thereafter approve such plan, plat or replat without the approval of such district or company endorsed thereon.

K. Other certificates required by State regulations.

SECTION 4.070. SUPPLEMENTAL INFORMATION WITH PLAT. The following data shall accompany the plat:

A. Title Report. A preliminary title report issued by a title insurance company in the name of the owner of the land, showing all parties whose consent is necessary and their evidence of a clear and marketable title.

B. Survey Data Sheets. Sheets and drawings showing the following:

1. Traverse data including the coordinates of the boundary of the subdivision and ties to section corners and donation land claim corners, and showing the error of closure, if any. A survey control work sheet may be substituted for this item.

2. The computation of distances, angles and courses shown of the plat.
3. Ties to existing monuments, proposed monuments, adjacent subdivision, street corners and state highway stationing.

C. Deed Restrictions. A copy of any deed restrictions applicable to the subdivision.

D. Homeowner's Association. A copy of any homeowner's association agreements proposed or required for the subdivision.

E. Dedications. A copy of any dedication requiring separate documents, specific reference to parks, playgrounds, etc.

F. Taxes. A list of all taxes and assessments on the tract which have become a lien on the tract.

G. County Court Certificate. A certificate by the County Court that the subdivider has complied with requirements of Section 8.010 and 8.020 on improvement guarantee.

H. Improvement. If grading, and/or street improvements, and/or sewer, and/or water facilities are required as the conditions of approval of the final plat, the following shall be required to be submitted with the final plat:

1. Cross sections of the proposed streets, showing width of roadways, types of surfacing, curb locations, width and location of sidewalks.
2. Plans and profiles of proposed water distribution system showing pipe sizes and location of valves and fire hydrants.
3. Plans and profiles of proposed water distribution system showing pipe sizes and location of valves and fire hydrants.
4. Specification for the construction of all proposed utilities.
5. Grading plans and specifications as required for areas other than streets and ways.
6. Planting plans and specifications for street trees and other plantings in public area.

I. Access Permits. Where access is to be a county road or state highway the necessary access permits shall be obtained prior to final plat review.

SECTION 4.080. TECHNICAL PLAT REVIEW.

A. Ordinance Check. Upon receipt by the Planning Department, the plat and other data shall be reviewed by the County Surveyor, affected City Public Works Superintendent, County Roadmaster, and the County Planning Director who shall examine them to

determine that the subdivision as shown is substantially the same as it appeared on the approved preliminary plan, and there has been compliance with provisions of the law of this ordinance.

B. Field Check. The County Roadmaster, County Surveyor, County Planning Director and affected City Public Works Superintendent may make such checks in the field as are desirable to verify that the map is sufficiently correct on the ground and the Roadmaster or Superintendent or representative thereof may enter the property for this purpose.

C. Corrections. If the County Roadmaster, County Surveyor, affected City Public Works Superintendent and County Planning Director determine that full conformity has not been made, the subdivider shall be advised thereby of the changes or additions that must be made and the subdivider shall be afforded a reasonable opportunity to make the changes or additions.

SECTION 4.090. APPROVAL OF THE FINAL PLAT.

A. If the Planning Director does not approve the plat, it shall advise the subdivider of the changes or additions that must be made and shall afford him an opportunity to make corrections. If the Planning Director determines that the plat conforms to all requirements it shall give its approval, provided supplemental documents and provision for required improvements are satisfactory. Approval shall be indicated by the signature of the Planning Director. The Planning Director may refer any final plat to the Planning Commission for review, if the final plat does not substantially conform to the approved tentative plan or if any other conditions warrant review. Approval of the plat does not constitute or affect an acceptance by the public of the dedication of any street or other easement shown on the plat; nor does such approval constitute final approval, said authority for final approval being vested with the County Court.

B. No plat of a proposed subdivision shall be approved unless:

1. Streets and roads for public use are to be dedicated without any reservation nor restriction other than reversionary right upon vacation or restriction other than reversionary right upon vacation of any such street or road and easement for public utilities.
2. Streets and roads held for private use and indicated on the tentative plan of such subdivision have been approved by the county.
3. The plat or map contains provision for the dedication to the public of all common improvements, including but not limited to streets, roads, parks, sewage disposal and water supply systems; the dedication of which was made a condition of the approval of the tentative plan for the subdivision or the partition.

4. Explanation of all common improvements required as conditions of approval of the tentative plan of the subdivision will be recorded and referenced on the final plat or map.

C. No plat of a subdivision shall be approved by the county unless the county has received and accepted:

1. A certification by a municipally-owned domestic water supply system or by the owner of a privately owned domestic water supply system, subject to regulation by the Public Utility Commissioner of Oregon, that water will be available to the lot line of each and every lot depicted in the proposed plat; or

2. A bond, contract, or other assurance by the subdivider to the county that a domestic water supply system will be installed by or on behalf of the subdivider to the lot line of each and every lot depicted in the proposed plat; and the amount of any such bond, contract or other assurance by the subdivider shall be determined by a registered professional engineer, subject to any change in such amount as determined necessary by the county; or

3. In lieu of paragraphs 1 and 2 of this subsection, a statement that no domestic water supply facility will be provided to the purchaser of any lot depicted in the proposed plat, even though a domestic water supply source may exist. A copy of any such statement, signed by the subdivider and endorsed by the county, shall be filed by the subdivider with the final plat.

D. No plat of a subdivision shall be approved by the county unless the county has received and accepted:

1. A certification by a municipally-owned sewage disposal system or by the owner of a privately owned sewage disposal system that is subject to regulation by the Public Utility Commissioner of Oregon that a sewage disposal system will be available to the lot line of each and every lot depicted in the proposed plat; or

2. A bond, contract or other assurance by the subdivider to the county that a sewage disposal system will be installed by or on behalf of the subdivider to the lot line of each and every lot depicted on the proposed plat; and the amount of such bond, contract or other assurance shall be determined by a registered professional engineer, subject to any change in such amount as the county considers necessary; or

3. In lieu of paragraphs (1) and (2) of this subsection, a statement that no sewage disposal facility will be provided to the purchaser of any lot depicted in the proposed plat, where the Department of Environmental Quality has approved the proposed method on an individual lot-by-lot basis or an alternative method of sewage disposal. A copy of any such statement, signed by the subdivider and endorsed by the county shall be filed by the subdivider with the final plat. The subdivider shall deliver a copy of the statement to each prospective purchaser of a lot in the subdivision at or

prior to the signing by the purchaser of the first written agreement for the sale of the lot. The subdivider shall take a signed receipt from the purchaser upon delivery of such a statement.

G. No plat of a subdivision shall be approved by the county unless the county has received and accepted:

1. A final plat which is in compliance with the tentative plan approval and all conditions thereof.
2. A certification that all required and proposed improvements and repairs to existing public facilities damaged in the development have been completed or a proposed bond, contract or other assurance by the county and/or county District Attorney specifying the period within which required improvements and repairs shall be completed.
3. The plate complies with the county and affected City Comprehensive Plan and with any applicable zoning regulations and any ordinance or regulation applicable to the proposed subdivision or improvement thereof that are then in effect in the county.

SECTION 4.100. FINAL PLAT APPROVAL. Following approval, the final plat shall, without delay, be submitted to the County Court for final approval of the plat, supplemental documents, improvement and repair completions or assurances thereof. Such submittal shall occur within 45 days of approval.

SECTION 4.110. RECORDING OF PLAT. A subdivider shall, without delay, submit the plat for signatures of other public officials required by law. Approval of the plat shall be null and void if the plat is not recorded within 45 days after the date of approval of the governing body has been obtained. After obtaining all required approvals and signatures, the subdivider shall file the plat and an exact copy thereof in the County Clerk's office and the affected City Recorder's office.

A. No plat shall be recorded unless all ad valorem taxes and all special assessments, fees, or other charges required by law to be placed upon the tax roll, have been paid which have become a lien upon the subdivision or which will become a lien during the calendar year.

B. At the time of filing such plat, the person offering it for filing shall also file with the County Recording officer, an exact copy thereof, made with black India ink or photocopy upon good quality of linen tracing cloth or any other suitable drafting material having the same or better transparency. The engineer or surveyor who made the plat shall make an affidavit to indicate that the photocopy or tracing is an exact copy of the plat. The copy filed with the County Recording officer shall be certified by him to be an exact copy and then shall be filed in the archives of the County, and be preserved by filing without folding. The subdivider shall provide, without cost, prints

from such copy to the County Assessor, affected City Recorder and County Planning Department.

ARTICLE 5. LAND PARTITIONING

SECTION 5.010. APPLICABILITY OF REGULATIONS. All land partitioning within the County must be approved by the County Planning Commission, County Planning Director, and/or a designated official thereof. Said approvals will be granted in accordance with the provisions of this ordinance and more particularly this Article.

SECTION 5.020. APPLICATION PROCEDURES AND REQUIREMENTS. Any persons proposing a land partitioning, or his authorized agent or representative, will prepare and submit a copy of the Tentative Plan for the proposed partitioning together with an application for partitioning and the appropriate filing fee to the Planning Department at least 35 days prior to the Commission meeting at which consideration is desired, except as set forth in this Article. The Tentative Plan for partitioning, when submitted, will include the following:

1. A vicinity map locating the proposed partitioning in relation to adjacent subdivisions, roadways and adjoining land use and ownership patterns.
2. A plan of the proposed partitioning showing tract boundaries and dimensions, the area of each tract or parcel and the names, right-of-way widths, and improvement standards of existing roads.
3. Names and addresses of the land owner, the partitioner, a mortgagee if applicable, and the land surveyor employed or to be employed to make necessary surveys and prepare the Final Plat.
4. A statement regarding contemplated water supply, sewage disposal, solid waste disposal, fire protection, access, etc.
5. North point, scale and date of map, and property by tax lot, section, township and range.
6. Statement regarding the use for which the parcel(s) are to be created.

The Preliminary Plat may reveal the boundaries of the property to be other than thought to be correct by the landowner. An applicant is encouraged to have a Boundary Survey performed prior to submittal of the application and tentative plan.

SECTION 5.030. REQUIREMENTS FOR APPROVAL. No application for partitioning will be approved unless the following requirements are met:

1. Proposal is in compliance with ORS 92 and the County and affected City Comprehensive Plans and applicable Zoning.
2. Each parcel is suited for the use intended or offered; including, but not limited to, size of the parcels, topography, sewage disposal approval and guaranteed access.

Proof of access must show that each parcel has an easement sufficient for continued ingress and egress to a public, county or state highway or has a deeded access way.

3. All required public service and facilities are available and adequate.
4. Proposal will not have any identifiable adverse impacts on adjoining or area land uses, public services and facilities, and natural resource carrying capacities.
5. An approved water rights diversion plan as applicable.
6. Flag lots will not be permitted when the results would be to increase the number of properties requiring direct and individual access from a State Highway or other arterial. Flag lots may be permitted to achieve planning objectives under the following conditions:
 - a. When flag lot driveways are separated by at least twice the minimum frontage distance.
 - b. The driveway must meet driveway standards described in Article 8, Section 8.020.V.
 - c. The lot meets the minimum lot area of the zoning district, without including the driveway.
 - d. Only one flag lot will be permitted per private right-of-way or access easement.
7. The depth of any lot will not be restricted as long as a buildable parcel is proposed.
8. No plat of a subdivision or partition located within the boundaries of an irrigation district, drainage district, water control district, water improvement district or district improvement company will be approved unless the County has received and accepted a certification from the district or company that the subdivision or partition is either entirely excluded from the district or company or is included within the district or company for purposes of receiving services and subjecting the subdivision or partition to the fees and other charges of the district or company.
9. The Commission will deny an application for partitioning when it can be shown by the Commission that the partitioning is part of a plan or scheme to create more than three (3) parcels without going through subdivision, or is part of a development pattern creating more than three (3) parcels without subdividing.
10. In addition to the requirements set forth above, the following factors may be considered for approval or disapproval of an application for land partitioning if a geographical or other factor identified by other, appropriate professionals or Plans such as the requirements of the Comprehensive Plan, FEMA requirements, Byways rules, etc., requires it:
 - a. Placement and availability of utilities.
 - b. Safety from fire, flood and other natural hazards.

- c.— The same improvements may be required for a partitioning as required of a subdivision, if required it will be installed by the applicant.
- d. Possible effects on natural, scenic and historical resources.
- e. Need for onsite or offsite improvements.
- f. Need for additional setback, screening, landscaping and other requirements relative to the protection of adjoining and area land uses. If the proposed partition is located within an Urban Growth Boundary, the affected city must be given notice according to the respective Joint Management Agreement.
- g. In the approval of a land partition, the need for street and other improvements will be considered and may be required as a Condition of Approval at a different standard than for a subdivision.

SECTION 5.060. COMMISSION ACTION.

A public hearing is required for Planning Commission decisions concerning land partitioning. The Planning Commission will hold at least one public hearing on each application request. Notice of the hearing for the proposed land partition will be sent to the adjoining property owners within 250 feet from the property at least 20 days before the hearing. Public Notice of the hearing will be published in a newspaper of general circulation not later than 10 days prior to the date of the hearing by the Planning Director with time, place and purpose of the hearing and the place where copies of the Staff Report are to be available before the hearing. The procedures for the hearing, appeals, and administrative concerns will be as specified in Article 9 of the Zoning Ordinance.

The Planning Commission will take final action on all land partitioning decisions within 120 days after the application is deemed complete unless an extension has been requested by the applicant. If no such action is taken within a 120 day period, the subject application will be approved as submitted and it will be the duty of the Planning Director to certify the approval.

SECTION 5.065 PRELIMINARY PLAT REQUIREMENTS.

Following Commission approval of the Tentative Plan for a proposed partitioning, the person proposing partitioning will have prepared three copies of the preliminary plat map for the subject partitioning to be submitted to the Assessor's Office, County Surveyor and to the Planning Department. The Preliminary Plat will be prepared by a licensed Oregon land surveyor and comply with all requirements of ORS Chapter 92 or as defined in this Article. The Preliminary Plat will be drawn to meet the same requirements of the Final Plat Map described in Section 5.070.

SECTION 5.070. FINAL PLAT MAP FOR PARTITIONING. The Final Partition Plat will be completed within two years from the date of the Commission action or the approval of the partitioning will expire and said approval will be declared null and void. A one-year extension may be granted when a written request is made prior to the expiration of the permit with stated reasons for the request for which the applicant was not responsible. Five (5) copies of the Final Plat map will be submitted to the County for approval. The said five copies will be circulated for approval and signature in the following order: Water Rights approval (if required), County Surveyor, Planning Director, County Assessor, and the

original recorded in the office of the County Clerk. Copies of said final map will be provided by the partitioner without cost to the County Assessor, County Surveyor and County Planning Director. Two copies of the Final Plat map will be of approved reproducible material as required by ORS 92.080. Once recorded the copies will be distributed as follows: (1) approved reproducible to the County Clerk; (1) approved reproducible to the County Surveyor; one each paper copy to the Planning Director and the Assessor; and the final paper copy to be returned to the surveyor.

1. Final Plat Map Requirements:

- a. Will be drawn to an appropriate scale on a sheet 18" by 24" and as required by ORS 92.080 or the County Surveyor. The Plat will be of a scale and lettering size as required by the County Surveyor so that all details may be clearly and legibly shown.
- b. Name of owner, developer, and land surveyor will be shown on the map.
- c. Date, scale, north point, legal description of boundaries, and a tie by actual survey to a section or donation land claim corner.
- d. Parcel boundary lines, with dimensions and bearings; bearings will be to the nearest second and distances to the nearest 0.01 feet. The area of each parcel will be shown.
- e. An affidavit by the land surveyor involved in the partitioning certifying that all parcels have been surveyed and monumented as required for lots within a partition.
- f. A certification of any public dedication.
- g. A certification of approval for execution by the County Planning Director.
- h. When a partition would create parcels greater than eighty acres or when not required by the Morrow County Subdivision Ordinance, the partition need not be surveyed or monumented, but must be platted using the best available information. The approximate acreage of each unsurveyed parcel will be shown and any unsurveyed parcel will have the words "UNSURVEYED" placed in bold letters adjacent to the parcel number. Unsurveyed parcels need not comply with ORS 92.050(5), (7), and (8).

2. Approval Requirements. No final map for land partitioning will be approved by the Planning Director unless all of the following requirements are met:

- a. The final map is in strict conformance with the Tentative Plan approved by the Commission and conditions thereof have been met or guaranteed.
- b. The final map is in strict conformance with the requirements set forth in Subsection A of this Section or as otherwise approved by the Commission or as otherwise set forth in the Article.
- c. Access is guaranteed to each parcel.
- d. Each parcel is approved for subsurface sewage disposal if applicable to the intended or offered use.
- e. All required public utilities are available.
- f. A guarantee of all proposed or required improvements has been submitted and approved or such improvements completed and approved as set forth by the Commission.

3. No partition will be recorded unless all taxes, interest and penalties imposed on land disqualified for any special assessment and all special assessments, fees, or other charges required by law have been paid.

SECTION 5.075. REPLATTING. A reconfiguration of a recorded subdivision or partition plat or a change in the number of lots in the subdivision or partition may be approved by the Planning Commission or as defined in ORS 92.180. Replats will act to vacate the platted lots or parcels and easements within the replat area with the following conditions:

1. A replat will apply only to a recorded plat.
2. Notice shall be provided when the replat is replatting all of an undeveloped subdivision as defined in ORS 92.225.
3. Notice shall be provided to the owners of property adjacent to the exterior boundaries of the tentative subdivision replat.
4. When a utility easement is proposed to be realigned, reduced in width or omitted by a replat, all affected utility companies or public agencies shall be notified, consistent with a governing body's notice to owners of property contiguous to the proposed plat. Any utility company that desires to maintain an easement subject to vacation under this section must notify the Planning Department in writing within 14 days of the mailing or other service of the notice.
5. A replat will not serve to vacate any public street or road.
6. A replat will comply with all subdivision provisions of this Article and all applicable Ordinances.

SECTION 5.080. APPEAL PROCEDURE. An appeal of a decision or requirement of the Planning Commission or the Planning Department relative to a land partitioning will be made in accordance with the provisions of Article 12 of this Ordinance.

SECTION 5.090. PROPERTY LINE ADJUSTMENT REGULATIONS.

Definition: A property line adjustment is an adjustment of a property line by the relocation of a common boundary where an additional unit of land is not created and where the existing unit of land reduced in size by the adjustment complies with any applicable zoning ordinance. ORS 92.010(7)(b).

APPLICABILITY AND PURPOSE:

All property line adjustments within the County must be approved by the Planning Director. Said approvals will be granted in accordance with the provisions of State Statute, this Ordinance and more particularly this Article. The purpose of this Section is to provide the basis to review property line adjustments.

APPLICATION PROCEDURE AND REQUIREMENTS:

Applications for a property line adjustment will be required to provide a site plan which shows all of the property line dimensions and the area and dimensions to be added or reduced from each property. A survey will be filed with the County Surveyor. New or corrected Deeds which describe the adjusted configuration will be recorded in the Morrow County Deed Records. No property line adjustment may cause a new lot or parcel to be created. A property line adjustment deed will contain the names of the parties, the description of the adjusted line, references to original recorded documents and signatures of all parties with proper acknowledgement.

The application will be evaluated by an Interdepartmental Review process whereby the Planning Director, Assessor, and County Surveyor will approve the application prior to final approval.

REQUIREMENTS FOR APPROVAL:

1. The property line adjustment will not create any additional units of land.
2. A property line adjustment will not create a unit of land which has been reduced to less than the minimum lot size for the applicable zone.
3. The property line adjustment will not eliminate access for any of the properties unless an alternative access has been provided and approved.
4. The property line adjustment will not cause an undeveloped property to become ineligible for a septic system or to maintain water supply.
5. The revised line must not result in a violation of structural setback requirements of the applicable zone.
6. Notification will be given to an irrigation district, drainage district, water control district, water improvement district or district improvement company that lies within the boundaries of a property line adjustment. The applicant must comply with any requirements of the affected district, if any.
7. A property line adjustment will not cross partition or subdivision lines. A property line adjustment will not be done in conjunction with partitioning or subdividing. Any adjustments need to be completed, including deed recording, prior to partitioning or subdividing. When a proposed property line adjustment would occur in a platted and recorded subdivision or partition, see Section 5.075 for Replatting requirements.

SECTION 5.094. ADDITIONAL APPLICATION TYPES:

Split Zoning: Property line adjustments may be permitted across a zoning designation boundary to create a split-zoned property if:

1. The adjusted properties lie entirely outside of an urban growth boundary and outside of an incorporated city; and;
2. Each parcel is consistent with the minimum parcel size of the applicable zoning area.

Combinations: Approval for a combination of properties is made by the County Assessor. No survey is required but the combination requires a letter of approval by the Planning Director, or designee, stating the possible land use implications of the combination.

SECTION 5.100. PARTITIONING FOR FINANCIAL PURPOSES.

1. Upon approval by the Planning Director, a special permit authorizing the creation of a security interest or leasehold in a parcel of land will be granted.
2. Permits issued under the authority of this section will be subject to the following limitations and restrictions:
 - a. A parcel possessed by a person under the terms of a lease or a security interest, and the remaining parcels, must remain in the legal use that the parcels were at the time the interest become possessory; except the parcel(s) may be put into agricultural use; but in no case may an additional structure or security interest be added to any parcel by the authority of the permit authorized in Subsection (1) of this Section. To establish uses other than agriculture or to erect structures not a part of the security interest, including farm accessory structures, the owner of the parcel must secure a land partitioning approval as required by this Ordinance and this Article.
 - b. The permit authorized in Subsection A of this Section will be valid for the time of the lease or the life of the security interest. When there is a default and foreclosure, the permit will only be valid until a land partitioning permit is granted or the parcels are once again rejoined as a contiguous unit of land.
 - c. At the end of the life of the security interest, if there is no default or foreclosure, or in the case of leaseholds at the end of the lease, the parcels will be rejoined into a contiguous unit of land and combined into a single tax lot. The owner of the property will be in violation of this ordinance if he has not within 30 days of the permit becoming void, made written application to the County Assessor for the combination of the parcels into a single tax lot.
 - d. The application will be evaluated in an Interdepartmental Review process whereby the Planning Director, Assessor, and County Surveyor will review the application prior to final approval.
3. No permit may be issued under this section until the applicant, the owners of the subject property, and the holder of the security or lease interest sign a statement indicating that all parties understand the limits being placed upon the permit. This statement will be recorded against the deed to the property.
4. The permit issued under this section will be immediately void if the owner of the property attempts any transfer of the subject parcels, except as provided by the terms of the permit.

5. The partitioning permit authorized by this section will only be granted if the applicant certifies, and the Planning Director finds that:
 - a. The intended partitioning is temporary and not created for the purpose of evasion of the requirements of this ordinance, other ordinances or regulations or State Statute and administrative rules adopted pursuant thereto.
 - b. The partitioning will not result in the need for additional roads or other access.
 - c. A partition map approved by the Planning Director is provided. A survey may be required.
 - d. The partition will not result in the need for additional public improvements or services.

SECTION 5.120. LAND PARTITIONING IN THE EXCLUSIVE FARM USE ZONE

Within the Exclusive Farm Use Zone, partitions must provide for the continuation of the existing commercial agricultural enterprises within the area as well as meet the minimum lot requirement. The exceptions to these requirements are:

1. The application and approval for non-farm dwellings as provided in the Morrow County Zoning Ordinance.
2. Creation of a parcel with an existing dwelling to be used for historic property that meets the requirements of ORS 215.213(1)(q).
3. To allow a provider of public parks or open space or a not-for-profit land conservation organization to purchase at least one of the resulting parcels provided:
 - a. A parcel created by the land division that contains a dwelling is large enough to support continued residential use of the parcel.
 - b. A parcel created pursuant to this subsection that does not contain a dwelling:
 - i. Is not eligible for siting a dwelling, except as may be authorized under ORS 195.120;
 - ii. May not be considered in approving or denying an application for siting any other dwelling.
 - c. May not be smaller than 25 acres unless the purpose of the land division is:
 - i. To facilitate the creation of a wildlife or pedestrian corridor as part of the implementation of a wildlife habitat protection plan; or
 - ii. To allow a transaction in which at least one party is a public park or open space provider, or a not-for-profit conservation organization, that has cumulative ownership of at least 2,000 acres of open space or park property.
4. The County may approve a division of land smaller than the minimum lot or parcel size provided:
 - a. The division is for the purpose of establishing a church, including cemeteries in conjunction with the church;

- b. The church has been approved by the Planning Commission as a Conditional Use.
- c. The newly created lot or parcel is not larger than five acres; and
- d. The remaining lot or parcel, not including the church, meets the minimum lot or parcel size either by itself or after it is consolidated with another lot or parcel.

SECTION 5.140 JUDICIAL AND OTHER ILLEGAL PARTITIONS:

Land partitions authorized by Circuit Court settlements which are not part of a foreclosure, are not exempt from this Ordinance nor from ORS 92 requirements. When a Court decision has been granted authorizing a land partition, it is the landowners' responsibility to follow the procedures outlined in this Ordinance. Any action which has the effect of dividing property into new lots or parcels without the property owners obtaining the required County approval will result in those affected properties becoming undevelopable.

SECTION 5.150. PARCEL SIZE EXCEPTIONS.

Whereas land sections in the County are commonly affected by survey adjustment, requirements relative to parcel sizes will be considered as standard metes and bounds land section divisions; i.e. 160, 80, 40, 20, etc.; parcel sizes may, therefore, be reasonably smaller or larger than set forth by regulation if an acreage change is due to a survey adjustment. When a parcel to be created would be, because of a survey adjustment, 10 percent or less deviation from a minimum parcel or lot size, the deviation will be considered an exception and meet the minimum lot size requirement. In this instance, an Area or Minor Variance would not be necessary as described in Article 7.

ARTICLE 6. PLANNED UNIT DEVELOPMENT

SECTION 6.010. AUTHORIZATION. When a Planned Unit Development has been authorized pursuant to applicable zoning regulations, such a development may be approved by the county in accordance with the provisions of this article and this ordinance.

SECTION 6.020. APPLICABILITY OF REGULATIONS. The requirements for a planned unit development set forth in this article are in addition to the requirements set forth for a standard subdivision in this ordinance.

SECTION 6.030. PURPOSE FOR PLANNED UNIT DEVELOPMENT

REGULATIONS. The planned unit development authorization serves to encourage developing as one project tracts of land that are sufficiently large to allow a site design for a group of structures. Deviation from specific site development standards is allowable as long as the general purposes for the standards are achieved and the general provisions of this ordinance and applicable zoning regulations are observed. The planned unit development approach is appropriate if it maintains compatibility with the surrounding area and creates and attractive, healthful, efficient and stable environment. It should either promote a harmonious variety or grouping of uses, or utilize the economy of shared services and facilities. It is further the purpose of authorizing planned unit development to take into account the following:

- A. Advances in technology and design.
- B. Recognition and resolution of problems created by increasing population density.
- C. A comprehensive development equal to or better than that resulting from traditional lot-by-lot land use development, in which the design of the overall unit permits increased freedom in the placements and uses of buildings and the location of open spaces, circulation facilities, off-street parking areas and other facilities.
- D. The potential site characterized by special or limiting features of geography, topography, size or shape, natural or historic resources.
- E. The height and bulk characteristics of buildings can vary as long as the ratio of site area to dwelling units and openness of the site will be in harmony with the area in which the proposed development is located.
- F. Provision of housing and related land uses at maximum economic efficiency for the community, buyer and seller.
- G. Provision of a living environment with aesthetic qualities, common open space and recreation areas, and energy efficient access to needed services and facilities.

SECTION 6.040. REQUIRED FINDINGS FOR APPROVAL. The county shall approve a planned unit development only if it finds that the planned unit development will

satisfy the intent of this ordinance relating to standard subdivision development, the intent of applicable zoning regulations and the standards of this article, including the following:

A. The planned unit development is an effective and unified treatment of the development possibilities on the project site while remaining consistent with the Comprehensive Plan and making appropriate provisions for the reservation of natural features such as natural vegetation and special terrain features.

B. The planned unit development will be compatible with the area surrounding the project site and with no greater demand on public facilities and services than other authorized uses for the land.

SECTION 6.050. PLANNED UNIT DEVELOPMENT SITE SIZE. No PUDs or subdivisions for nonfarm or nonforest purposes shall be allowed on land zoned EFU and FU unless an exception is taken to the applicable resource goal under the Statewide Planning Goals. Any such development that creates new urban development or rural land an exception to Statewide Planning Goals 11 and 14 shall be required. Consistent with OAR 660, Division 14.

SECTION 6.060. DIMENSIONAL AND BULK STANDARDS.

A. The minimum lot area, width, frontage and yard requirements otherwise applying to individual buildings in the zone in which a planned unit development is proposed do not apply within a planned unit development.

B. If the spacing between main buildings is not equivalent to the spacing which would be required between buildings similarly developed under this ordinance and applicable zoning on separate parcels, other design features shall provide light ventilation and other characteristics equivalent to that obtained from the spacing standards.

C. Buildings, off-street parking and loading facilities, open space, landscaping and screening shall provide protection outside the boundary lines of the development comparable to that otherwise required of development in the applicable zone.

D. The maximum building height shall, in no event, exceed those building heights prescribed in the zone in which the planned unit development is proposed except that greater height may be approved if surrounding open space within the planned unit development, building setbacks and other design features are used to avoid any adverse impact due to the greater height on other uses within and outside the development and on any solar energy collection systems.

E. The building coverage for any planned unit development shall not exceed 40 percent of the land area being developed exclusive of public and private streets.

F. Common open space and other such amenities, exclusive of streets, shall constitute at least 30% of the total land area of the development.

SECTION 6.070. PROJECT DENSITY. The project density standards set forth hereinafter are in reference to the number of dwelling units or other potential population measures per acre after public or private street right-of-way has been excluded.

A. The planned unit development may result in a density in excess of the density otherwise permitted within the zone in which the planned unit development is to be constructed hereinafter as set forth.

1. For an approved scheme of open space, a maximum increase in density of five percent if the space is to be continuously maintained undeveloped and a maximum increase of ten percent if the space is to be continuously maintained and developed.
2. For distinctiveness and excellence in siting, design and landscaping that will provide unusual enhancement to the general area, a maximum increase in density of ten percent.

B. If the Planning Commission finds that any of the following conditions would be created by an increase in density permitted by this section, it may either prohibit any increase in density or limit the increase in density by the amount deemed necessary to avoid the creation of any of these conditions:

1. Inconvenient or unsafe access to the planned unit development or adjoining developments.
2. Traffic congestion in the streets which adjoin the planned unit development to the overall street system in the area of the development.
3. An excessive burden on sewage, water supply, parks, recreational areas, schools or other public facilities which serve or are proposed to serve the planned unit development.

SECTION 6.080. COMMON OPEN SPACE.

A. No open area may be accepted as common open space within a planned unit development unless it meets the following requirements:

1. The location, shape, size and character of the common open space are suitable for the planned development.
2. The common open space is for amenity or recreational purposes and the uses authorized are appropriate to the scale and character of the planned unit development, considering its size, density, expected population, topography and the number and type of dwellings provided.

3. Common open space will be suitably improved for its intended use, except that common open space containing natural features worthy of preservation may be left unimproved. The buildings, structures and improvements to be permitted in the common open space are appropriate to the uses which are authorized for the common open space.

4. The development schedule which is part of the development plan coordinates the improvement of the common open space and the construction of buildings and other structures in the common open space with the construction of residential dwellings in the planned unit development.

5. If buildings, structures or other improvements are to be made in the common open space, the developer provides a bond or other adequate and approved assurance that the buildings, structures and improvements will be completed within a specified period of time. The county shall release the bond and other assurances when the buildings, structures and other improvements have been completed according to the development plan.

B. Land shown of the final development plan as common open space shall be conveyed under on eof the following options:

1. To a public agency which agrees to accept such conveyance and to maintain the common open space and any buildings, structures or other improvements which have been placed on it. Unless such common open space and improvements thereof are of such scale to provide a public benefit outside the subject development and such open space and improvements are publicly dedicated to the appropriate public agency, said agency shall not accept the conveyance set forth by this provision without establishing by agreement with the developer an appropriate service and maintenance fee on an annual basis. Such requirement is deemed necessary to preclude general tax monies being expended for the benefit of a single development.

2. To an association of owners or tenants, created as a non profit corporation under the laws of the state, which shall adopt and impose articles of incorporation and bylaws and adopt and impose a declaration of covenants and restrictions on the common open space that is acceptable to and approved by the city a providing for the continuing care of the space. Such an association shall be formed and continued for the purpose of maintaining the common open space and all improvements. Such provisions shall be set forth as a part of each sale, lease or rental contract or deed involving any lot, parcel, facility, component or interest in the subject development.

C. No common open space may be put to a use not specified in the final development plan unless the final plan is first amended to permit the use. However, no change of use may be authorized as a waiver of any of the covenants limiting the use of common open space area, and all rights to enforce these covenants against any use are expressly reserved.

D. If the common open space is not conveyed to a public agency, the covenants governing the use, improvements and maintenance of the common open space shall authorize the county to enforce their provisions.

E. Bicycle and Pedestrian Circulation. Bicycle and pedestrian circulation plans shall be included in Planned Unit Development Applications. If appropriate, the Planning Commission may require the installation of bicycle and/or pedestrian facilities, as provided in Section 9.030 of the Morrow County Subdivision Code.

SECTION 6.090. ACCESSORY USES IN A PLANNED UNIT DEVELOPMENT. In addition to the accessory uses of the primary uses authorized, accessory uses approved as a part of a planned unit development may include the following:

A. Golf Course.

B. Private park, lake or waterway.

C. Recreation area, building, clubhouse or social hall.

D. Other accessory structures which the Planning Commission finds are designed to serve primarily the residents of the planned unit development, and are compatible to the design and other uses of the planned unit development.

E. Any commercial use permitted as a component of a planned unit development shall be limited to those types of commercial uses specifically designed to serve the development zone and shall be subject to the following conditions:

1. Each such use shall be wholly enclosed within a building; no outside storage shall be permitted.
2. The total of such uses shall not exceed more than three percent of the total land area of the development, and no commercial use including buildings and parking shall exceed more than 70 percent of the land area designed therefor.
3. No such use or assemblage of such use shall generate more than 100 auto trips daily per acre, or one auto trip daily per dwelling unit in the development, whichever is greater.

SECTION 6.100. APPLICATION SUBMISSION. An applicant shall include with an application for a planned unit development either an Outline Plan or a Tentative Development Plan as described in Section 6.120. Except as otherwise set forth in this article the procedure for review and approval of a planned unit development is the same as set forth for a standard subdivision in this ordinance. An application for a planned unit development shall be accompanied by the appropriate filing fee.

SECTION 6.110. OUTLINE DEVELOPMENT PLAN. If an Outline Development Plan is prepared and submitted with the application for a planned unit development, it shall include both maps and written statements as set forth in this section. The information shall deal with enough of the area surrounding the proposed planned unit development to demonstrate the relationship of the planned unit development to adjoining uses, both existing and allowable under applicable zoning.

A. The maps which are part of the outline plan may be in general schematic form, but to scale, and shall contain the following information:

1. The existing topographic character of the land.
2. Existing and proposed land uses and the approximate location of buildings and other structures.
3. The character and approximate density of the proposed buildings.
4. The approximate location of the collector streets.
5. Public uses, including schools, parks, playgrounds and other public open spaces or facilities.
6. Common open spaces and a description of the proposed use of these spaces.
7. Landscaping plans.
8. Irrigation plans and design.

B. Written, signed statements which are part of the outline development plan shall contain the following information.

1. An explanation of the character of the planned unit development and the manner in which it has been planned to take advantage of the planned unit development regulations.
2. A statement of the present ownership of all the land included within the planned unit development.
3. A general indication of the expected schedule of development and improvements.

C. Planning Commission approval of the outline development plan shall constitute only a provisional approval of the planned unit development contingent upon the approval of the preliminary development plan.

SECTION 6.120. TENTATIVE DEVELOPMENT PLAN. A tentative development plan shall be prepared and submitted by the applicant for a planned unit development and shall include the following information:

A. A map to scale showing street systems, lot or partition lines and other divisions of land for management, use or allocation purposes.

B. Areas proposed to be conveyed, dedicated or reserved for public streets, parks, parkways, playgrounds, school sites, public buildings and similar public and semi-public uses and facilities.

C. A plot plan for each building site and common open space area, showing the location of buildings, structures and other improvements and indicating the open spaces around buildings and structures.

D. Elevation and perspective drawings of proposed structures, including floor plans of proposed structures.

E. A development schedule indicating:

1. The approximate date when construction of the project can be expected to begin.
2. The stages in which the project will be built and the approximate date when construction of each stage can be expected to begin.
3. The anticipated rate of development.
4. The approximate dates when each stage in the development will be completed.
5. The area, location and degree of development of common open space that will be provided at each stage.

F. Agreements, provisions or covenants which govern the use, maintenance and continued protection of the planned unit development and any of its common open space areas.

G. The following plans and diagrams, insofar as the reviewing body finds that the planned unit development creates special problems of traffic, parking, landscaping or economic feasibility:

1. An off-street parking and loading plan.
2. A circulation diagram indicating proposed movement of vehicles, goods and pedestrians without the planned unit development and to and from thoroughfares. Any special engineering features and traffic regulation devices needed to facilitate or insure the safety of this circulation pattern shall be shown.

3. A landscaping and tree plan.
4. An economic feasibility report or market analysis.

SECTION 6.130. SEPARATE APPROVAL OF THE TENTATIVE DEVELOPMENT PLAN.

A. If an outline development plan has been submitted and the planned unit development has been provisionally approved based on the information in the outline development plan, the applicant shall file the tentative development plan with the Planning Commission within six months following the provisional approval of the outline development plan. The Planning Commission shall give notice and provide an opportunity to be heard to each of the following:

1. A person who is on record as having appeared at the hearing on the outline development plan.
2. A person who has indicated in writing a desire to be notified.
3. Other persons who may have an interest.

B. The Commission, having previously provisionally approved the proposed planned unit development, shall then either reapprove, disapprove, or reapprove with modifications the planned unit development based on the tentative development plan.

C. If an outline development plan has been submitted and approved, a tentative development plan may be submitted in stages. If a tentative development plan covering at least 30 percent of the area of the outline development plan has not been submitted within six months following the provisional approval of the planned unit development, then the provisional approval of the planned unit development by the Planning Commission shall terminate unless, for good cause, the Planning Commission extend for three months the period for filing of the tentative development plan.

D. If the Planning Commission finds evidence of a material deviation from the approved tentative development plan, the Planning Commission shall advise the applicant to submit application for amendment of the planned unit development. An amendment shall be considered in the same manner as an original application and shall be accompanied by the appropriate filing fee.

SECTION 6.150. CONTROL OF THE DEVELOPMENT AFTER COMPLETION.

The final development plan shall continue to control the planned unit development after it is finished and the following shall apply:

- A. The county, in issuing a certificate of completion of the planned unit development, shall note the issuance on the recorded final development plan.

B. After the certificate of completion has been issued, the use of the land and the construction, modification or alteration of a building shall be governed by the approved final development plan.

C. After the certificate of completion has been issued, no change shall be made in development contrary to the approved final development plan without approval of an amendment to the plan except as follows:

1. Minor modifications of existing buildings or structures may be authorized by the Planning Commission if they are consistent with the purposes and intent of the final plan and do not increase the cubic footage of a building or structure.

2. A building or structure that is totally or substantially destroyed may be reconstructed without approval of an amended planned unit development if it is compliance with the purpose and intent of the final development plan.

D. An amendment to a completed planned unit development may be approved if it is required for the continued success of the planned unit development, if it is appropriate because of changes in conditions that have occurred since the final development plan was approved or because there have been changes in the development policy of the community as reflected by the county and affected city Comprehensive Plan or related land use regulations.

E. No modification or amendment of a completed planned unit development is to be considered as a waiver of the covenants against any charge permitted by this section are expressly reserved.

SECTION 6.160. AUTHORIZATION TO APPROVE OR DISAPPROVE PLANNED UNIT DEVELOPMENTS. A planned unit development as set forth in this ordinance shall be approved, modified, disapproved or amended in accordance with the standards and procedures of this article, this ordinance and other applicable rules and regulations. In judging whether or not a planned unit development proposal shall be approved or disapproved the Planning Commission shall weigh its appropriateness and desirability or the public convenience or necessity to be served against any adverse conditions that would result from authorizing the particular development at the location proposed and, to approve such development, shall find that the following criteria are either met, can be met by observance of conditions, or are not applicable.

A. The proposal will be consistent with the county and affected city Comprehensive Plan and the objectives of the zoning ordinance and other applicable policies of the affected city and county.

B. The location, size, design, and operating characteristics under the proposal will have minimal adverse impact on the livability, value or appropriate development of abutting properties and the surrounding area.

C. The location and design of the site and structures for the proposal will be as attractive as the nature of the use and its setting warrants.

D. A proposal will preserve environmental assets of particular interest to the community.

E. The applicant has a bona fide intent and capability to develop and use the land as proposed and has no inappropriate purpose for submitting the proposal, such as to artificially alter property values for speculative purposes.

SECTION 6.170. PLACING CONDITIONS ON A PLANNED UNIT

DEVELOPMENT. In approving a new planned unit development or the amendment of an existing planned unit development, the Planning Commission may impose, in addition to those standards and requirements expressly specified by this ordinance, additional conditions which it finds necessary to avoid a detrimental environmental impact and to otherwise protect the community as a whole. These conditions may include but are not limited to the following:

A. Establishing a special yard or other open space or lot area or dimension.

B. Limiting the height, size or location of a building or other structure.

C. Designating the size, number, location and nature of vehicle access points.

D. Increasing the amount of street dedication, roadway width or improvements within the street right-of-way.

E. Designating the size, location, screening, drainage, surfacing or other improvements of a parking area or truck loading area.

F. Limiting or otherwise designating the number, size, location, height and lighting of signs.

G. Limiting the location and intensity of outdoor lighting and requiring shielding.

H. Requiring diking, screening, landscaping or another facility to protect adjacent or nearby property and designating standards for its installation and maintenance.

I. Designating the size, height, location and materials for a fence.

J. Protecting and preserving existing trees, vegetation, water resources, wildlife habitat or any other significant natural resources.

SECTION 6.180. PROCEDURE FOR TAKING ACTION ON A PLANNED UNIT

DEVELOPMENT. The procedure for taking action on a planned unit development proposal shall be as follows:

A. Any person proposing a planned unit development, or his authorized agent or representative, may initiate an application for a planned unit development as set forth in Section 3.010 and 6.100 of this ordinance.

B. Prior to submission to the Planning Commission a proposal for a planned unit development shall be submitted to the Subdivision Review Committee and the affected city in accordance with Article 2 of this ordinance.

C. The Planning Commission shall hold a public hearing on the proposed planned unit development and shall review the proposal in accordance with Section 3.060 of this ordinance relative to the review of an outline development plan and a tentative development plan and in accordance with Section 4.080, 4.090 and 4.100 of this ordinance relative to the review of the final development plan.

SECTION 6.190. RECORDING OF FINAL DEVELOPMENT PLAN. A developer of a planned unit development shall, without delay, proceed with the recording of the final development plan following approval by the county in accordance with the standards and requirements set forth by this ordinance and other applicable regulations for a standard subdivision.

SECTION 6.200. RESUBMISSION OF DENIED DEVELOPMENT PLAN. If the outline development plan or preliminary development plan for a proposed planned unit development is denied, resubmittal thereof shall not be accepted by the county for a period of six months after the date of the final action denying said plan. Resubmission shall require the applicant to consider all items for which the prior denial was based, and the resubmission shall be accompanied by a new filing fee.

ARTICLE 7 CREATION OF STREETS AND WAYS NOT PART OF A SUBDIVISION

SECTION 7.010. APPLICATION. Any person desiring to create a street or way not part of a subdivision or major partition shall make written application to the Planning Department. Said application shall be made on prescribed form and shall be accompanied by the required information and appropriate filing fee.

SECTION 7.020. CREATION OF STREETS OUTSIDE A SUBDIVISION. The creation of a street shall be in conformance with requirements for subdivision except, however, the Planning Commission may approve the creation of a street to be established by deed without full compliance with the regulations applicable to subdivisions provided any of the following conditions exist:

- A. The establishment of the street is initiated by the City Council or County Court and is declared essential for the purpose of general traffic circulation and the partitioning of land is an incidental effect rather than the primary objective of the street.
- B. The tract in which the street is to be dedicated is an isolated ownership of one acre or less.
- C. The tract in which the street is to be dedicated is an isolated ownership of such size and condition as to make it impossible to develop more than two lots.

SECTION 7.030. PROCEDURE.

- A. Upon receipt of written application and appropriate filing fee for street dedication, the Planning Director shall refer the proposal to the Planning Commission, County Roadmaster, and affected City Public Works Department for review and recommendation. Two copies of the proposed improvements shall be forwarded to the Planning Commission at least ten days prior to a regularly scheduled meeting.
- B. Where access is to a City Street, County Road or State Highway, the necessary permits shall be obtained prior to approval by the County Commission.
- C. The Planning Commission, Roadmaster and affected City Public Works Department shall report their findings to the Planning Director and give their recommendations regarding the proposed dedication and improvements. The Planning Commission shall also recommend a classification for the proposed street.
- D. Upon receipt of written findings and recommendations from the Planning Commission, Roadmaster and affected City Public Works Department, the proposal shall be submitted to the County Court for preliminary review and approval. Such submission shall be made at least ten days prior to a regularly scheduled meeting.

E. Upon preliminary approval by the County Court, the engineering and improvements design or the roadway conforming to the requirements of this ordinance and other applicable regulations shall be submitted to the County Roadmaster and affected City Street Departments for review and approval. Said engineer and improvements design shall be prepared and signed by a licensed engineer or surveyor.

F. Following approval of the roadway engineering and design, the applicant shall prepare a warranty deed dedicating said street to the public and an improvement guarantee. Said documents shall be submitted to the District Attorney for review and approval.

G. Following receipt of the approval set forth in subsections E and F of this section, the deed and improvements guarantee shall be submitted to the County Court for final approval.

SECTION 7.040. CREATION OF WAYS. Any easement of way providing access to property and which is created in order to allow the partitioning of land for the purpose of transfer or ownership or building development, whether immediate or future, shall be in the form of a street, except that a private easement of way to be established by deed without full compliance with these regulations may be approved by the Planning Commission provided it is the only reasonable method by which the rear portion of an unusually deep lot large enough to warrant partitioning into two parcels may be provided with access. A copy of the proposed document to create the easement shall be submitted to the Planning Director at least ten days prior to the Planning Commission meeting at which consideration is desired. The document and such information as may be submitted shall be reviewed by the Planning Commission and, if assurance of adequate utility and vehicular access is indicated, shall be approved.

ARTICLE 8. DESIGN STANDARDS

SECTION 8.010. COMPLIANCE REQUIRED. Any land division, whether by Subdivision, creation of a street or other right-of-way, partitioning or planned unit development, shall be in compliance with the design standards set forth by this ordinance.

SECTION 8.020. STREETS. (MC-02-05)

A. General. The location, width and grade shall be considered in their relation to existing and planned streets, to topographical conditions, to public convenience and safety, and to the proposed use of land to be served by the street. The street system shall assure an adequate traffic circulation system with intersection angles, grades, tangents and curves appropriate for the traffic to be carried considering the terrain. Streets shall be designed and constructed in conformance with the basic cross-sections in the County TSP Update, with horizontal and vertical alignment geometry conforming to the latest version of applicable ODOT and/or AASHTO standards.

B. Design and Construction Approval. Any facility or improvement conditioned to be constructed as part of private development activity and subsequently dedicated to the County must first receive design approval by the Morrow County Public Works Department. Design approval shall include all other pertinent issues related to roadway construction and operations, including but not limited to drainage, maintenance, serviceability, and pavement design. Upon request of an applicant, the County shall provide applicable design criteria and the rationale for establishing the criteria. Street design plans submitted for County approval shall be stamped by a registered professional engineer with appropriate experience. The Public Works Department is responsible for providing regular inspections throughout construction, and performing final inspection upon completion and prior to acceptance of the improvement as public right-of-way. An equitable Plan Review and Construction Inspection fee shall be determined at the initiation of plan review and charged to the developer.

C. Minimum Right-of-Way and Roadway Width. Unless otherwise approved in the tentative plan, the street right-of-way and roadway surfacing widths shall not be less than the minimum width in feet set forth in the following table. Additional right-of-way may be necessary to conform to standards and specifications set forth in current AASHTO and/or ODOT design standards, and other applicable affected City standards and specifications.

Where conditions, particularly topography or the size and shape of land parcels, make it impractical to provide buildable lots, narrower right-of-way may be accepted ordinarily not less than 40 feet. Slope easements, while generally undesirable, may be required in extreme cases.

The Roadway Standards set forth in the following table shall be observed unless a variance has been obtained.

ROADWAY STANDARDS					
Road Classification	Right of Way (ft)	Lane Width (ft)	Paved Shoulder Width (ft)	Pavement Width (ft)	Average Daily Traffic (ADT)
Rural Access I*	60	9	1	20	100-200
Rural Access II*	60	9	1	20	50-100
Rural Collector I	60	12	3-4	30-32	300-500
Rural Collector II	60	12	2	28	200-300
Rural Collector III	60	12	1	26	100-200
Rural Arterial I	60	12	4-8	32-40	> 700
Rural Arterial II	60	12	3-6	32-40	300-700
Rural Gravel	60	11	n/a	n/a	n/a

* Rural Access 1 and Rural Access II differ in the surface type – Rural Access II is gravel.

D. Reserve Strips. Reserve strips or street plugs controlling the access to streets will not be approved unless necessary for the protection of the public welfare or of substantial property rights and in these cases they may be required.

E. Alignment. All streets other than minor streets, as far as is practical, shall be in alignment with existing streets by continuations of the center lines thereof. Staggered street alignment resulting in “T” intersections shall, wherever practical, leave a minimum distance of 200 feet between the center lines of streets having approximately the same direction and, in no case, shall be less than 100 feet. The streets and roads shall be laid out so as to conform to the plat of subdivisions and maps of partitions already approved for adjoining property as to width, improvements, general direction, and in all other respects, unless the Planning Commission determines it is in the public interest to modify the street or road pattern. Streets and roads shall be laid out in such a way so as to connect to existing roads at the time of development or through extension at a future date by creating dead-end streets without turn-arounds.

F. Future Extension of Streets. Where necessary to give access to or permit a satisfactory future subdivision on adjoining land, streets shall be extended to the boundary of the subdivision and the resulting dead-end streets may be approved without a turn-around. Reserve strips and street plugs may be required to preserve the objectives of street extensions. Streets and accessways are always required unless one or more of the following conditions exists:

1. Physical or topographic conditions make a street or accessway connection impracticable. Such conditions include but are not limited to freeways, railroads, steep slopes, wetlands, or other bodies of water where a connection could not reasonably be provided;
2. Buildings or other existing development on adjacent lands physically precludes a connection now or in the future considering the potential for redevelopment; or

3. Where streets or accessways would violate provisions of leases, easements, covenants, restrictions, or other agreements existing as of May 1, 1995, which preclude a required street or accessway connection.

G. Intersection Angles. Streets shall be laid out to intersect at angles as near to right angles as practical, except where topography requires a lesser angle. In no case shall the acute angle be less than 80 degrees unless there is a special intersection design. An arterial or collector street intersecting with another street shall have at least 100 feet of tangent adjacent to the intersection unless topography requires a lesser distance. Other streets, except alleys, shall have at least 50 feet of tangent adjacent to the intersection unless topography requires a lesser distance. The intersection of more than two streets at any one point will not be approved. Right-of-way lines at street intersections shall have a minimum corner radius of 15 feet.

H. Existing Streets. Whenever existing streets, adjacent to or within a tract, are of inadequate width, additional right-of-way shall be provided at the time of land division by the developer. During consideration of the tentative plan for a subdivision, the Planning Commission shall determine whether improvements are required to existing streets, either adjacent to or within the tract. They may require such improvements as a condition of approval of the tentative plan.

I. Half Streets. Half streets, while generally not acceptable, may be approved where essential to the reasonable development of the subdivision or partition when in conformity with the other requirements of these regulations and when the Planning Commission finds it will be practical to require the dedication of the other half when the adjoining property is divided. Whenever a half street is adjacent to a tract to be divided, the other half of the street shall be provided within such tract. Reserve strips and street plugs may be required to preserve the objectives of half streets.

J. Cul-de-Sac. A cul-de-sac, while not encouraged, may be used as part of a development plan, consistent with other provisions of this section (refer to Section 8.020.E). A cul-de-sac shall be as short as possible and shall have a maximum length of 400 feet and serve building sites for not more than 9 dwelling units unless approved otherwise by the Commission. A cul-de-sac shall terminate with a circular turn-around.

K. Street Names. Except for extensions of existing streets, no street name shall be used which will duplicate or be confused with the name of an existing street in the city or county. Street names and numbers shall conform to the established pattern in the affected city urban area, and shall be subject to the approval of the Planning Commission.

L. Installation of Regulatory Signs in County Road Right-of-Way. Developers are to install street name, posted speed, and other traffic control and/or regulatory signage required for private developments, per applicable standards of Morrow County and the Manual on Uniform Traffic Control Devices (MUTCD).

M. Private Signage within County Road Right-of-Way. Residents may request specific cautionary signage for individual resident(s) to be installed within County right-of-way. All costs including materials, installation, maintenance, and removal, shall be borne by the requestor.

N. Grades and Curves. Grades shall not exceed eight (8) percent on arterials, ten percent on collector streets or 12 percent on other streets except as otherwise provided for. Center line radii of curves shall not be less than 500 feet on arterials, 250 feet on collectors, or 100 feet on other streets and shall be on an even 10 feet. Where existing conditions, particularly topography, make it otherwise impractical to provide buildable sites, the Planning Commission may accept steeper grades and sharper curves as specifically provided for in current County Design Standards. In flat area, allowance shall be made for finished street grades having a minimum slope, preferably of at least 0.5 percent.

O. Streets Adjacent to Railroad Right-of-Way. Wherever the proposed land division contains or is adjacent to a railroad right-of-way, provision may be required for a street approximately parallel to and on each side of such right-of-way at a distance suitable for the appropriate use of land between the streets and railroad. The distance shall be determined with due consideration at cross streets of the minimum distance required for approach grades to a future grade separation and to provide sufficient depth to allow screen planting along the railroad right-of-way.

P. Marginal Access Streets. Where a land division abuts or contains an existing or proposed arterial street, the Planning Commission may require marginal access streets, reserve frontage lots with suitable depth, screen planting contained in a non-access reservation along the rear or side property line, or other treatment necessary for adequate protection of residential properties and to afford separation of through and local traffic.

Q. Alleys. Alleys shall be provided in commercial and industrial districts, unless other permanent provisions for access to off-street parking and loading facilities are approved by the Planning Commission.

R. Curbs. Curbs shall be required on all urban area streets unless otherwise approved by the County and affected City, and shall be installed by the developer in accordance with the standards set forth in current County Design and Construction Standards or other standards set forth by the affected City and County.

S. Proposed Corridors. For land adjacent to or containing a proposed corridor (see corridor map in the TSP), the Planning Commission may require the dedication of a suitable right-of-way that shall be provided at the time of land division.

T. Access Management.

1. Applications for development with access onto state highways shall be provided to ODOT for review, to ensure consistency with adopted ODOT Access Management Standards shown below. These standards apply only to unsignalized

access points. New traffic signals on state facilities shall meet signal spacing standards in OAR 734-020 (desired minimum spacing for new traffic signals on state highways is at least 0.5 miles from the nearest existing or planned signal) or, if applicable, the standards in the adopted Interchange Area Management Plan (IAMP). For approval of a new traffic signal on a County facility as part of a condition of development approval, the applicant shall be required to show, through an analysis prepared by a qualified professional engineer registered in the State of Oregon, that the signal is warranted to improve traffic operations, address safety deficiencies, or a combination.

Access Management Standards for Morrow County non-Interstate Highways						
Highway	Classification	Access Spacing Standards for Public or Private Unsignalized Access (ft) for Posted Speed Indicated (mph)				
		>55	50	40 & 45	30 & 35	<25
US 730, OR 74	Regional	990	830	750	600	450
OR 206, OR 207	District	700	550	500	400	400

Source: Oregon Administrative Rules Section 734-051 (2004)

2. Access within the influence area of existing or proposed state highway interchanges for which there is no adopted IAMP is regulated by standards in OAR 734-051. These standards do not retroactively apply to interchanges existing prior to adoption of the 1999 Oregon Highway Plan, except or until any redevelopment, change of use, or highway construction, reconstruction or modernization project affecting these existing interchanges occurs. It is the goal at that time to meet the appropriate spacing standards, if possible, but, at the very least, to improve the current conditions by moving in the direction of the spacing standard.

3. Access within a mapped and adopted IAMP Management Area of an existing or proposed state highway interchange is regulated by the adopted plan associated with that interchange. In an IAMP Management Area, proposed access shall be consistent with the associated Access Management Plan.

4. Morrow County also requires an access permit for land use development proposing access onto a County road. Access permit requirements for land use development are outlined in Section 4.010 of the Morrow County Zoning Code, and development proposing access onto a County road is subject to access spacing standards specified in the table below.

RECOMMENDED ACCESS MANAGEMENT STANDARDS FOR COUNTY ROADS ^a				
Functional Classification	<u>Intersection</u>			
	<u>Public Road</u>		<u>Private Drive</u>	
	Type	Minimum Spacing	Type	Minimum Spacing
Rural Arterial	at-grade	600 ft	Left/right turns	300 ft
Rural Collector	at-grade	300 ft	Left/right turns	100 ft
Rural Local	at-grade	200 ft	Left/right turns	Access to each lot

a. For most roadways, at-grade crossings are appropriate. Also, allowed moves and spacing requirements may be more restrictive than those shown to optimize capacity and safety. Any access to a state highway requires a permit from the district office of ODOT and is subject to the access spacing standards in the previous table in this section.

Approval of a variance from the County access spacing standards is subject to the following requirements:

1. The granting of a variance for access management standards shall be in harmony with the purpose and intent of these regulations and shall not be considered until every feasible option for meeting access standards is employed.
2. Applicants for a variance from these standards must provide proof of unique or special conditions that make strict application of the provisions impractical. Applicants shall include proof that:
 - a. Indirect or restrict access cannot be obtained;
 - b. No engineering or construction solutions can be applied to mitigate the condition; and,
 - c. No alternative access is available from a street with a lower functional classification than the primary roadway.
3. No variance shall be granted where such hardship is self-created.

U. Corner Clearance. Corner clearance at intersections shall meet or exceed the minimum connection spacing requirements for that roadway. New connections shall not be permitted within the functional area of an intersection or exchange as defined by the connection spacing standards of this ordinance, unless no other reasonable access to the property is available. Where no other alternatives exist, the Morrow County Planning Department may allow construction of an access connection along the property line farthest from the intersection. In such cases, directional connections such as right-in/right-out, right-in only, or right-out only may be required.

V. Driveways. Driveways onto State highways shall be consistent with ODOT Access Management Standards. Driveways onto County facilities, which require an access permit from the Morrow County Department of Public Works, shall be consistent with County access management standards and meet the following standards.

All private access driveways shall meet the following standards. Those that do not meet these standards shall require an access variance.

Land Use	Minimum (feet)	Maximum (feet)
Single Family Residential	10	24
Multi-Family Residential	24	30
Commercial	24	40
Industrial	30	40

Driveway approaches must be designed and located to provide an exiting vehicle with an unobstructed view meeting County sight distance requirements. Construction of driveways along acceleration or deceleration lanes and tapers shall be avoided due to the potential for vehicular weaving conflicts.

The length of driveways shall be designed in accordance with the anticipated storage length for entering and exiting vehicles to prevent vehicles from backing into the flow of traffic on the public street or causing unsafe conflicts with on-site circulation.

For unpaved driveways connecting to paved roadways, a paved driveway apron must be provided per Morrow County Department of Public Works standards.

W. Easements and Legal Access. All lots must have access onto a public right-of-way. This may be provided via direct frontage onto an existing public road, a private roadway, or an easement. Minimum easement requirements to provide legal access shall be as follows:

1. 1000 feet or less, an easement width of 20 feet.
2. More than 1000 feet, an easement width of 40 feet.
3. Parcels where 3 or more lots share an access (current or potential), an easement of 60 feet.

X. Joint and Cross Access. Adjacent commercial or office properties classified as major traffic generators shall provide a cross access drive and pedestrian access to allow circulation between sites. These shall be established as a system wherever feasible including:

1. A continuous service drive consistent with access management standards.
2. Stub-outs or other design features to allow tie-ins to adjacent properties.

Pursuant to this section, property owners shall record an easement allowing joint or cross access between parcels, record an easement on the deed to dedicate access rights to the main roadway, and to close non-conforming existing driveways, and to record a joint maintenance agreement with the deed defining maintenance responsibilities of property owners.

Y. Requirements for Phased Development Plans. In the interest of promoting unified access and circulation systems, development sites under the same ownership or consolidated for the purposes of development and comprised of more than one building site shall be reviewed as a single property in relation to the access standards of this ordinance. This shall also apply to phased development plans.

Z. Nonconforming Access Features. Legal access in place as of the date of adoption that do not meet spacing and design standards shall be brought into compliance with applicable standards when new access permits are requested or when a change in land use or improvements occurs.

AA. Reverse Frontage. Lots that front on more than one street shall be required to locate motor vehicle access on the street with the lower functional classification.

AB. Shared Access. Subdivisions with frontage on the state highway system shall be designed into shared access points to and from the highway. If access to a lower classification street becomes available, then conversion to that access is encouraged, along with closing the state highway access.

AC. Connectivity. The street system of a proposed subdivision shall be designed to coordinate with existing, proposed, and planned streets outside of the subdivision as provided in this Section and in the local street plans of the TSP. Whenever a proposed development abuts unplatted land or a future development phase of the same development, street stubs shall be provided to provide access to abutting properties or to locally extend the street system into the surrounding area. All street stubs shall be provided with a temporary turn-around unless specifically exempted by the Public Works Director, and the restoration and extension of the street shall be the responsibility of any future developer of the abutting land. Minor collector and local residential access streets shall connect with surrounding streets to permit the convenient movement of traffic between residential neighborhoods or facilitate emergency access and evacuation. Connections shall be designed to avoid or minimize through traffic on local streets. Appropriate traffic controls, such as traffic calming measures, are preferred means of discouraging through traffic.

AD. Private Streets Outside an Urban Growth Boundary. All private streets providing access from a public roadway to a proposed land division shall meet the following standards:

1. Have a minimum sight distance in compliance with adopted County Standards at any intersection with a public road. Additional sight distance or advance

warning signage or other devices may be required where known safety hazards exist.

2. For each private street, there shall be a legal recorded document which includes:
 - a. A legal description of the proposed easement;
 - b. Ownership of the street;
 - c. Use rights; and
 - d. A maintenance and construction agreement which includes Fire Marshal approved street specifications and turn around area (if required) and the allocation and/or method of determining liability for maintenance.
3. Where drainage conditions require it, a private street shall be ditched in conformance with the County Road Standards.
4. Private streets which access public or County roads shall be located, designed and constructed (within the public right-of-way) in accordance with adopted standards for County roads.
5. Prior to establishing a private driveway or a private street, the owner shall obtain an access permit for access to the intersecting public road. As a condition of granting access to a public road, the County may require the applicant to clean the ditch serving the parcel and remove sight obstructing vegetation in the vicinity of the access.

SECTION 8.030. BLOCKS.

A. General. The length, width, and shape of blocks shall take into account the need for adequate building site size and street width and shall recognize the limitations of the topography.

B. Minimum Block Lengths. Minimum block lengths of 600 feet shall be established within urban growth boundaries. A goal for areas outside of urban growth boundaries is a minimum of 1,200 feet. A block shall have sufficient width to provide for two tiers of building site unless topography or the location of adjoining streets justifies an exception.

C. Easements.

1. Utility Lines. Easements for sewers, water mains, electric lines or other public utilities shall be at least 12 feet wide and centered on lot or parcel rear lot lines, except for utility pole tieback easements which may be reduced to six feet in width.

2. Water Courses. If a tract is traversed by a water course, such (as) a drainage way, channel or stream, there shall be provided a storm water easement or drainage right-of-way conforming substantially with the lines of the water course, and such further

widths as will be adequate for the purpose. Streets or parkways parallel to the major watercourses may be required.

3. Pedestrian and Bicycle Ways. When desirable for public convenience, a pedestrian or bicycle way at least 10 feet in width may be required to connect to a cul-de-sac or to pass through an unusually long or oddly shaped block or otherwise provide appropriate circulation.

SECTION 8.040. BUILDING SITES.

A. Size and Shape. The size, width, shape and orientation of building sites shall be appropriate for the location of the land division and for the type of development and use contemplated, and shall be consistent with the residential lot size provisions of the zoning ordinance with the following exceptions:

1. In areas that will not be served by a public sewer, minimum lot and parcel sizes shall permit compliance with the requirements of the Department of Environmental Quality and shall take into consideration problems of soil structure and water table as related to sewage disposal by septic tank.

2. Where property is zoned and planned for business or industrial use, other widths and areas may be permitted at the discretion of the Planning Commission. Depth and width of properties reserved or laid out for commercial and industrial purposes shall be adequate to provide for the off-street service and parking facilities required by the type of use and development contemplated.

B. Access. Each lot and parcel shall abut upon a street other than an alley for a width of at least 50 feet.

C. Through Lots and Parcels. Through lots and parcels shall be avoided, except where they are essential to provide separation of residential development from major traffic arterials or adjacent non-residential activities or to overcome specific disadvantages of topography and orientation. A planting screen easement at least ten feet wide and across which there shall be no right of access may be required along the line of building sites abutting such a traffic arterial or other incompatible uses.

D. Lot and Parcel Side Lines. The lines of lots and parcels, as far as it is practicable, shall run at right angles to the street upon which they face, except that on curved streets they shall be radial to the curve.

E. Division by ROW, Drainage Ways. No lot shall be divided by the boundary line of the County, City, or other taxing or service district, or by the right-of-way of a street utility line or drainage way, or by an easement for utilities or other services.

SECTION 8.050. GRADING OF BUILDING SITES. Grading of building sites shall conform to the following standards unless physical conditions demonstrate the priority of other standards.

- A. Cut slopes shall not exceed one foot vertically to one-half feet horizontally.
- B. Fill slopes shall not exceed one foot vertically to two feet horizontally.
- C. The character of soil for fill and the characteristics of lots and parcels made usable by fill shall be suitable for the purpose intended.

SECTION 8.060. BUILDING LINES. If special building setback lines are to be established in a subdivision, they shall be shown on the subdivision plat and included in the deed restrictions.

SECTION 8.070. LARGE BUILDING SITES. In dividing tracts into large lots or parcels, which at some future time are likely to be redivided, the Planning Commission may require that the blocks be of such size and shape, so that they may so be divided into building sites and contain such site restrictions as will provide for extension and opening of streets at intervals which will permit a subsequent division of any tract into lots or parcels of smaller size.

SECTION 8.080. LAND FOR PUBLIC PURPOSES.

A. If the county or affected city has an interest in acquiring a portion of a proposed subdivision for a public purpose, or if the county has been advised of such interest by a school district or other public agency, and there is reasonable assurance that steps will be taken to acquire the land, then the Planning Commission may require that those portions of the subdivision to be reserved for public acquisition, for a period not to exceed one year.

B. Within or adjacent to a subdivision, a parcel of land of not more than five (5) percent of the gross area of the subdivision may be required to be set aside as and dedicated to the public by the Planning Commission as being suitable and adaptable for park and recreation uses. In the event no such area is suitable for park and recreation purposes, the subdivider may be required, in lieu of setting aside land, to pay into a public fund an amount equal to the value of the area required for dedication above in the subdivision. If the nature of the subdivision is being dedicated to the public for streets and other public uses, the requirements of this section shall be reduced so that the total obligation of the subdivider does not exceed 40 percent.

ARTICLE 9. IMPROVEMENTS

SECTION 9.010. IMPROVEMENT PROCEDURES. In addition to other requirements, improvements to be installed by a subdivider, either as a requirement of this ordinance or other applicable regulations or at his own option, shall conform to the requirements of this article.

A. Plan Review and Approval. Improvement work shall not be commenced until plans therefore have been reviewed and approved by the county or a designated representative thereof. Such review and approval shall be at the expense of the developer. To the extent necessary for evaluation of a proposed development, such improvement plans may be required before approval of the tentative plan of a subdivision or the tentative development plan of a planned unit development.

B. Notification. Improvement work shall not commence until after the county has been notified and approval thereof has been granted, and if work is discontinued for any reason it shall not be resumed until after the county is notified and approval thereof granted. The cost of such inspections and approvals shall be borne by the developer.

C. Improvements as Platted. Improvements shall be designed, installed and constructed as platted and approved, and plans therefor shall be filed with the final plat at the time of inspection.

D. Inspection. Improvements shall be constructed under the inspection and approval of an inspector designated by the county. Expenses incurred thereof shall be borne by the developer. The county, through said inspector, may require changes in typical sections and details of improvements if unusual conditions arise during construction to warrant such changes in the public interest.

E. Utilities. Underground utilities including but not limited to electric power, telephone, water mains, water service crossings, sanitary sewers and storm water drains, to be installed in streets shall be constructed by the subdivider prior to the surfacing of the streets.

F. As Built Plans. A map showing public improvements as built shall be filed with the affected city and county upon completion of the improvements and a copy thereof shall be recorded with the final plat. Such map shall also be provided in reproducible form (Mylar or comparable).

SECTION 9.020. SPECIFICATIONS FOR IMPROVEMENTS. See Appendix "A" for specifications.

SECTION 9.030. IMPROVEMENTS IN SUBDIVISIONS. The following improvements shall be installed at the expense of the subdivider:

A. Streets. Streets, including alleys and curbs may be required, within the subdivision, adjacent thereto, and those outside the subdivision may require to be improved as a condition of subdivision approval, and shall be improved to affected city or county specifications set forth by this ordinance and other applicable affected city and county regulations. Catch basins shall be installed and connected to drainage facilities in accordance with specifications in this and other applicable regulations. Upon completion of street improvements, monuments shall be re-established in accordance with this ordinance and ORS at every street intersection and all points of curvature and points of tangency at their centerlines.

B. Surface and Storm Sewer System. Drainage facilities shall be provided as deemed necessary within the subdivision and to connect the subdivision drainage to drainage ways or storm sewers outside the subdivision. Design of drainage within the subdivision, as provided by specifications of this ordinance and other applicable standards, shall take into account the capacity and grade necessary to maintain unrestricted flow from drainage through the subdivision and allow extension of the system to serve such areas.

C. Sanitary Sewers. Sanitary sewers as required shall be installed to serve the subdivision and to connect the subdivision to existing mains. In the event it is not possible to connect the subdivision to an affected city sewer system, the affected city and county may jointly authorize the use of an interim system, if lot areas are of adequate, considering the physical characteristics of the area and if sewer laterals designed for future connection to a sewage disposal system are installed and sealed. Design shall take into account the capacity and grade to allow for desirable extension beyond the subdivision.

D. Water System. Water lines and fire hydrants serving each building site in the subdivision and connecting the subdivision to the serving system as may be required shall be installed by specifications required by the county and/or affected city and serving water system surveyor. The design shall take into account water provisions for extension beyond the subdivision.

E. Pedestrian Facilities... Site plans shall include a pedestrian circulation plan for providing safe and convenient pedestrian access. Pedestrian facilities as may be required shall be installed on at least one side of a public street and in any special pedestrian facility or walkway within the subdivision; in the case of primary or secondary arterials, special type industrial districts, or in rural areas, the Planning Commission may approve a subdivision without appropriate pedestrian facilities, if alternative pedestrian routes are available or if applicant can demonstrate that there is no need for such facilities, and provided further that in the case of streets serving lots equivalent to two and one-half or less dwellings per gross acre, the requirement of walkways shall not apply, provided there is no evidence of special pedestrian activity along the streets involved. Walkways shall be constructed to specifications set forth by the affected city or county specifications.

F. Bicycle Facilities. Site plans shall include a bicycle circulation plan. If appropriate to the extension of a system of bicycle routes, existing or planned, the Planning Commission may require the installation of bikeways or other bicycle facilities.

G. Streets Name Signs. Street name signs shall be installed at all street intersections. One street sign shall be provided at the intersection of each street. Two street signs shall be provided at four-way intersections.

H. Street Lights. Street lights may be required and if so required shall be installed and shall be served from an underground source of supply.

I. Curbs. Curbs may be required on urban area streets, and if so required shall be installed by the developer in accordance with standards set forth by the affected city or county.

J. Other. The developer shall make necessary arrangement with the utility companies or other persons or corporations affected for the installation of underground lines and facilities. Electrical lines and other wires, including but not limited to communication, street lighting and cable televisions may be required to be placed underground.

SECTION 9.040. IMPROVEMENTS IN PARTITIONS. The same improvements may be required for a partitioning and if so shall be installed to serve each building site of a partition as required of a subdivision.

SECTION 9.050. APPROVAL OF IMPROVEMENTS. All improvements shall be approved by the affected city and county inspectors prior to acceptance by the county. All costs of inspection shall be paid for by the developer.

SECTION 9.060. ACCEPTANCE OF IMPROVEMENTS. Improvements shall receive preliminary acceptance after inspection at the time the improvements are constructed. Final acceptance shall be considered by the county within one year after construction is completed.

SECTION 9.070. BUILDING PERMITS. No building permit shall be issued upon lots to receive and be served by sanitary sewer and water service as improvements required pursuant to this ordinance unless such improvements are in place and serviceable or bonded for and approved by the county. All improvements required and pursuant to this ordinance and other applicable regulations shall be completed, in service and approved by the county prior to the sale and occupancy of any building unit erected upon a lot within the subdivision, partition or planned unit development. Prior to sale and occupancy, and as a condition of acceptance of improvements, the county may require a one-year Maintenance Surety Bond in an amount not to exceed ten percent of the value of all improvements to guaranteed maintenance of said improvements for a period of not less than one year from the date of acceptance.

ARTICLE 10. IMPROVEMENT GUARANTEE

SECTION 10.010. AGREEMENT FOR IMPROVEMENTS. Prior to final approval of a subdivision plat or partition map by the county, the subdivider shall either install required improvements and repair existing streets and other public facilities damaged in development of the property or execute and file with the county an agreement between himself and the county, specifying the period which required improvements and repairs shall be completed and provided that, if the work is not completed within the period specified, the county may complete the work and recover the full cost and expense together with court costs and attorney fees necessary to collect said amounts from the land divider. The agreement shall also provide for payment to the affected city and county for the cost of inspection by the affected city and county.

SECTION 10.020. BOND.

A. Type of Security. The land divider shall file with the agreement, to assure his full and faithful performance thereof, one of the following, pursuant to approval and acceptance by the County Court.

1. A surety bond executed by a surety company authorized to transact business in the State of Oregon in a form approved by the District Attorney.
2. A personal bond co-signed by at least one additional person together with evidence of financial responsibility and resources of those signing the bond sufficient to provide reasonable assurance of ability to proceed in accordance with the agreement.
3. Such other security as may be deemed necessary by the County Court to adequately insure completion of improvements pursuant to the agreement.
4. Such other security as may be deemed necessary by the County Court to adequately insure completion of improvements pursuant to the agreement.

B. Amount Required. Such assurance of full and faithful performance shall be for a sum approved by the county sufficient to cover the cost of the improvements and repairs, including related engineering and incidental expenses, and to cover the cost of affected city and county inspection.

C. Default Status. If a land divider fails to carry out provision of the agreement and the county has unreimbursed costs or expenses resulting from such failure, the county shall call on the bond or cash deposit for reimbursement. If the cost and expense incurred by the county exceed the amount of the bond or cash deposit, the land divider shall be liable to the county for the difference plus any attorney fees and costs incurred.

ARTICLE 11. VARIANCE AND EXCEPTIONS.

SECTION 11.010. APPLICATION. The Planning Commission may authorize variances or exceptions to requirements of this ordinance. Application for a variance or an exception shall be made by a petition of the developer stating fully the grounds of the application and the facts relied upon by the petitioner. The petition shall be filed with the tentative plan. A variance or exception may be granted only in the event that all the following circumstances exist:

A. **Exceptional Circumstances.** Exceptional or extraordinary facts apply to the property which do not apply generally to other properties in the same vicinity, and result from tract size or shape, topography or other circumstances over which the owner of the property, since enactment of this ordinance, has no control.

B. **Preservation of Property.** The variance is necessary for the preservation of a property right of the applicant substantially the same as owners of other property in the same vicinity possess.

C. **Not Detrimental.** The variance would not be materially detrimental to the purposes of this ordinance, or to property in the same vicinity in which the property is located, or otherwise conflict with the objectives of the Comprehensive Plan, any other area plan, or policy thereof.

D. **Minimum.** The variance requested is the minimum which would alleviate hardship.

E. **For a variance to access standards:** The granting of a variance shall be in harmony with the purpose and intent of these regulations and shall not be considered until every feasible option for meeting access standards is employed.

F. **Applicants for a variance from these standards must provide proof of unique or special conditions that make strict application of the provisions impractical.**

G. **No variance shall be granted where such hardship is self-created.**

SECTION 11.020. PLANNING COMMISSION ACTION ON VARIANCE OR EXCEPTION. In granting or denying a variance or exception, the Planning Commission shall make a written record of its findings and the facts in connection with, and shall describe the variance or exception granted and the conditions designated. The county shall keep the findings on file as a matter of public record, and a copy of the variance or exception granted and the conditions thereof shall be recorded together with the final plat by the developer.

ARTICLE 12. ADMINISTRATION, APPEALS.

SECTION 12.010. Approval or denial of an application for land development shall be based upon and accomplished by a brief statement that explains the criteria and standards considered relevant to the decision, states the facts relied upon in rendering the decision and explains the justification for the decision based on the criteria, standards and facts set forth.

SECTION 12.020. A person may appeal to the County Court a decision or requirement made pursuant to this ordinance by the Planning Commission. A person may appeal to the Planning Commission from a written decision made by the Planning Commission from a written decision made by the Planning Director or other County Official. Written notice of the appeal must be filed with the County within fifteen (15) days after the decision is made for a minor partition and within 30 days for a subdivision or major partition. The notice of appeal shall state the nature of the decision or requirement and the specific grounds for the appeal setting forth the error and the basis of error sought to be reviewed.

A. The County Court or Planning Commission shall hold a hearing on the appeal within 30 days from the time the appeal is filed. The County Court or Planning Commission may continue the hearing for good cause.

B. The County Court may review a lower decision upon its own motion after giving 10 days notice to the parties involved in the decision and if such review is within 15 days of receipt of notice of said initiated lower decision.

C. In the case of an appeal to a Planning Commission action, the petition for appeal shall be accompanied by the required fee plus a deposit to cover the estimated costs of the transcript as specified by the Planning Director, which deposit shall be paid within five (5) days of such estimate by the Planning Director. Within ten (10) days of such notice of completion of a required transcript, the party seeking review shall transmit the balance due of any required transcript fee to the Planning Director and failure to do so may cause dismissal of the appeal. Any deposit in excess shall be returned to the party.

D. In the case of an appeal to a Planning Commission action, unless otherwise provided by the County Court in Subsection 12.020.E, the review of the initial action shall be confined to the record of the proceeding below which shall include:

1. All materials, pleadings, memoranda, stipulations, and motions submitted by any party to the proceeding and received or considered by the Commission as evidence.
2. All materials submitted by the Planning Director with respect to the application.
3. The transcript of the hearing below.
4. The findings and action of the Commission and the petition of appeal.

5. Argument (without introduction of new or additional evidence) by the parties or their legal representative at the time of review before the County Court.

E. The County Court may, at its option, determine to admit additional testimony and other evidence by all interested parties or parties of record, to supplement the record of the proceedings held by the Commission. Such consideration may be initiated by order of the County Court or upon written motion of a party of record or interested person. Such written motion set forth with particularity to the basis for such request and the nature of evidence sought to be introduced. Prior to making the determination of whether to permit the record to be supplemented, the County Court shall provide an opportunity for all parties to be heard on the matter. The County Court may grant the opportunity to supplement the record if it finds such necessary to:

1. Prevent prejudice to parties.

2. To take into consideration the inconvenience of locating the evidence at the time of initial hearing, with such inconvenience not being the result of negligence or dilatory act by the moving party.

F. Following the hearing, the County Court may affirm, overrule or modify any decision or requirement and shall set forth findings for such decision.

G. The procedure, public notice and type of hearing for an appeal or review shall be in the same manner as for any application under this ordinance.

SECTION 12.030. Application or filings required by this ordinance shall be accompanied by a filing fee in the amount established by this section, and set forth in the Fee Schedule Ordinance adopted by the Morrow County Court.

SECTION 12.040. This Ordinance, known as the Morrow County Subdivision Ordinance of 1980, amended and readopted in its entirety on November 7, 2001, further amended by the 2005 Transportation System Plan Update and a 2005 Update to Article 5, and amended again in 2012 during adoption of the Port of Morrow and Interstate 84/Highway 730 Interchange Area Management Plans, shall be effective immediately after adoption by the Morrow County Court on February 22, 2012. (MC-C-3-01) (MC-02-05) (MC-04-05)