Canyonville

Interchange

I-5 Exit 99: Interchange Area Management Plan

Oregon Department of Transportation

March 2006

THIS PAGE WAS INTENTIONALLY LEFT BLANK

Acknowledgements

Technical Advisory Committee

Clarice Dennison
Canyonville Planning Commission

Mike Lutrell
Douglas County Public Works Department

Kelly Niemeyer
Douglas County Planning Department

Wayne Shammel
Cow Creek Band of Umpqua Tribe of Indians, General Counsel

Lisa Cortes
Oregon Department of Transportation

Ingrid Weisenbach
Oregon Department of Transportation

Haregu Nemariam
Oregon Department of Transportation

Bob Grubbs
Oregon Department of Transportation

Ron Hughes
Oregon Department of Transportation

Steve Madison
Oregon Department of Transportation

THIS PAGE WAS INTENTIONALLY LEFT BLANK

TABLE OF CONTENTS

LIST OF TABLES

LIST OF FIGURES

1: INTRODUCTION

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. The Oregon Department of Transportation (ODOT) Region 3 is required to prepare an Interchange Area Management Plan (IAMP) for the proposed I-5: Exit 99 Interchange Improvement project (Key 12707). It is the goal at the time of redesign of the interchange to meet the appropriate spacing standards, but at the very least, to improve the current conditions by moving in the direction of the spacing standards (OAR 734-051-0190(2) (B)). The interchange project is located at mile point 99.53 within the Canyonville Urban Growth Boundary (UGB). The IAMP must be developed in accordance with the Oregon Highway Plan (OHP) Policy 3C, Oregon Administrative Rule(OAR) 734-051-0155, Interchange Access Management Spacing Standards for Approaches, and the Oregon Transportation Investment Act (OTIA) conditions for interchanges adopted by the Oregon Transportation Commission (OTC) on January 6, 2002.

The IAMP focuses on existing and future land use and access management in the interchange's area of influence. The goal of the IAMP is to improve and protect operations of the North Canyonville interchange area and protect the upcoming project that will improve the interchange. The IAMP includes an Access Management Strategy (AMS) that identifies short-term project specific actions only. The IAMP includes recommended long-term strategies for the area outside of the project limits, but within a ¼ mile of the interchange ramp terminals. This information will help continue coordination efforts between Douglas County (County), Cow Creek Band of Umpqua Tribe of Indians (Tribe), Canyonville (City), and ODOT.

OBJECTIVES

The Canyonville IAMP is intended to outline access management strategies that will be considered for implementation in conjunction with the I-5: Exit 99 Interchange Improvement project and recommended long-term access improvements for the County to consider for future improvements to roadways under their jurisdiction in the influence area. The IAMP will provide an analysis of potential land use changes around the interchange. These will allow the City and County to refine local land use designations and Comprehensive Plan policies in order to ensure that growth which impacts the interchange will not overwhelm future interchange improvements.

I-5: EXIT 99 INTERCHANGE IMPROVEMENT PROJECT BACKGROUND

The project is being coordinated with the City, County, and Tribe to improve the existing interchange. The I-5: Exit 99 Interchange Improvement Project (KN 12707) is intended to mitigate traffic impacts from existing and planned developments, improve access management at the off-ramp and on-ramps, replace the two I-5 overpass bridges, and improve operations.

The project is located on Interstate 5 (I-5) approximately 0.4 mile north of the center of the city of Canyonville, Douglas County, Oregon. The Canyonville Exit 99 interchange is within the Canyonville urban growth boundary (UGB), approximately 25 miles south of Roseburg and 40 miles north of Grants Pass. Most of the project area is within existing ODOT right-of-way. The existing northbound (NB) and southbound (SB) bridges carry I-5 traffic over Irwin Access Road. The project is located in Sections 21 and 28, Township 30 South, Range 5 West, Willamette Meridian, on Douglas County Assessors Tax Lot Map T30S-R5W-S21. Adjacent land uses include Seven Feathers Truck Stop to the northwest, the Seven Feathers Casino, residential, and commercial development to the southeast, and residential and commercial developments to the northeast. A steep, undeveloped, forested hillside is southwest of the project area.

The project area is located within the South Umpqua River basin in the Klamath Mountains Ecoregion. The South Umpqua River is located east of the project area. The surrounding landscape is mostly forested, with mountainous topography. The project area is situated at an elevation of approximately 750 feet, at the base of a 1,200-foot summit.

The I-5: Exit 99 interchange project area consists of an I-5 off-ramp for SB traffic and I-5 on-ramps for NB and SB traffic. Figure 1 shows the project area and surroundings. There are two lanes of traffic in each direction of I-5. Two three-span bridges at the interchange allow I-5 traffic to pass over Irwin Access Road, which is on a northeast-southwest alignment. The existing bridges were built around 1956 and are on the list of cracked bridges identified throughout the state. ODOT proposes to replace the two bridges (overpasses). In conjunction with the necessary bridge replacements, ODOT would realign the existing Exit 99 on-ramps for both NB and SB I-5, realign the existing Exit 99 off-ramp for SB I-5, and realign and improve adjacent roads. Improvements to Jeffries Drive and a road providing access to tribal property to the west of I-5 would require minor improvements to a culvert carrying Jordan Creek beneath I-5 (DEA 2005).

Figure 1: Interchange Management Area

THIS PAGE WAS INTENTIONALLY LEFT BLANK

Purpose and Need for the Project

The purpose of the I-5: Exit 99 Bridge Replacements and Interchange Improvements Project is to replace the two I-5 overpass bridges, to provide capacity for additional traffic expected from planned development, and to improve access management at the off-ramp and on-ramps for I-5.

The bridge structures at Exit 99 are listed on the state cracked bridge list. Also, because the bridges do not provide adequate clearance over Irwin Access Road, the new bridge structures would be built with adjustments made to the underpass in order to meet clearance requirements. As part of the Oregon Transportation Investment Act (OTIA) III – a 10-year, $3 billion program – ODOT will repair or replace hundreds of bridges, pave and maintain city and county roads, improve and expand interchanges, add new capacity to Oregon's highway system, and remove freight bottlenecks statewide (ODOT no date). The two I-5 overpass bridges would be replaced under the OTIA III program.

The Exit 99 interchange is being put under pressure by additional traffic generated by continuing growth and development in the Canyonville area. Much of the land in the project area is owned by the Cow Creek Band of the Umpqua Tribe of Indians (Tribe), including the Seven Feathers Hotel and Casino Resort located in the southeast quadrant of the project area. New development planned for both sides of the interchange is expected to draw additional traffic to the area. The planned development includes a 200-space RV park west of the interchange (under construction), an interpretive garden northwest of the interchange, an 18-hole golf course with driving range northwest of the interchange, and a 12-store outlet shopping mall area on the east side of the interchange. The rest areas closest to Exit 99 to the north and to the south have either been closed or are scheduled to be closed in the near future. A potential new rest stop being considered for the north end of the SB off-ramp frontage road, called Jeffries Drive, would put additional pressure on this interchange.

The configuration of the local roads connecting with the SB and NB ramps is inefficient and challenging to drivers. There are private accesses in close proximity to the SB off-ramp along Jeffries Drive, which connects to the SB off-ramp in the existing configuration. The configuration of Jeffries Drive with the SB off-ramp requires vehicles to make a tight turn, which is difficult for a high percentage of the trucks using the SB off-ramp. The junction of the NB on-ramp with Stanton Park Road, a local road also known as Yokum Road, is aligned at a severe acute angle rather than being perpendicular. This configuration is confusing to drivers and can present an unsafe situation.

The project is needed because of the above conditions. ODOT's proposed upgrade of Exit 99 on I-5 to accommodate traffic demands for the interchange would require ODOT to obtain a permanent easement on tribal trust land for highway right-of-way purposes (DEA 2005).

An Environmental Assessment (EA) was prepared to address the potential environmental effects of the Project and the potential effects granting an easement on tribal trust land to ODOT. The EA was prepared in accordance with the Bureau of Indian Affairs (BIA) National Environmental Policy Act (NEPA) standards. In addition,

and Interchange Modification Request was prepared to request Federal Highway Administration (FHWA) approval for the modified interchange. The policy addresses the requirements contained in the policy statement "Additional Interchanges to the Interstate System", published in the Federal Register on February 11, 1998.

INTERCHANGE MANAGEMENT AREA

The IAMP interchange area of influence extends 1/4 mile (1320 feet) beyond the end of the interchange ramp terminal intersections of Exit 99 North Canyonville along the approach roads. Figure 1 shows the approximate boundary of the North Canyonville Interchange Management Area (IMA).

The I-5 Interchange Improvement Project will occur around the NB on-ramp and SB on/off-ramp, however, for the purpose of a 20-year IAMP, the study area has been expanded to include the Exit 99 NB off-ramp. The NB off-ramp's interchange area of influence is outside of the I-5: Exit 99 Interchange Improvements Project (Project) Limits. The minimum interchange area of influence extends ¼ in each direction from ramp terminals. The ¼ mile south of the NB off-ramp extends onto Main Street, under County jurisdiction; therefore, long-term strategies have been developed as recommendation to the County. This is also the case with Stanton Park Road north of the NB on-ramp. Currently Stanton Park Road is connected to the ramp terminal and intersects with Main Street, but after the Project it will be disconnected from the ramp and realigned to intersect with Gazely Bridge Road east of its current intersection with Main Street. The IMA boundary shown on the figure is approximate. Some land was included in the analysis west of the boundary to include proposed land uses. The parcels facing the frontage roads will be the focus of the access management analysis.

The area is urban in nature and is characterized by 45 approach points fronting the approach roads to the interstate. The effort will focus on identifying opportunities for interchange area access management measures.

2: EXISTING CONDITIONS

LAND USE / ZONING

Pursuant to the requirements stated in the Oregon Administrative Rule 734-051-0125 for the preparation of an IAMP, a summary of land uses are described below for the IMA. This section provides a description of the existing comprehensive plan designations.

Canyonville

Canyonville has land use planning jurisdiction for areas within UGB and City limits. The City zoning designations in the IMA include tribal lands; single-family residential, commercial retail, commercial highway related, and Community Service (see **Figure 2**). Specifically, the land within City limits in the IMA consists of the two zones R-1 Single Family Residential allowing 2-5 units/acre and C-2 commercial retail. The majority of the land located within the UGB is Tribal lands. The other zones found in the UGB within the IMA are C-2 Commercial Retail (Best Western Motel), CS Community Service (Masonic Cemetery), C-3 Commercial Highway related (Burger King), and R-1 Single Family Residential. The management land within the UGB is coordinated by the UGMA between the City and County.

On the east side of the Interstate north of Gazley Rd is the only Commercial Highway zoned parcel (Burger King). The rest of the parcels in this area are zoned R-1 Residential and Tribal. Current land uses are residential and two small motels.

The dominant feature on the east side of the Interstate south of Gazley Rd in the UGB is the Seven Feathers Hotel and Casino. The other existing land use in this area is the Masonic Cemetery (CS; Community Service). The zoning is commercial; however, the majority of uses are non-conforming single family residential. Uses south of the project area in City limits include residential and a few commercial businesses. The commercial businesses consist of two automobile services, fencing business, and a small second hand store located on the bottom level of a residence.

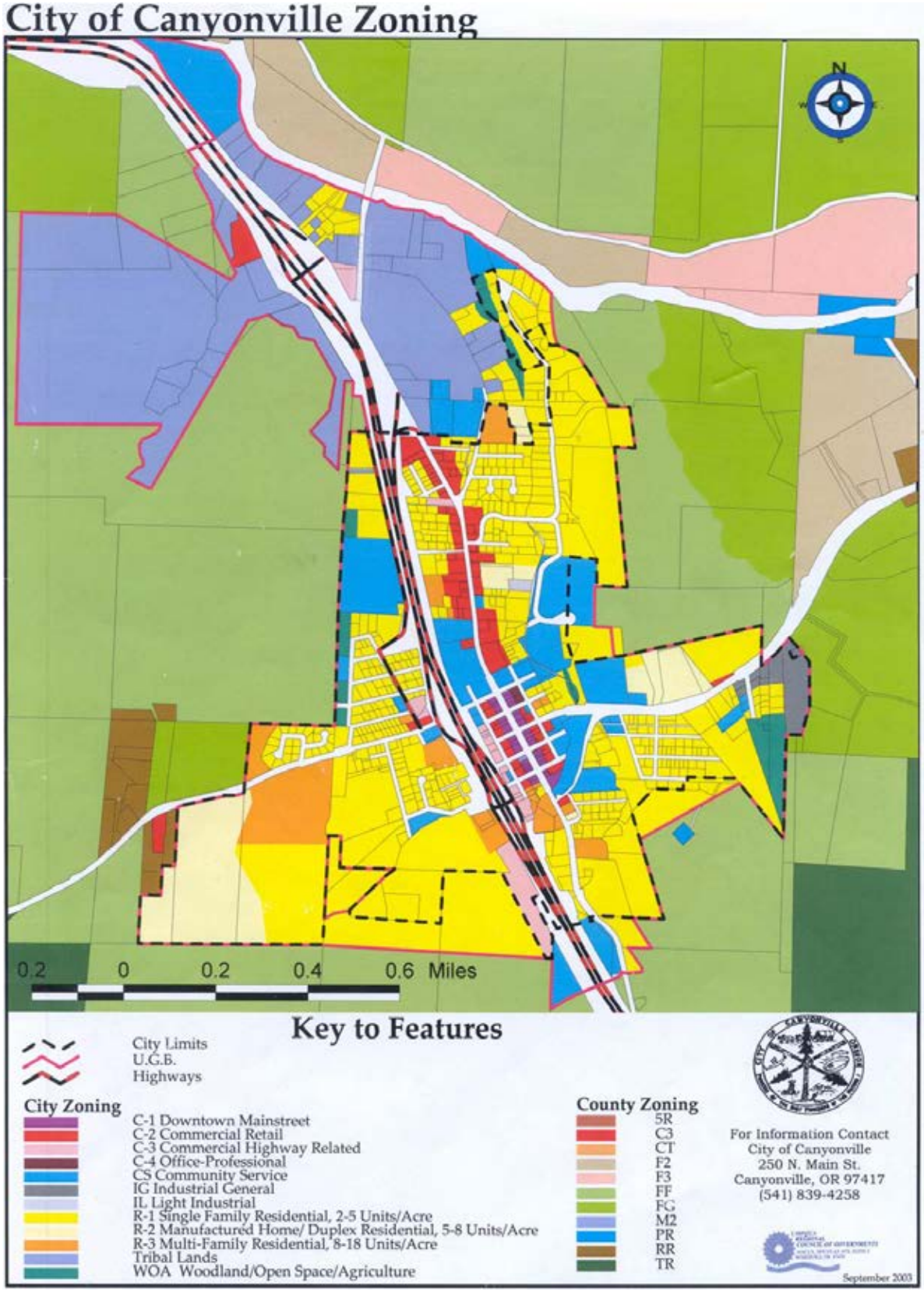
The dominant feature on the west side of the interstate is the Seven Feathers Truck and Travel center. The only non-tribal parcel in this part of the study area is Best Western Motel zoned C-2 commercial retail.

County

The County zoning within and surrounding the IMA is primarily Farm Forest (FF) (see **Figure 2**). The stated purpose of the classification is to promote management utilization, and conservation of current, or potential, forested grazing lands. Uses in this zone are limited to farm and forest use, associated buildings, and limited home occupations. The minimum lot size is 80 acres. Across the river to the northeast, lies Exclusive Farm Use – Cropland (F2, F3). The purpose of the zones is to provide areas for the continued agricultural use and permit the establishment of only those new uses which are compatible with agricultural activities. The minimum property size established by this zone (Article 4) is intended to promote commercial agricultural pursuits, such as

grain lands, croplands and horticultural areas. Permitted uses are farm use, their associated buildings and accessory uses, and propagation or harvesting of a forest product. The difference between the two is the acreage minimums.

Figure 2: City of Canyonville Zoning map



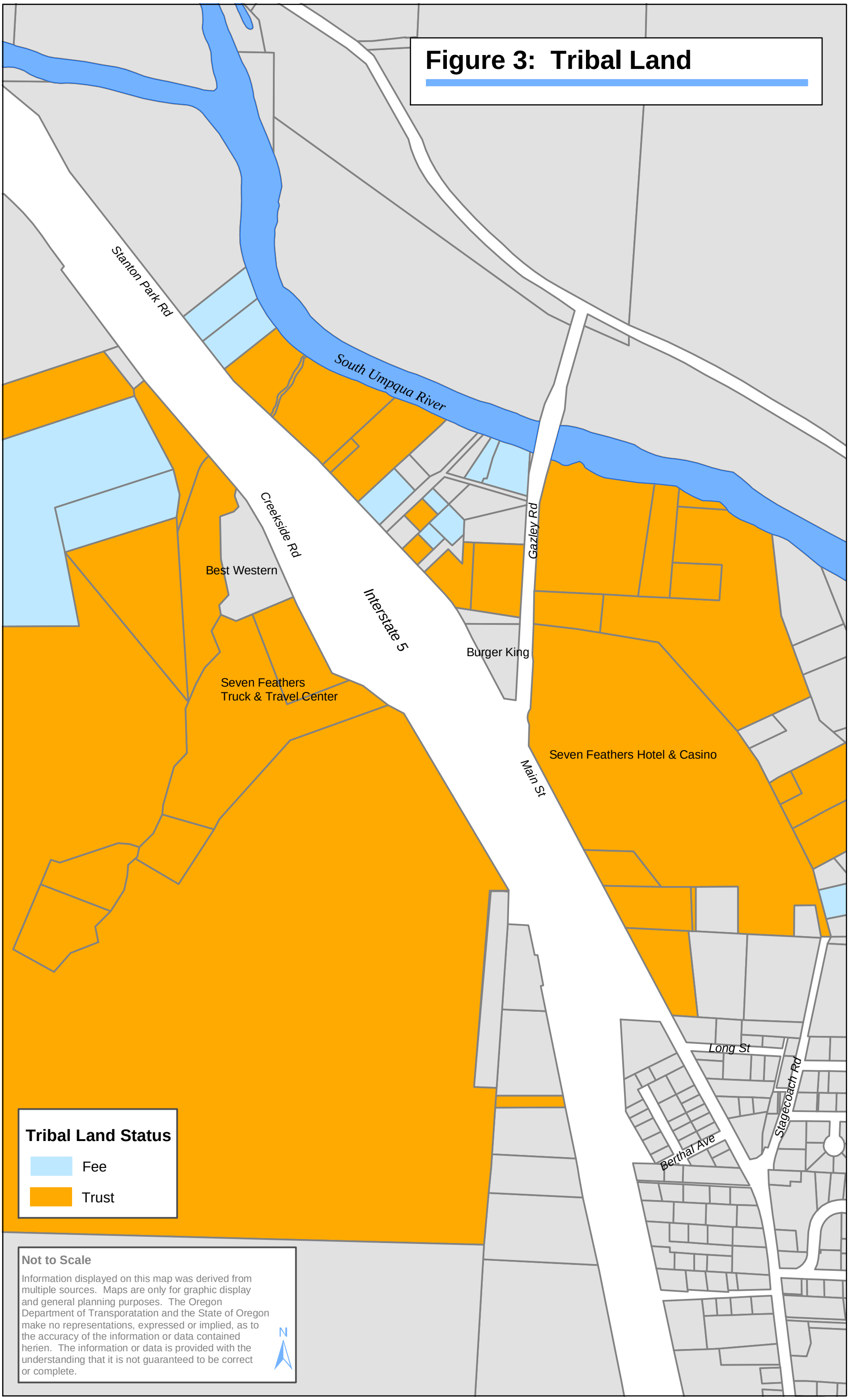
THIS PAGE WAS INTENTIONALLY LEFT BLANK

Tribal

Land in Trust is for the benefit of current and future generations of the tribal members. The title is held legally by the federal government, acting as trustee, in a trust status. This status means that the land is not subject to state or local laws and falls under tribal government authority. Land held in “trust” by the federal government cannot be sold, transferred, leased or used without tribal approval. However, Tribal “fee” land (private corporate ownership) is generally subject to the same zoning and subdivision regulations of the local jurisdiction where the land is located. All trust land under tribal law is zoned multi-use. The Tribe shall be required to apply for a permit to roadways under state and county jurisdiction (See **Figure 3**).

THIS PAGE WAS INTENTIONALLY LEFT BLANK

Figure 3: Tribal Land



THIS PAGE WAS INTENTIONALLY LEFT BLANK

ROAD CHARACTERISTICS

These data were gathered in order to gain understanding about the Interstate. Information will be helpful in identifying access issues and developing recommendations for access management for the project area.

Table 1: Current Network[1]

County Road No.	Name	Classification	Speed	Jurisdiction
001B	Stanton Park Road(Realigned to Gazley Bridge Road)	Major Collector	45 MPH	County
001C	Main Street(S from I-5 Exit 99 NB off-ramp to 3rd Street)	Major Collector	25 MPH/20 through School District	County
N/A	Main Street (Gazely Bridge Road to I-5 Exit 99 NB off-ramp)	Local Interest Road	25 MPH/20 through School District	State
NA	Creekside Blvd. (I-5 Exit 99 to End)	Local Interest Road	30 MPH	State
035	Gazley Bridge Road	Major Collector	45 MPH	County
N/A	Long St	Local	25 MPH	City
N/A	Klenke Ln	Local	Private	Tribe
N/A	I-5 Mainline	Interstate/ Principal Highway	65 MPH	State

Based on Functional Classification, different standards apply for speed, access, and mobility standards. Functional classification is the process by which streets and highways are grouped into classes, or systems, according to the character of service they are intended to provide. The county uses a four part classification system to describe function of the roads under their jurisdiction. This system includes principal highways, arterials, collectors, and local roads. Collector roads are further broken down into major and minor collectors. The following characteristics apply to classifications within the IMA:

[1] As of Cooperative Improvement Agreement I-5: Exit 99 Interchange Improvements & Bridge Replacement Douglas County No. 21133.

County

Principal Highway – These fall under state jurisdiction.

Major collector – They provide the connection of major residential and activity centers. Such roads primarily accommodate through traffic and channel traffic from local and minor collectors onto streets of higher classification. Access to adjacent properties may be limited to balance between movement and access. In rural areas, major collectors connect minor rural communities, provide secondary access between major communities and provide access to major employment, recreational and rural residential areas.

Minor collector – They are intended to distribute local traffic onto other minor collector, major collector or arterials. Property access onto minor collectors is often allowed. In rural areas, minor collectors also connect rural residential areas.

Local – They are intended to provide direct access to abutting property and move traffic from its origin to the major road network. The through movement of traffic on local roads is to be discouraged.

City

Canyonville uses arterial, collector, and local street classifications. The classification characteristics for classifications existing in the study area are as follows:

Local – They provide access to abutting property and their secondary function is to move local traffic to a collector. Through traffic, especially buses and heavy trucks should be strongly discouraged.

Current Deficiencies

Table 2: Geometric deficiencies include:

Deficiency	Standard
SB ramp terminal intersection has limited sight distance (22 miles/h) due to horizontal curvature.	At least 31 miles/h
Numerous driveways and intersections along northbound ramps.	No access point along ramps
Private Business access along Creekside Rd. is only 164 ft from SB ramp terminal	First full access intersection should be at least 1320 ft from ramp terminal
Existing ramp terminal spread is only 459 ft	Desirable ramp terminal spread is 558 ft
75 ft curve on frontage/crossroad sight distance limited to 164 ft	Recommended sight distance is 394 ft (local arterial)
NB entrance ramp accel lane is 951 ft	1083 ft
Existing vertical clearance is 15.5 ft.	Desirable vertical clearance is 17 ft (local arterial)

Deficiency	Standard
NB exit ramp is only 2854 ft from NB entrance ramp at Canyonville interchange	Desirable ramp spacing is 0.6 miles
Interchange located within 1.86 miles of adjacent interchanges	At least 6 miles in rural areas
SB ramp terminal intersection has limited sight distance (< 22 miles/h) due to horizontal curvature	Sight distance should be provided for at least 31miles/h (local arterial)

The configuration of the local roads connecting with the south-bound and north-bound ramps is inefficient and challenging to drivers. The configuration makes movement difficult for trucks and freight. There are several private accesses in close proximity to the south-bound off-ramp along the frontage road that connects to the southbound off-ramp. The junction of the northbound on-ramp with a local road meets at a severe acute angle rather than a perpendicular alignment. This configuration is confusing to drivers and can present an unsafe situation (Toews 2004).

The Irwin bridge structures at Exit 99 are deficient and listed on the cracked bridge list. The Irwin under crossing road that passes beneath the bridges does not have the necessary height required. The existing height is 15 ½ ft and the standard is 17 ft.

TRAFFIC CHARACTERISTICS

Greater mobility is expected on roads with higher classifications. Mobility standards are used to determine the traffic a road can handle. Once mobility standards are set, depending on functional classification, it is possible to see deficiencies in road capacity. In this plan, mobility is measured by a volume to capacity ratio (v/c). For example, the county urban v/c for a major collector equals 0.90, which means peak hour traffic uses 90 percent of the roads capacity; ten percent of the roads capacity is not used. If v/c mobility exceeds the standard traffic may begin to form queues. V/C is used to help plan for future developments and the transportation system. The goal is to keep developments and land use so that they do not exceed v/c mobility standards.

Volumes

The V/C ratios of the unsignalized intersections evaluated are all within the 1999 OHP and County V/C mobility standards. No-Build 1999 OHP mobility standards for the freeway ramps are 0.85. Freeway operation with merge and diverge movements at the ramps was within 1999 OHP mobility standards (See Figure 2 in Appendix A) The following Table 3 from the County TSP summarizes the maximum allowable volume to capacity (V/C) ratios for county routes based on functional classification. County roads in the UGB fall under urban standards.

Table 3: County Mobility Standards

Classification	V/C Urban	V/C Rural
Arterial	0.85	0.80
Major Collector	0.90	0.85
Minor Collector	0.95	0.90
Necessary Local	0.95	0.90

Where two different county route classifications intersect, the V/C ratio of the higher county classification shall be used for the intersection. The County Public Works Engineering Department shall have the final determination of roadway capacity issues.

The City does not have mobility standards listed for their system.

Table 4: 2003 Unsignalized Intersection Analyses

Intersection	Controlling Approach[1]	Volume to Capacity (V/C) Ratios	Mobility Standard
		2003	
SB on/off ramp	Southbound Off- Ramp Left / Right Turns	0.70	0.85
NB On-ramp at Stanton Park Road	On Stanton Park Rd Southbound Through / Right Turn	0.20	0.85
Main Street at Underpass	Under crossing Eastbound Left /Right Turns	0.37	0.85
Main Street at Gazley Bridge Road	On Gazley Westbound Left /Right Turns	0.30	0.85
Creekside Rd at Truck Parking and Employee Parking	Truck Parking Eastbound Left / Right Turns	0.07	0.90
Main Street at Casino Access	Casino Access Westbound Left Turn	0.33	0.85

1 On Unsignalized Intersections, the operation of the intersection is determined by the approach with the highest volume to capacity (v/c) ratio. This v/c ratio reflects the operation of the controlling approach and not for the entire intersection.

All of the analyzed intersections are shown to operate at an acceptable level within the v/c parameters established by the agency with jurisdiction of the facility (Toews 2004).

Crash records

Five crashes were reported between 1998 and 2002 in the interchange area. The crashes (1998-2002) on I-5 through the interchange area are mainly fixed object and rear-end collisions due to driver error with no pattern between them. The crash rate is

0.24, which is average with the five-year average of 0.22[2] crashes per million vehicle-miles for a rural freeway segment. Freeway ramp crash rates cannot be directly compared to crash rates on other types of roadway sections because of the numerous variables such as shorter length, narrower cross-sections, sharper turns, steeper grades, and intersections (Toews 2004).

The majority of the crashes on the frontage roads and ramps have been rear-end collisions. The rest of the collisions occur because of improper turning or backing maneuvers.

Table 5: Non-Interstate 2000-2002 Crash Summary[3]

Location	Number	Type	Cause
Stanton Park Rd	1	*PDO	Left turn in front of traffic (1)
Creekside Rd to SB Stanton Park Rd	1 1	PDO *INJ	Failed to avoid stopped car (2)
Stanton Park Rd to NB Stanton Park Rd	1 1	PDO INJ	Ran stop sign (1) Failed to Avoid stopped car (1)

*Property Damage Only
*Injury

[2] Transportation Planning Analysis Unit Technical Memorandum: Canyonville Exit 99 Interchange Pacific Highway (I-5), Mile Post 99.0 dated March 26, 2004.

[3] Department of Transportation, Transportation Development Division, Transportation Data Section Crash Analysis & Reporting Unit.

3: FUTURE CONDITIONS/NO BUILD SCENARIO

LAND USE/ZONING

Canyonville

The plan map for the City is consistent with existing zoning. Although, the City plan map zoning is consistent with existing zoning, it is difficult to predict what exactly will happen within the UGB because the majority of the land in the IMA is Tribal trust land. The planned land uses within city limits in the study area is commercial retail and single family residential and the plan map remains consistent with these zoning designations.

More traffic could generate if the current non-conforming uses of parcels south of the NB off-ramp redeveloped to existing and planned commercial zoning. Parcels are small and would most likely need to develop together to generate significant traffic impacts. A preliminary analysis was done to determine possible future 2002 Highway Design Manual (HDM) v/c ratios if the non-conforming parcels were developed to full build out and if the approximate 4 acres of residential parcels were rezoned to commercial and developed to full build out[4]. The results are as follows: The SB off-ramp intersection with Creekside Drive v/c ratios are 0.55 and 0.91 for 2006 and 2026 respectively. The HDM mobility standard is 0.65 and the state mobility standard is 0.85, so it would possibly be exceeded in 2012. The NB off-ramp intersection with Main Street v/c ratios are 0.52 and 0.97 for 2006 and 2026 respectively. It estimated to exceed the HDM mobility standard of 0.65 and the state mobility standard of 0.85 in 2012. There would need to be more detailed analysis in the future to determine mitigation if the full build out commercial scenario occurs. Policy 7 of the City's Comprehensive Plan will ensure coordination between the City and ODOT to mitigate transportation impacts that may result from commercial and industrial development at the north I-5 interchange.

The City has discussed expanding its' UGB north and zone it light industrial in the future. At this time, no specifics are known. ODOT, City, and County must work together in planning and decision making relating to transportation.

Policy 7 of the City Comprehensive Plan reads as follows: Coordinate with the Oregon Department of Transportation (ODOT) to mitigate transportation impacts that may result from commercial and industrial development at the north I-5 interchange. No plan amendment shall be approved in Canyonville that may adversely affect the level-of-service (LOS) at the Exit 99 interchange, unless a transportation impact study (TIS) has been approved in coordination with ODOT, consistent with OAR 660-12-060. This policy will ensure that the agencies work together to make the best land use and transportation decisions.

County

The County is not aware of any planned developments around the IMA at this time. The County plan map shows that land is planned for Agriculture north and east of the UGB

[4] This analysis included the preferred alternative described in chapter 4. The SB off-ramp has right and left lanes and NB off-ramp has single shared left/right lane stop control on the off-ramps.

near the IMA. Land is planned Farm/Forest Transitional west of the UGB near the IMA. However, the land to the west is in trust and some of the land to the east so it is tribal multi-use.

Tribal

The Tribe has plans for several new developments in the project area. Tribal planning representatives were consulted about the type, size, location and completion dates of the proposed developments. The proposed developments within the next 20 years include:

- 200 space RV Park
- Rest area
- Interpretive Garden
- 18 hole golf course with driving range
- outlet shopping mall

Construction of the proposed project will require acquisition of part of a mini storage facility and of the residential structure located east of I-5 within projects limits to allow through connection of Stanton Park Road to Gazely Bridge Road (DEA 2005). Both are owned by the Tribe. The Tribe will be required to apply for a permit to roadways under state and county jurisdiction.

TRAFFIC CHARACTERISTICS

Volumes

ODOT Transportation Planning Analysis Unit (TPAU) performed a cumulative analysis to obtain the 2006 and 2026 no-build volumes. A cumulative analysis looks at the existing and proposed development and the resulting generated trips. Historic growth was used to predict the amount of future through trips.

Future through (external – external) trips were estimated using the 20 year historical growth rates for I-5 on the north and south sides of the study area. Over the last 20 years, the average growth rate for I-5 through this area is 2% per year (Toews 2004).

The volumes shown for 2006 No-Build analysis assumes that the following additional traffic volume generators are in place–

- proposed 200 space RV Park, operating at 1/2 capacity
- proposed interpretive garden,
- new rest area.

The volumes shown for the 2026 No-Build analysis assumes that the following additional traffic volume generators are in place–

- RV Park is now operating at capacity,
- rest area is in operation,

- interpretive garden has been expanded,
- 18 hole golf course with driving range is added,
- and an outlet shopping mall.

The following results of the no-build traffic analysis are shown in Table 5.

2006 – When additional traffic volumes are added due to historic growth and proposed development, the SB on/off ramp exceeds capacity, which indicates that the intersection can expect to experience congestion and delay. Reported queue length becomes “unstable” because the intersection is over capacity and the reported queue may be much longer and could extend onto I-5. Freeway operation with merge and diverge movements at the ramps was within 1999 OHP V/C mobility standards. The other intersections evaluated are within the 1999 OHP V/C mobility standards with minimal queuing (See Figure 3 in Appendix A).

2026 – When significant amounts of traffic volumes are added due to growth and development, both the SB on/off ramp and the Main Street at the Freeway operation with merge and diverge movements at the ramps was within 1999 OHP V/C mobility standards. As Creekside Drive carries larger traffic volumes, fewer gaps will be available for vehicles to use to get onto Creekside Drive. The Creekside Drive access to the truck parking, just south of the restaurant, has the potential to back-up into the truck parking lot as more and more traffic occurs on Creekside Drive. Main Street at the under pass intersection operates over capacity. Again, the queue length reported may be much longer causing blocking. The other intersections evaluated are within the 1999 OHP V/C mobility standards with minimal queuing.

Table 6: No-Build Unsignalized Intersection Analysis

Intersection	Controlling Approach[1]	Volume to Capacity (V/C) Ratios		Mobility Standard
		2006	2026	
SB on/off ramp & Creekside Drive/Road	Southbound Off- Ramp Left / Right Turns	**1.20**[2]	**1.70**[2]	0.85
NB On-ramp & Stanton Park Road/Main St.	On Stanton Park Rd Southbound Through / Right Turn	0.32	0.70	0.85
Main Street & Irwin Access Road	Under crossing Eastbound Left /Right Turns	0.77	**1.50**[2]	0.85
Main Street & Gazley Bridge Road	On Gazley Westbound Left /Right Turns	0.40	0.78	0.85
Creekside Dr. at Truck Parking and Employee Parking	Truck Parking Eastbound Left / Right Turns	0.18	0.28	0.90
Main Street at Casino Access	Casino Access Westbound Left Turn	0.42	0.75	0.85

[1] On Unsignalized Intersections, the operation of the intersection is determined by the approach with the highest volume to capacity (v/c) ratio. This v/c ratio reflects the operation of the controlling approach and not for the entire intersection.

[2] The dark shaded areas show the areas where mobility standards are not met (Toews 2004).

4: PREFERRED ALTERNATIVE

The project team identified design elements to consider in the development of the alternative. The I-5 Improvement Project analyzed several design elements in various combinations to determine which would provide the best build alternative for the interchange area. The design elements include –

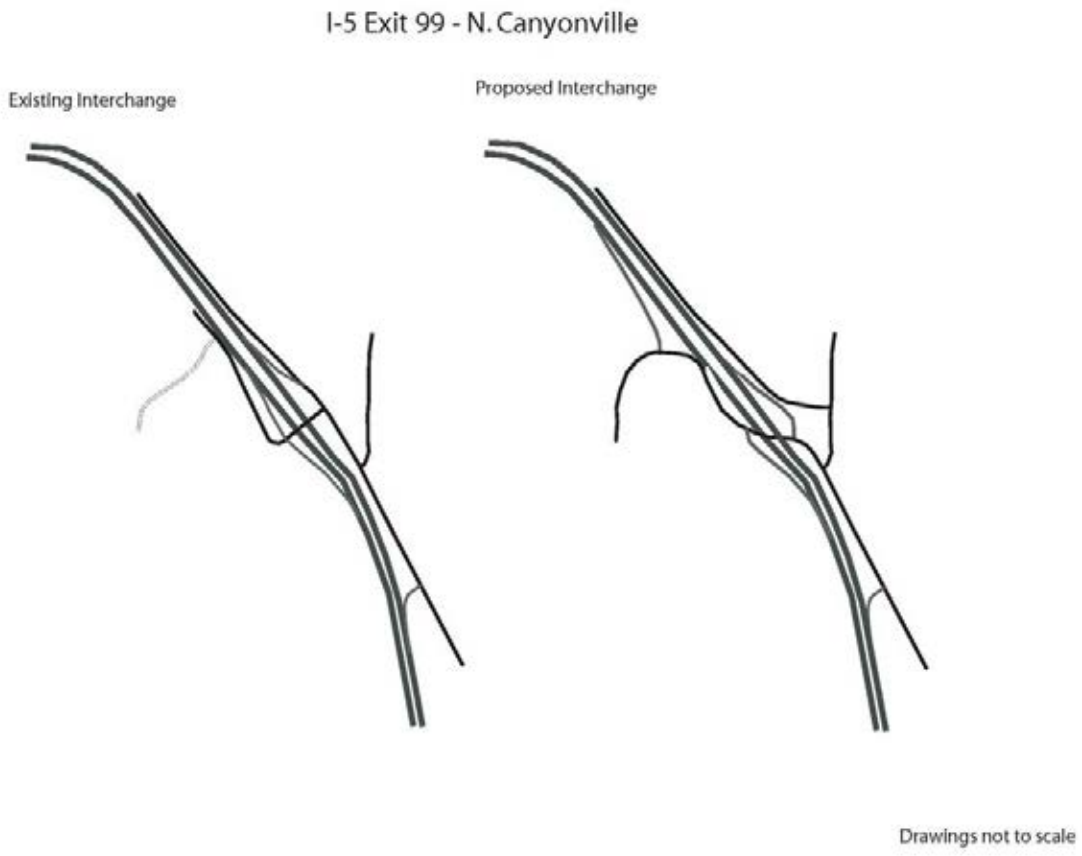
- Realigning Stanton Park Road with Gazley Bridge Road to eliminate the atypical lane configuration of the intersection. The two roads meet at a severe acute angle rather than a perpendicular alignment. This configuration is confusing to drivers and can present an unsafe situation.
- Widening the under crossing to four lanes by adding eastbound and westbound back-to-back left-turn lanes. No additional through lanes would be added.
- Signalizing the SB on/off ramp.
- Signalizing the SB on/off ramp and the Main Street at the under crossing intersection.
- Realigning the Main Street at the under crossing intersection so that the through movement is between Main Street and the under crossing.
- Moving the SB off ramp north of the interchange and "T" it into the local tribal road that leads to the RV Park and rest area.
- Building a roundabout at the SB on/off ramp.
- Sidewalks and bike lanes.

The preferred alternative as described in the Technical Memorandum for the traffic analysis (Toews 2004) includes the following design elements (see **Figure 4**).

- Move the SB off ramp north of the interchange and "T" it into the local tribal road (Creekside Drive) to the RV Park and proposed rest area,
- Realign Main Street with the under crossing to allow for free flow traffic between them,
- Realign Stanton Park Road to align with Gazley Bridge Road and separate the NB on-ramp,
- Widen and realign the under crossing to include two through lanes with eastbound and westbound back-to-back left-turn lanes,
- Widen Creekside Drive to two lanes with a continuous left-turn lane.

The preferred alternative addresses the traffic flow conditions and allows design flexibility to accommodate planned and future development and growth in the interchange area during the project life through 2026 (DEA 2005).

Figure 4: Proposed Interchange



ROAD CHARACTERISTICS

Stanton Park road will be realigned with Gazley to eliminate the confusion caused by an acute angle between the NB on-ramp and the current Stanton Park road. Realigning Stanton Park road helps by eliminating most of the access points between the NB ramps.

The preferred alternative adds bike lanes on both sides of the road from Creekside to Main and on the rebuild section of Stanton Park. Sidewalks are being built on the business side of Creekside to Main and on the north side of the rebuild section of Stanton Park. Relocating the SB off-ramp improves the turning movement for freight.

TRAFFIC CHARACTERISTICS

Both the SB off and the SB on ramps will operate within 2002 HDM V/C guidelines through the project's design life based on existing and known planned development. The V/C at the intersection of the SB off ramp and the frontage road is 0.70 at the end of the project life. Main Street at the under crossing results in a V/C of 0.26 at this intersection. This intersection has ample capacity to allow for unexpected growth and development and still operate within the 2002 HDM V/C guidelines.

Table 7: Preferred Alternative Future Volume to Capacity

Intersection	Controlling Approach[1]	Volume to Capacity (V/C) Ratios	Mobility Standards/ HDM Acceptable V/C
		2026	
SB-Off ramp & Creekside Drive	Southbound Off- Ramp Left turn	**0.84**	0.85/0.65
SB On-ramp & Creekside Drive	SB On-ramp Left turn	0.42	0.85/0.65
Main Street & Irwin Access Road	Under crossing Eastbound Left turn	0.26	0.85/0.75
Main Street & Gazley Bridge Road	On Gazley Westbound Left /Right Turns	**0.97**	0.85/0.75
Main Street at Casino Access	Casino Access Westbound Left Turn	0.65	0.85/0.75

The build alternative will allow the interchange intersections to operate at acceptable HDM acceptable v/c ratios in the design year 2026 with the exception of two intersections. One of these is Main St. & Gazley Bridge Road. This design feature was present in all the build alternatives. With the realignment of Stanton Park Road with Gazley Bridge Road, more vehicles will use this intersection, and it is anticipated to exceed vehicle-to-capacity standards in the year 2020. At that time, if the SB Gazely leg of the intersection were modified from the single left-turn/right-turn lane to two lanes, providing a right-turn lane and a left-turn lane, then the intersection will meet standards

and a v/c ratio of 0.71 in the design year 2026 (DEA 2005). Currently, the design of an added lane is not part of the project due to cost and right-of-way issues, however, it may be phased into the project at a time in the future so that the intersections does not exceed capacity standards in the futures. The other is the SB off-ramp and Creekside Drive intersections. With all the development projected, it is expected to operate with 19% less than the standard capacity, however it will have 16% of capacity available for an unsignalized intersection. If the SB off-ramp were signalized, the v/c ratio would drop to 0.64 providing 20% more capacity than the unsignalized intersection and would meet HDM v/c standards. Listed below is how the preferred alternative addresses the geometric deficiencies.

Table 8: Proposed Geometry Improvements

Deficiency	Standard	Improvement
SB ramp terminal intersection has limited sight distance (22 Miles/h) due to horizontal curvature.	At least 31 miles/h	Move SB ramp to North, improves Sight Distance
Numerous driveways and intersections between northbound ramps.	No access point along ramps	Improved with Access Management Plan
Access along Creekside Rd. is only 164 ft from SB ramp terminal	First full access intersection should be at least 1312 ft from ramp terminal	Move SB ramp to North.
Existing ramp terminal spread is only 500 ft	Desirable ramp terminal spread is 558 ft	Move SB off-ramp
75 ft curve on frontage/crossroad sight distance limited to 164 ft	Recommended sight distance is 394 ft (local arterial)	Realign road
NB entrance ramp accel lane is 951 ft	1,083 ft	Construct to Standard
Existing vertical clearance is 15 ft.	Desirable vertical clearance is 17 ft (local arterial)	Construct to Standard
NB exit ramp is only 0.54 mile from NB entrance ramp at Canyonville interchange	Desirable ramp spacing is 0.56 mile	Beyond scope, not addressed
Interchange located within 1.86 mile of adjacent interchanges	At least 6.2 mile in rural areas	Beyond scope, not addressed

5: ACCESS MANAGEMENT

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

Most state roads serve a function somewhere between the Interstate Highway and the local road. One of the responsibilities of the ODOT is to ensure that the design of each state road properly balances access and mobility based on the road's classification. Access Management is the means to provide this balance.

Access Management typically includes:

- Frequency, spacing and design of private driveways
- Left/Right turn lanes
- Frequency and location of cross streets
- Frequency and location of traffic signals
- Use of median barriers
- Sight distances and corner clearances

The IAMP differs from previous access management efforts in that it looks at access on approach roads to interchanges and land use from a planned, long range, system-wide approach rather that on a case-by-case basis. It recognizes that parcel by parcel access decisions made in the early stages of corridor development make it difficult, if not impossible; to preserve roadway capacity and mobility as development occurs.

ACCESS MANAGEMENT AND ECONOMIC DEVELOPMENT

There is intense pressure to allow roadside businesses unlimited access to the roadway, often resulting in strip development. This may provide an immediate opportunity for the developer, but over time, the traffic that supported the business can become traffic congestion that may keep prospective customers away. The congestion on the roadway system results in excessive time delays, delayed shipments, interrupted deliveries, loss of potential customers, and transfer of business activity to other more easily accessed businesses. Additionally, the congestion leads to increased fuel consumption, poor air quality and less desirable communities.

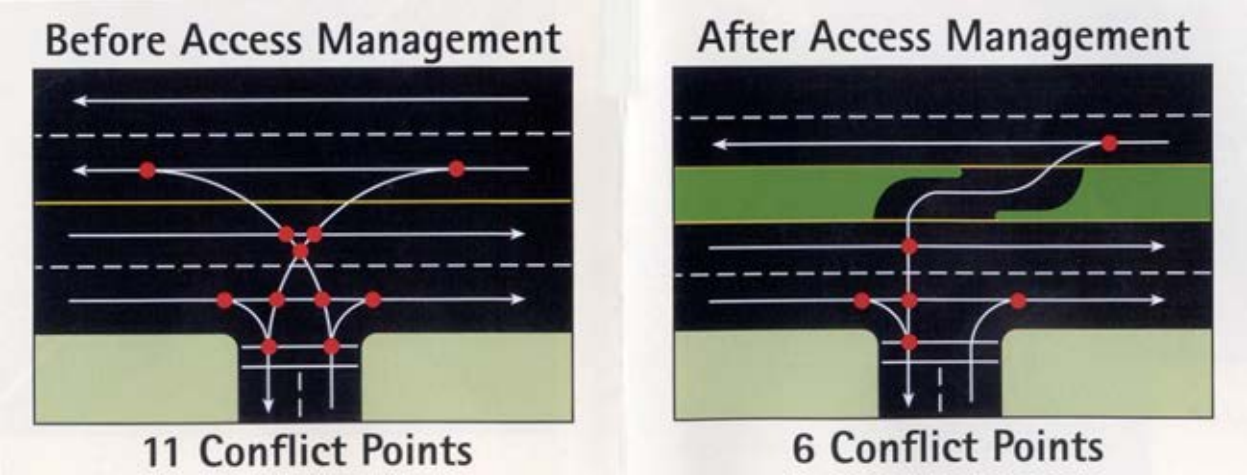
The challenge is to determine how to best apply techniques that protect the efficiency and investment, and also contributes to the City of Canyonville's' local economy and

community values. Access Management is one technique the State employs to provide more efficient highways and roadways. As traffic flow becomes more efficient, the roadway is able to handle additional traffic allowing congestion levels to decrease. This results in more motorists being exposed to roadside businesses.

ACCESS MANAGEMENT AND SAFETY

Access management is a safety issue. A basic principal of access management is to limit the number of conflict points along a roadway by limiting the number of driveways and in some locations restricting turning movements. Drivers become overwhelmed by the numerous conflict points when approaches are in close proximity to one another, increasing the potential for crashes. Studies indicate that 50-60% of accidents are access related. These include all left turn and right angle accidents, and most rear end accidents. A 1992 study by the Insurance Institute for Highway Safety found that 58% of urban area accidents occurred at or near intersections.

Figure 5: Conflict Points Before and After Access Management[5]



While automobile-automobile accidents are most common, proper access management also increases the ease of travel for cyclists and pedestrians. Excessive access points results in a disjointed network for non-automobile traffic. Also, Disabled persons are placed at risk when excessive access points exist.

The principles of access management should be used as a guide to planning and design of access points along corridors to ensure adequate access to property and to ensure the capacity of the roadway is maintained, at a relatively low cost. If, however, construction of access points occurs at random, with little thought given to proper spacing, design, or long-term impacts, it is very costly, and often difficult to correct the situation once development along the corridor is complete.

[5] Taken from ODOT's What is Access Management? Brochure (2003).

The Oregon Perspective – Facts & Figures[6]

- Approximately 50% of all non-freeway crashes are at or near driveways and intersections, and 50% of these crashes result in an injury.
- Every time a vehicle stops in a mile, fuel consumption increases by 20%, as well as an increase in emissions and fumes.
- There are more than 48,000 Oregon-based trucks. If each of those trucks was delayed in traffic only 5 minutes once a month, the extra cost of those trips would amount to $1.2 million/year.
- On an average weekday, 780,000 tons of freight worth $500 million moves by truck over Oregon roads.
- Every year, 45 million tourists travel on Oregon's highways. It is important that tourists enjoy a safe and efficient trip to their destinations. Access management makes these trips possible.

The Research Perspective – Facts & Figures[7]

- Each additional access point increases the accident rate by 4%
- Increasing the access points from 10 to 20 per mile would increase the accident rate by 40%.
- A road with 60 access points per mile would have tripled the accident rate of a road with 10 access points per mile.

The access management strategy must balance the competing needs of traffic capacity and safety for I-5 and local access needs. The Oregon Highway Plan (OHP) devotes an entire section to the discussion of access management. More detailed requirements and the access spacing standards for state highways are specified in Oregon Administrative Rule (OAR) 734-051 (Division 51): Highway Approaches, Access Control, Spacing Standards, and Medians. Ideally, a project will include provisions by which access within the project limits can be made fully compliant with Division 51. In many instances, however, access needed for existing development will not allow these standards to be met. When the requirements and standards cannot be met, the access management strategy must demonstrate progress toward meeting the applicable standards.

ACCESS STANDARDS

OAR 734-051 and the OHP contain standards for private driveway and public road approach spacing based on highway classifications and speeds. According to these standards, the first full intersection on the crossroad at an interchange should be no closer than 1,320 feet for rural interchanges with two-lane crossroads. Approach roads that are less than 1,320 feet but no closer than 750 feet shall be limited to right-in/right-out. Requests for deviations from these standards can be made, and the process is outlined in OAR 734-051-0135.

---

[6] Taken from ODOT's *What is Access Management?* Brochure (2003).

[7] Papayannoulis, Vassilios et al. Access Spacing and Traffic Safety. TRB Circular E-C019: Urban Street Symposium

OAR 734-51-0115 (1)(c)(C) and 734-051-0125 (1)(c)(C) require that "for a highway or interchange construction or modernization project…the project will improve spacing and safety factors by moving in the direction of the access management spacing standards, with the goal of meeting or improving compliance with the access management spacing standards." The OAR 734-051 and OHP access spacing standards apply to both streets and driveway approaches and are measured from the center of one access to the center of the next access on the same side of the road.

This section summarizes the IAMP's Access Management Plan. Although the access management plan imposes some restrictions and reductions of access for property near the interchanges, access management actions in this plan do not prevent the properties from being used or developed to be used in a manner consistent with their adopted comprehensive planning designations. The access management plan will help to maintain the locational advantage for these properties by improving traffic circulation, mobility, and freeway access.

SHORT-TERM APPROACH RELATED STRATEGIES FOR PREFERRED ALTERNATIVE

The goal of the AMS (short-term actions) is to move towards access spacing standards identified in Division 51 at the time of the I-5: Exit 99 Interchange Improvement project. AMS outlines how to improve access in the Projects limits and how to implement Division 51, OHP access management policies, and local policies, while recognizing that access spacing standards may not be achieved on all existing driveways and road approaches and that deviations may be needed, as appropriate. Generally, short-term strategies include closing, modifying, relocating, consolidating driveways and purchasing access rights. ODOT Project Teams must consider AMS recommendations within the IAMP during project development within the project limits.

LONG-TERM APPROACH RELATED STRATEGIES

The goal of the Plan (long-term strategies) is to move towards the County access spacing standards as land use changes and development application occur, or in concurrence with future roadway improvement projects. Plan strategies for approaches outside of project limits on County roadways or public spaces, are recommendations to the County as long-term strategies. Long-term strategies include encouraging consolidation of access points, encouraging shared access points between adjacent properties, offsetting driveways at proper distances to minimize the number of conflict points, providing driveway access via local roads where possible, and minimizing driveway widths. ODOT, City, and County must consider the Plan strategies listed for each approach below when there is a roadway construction project that occurs within the limits of this plan or property is developed, redeveloped or undergoes a change-of-use.

Figure 6 shows approaches from 2004 field visits. There are currently 45 approaches within the IMA. There are 17 approaches within project limits and 28 approaches outside project limits. The following short-term access management strategies (see Table 9) and long-term recommended Plan strategies (see Table 10) were developed

with the preferred alternative. ODOT does not have jurisdiction over all the roads in the IMA (see Table 1) so close coordination with County and Tribe is needed in order for strategies or policies to be implemented.

THIS PAGE WAS INTENTIONALLY LEFT BLANK

Figure 6: Existing Approaches

THIS PAGE WAS INTENTIONALLY LEFT BLANK

APPROACHES

A list of approaches was developed from survey maps and from 2004 field visits. (See Appendix A for more detailed information.) Using ODOT's Central Highway Approach/Maintenance Permit System (CHAMPS) database and Douglas County, approaches were checked to see if they had legal approach permits. There was not an ability to correlate with certainty any of the permits on file to any current road approach. There are six permits on file that may be relevant to the county roads (former state jurisdiction). The permits are all dated early 1960's and do not hold enough information to decisively determine the location, such as Tax Lot, Township, Section and Range. To further complicate matters, several years ago the highway mile points were changed and the permit mile points are no longer relevant, road names have changed and the right of way mapping for the former state roads has been purged. All approaches on County roadways before 1985, when the County acquired jurisdiction from ODOT, are considered grandfathered, if safety related issues do not exist. County would treat "grandfathered" accesses as if they were permitted for the current use. Any change of use, as with a permitted approach, would trigger reauthorization of the access.

County public works will review each of these approaches on the roads under their jurisdiction case by case at the time of future improvements, redevelopment, or change of use of property to ensure they meet minimum safety standards. The Counties' general permitting process requires identifying the roads functional classification, reviewing the site, and stopping distance. County checks to see if sufficient specifications are met on constructing approach, and if there is sufficient distance and safe distance to another approach. If right-of-way needs maintenance, then the applicant is responsible. Typically, new approaches are not granted access on arterials and major collectors unless there is not any other reasonable access. Most of the Counties' requests for new access are for proposed property division. The County Public Work's unwritten policy is to encourage property development, however, access to the parent parcel and all subsequent parcels shall come from a common location. Accesses are not permitted that do not meet minimum safety standards[8].

County usually only allows one access per lot. If it is near a large intersection, County checks if an alternative location to a lesser traveled or lower functional class road is possible or, if it is possible, to share an easement. The County will coordinate with the City and consider recommendations in this document; however, county will have final authority over location, design, or whether an access will be allowed to their jurisdiction.

The following factors were considered for each approach before a recommendation was developed: safety, existing and potential land use, the existing site plan, the number of approaches, future plans for development of a parcel and access to local streets.

Figure 7 shows proposed approach strategies. The AMS approaches are labeled with letters and long-term Plan strategies are labeled with numbers. There is a brief description of each approach recommended for modification during construction of

[8] Douglas County references American Association of State Highway and Transportation Officials (AASHTO) standards.

interchange improvements and approaches that have recommended long-range strategies.

Figure 7: Proposed Approach Strategies

Includes short-term & long-term strategies

Strategy

- no change
- modify
- narrow
- consolidate
- relocate
- closure

Letters denote short-term
Numbers denote long-term

Not to Scale

Information displayed on this map was derived from multiple sources. Maps are only for graphic display and general planning purposes. The Oregon Department of Transporatation and the State of Oregon make no representations, expressed or implied, as to the accuracy of the information or data contained herien. The information or data is provided with the understanding that it is not guaranteed to be correct or complete.

N

NOTE: In some cases, redevelopment may include combining several parcels. When this occurs, the recommended approaches may no longer be appropriate. The ODOT Regional Access Management Engineer (RAME) will be responsible for making the determination on state facilities. The County Public Works Department will be responsible for making the determination on County facilities.

THIS PAGE WAS INTENTIONALLY LEFT BLANK

Table 9: Short-term Strategies

ID	Description	Zoning	Use	Short-term Actions
A	Single dwelling access to Creekside Frontage Rd	Tribal	Residential	Close or relocate to Stanton Park Road
B	Private Drive	Tribal	Under Development	Close.
C	Tribal Development Road	Tribal	Under Development	Close.
D	Tribal development Rd. split access to Creekside Rd	Tribal	Under Development	Close.
E	Best Western North Access to Creekside Rd	C-2	Motel	No action.
F	Best Western South Access to Creekside	C-2	Motel	No action.
G	7 Feathers Truck and Travel Gas Pump	Tribal	Truck Stop	Modify into two approaches (Ga & Gb) 50' & 40' wide.
H	Mini market and deli/gas pump	Tribal	Truck Stop	Modify into right-in/right-out. Install median.
I	Creekside Restaurant/gas pump	Tribal	Truck Stop	Modify to on-site circulation with no access to Creekside Blvd.
J	Creekside parking lot	Tribal	Truck Stop	Modify to on-site circulation with not access to Creekside Blvd.
K	Truck parking/crosswalk	Tribal	Truck Stop	Modify. Channelize to encourage right-out movements. Install median.
L	2nd car parking next to SB on ramp, Jordan Cr, Floodway	Tribal	Parking	Modify. Channelize to encourage right-out movements. Install median.
M	Gazely Rd		Public Street	No action.
N	Single dwelling	Tribal	Residential	Close.
O	Riepe Court serves 4 dwellings	R-1	Private Drive	Relocate approximately 50' south to improve sight distance.
P	Single dwelling, Access to Stanton Park	R-1	Residential	No action.
Q	Klenke Ln serves 10 dwellings/no thru traffic	Tribal	Private Drive	No action.

INTERCHANGE IMPROVEMENT SHORT-TERM ACCESS MANAGEMENT STRATEGIES

Approach A- The property in the extreme northwest portion of the project area would either be purchased or have a new access road constructed to replace the loss of its

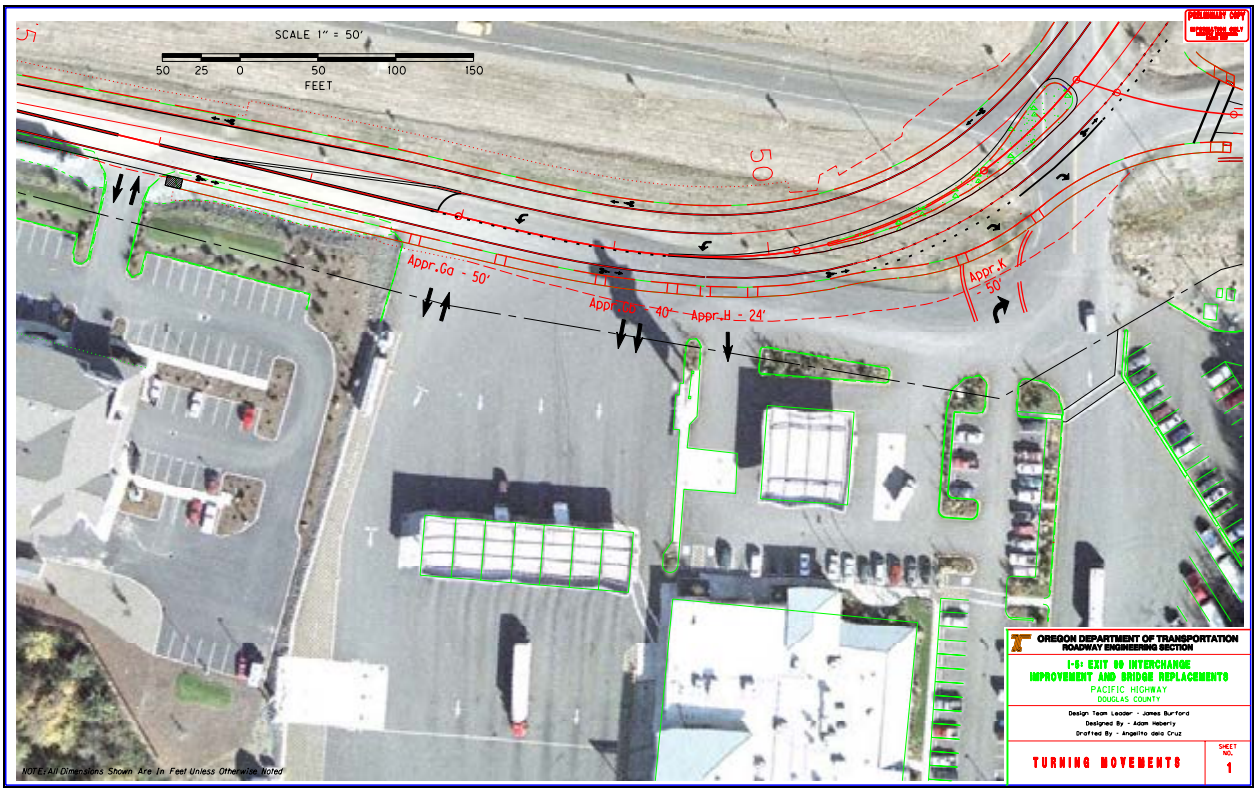
existing access road. The driveway for the property currently connects with Jeffries Drive. The project would realign Jeffries Drive and the SB off-ramp, cutting off access to the property. Therefore, ODOT would either purchase the tracts or construct an access road underneath the new SB off-ramp and I-5. The new access road would be connected to Stanton Park Road (also known as Yokum Road) on the east side of I-5 (DEA 2005). ODOT Right-of-Way will be negotiating with the property owners directly to identify the final strategy.

Approaches B, C, D- These approaches will be closed during construction of the interchange improvement project. A new road will be constructed to the proposed rest area. The first access on the new road will be the rest area (900 FT). Access control shall be purchased up to the first access point.

Approach E- This approach is currently restricted by a chained entrance. The approach does not circulate around the motel. The motel said they will continue to keep the approach chained and it is used rarely for certain vehicles to access the creek behind the motel.

Approaches G, H, I, J, K, & L - These approaches all provide access to the Seven Feathers Truck & Travel Center. Approach G will be redesigned to have two approaches (Ga & Gb on figure 8) 50 & 40 feet wide. Currently the approach is 188 feet wide. The northern approach (Ga) will be designed for two-way travel and large enough to accommodate the truck traffic. The south approach will be designed for entrance only traffic to avoid conflicts with trucks entering the weigh station directly to the west of the approach on the property. Approaches H will be right-in/right-out. Approach K will be channelized to encourage right-out only movements. A median will be installed to ensure the right-in/right-out movements. The raised median will remain in place to provide access control, but will allow vehicles to store in the left turn lane just west of the southbound entrance ramp terminal. Approaches I, J, & L will be on-sight circulation and will not have curb cuts to Creekside Blvd. (See Figure 8 below).

Figure: 8 Existing and Proposed access at Seven Feathers Truck and Travel Center



Approach N- This approach will be closed because the realigned Stanton Park Road will cut through the property. The approach will no longer be needed.

Approach O- This approach serves four dwellings and should be moved approximately 50 feet south for better sight distance with the realignment of Stanton Park Road.

Table 10: Long-term Strategies

ID	Description	Zoning	Land Use	Access Strategies
1	Abandoned, appears to be former auto repair shop	C-2	Vacant Commercial	Consolidate into #2 if tax lots 2700 & 2800 redevelop together and relocate to the property line. If not, no action or relocate to the north to maximize spacing with tax lot 2700.
2	Single dwelling with dual access	C-2	Vacant Lot	Consolidate with #3 upon redevelopment. If tax lots 2700 & 2800 redevelop together consolidate with #1 #3 and relocate to the property line.
3	Single dwelling with dual access	C-2	Vacant Lot	Consolidate into #2.
4	1st level: Hills Trading Post/ 2nd story: dwelling	C-2	Mixed Use	Narrowed to appropriate width for use. Commercial: 20-40' Residential: 16-20'.
5	Single dwelling	C-2	Residential	No Action.
6	Single dwelling	C-2	Residential	No Action.
7	Single dwelling	C-2	Residential	No Action.
8	Single dwelling	C-2	Residential	No Action.
9	Berthal St.		Public Street	No action. Will continue to be public street.
10	Canyonville Collision/vacant auto repair	C-2	Shop	Close upon development, alternate access via Berthal Avenue.
11	Fencing Business/closed off, Access to Johnson	C-2	Fencing Business	Close upon development, alternate access via Johnson Street.
12	Stage Coach Rd		Public Street	No action. Will continue to be public street.
13	Serves 4 dwellings, Access to TL 1400,1500,160	C-2	Residential	Consolidate #14 into #13. Relocate #13 to property line.
14	Single dwelling	C-2	Residential	Consolidate with #13. Relocate #13 to property line.
15	Single dwelling	C-2	Residential	No Action.
16	Single dwelling	C-2	Residential	No Action.
17	Long St		Public Street	No action. Will continue to be public street.
18	Car yard, Access to Main St.	C-2	Auto Repair Shop	No Action.
19	Masonic cemetery access, TL 100, Access to Main St.	Tribal	Cemetery Access	No Action.
20	7 Feathers Casino out exit	Tribal	Casino	No Action.
21	7 Feathers Casino in entrance	Tribal	Casino	No Action.
22	Valley View Motel entrance, one shared with TL 2300	Tribal	Motel	Consolidate upon redevelopment with #23 if tax lots 2100 & 2200 develop together. Mid-term action:

ID	Description	Zoning	Land Use	Access Strategies
1	Abandoned, appears to be former auto repair shop	C-2	Vacant Commercial	Consolidate into #2 if tax lots 2700 & 2800 redevelop together and relocate to the property line. If not, no action or relocate to the north to maximize spacing with tax lot 2700.
2	Single dwelling with dual access	C-2	Vacant Lot	Consolidate with #3 upon redevelopment. If tax lots 2700 & 2800 redevelop together consolidate with #1 #3 and relocate to the property line.
3	Single dwelling with dual access	C-2	Vacant Lot	Consolidate into #2.
				sign for directional movement to increase driver expectation.
23	Valley View Motel, shared access w/TL 2100 single dwelling	Tribal	Motel	Consolidate upon redevelopment into #22 if tax lots 2200 & 2100 develop together. Mid-term action: sign for directional movement to increase driver expectation.
24	2 dwellings with joint access to Stanton Park	Tribal	Residential	Relocate to the north to maximize spacing between approaches.
25	Riverside Motel entrance	Tribal	Motel	Consolidate upon redevelopment with #26 and relocate to center of the parcel to maximize spacing. Mid-term action: sign for directional movement to increase driver expectation.
26	Riverside Motel/no trucks/no turn around	Tribal	Motel	Consolidate upon redevelopment into #25 and relocate to center of parcel to maximize spacing. Mid-term action: sign for directional movement to increase driver expectation.
27	Single dwelling	Tribal	Residential	No Action.
28	South Umpqua Fire District/dead end	Tribal	Vacant	No Action.

Note: In some cases, redevelopment may include combining several parcels. When this occurs, the recommended approaches may be no longer appropriate. The ODOT Regional Access Management Engineer (RAME) will be responsible for making this determination on roadways under state jurisdiction. Douglas County public works will be responsible for making this determination on roadways under County jurisdiction.

LONG-RANGE PLAN STRATEGIES

It is recommended that when redevelopment occurs or Stanton Park or Main Street is improved that approaches be put in at a standard width depending on property use. The majority of approaches 1-19 are currently non-conforming uses because they are single-family residences located on property zoned commercial (C-2). An approach

width of 20-40 FT is recommended for properties developed as commercial and an approach width of 16-20 FT is recommended for properties that continue to be used as single-family residences.

Approaches 1, 2, & 3- These approaches should be consolidated if property is developed together. If properties do not develop together, approaches 2 & 3 should consolidate to allow one approach on the single parcel.

Approach 4- This approach should be narrowed to meet property use. Currently this approach is 42 FT wide.

Approach 10- It is recommended that this approach be closed and alternate access be taken off of Berthal Avenue. Currently, the approach is cabled off during non-business hours to stop people from cutting through the property to the side street.

Approach 11- It is recommended that this approach be closed and alternate access be taken off of Johnson Street.

Approaches 13 & 14- These approaches are currently separated by a log barrier. Approach 14 should be closed, log barrier removed, and have access through 13 with one approach to access multiple residences.

Approaches 25 & 26- These approaches should be consolidated to reduce conflict points if redeveloped unless traffic studies show otherwise. Medium-term strategies should include restricting access to Riverside motel by adding signs for directional movement. One should be designated “entrance” and one should be designated “exit” to increase driver expectation.

Approach 24- This approach should be relocated north to maximize spacing between approach points.

Approaches 22 & 23- These approaches should be consolidated to reduce conflict points if redeveloped. Medium-term strategies should include restricting access to Valley View motel by adding signs for directional movement. One should be designated “entrance” and one should be designated “exit” to increase driver expectation. These should be restricted by signs for directional movements. One should be designated “entrance” and one should be designated “exit”.

ADDITIONAL TOOLS FOR IMPLEMENTATION

The following excerpts are from City of Canyonville plans that will guide future access management decisions and approving plan amendments:

The City of Canyonville Bicycle/Pedestrian Corridor Design (1998-1999) plan proposes that, “at the time of development or redevelopment, property fronting Main Street will provide only one direct access to Main Street. In no case will more than two driveways be closer than 300 feet on a single tax lot. Shared driveways between more than one

tax lots are encouraged. Access to local streets, perpendicular to Main Street is encouraged."

The City of Canyonville Comprehensive Plan includes goals and policies that state:

Policy 6: The City shall work with the Oregon State Department of Transportation and Douglas County to improve the transportation system in the City consistent with the Goals and Policies of the plan in regard to projects planned within the city limits or the urban growth boundary.

Policy 7: Coordinate with Oregon Department of Transportation (ODOT) to mitigate transportation impacts that may result from commercial and industrial development at the north I-5 interchange. No plan amendment shall be approved in Canyonville that may adversely affect the level-of-service (LOS) at the Exit 99 interchange, unless a transportation impact study (TIS) has been approved in coordination with ODOT, consistent with OAR 660-12-060.

THIS PAGE WAS INTENTIONALLY LEFT BLANK