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May 13, 2008

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**NATURAL RESOURCES
Bureau of Indian Affairs-NWRO**

Bureau of Indian Affairs
Gerald Hendrickson
911 NE 11th Avenue
Portland, OR 97232-4169

Re: Joint Comments on the Confederated Tribes of the Warm Springs
Bridge of the Gods Resort and Casino
Draft Environmental Impact Statement (DEIS)

Hood River County, the City of Cascade Locks and the Port of Cascade Locks jointly submit these comments on the Draft Environmental Impact Statement for the Confederated Tribes of the Warm Springs Bridge of the Gods Resort and Casino.

The County, City and Port strongly support the proposal to develop the Cascade Locks Resort and Casino project within the urban growth boundary of the City of Cascade Locks on land currently owned by the Port and within the Port's Industrial Park.

While strongly supporting the Cascade Locks proposal, including a much needed new interchange that will provide rail grade separated direct access between the Port's Industrial Park and Interstate 84, the County, City and Port all oppose the closure of East Cascade Locks Interchange (ECLI). The City of Cascade Locks and the Port of Cascade Locks have approved Resolutions opposing the closure of the ECLI. These resolutions shall be submitted as part of our official comments.

As traffic safety would not be significantly impacted (in fact may be improved on the overall street/highway system) and as there would be major benefits such as improved emergency response, improved traffic mobility, and maintaining the economic vitality of the City of Cascade Locks, it is recommended that the ECLI remain open with implementation of the new Forest Lane interchange as proposed in Alternative 21J. ODOT has stated that the interchange is a BIA project and that requests for design exceptions must be requested from the BIA to ODOT. The design exception process was developed by ODOT to respond to local situations where the conditions make it difficult to achieve design standards.

Therefore, the City, County and Port requests that a design exception to spacing standards be requested by the BIA allowing ECLI to remain open and functional. We provide the following information in support of a variance request:

- **ECLI and West Cascade Locks Interchange (WCLI) functions as a single, split interchange** – The American Association of State Highway and Transportation Officials (AASHTO), *A Policy on Geometric Design of Highways and Streets, 2004*, page 743, defines an “interchange” as ...*a system of interconnecting roadways in conjunction with one or more grade separations that provides for the movement of traffic between two or more highways on different levels.* Further, the “Policy” provides an illustration of a split interchange in Exhibit 10-54. Among the interchanges illustrated in the exhibit is a “split” interchange, where two pairs of ramps are provided at two separate crossroads in order to provide full access to a highway in all travel directions. ECLI and WCLI split interchange function as a single full access interchange. As I-84 signage and State maps indicate, ODOT has assigned ECLI and WCLI the same exit number, Exit 44. The ECLI half of the split interchange provides a connection to and from the east on I-84 and the WCLI half of the split interchange provides access to and from the west on I-84. US 30 is the connector road between the split interchange halves and operates as part of the interchange by providing full access to and egress from I-84. Without one of the halves, the interchange would only be a partial interchange that does not provide I-84 access/egress in all travel directions. In terms of regional connectivity, both the ECLI and the WCLI halves of the existing Cascade Locks split interchange function as a single pair in order to provide adequate regional route connections between I-84 and Washington State Route 14 (SR-14), the Bridge of the Gods, and US 30. The Bridge of the Gods acts as a key regional connection to the State of Washington and SR-14. Regional traffic from the Bridge of the Gods currently travels onto US 30 to access I-84. Closing ECLI will force regional traffic from the Bridge of the Gods to detour onto local collector roadways, Forest Lane and the I-84 Frontage Road, in order to access eastbound I-84 and exit westbound I-84. Forcing regional traffic onto more local routes would not be acceptable in terms of connectivity for the regional and the local transportation network. Both halves of Exit 44 are required to provide full and acceptable regional connections between I-84, US 30, the Bridge of the Gods and SR 14.
- **The City of Cascade Locks, Hood River County, and the Port of Cascade Locks were not adequately consulted in the process leading to the selection of the Operationally Acceptable Alternative (OAA)** –The U.S. Department of Interior was the lead agency in the preparation of the DEIS. The City, County and Port worked in conjunction with ODOT and the Federal Highway Administration (FHWA) as cooperating agencies in the preparation of the DEIS. All of the agencies were participants in the Access Working Group, a subcommittee focusing on freeway access. Access Working Group meetings were held in December, 2005 and January, 2006 to discuss alternatives for the Access Point Decision Report (APDR) and screening criteria. None of the OAA’s discussed at these meetings included the proposed closure of ECLI. At this time a series of meetings that specifically excluded

participation by the City, the County and the Port were held over the course of 2006 between the BIA, ODOT and FHWA concerning the proposed closure of ECLI. The Bureau of Indian Affairs (BIA) presented a preliminary draft APDR to ODOT and FHWA in May, 2006, identifying the OAA as a new interchange at Forest Lane and the closure of the Herman Creek Interchange. According to the BIA, there was no discussion of the proposed closure of ECLI at this time. In August, 2006, the BIA submitted a draft APDR to ODOT and FHWA, and again, according to the BIA, there was no discussion of the proposed closure of ECLI at this time. On September 13, 2006, ODOT and FHWA met with the BIA to discuss the draft APDR. The Port, City and County were not invited to attend this meeting. According to BIA staff, ODOT advised the BIA to consider "other interchange closures", although the proposed closure of ECLI was not specifically mentioned. On October 12, 2008, ODOT provided the BIA written comments on the APDR, including comments directing the BIA to consider closure of ECLI. These comments were not shared with the County, City and Port. On November 19, 2006 and on November 29, 2006, the BIA met with ODOT and FHWA and, according to the BIA, the BIA expressed the opinion that the proposed closure of ECLI constituted a new alternative that had never been discussed among the Access Working Group. The ODOT recommendation to close ECLI was not discussed with the City, County and Port until December 14, 2006 at an Access Working Group meeting, one full year since the last meeting at which the local communities were given the chance to participate in the freeway access decision process. Minutes of the December 14th 2006 meeting document strong objections to the proposed closure of ECLI.

- **ECLI spacing is consistent with FHWA "guidelines"** – The new interchange is to be located 1.3 miles east of the East Cascade Locks half interchange and 2.72 miles east of the West Cascade Locks half of the split interchange. These distances would meet the minimum urban interchange spacing guidelines recommended by AASHTO. Attachment A, page 807 from the AASHTO (FHWA) Policy states: *Minimum spacing of arterial interchanges (distance between intersecting streets with ramps) is determined by weaving volumes, ability to sign, signal progression, and lengths of speed-change lanes. A general rule of thumb for minimum interchange spacing is 1.5km (1 mi) in urban areas and 3.0km (2 mi) in rural areas.* As with all State DOTs the Oregon DOT has adopted (approved) the AASHTO Policy. However, Oregon may be the only State DOT to have developed a "standard" spacing of 3 miles in urban areas. The western states of California, Washington, Utah, Colorado, Arizona and Idaho have adopted the one mile spacing in urban areas consistent with AASHTO's (FHWA) guidelines.
- **Closing ECLI produces no measurable increase in traffic safety** - As stated, a safety analysis of sample split interchanges similar to the East and West Cascade Locks interchange was done to examine what could be expected in terms of traffic safety should the new interchange be installed without closing the East Cascade Locks half of the interchange. Table 1(Attachment B) summarizes the traffic safety analysis. Existing crash data for the East and West Cascade Locks interchange is also included in that table. As indicated in that table, the average 5-year crash rate (2002

to 2006) at the existing East and West Cascade Locks split interchange is less than the statewide average for similar functional classification roadways. The Safety Priority Index System (SPIS) is a method developed by ODOT for prioritizing locations where funding for safety improvements can be spent most efficiently and effectively. Locations ranked within the top 10% SPIS are considered to be in greater need of safety improvements and are given higher improvement priority. As indicated in the Table 1, the project area is currently not ranked within the top 10% Safety Priority Index System (SPIS). None of the sample split interchanges listed in Table 1 are considered within the Top 10% SPIS. The average crash rates experienced at the sample split interchanges did not vary substantially from the statewide averages for similar functional classification roadways. It should be noted that these sample interchanges are located closer to their adjacent interchanges than the new Forest Lane interchange would be even if the East Cascade Locks half of the split interchange remains open. Based on the crash analysis at the similar interchanges, it is not anticipated that there would be any significant impacts to traffic safety on I-84 should the new interchange be installed without closing the East Cascades Locks half of the existing adjacent interchange. Also of note is that there are typically less crashes experienced on freeway routes as opposed to collector roadways. This can be observed by comparing the 0.52 average 5- year (2002 to 2006) statewide crash rate for interstate freeways with the higher 2.2 average 5-year statewide crash rate for urban collector roadways. Should the East Cascade Locks half of the interchange be closed, drivers would need to spend more time traveling greater distances on local collector roadways (Forest Lane and I-84 Frontage Road) that are typically more prone to crashes than an interstate freeway. Safety would be of particular concern on the I-84 Frontage Road as it has sharp curves, not suitable for freight traffic, and would be difficult to mitigate as improvements are limited by the adjacent wetlands.

- **Emergency Response and Public Safety** - Efficient and effective emergency response is imperative for the safety of the general public. The City of Cascade Locks Fire and EMS Department is the primary unit that responds to emergencies in the vicinity of I-84 from Hood River all the way to Multnomah Falls. In addition, the City provides rescue relief for hikers on local trails within that area. The City also responds to emergencies on SR 14 in Skamania County, Washington and provides rescue relief for hikers on local trails near the Multnomah Falls and Hood River areas. Closure of the East Cascade Locks half of the split interchange would increase the response time of the Fire Department, to the point where it could potentially cost a life. Emergency vehicles would need to either access the I-84 ramps in reverse, which is less safe and more time consuming, or travel on slower routes such as on Forest Lane or the I-84 Frontage Road. As closure of the East Cascade Locks half of the interchange would already increase vehicle traffic on Forest Lane and the I-84 Frontage Road, these routes would be even slower than before for emergency vehicle response. Closure of the East Cascade Locks half of the split interchange would also mean that there would be more traffic at the new Forest Lane interchange. The more traffic emergency vehicles are traveling against, the less safe and time consuming it is for emergency response vehicles and local traffic. The regional area is prone to disasters resulting from inclement weather, floods, ice storms, slides, and fire making

effective emergency response even more imperative. There is also the potential for a major train crash within the area as a main Union Pacific Railroad line runs through the City of Cascade Locks. According to the Washington Department of Transportation, there are major incidents about every two years on SR 14. These types of incidents also occur on I-84 requiring road closures. I-84, SR 14, and the Bridge of the Gods act as emergency detour routes during those times and those routes would be adversely impacted should vehicles have to detour onto Forest Lane and the I-84 Frontage Road during those times. Also of note is that the City has already approved the construction of a new fire station on Highway 30. The location of the new fire station was selected on the premise that the East Cascade Locks half of the split interchange would remain open. There would no longer be adequate access and egress to the approved fire station if the ECLI is closed. There are no hospitals located between Hood River and Multnomah County. This makes it even more critical that the regional roadway network provides good access and egress to regional routes for emergency responders so that they are not delayed. Each minute of delay can mean the difference between life and death. The City of Cascade Locks Fire and Emergency Service Department does not support the closure of the East Cascade Locks half of the existing split interchange on I-84. It is also expected that the closure would degrade the services of other emergency responders such as Hood River County Emergency Management and Skamania County Emergency Management as well and make it more difficult for them to perform their duties.

- **Adequate Regional Connectivity** - Maintaining adequate regional connectivity is one of the goals identified in the City of Cascade Locks *Transportation System Plan*. The Bridge of the Gods acts as a key regional connection to the state of Washington and State Route 14 (SR 14). Should East Cascade Locks be closed, regional traffic to and from Washington crossing over the Bridge of the Gods would be forced to detour onto local collector roadways (either Forest Lane or the I-84 Frontage Road) in order to access eastbound I-84 and exit westbound I-84. Forcing regional traffic onto more local routes would disrupt the connectivity for regional and local transportation networks.
- **Truck/Freight Mobility** - Maintaining adequate truck/freight mobility is a top priority for the City of Cascade Locks and is consistent with a primary goal identified by the State of Oregon. Adequate truck/freight mobility is essential for the economic vitality of both local and regional businesses. Should the East Cascade Locks half of the split interchange be closed to all trucks except those passing through the weigh station on eastbound I-84, local and regional trucks headed to and from the State of Washington would need to divert off the high speed interstate system onto slower local road systems, thereby increasing the shipping time of freight. Many trucks provide a variety of services in the area (i.e. postal delivery, UPS, Fed Ex, local business goods, etc.) and all of these services would be affected by the interchange closure. This applies to the City of Cascade Locks as well as Stevenson and Skamania County in Washington. It is anticipated that travel times for trucks entering and exiting the State of Washington via the Bridge of the Gods would increase by up to approximately 3 minutes per travel direction resulting in approximately 6,000

hours a year of delay based on 2006 average daily traffic volumes and truck percentage data provided in the *Draft Environmental Impact Statement* (DEIS).

- **Increased Traffic On Forest Lane** - Forest Lane is a local collector roadway that is part of the Historic Columbia River Highway and has a strong residential character from its intersection with WaNaPa Street east to the Herman Creek bridge. Current and future development, as well as zoning, will continue to emphasize residential uses of property adjacent to Forest Lane. Adding a significant amount of traffic to Forest Lane would adversely affect the environment in the local residential neighborhood and nature of the historic highway. Attachments C-I (Figures 19, 20, 21, 22, 32, 33, 34 from the DEIS) describe the significant impact closure of the ECLI will have on Forest Lane. Attachment C (Figure 19, DEIS) shows (highlighted in yellow) the existing 2008 Sunday PM peak traffic volumes (total 330 vph) east and westbound on Forest Lane at the WaNaPa intersection. Attachment D (Figure 20, DEIS) shows the 2008 Sunday PM peak traffic volumes on the exit and entrance ramps at the existing ECLI (exit-215 vph, entrance-195 vph). Attachment E (Figure 32, DEIS) shows the highlighted traffic volumes for 2008 with closure of the ECLI and the initial opening of the Resort/Casino on Forest Lane at the WaNaPa intersection. The total traffic volume east and westbound is 590 vph, an increase of 260 vph. This is a 79% increase implying that a majority of the increase is a result of the closure of the ECLI and rerouting of traffic destined for downtown Cascade Locks and the Bridge of the Gods onto Forest Lane. Attachment F (Figure 33, DEIS) further corroborates this observation showing the total eastbound ECLI entrance ramp and the westbound ECLI exit ramp traffic volume, if remaining open, of 380 vph in the Sunday PM peak. The increase in traffic volume on Forest Lane for 2028 can be established by reviewing Attachments G, H, and I (Figures 22, 34, and 31, DEIS). Attachment G shows the forecast 2028 Sunday PM peak traffic volume on the ECLI ramps without the Resort/Casino. Attachment I shows the Sunday PM peak traffic volumes (highlighted) on Forest Lane at the approach to the WaNaPa intersection without the Resort/Casino. The total two-way traffic volume is 550 vph in the Sunday PM peak. This reflects the residential and commercial growth in Cascade Locks from 2008 to 2028. Most likely this is an overestimation because without the Resort/Casino the economy in Cascade Locks would not support this growth. Attachment H shows the Sunday PM peak (highlighted) traffic volumes on Forest Lane at the WaNaPa intersection with the ECLI closed. This two-way traffic volume is 830 vph during the Sunday PM peak. This is an increase of 280 vph (51%). A majority of this traffic increase on Forest Lane is a result of closing of the ECLI. A comparison of the Forest Lane Sunday PM traffic volumes for 2008 with no closure of the ECLI and 2028 traffic volumes with closure of the ECLI and the Resort/Casino operational shows an increase of 152%. A majority of this traffic increase occurs with the closure of the ECLI. This would result in more exposure and potential conflicts for the local vehicle, bicycle, and pedestrian traffic along Forest Lane. Additionally, Figures 19 and 32 show that the east part of Forest Lane (Herman Creek Bridge – Shahala Area) will increase 105 to 410 peak trip hours (290%) as a result of closing ECLI. This is also significant because this portion of Forest Lane is not constructed to accepted road standards and does not have separate bicycle or pedestrian facilities. The

potential for conflicts between motor vehicles, bicycles and pedestrians is substantially increased. While a majority of this increase in traffic on Forest Lane results from the closure of the ECLI, the design of the proposed Forest Lane/Industrial Park interchange interfacing with the street system encourages traffic exiting westbound from I-84 and traffic exiting the Industrial Park/Resort/Casino site to use Forest Lane. There are designs that would “discourage” traffic on Forest Lane that would retain its scenic, historic, and residential nature. In part this relates to the location of the intersections adjacent to interchanges consistent with the AASHTO/FHWA and other State DOT guidelines as described in Attachment J from the 2004 AASHTO Policy. Recommended is an operational based determination of intersection separation as opposed to the ODOT “standard” of 1320’. If this methodology had been applied it would be possible to develop a design that would discourage traffic on Forest Lane as well as significantly reduce the cost of the interchange/roadway improvements and take less right-of-way. This coupled with maintaining the ECLI would further reduce the cost of the interchange/roadway system required improvements.

- **US 30 Route Continuity** - As regional traffic currently traveling on US 30 between Forest Lane and I-84 would be detoured onto Forest Lane and the I-84 Frontage Road (with closure of the East Cascade Locks half of the existing split interchange), concerns are raised about whether Forest Lane and the Frontage Road should be redefined as state routes. Maintenance of these roadways would then fall under ODOT jurisdiction. The redefinition of Forest Lane and Frontage Road into a state route would be necessary in order to maintain adequate US 30 route continuity with closure of the East Cascade Locks half of the existing I-84 split interchange.
- **Increased Travel Times** - Closing the East Cascade Locks half of the split interchange would be an inconvenience to local residents and regional SR 14/I-84 east traffic. Should East Cascade Locks be closed, local residents and regional traffic would need to detour either onto Forest Lane or the I-84 Frontage Road (both local collector roadways) in order to access eastbound I- 84 and to exit westbound I-84. This would increase their travel times by up to an average of approximately 3 minutes in each direction, totaling up to 6 minutes for vehicles traveling east to and from I-84 on a given day. With approximately 4,000 vehicles entering/exiting I-84 at the East Cascade Locks half of the existing split interchange each day, this corresponds to an average total delay (totalled for all vehicles) of 73,000 hours per year.
- **Limited I-84 Destination Signage** - Guide signs on I-84 are already being used to direct travelers to multiple destinations within the project area. Closure of East Cascade Locks half of the split interchange would mean that all the destinations currently being directed to exit at the East Cascade Locks and Wyeth interchange would now need to be directed to exit at the new Forest Lane interchange. In addition, signage on I-84 may also be required to direct travelers to the proposed resort and other potential new developments within the area. The Federal Highway Administration’s *Manual of Uniform Traffic Control Devices* and ODOT signing design standards limit the number of destinations that can be listed on guide signs at

each interchange. It may be difficult, if not impossible, to use guide signs to inform drivers of all the desired destinations served by the new Forest Lane interchange, should the East Cascade Locks half of the existing split interchange be closed.

- **Increase Fuel Consumption and Air Pollution** - Should the East Cascade Locks half of the existing split interchange be closed, vehicles detouring onto Forest Lane and the I-84 Frontage Road would need to stop at more intersections. This additional vehicle queuing would increase both fuel consumption and air pollution.
- **National Scenic Area Act** - The National Scenic Area (NSA) act encourages economic growth within urban areas. As the NSA limits development in areas outside of the urban growth boundary, it is important to maintain adequate local and regional access within the city in order to promote urban growth. Closure of the East Cascade Locks half of the split interchange would restrict access within the city, limit growth within the urban area, and hurt efforts to support and maintain a livable urban community within the City of Cascade Locks while preserving the NSA.
- **Impacts on Downtown Commercial Development** - One of the City of Cascade Locks goals is to maintain a vital and healthy downtown commercial area. Adequate access to and from the downtown area is crucial for the economic vitality of local businesses within the downtown area. This was made very apparent decades ago when the creation of I-84 devastated the downtown commercial district of Cascade Locks. With closure of the East Cascade Locks half of the split interchange; loss of what is already limited access will further harm the potential growth of downtown commercial development and the economy of the City of Cascade Locks.
- **Local Support** - There is very strong opposition by the local community in regards to closing the East Cascade Locks half of the split interchange. Many concerns regarding the closure have been expressed by local citizens to the City & Port of Cascade Locks. In order to advance the interests of the local community, the City & Port of Cascade Locks have declared their opposition to the closure in resolutions adopted by their Boards. The adopted resolutions emphasize many of the points listed in this white paper including: the East Cascade Locks half of the split interchange serves as a primary west-bound access road from I-84 to and from the Bridge of the Gods, is an important freight corridor, allows direct access to the downtown business community, and acts to reduce through traffic on the residential Forest Lane section of the Historic Columbia River Highway. The resolution notes that keeping the East Cascade Locks half of the existing split interchange would be consistent with the Oregon Highway Plan Goal #1 “to maintain and improve the safe and efficient movement of people and goods and contribute to the health of Oregon’s local, regional, and statewide economies and livability of its communities.”
- **Consistency with Adopted Transportation System Plan** - Closing the East Cascade Locks half of the existing split interchange as currently proposed in Alternative 21J would NOT be consistent with the most recent City of Cascade Locks *Transportation System Plan* (TSP). The new Forest Lane interchange project was adopted into the

most recent TSP. The TSP does not require that any of the existing adjacent interchanges be closed with the new interchange project. Requiring closure of the East Cascade Locks half of the existing split interchange would be inconsistent with the roadway improvements already approved and adopted as part of the TSP.

In addition to the comments concerning the proposed closure of ECLI, the County, City and Port would like to comment on potential impacts to Skamania County, Washington and the potential use of the Community Betterment Fund as a source of revenue to mitigate those impacts.

Included in the State of Oregon and Confederated Tribes of the Warm Springs Compact, as well as included in the Memorandum of Agreement between the City of Cascade Locks and the Confederated Tribes of the Warm Springs, are lists of counties that are preferred in directing expenditures from the Community Betterment Fund.

Therefore, the County, City and Port would like to request that Skamania County, Washington be specifically listed as a preferential county in receiving expenditures from the Community Betterment Fund, and that Skamania County have representation on the Community Betterment Fund Board assigned to prioritize project and funding requests.

Thank you for your consideration and we look forward to working with you to ensure that this project becomes a reality.

Sincerely,



Hood River County
Commission Chairman Ronald Rivers



City of Cascade Locks
Mayor Roger Freeborn



Port of Cascade Locks
Commission President Timothy Lee

Attachment A

Interchange Spacing

Interchange spacing has a pronounced effect on freeway operations. In areas of concentrated urban development, proper spacing usually is difficult to attain because of traffic demand for frequent access. Minimum spacing of arterial interchanges (distance between intersecting streets with ramps) is determined by weaving volumes, ability to sign, signal progression, and lengths of speed-change lanes. A general rule of thumb for minimum interchange spacing is 1.5 km [1 mi] in urban areas and 3.0 km [2 mi] in rural areas. In urban areas, spacing of less than 1.5 km [1 mi] may be developed by grade-separated ramps or by adding collector-distributor roads.

Uniformity of Interchange Patterns

When a series of interchanges are being designed, attention should be given to the group of interchanges as a whole, as well as to each individual interchange. Interchange uniformity and route continuity are interrelated concepts, and both can be obtained under ideal conditions. Considering the need for high capacity, appropriate level of service, and maximum safety in conjunction with freeway operations, it is desirable to provide uniformity in exit and entrance patterns. Because interchanges are closely spaced in urban areas, shorter distances are available in which to inform drivers of the course to follow when exiting a freeway. An inconsistent arrangement of exits between successive interchanges causes driver confusion, resulting in drivers slowing down on high-speed lanes and making unexpected maneuvers. Examples of inconsistent exit arrangements are illustrated in Exhibit 10-45A and include inconsistency of exit ramp locations with respect to the structure (near and far side of structure) and exit ramps on the left side of the traveled way. The difficulty of left-entrance merging with high-speed through traffic and the requisite lane changing for left-exit ramps make these layouts undesirable. Except in highly special cases, all entrance and exit ramps should be on the right. To the extent practical, all interchanges along a freeway should be reasonably uniform in geometric layout and general appearance, as shown in Exhibit 10-45B.

Route Continuity

Route continuity refers to the provision of a directional path along and throughout the length of a designated route. The designation pertains to a route number or a name of a major highway. Route continuity is an extension of the principle of operational uniformity coupled with the application of proper lane balance and the principle of maintaining a basic number of lanes.

The principle of route continuity simplifies the driving task in that it reduces lane changes, simplifies signing, delineates the through route, and reduces the driver's search for directional signing.

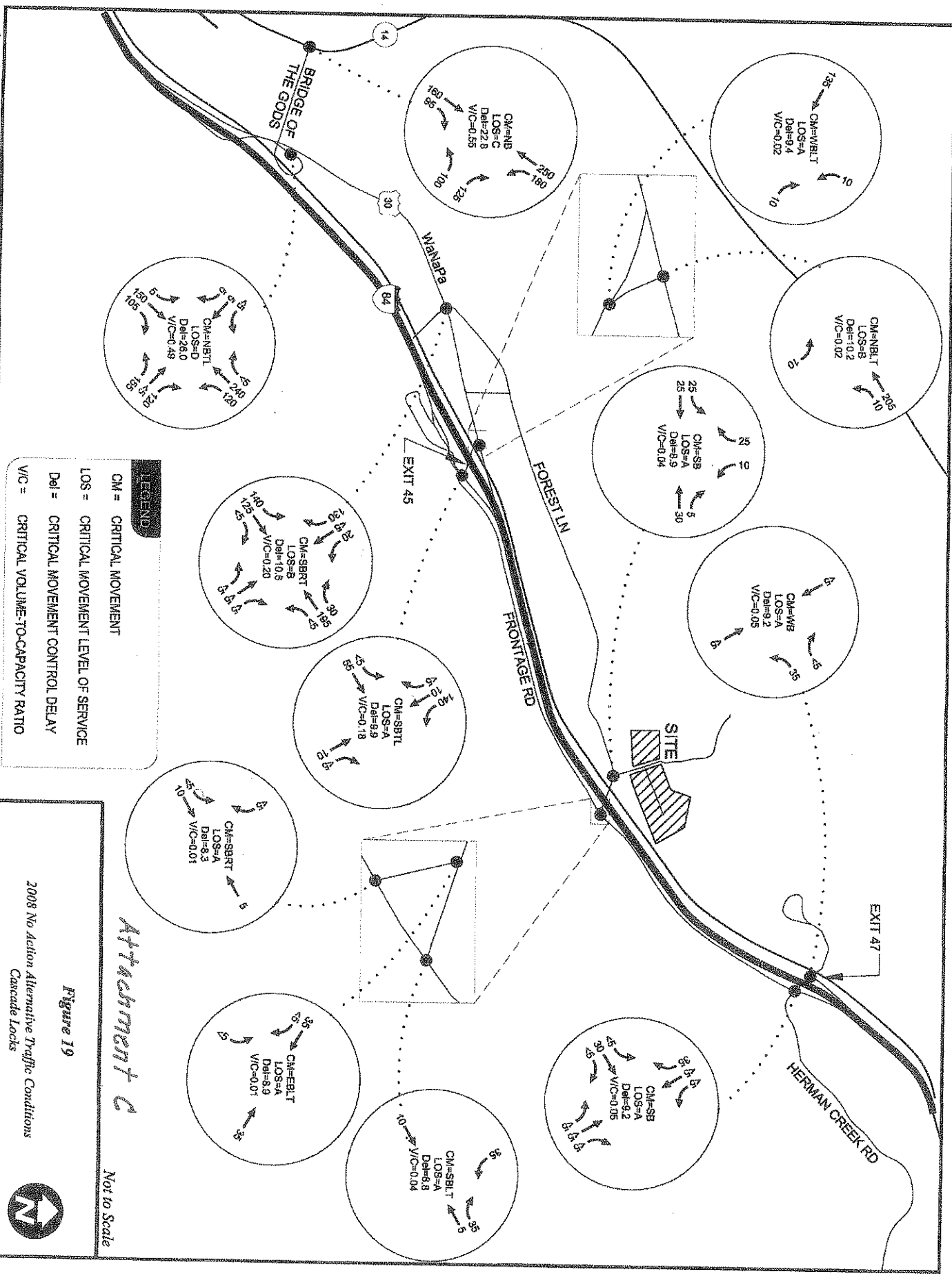
Desirably, the through driver, especially the unfamiliar driver, should be provided a continuous through route on which changing lanes is not necessary to continue on the through route.

Table 1
Traffic Safety Analysis at Similar Interchanges^{a,b}

ID.	Highway	City	From	To	Distance between crossroads	Distance to next adjacent interchanges in miles (north/south or east/west)	Apprx. ADT	Avg 5-year crash rate ^c	5-year statewide average	TOP 10% SPIS ^d
	I-84	Cascade Locks	West Cascade Locks (MP 43.64)	East Cascade Locks (MP 45.05)	1.41 miles	2.26/3.37 under existing conditions (distances to new Forest Lane interchange would be 1.3 miles and 2.73 miles to East and West Cascade Locks respectively)	20,000	0.14	0.52	No
1	I-84	Troutdale	Marine Dr (MP 16.90)	Graham Rd (MP 17.37)	0.47 miles	0.45/0.95	28,500	0.44	0.52	No
2	I-5	Bugene/ Springfield	30 th Ave (MP 189.87)	McVay Hwy (MP 189.24)	0.73 miles	1.45/1.04	50,790	0.17	0.52	No
3	I-205	Portland	Division St (MP 19.61)	Powell Blvd (MP 19.12)	0.49 miles	0.96/1.27	129,730	0.63 ^e	0.52	No

Notes:

- The crash analysis data includes crashes that occurred between the listed interchanges and within the interchange areas of influence (approximately 1000' past the interchange ramps).
- Crash data listed on this table is based on average 5-year crash data (2002 to 2006). Crash rates reported in this table are in crashes per million vehicle-miles-of-travel.
- The 5-year statewide averages listed in this table are for crash data on roadways with the same functional classification.
- SPIS = Safety Priority Index System.
- The slightly higher than average crash rate may be a result of this sample location being in a more dense urban area with greater congestion than the project location and the other sample locations listed on this table.



LEGEND

CM = CRITICAL MOVEMENT

LOS = CRITICAL MOVEMENT LEVEL OF SERVICE

Del = CRITICAL MOVEMENT CONTROL DELAY

V/C = CRITICAL VOLUME-TO-CAPACITY RATIO

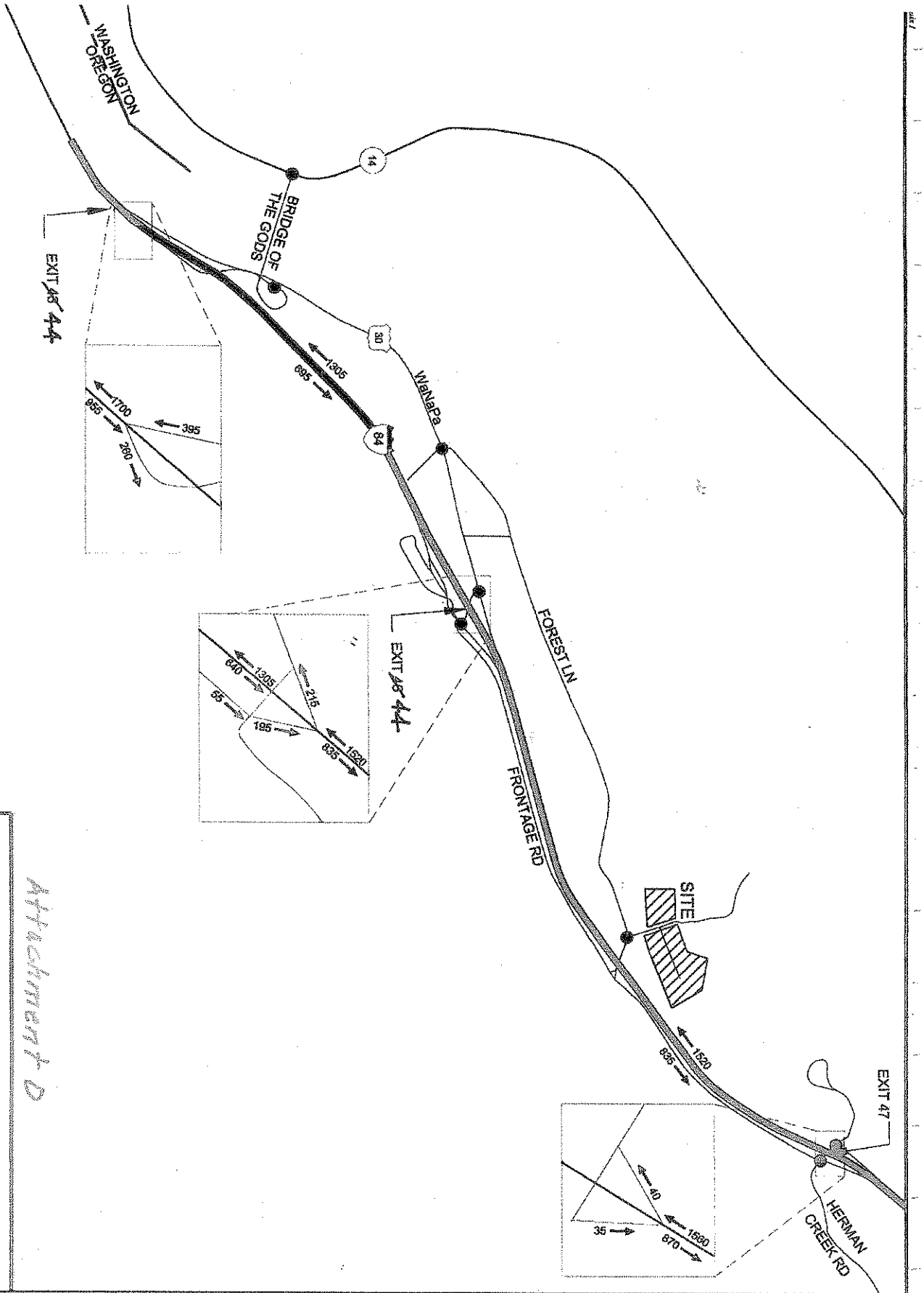
Attachment C

Figure 19

2008 No Action Alternative Traffic Conditions
Cascade Locks

North Arrow

Not to Scale

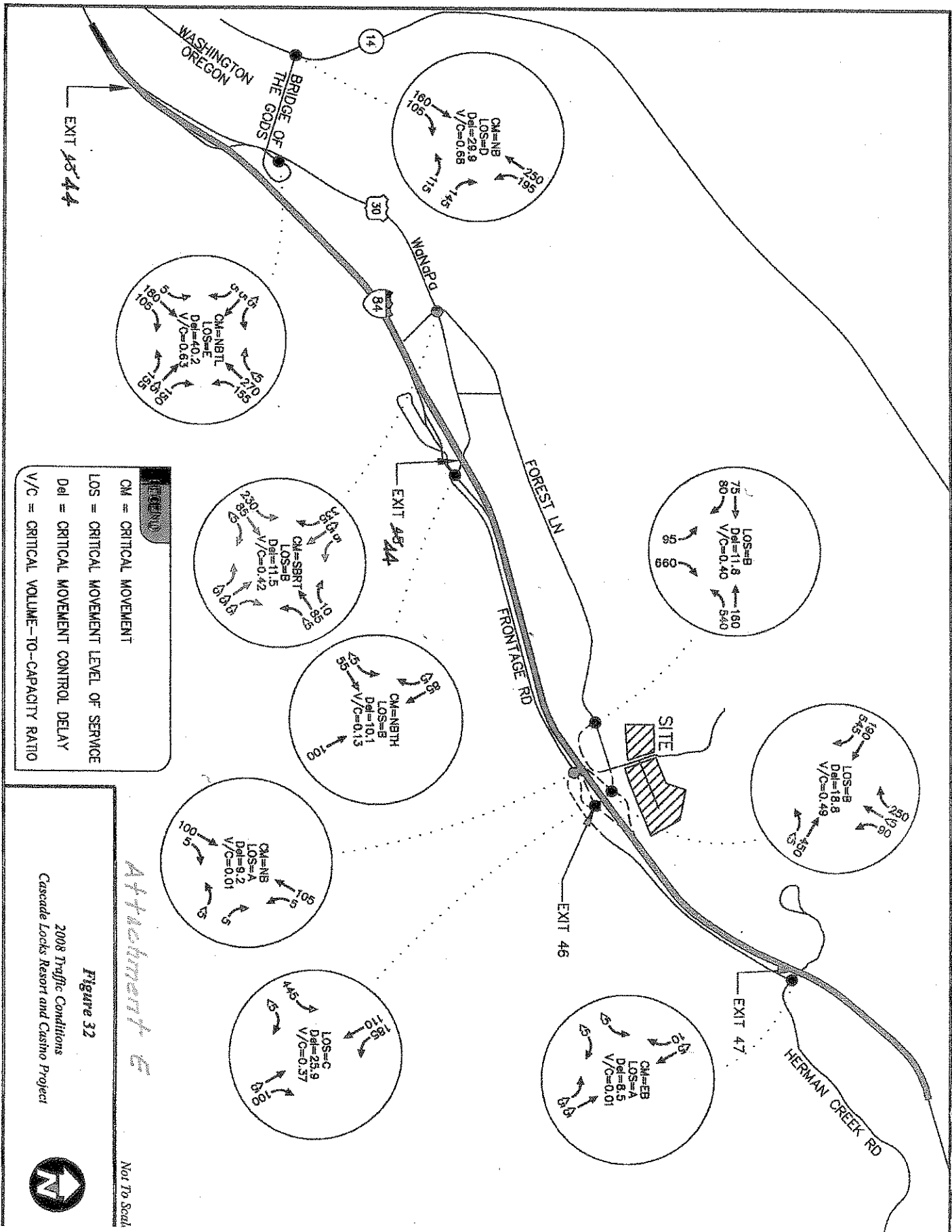


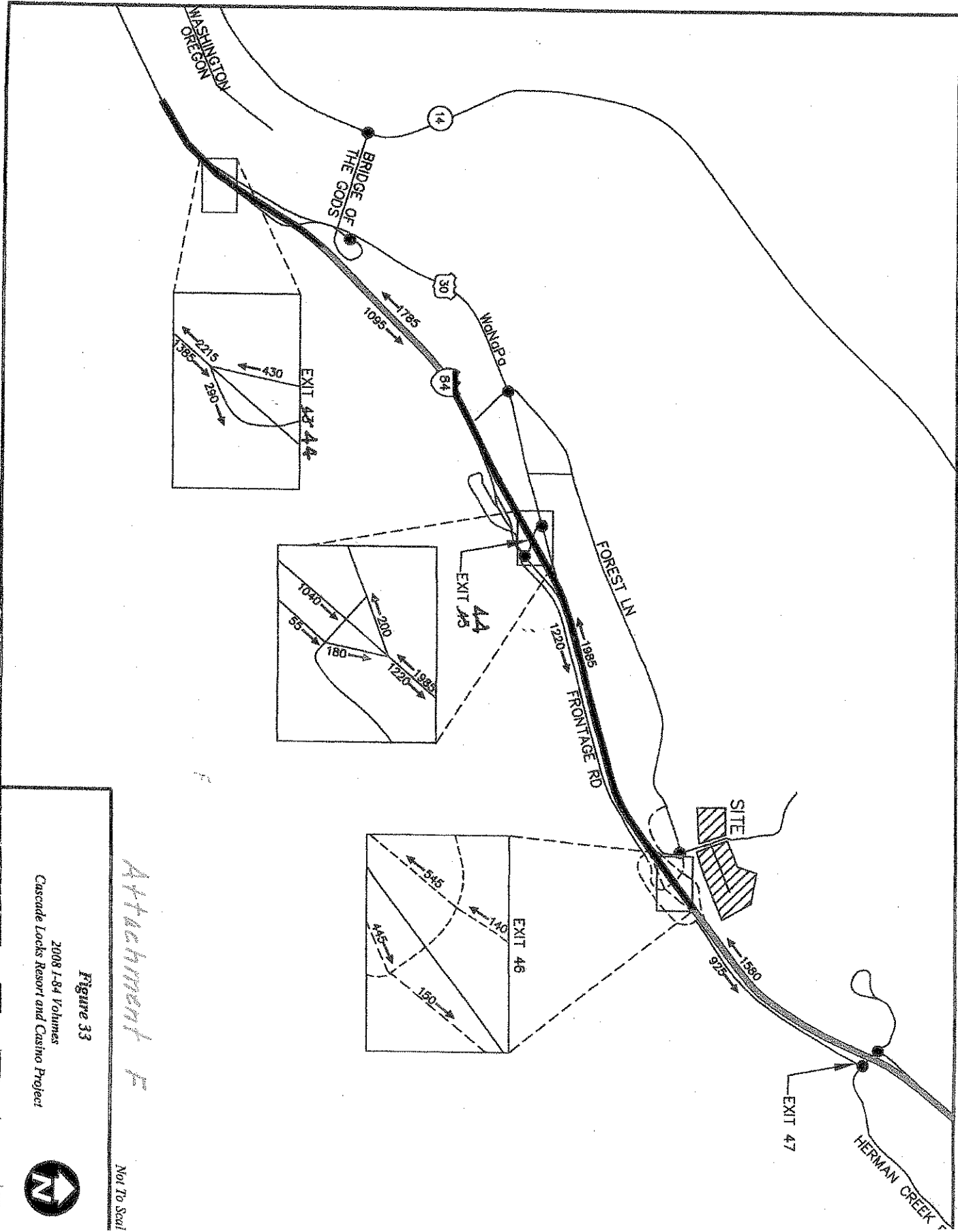
Attachment D

Figure 20

2008 No Action Alternative I-84 Traffic Volumes
Cascade Locks







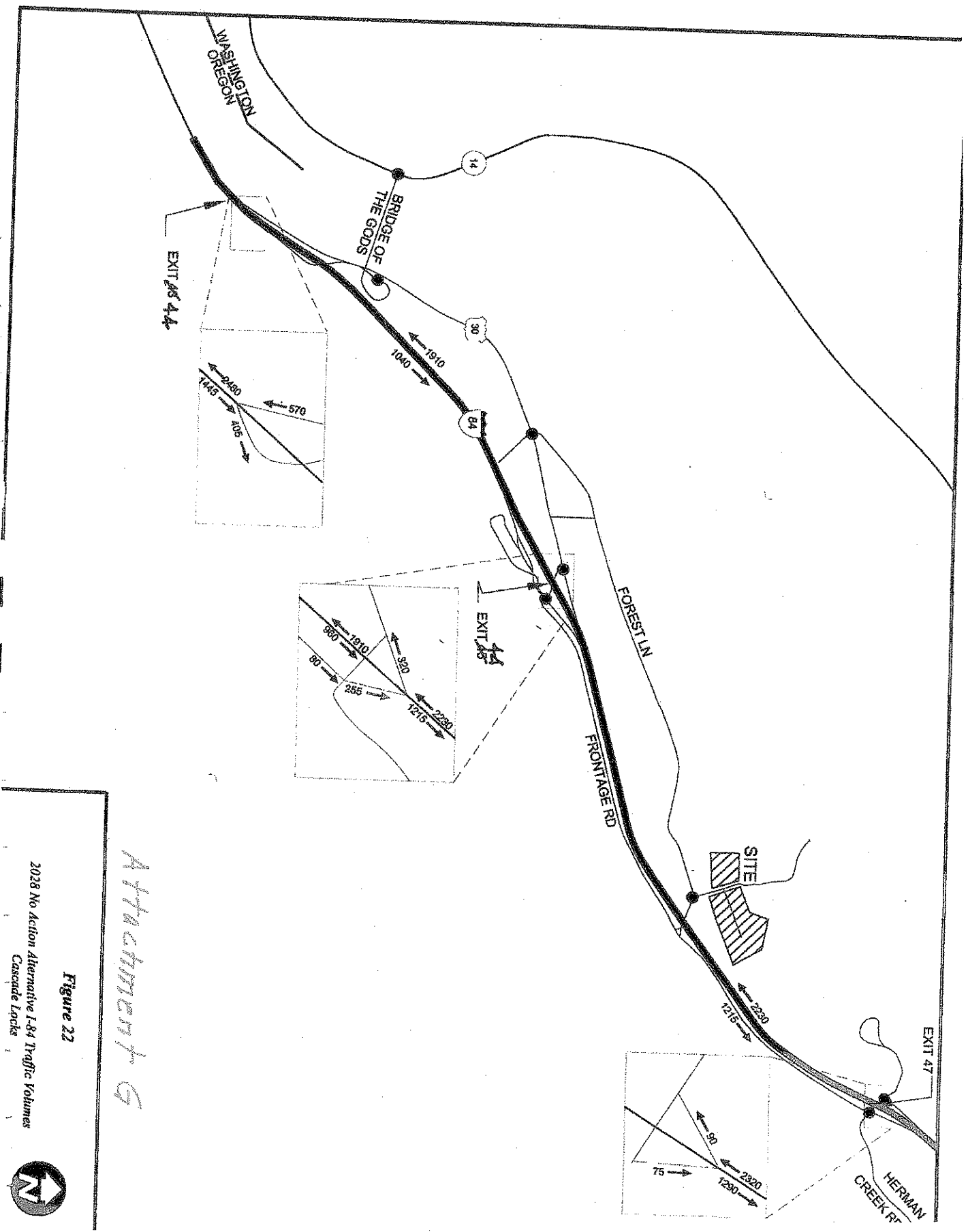
Attachment F

Figure 33

2008 I-84 Volumes
 Cascade Locks Resort and Casino Project

Not To Scale





Attachment 9

Figure 22

2038 No Action Alternative I-54 Traffic Volumes
Cascade Link



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

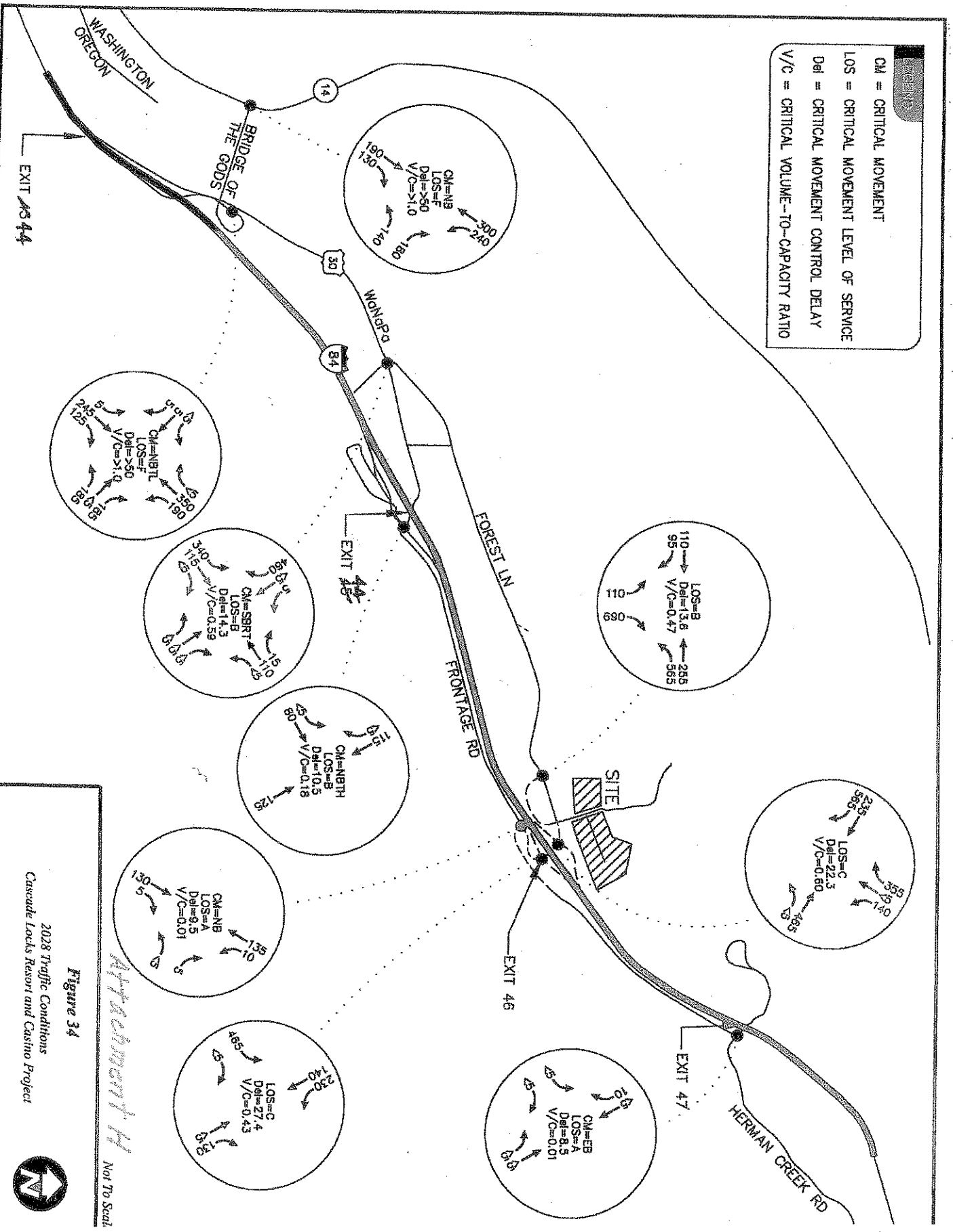


Figure 34

2028 Traffic Conditions
 Cascade Locks Resort and Casino Project

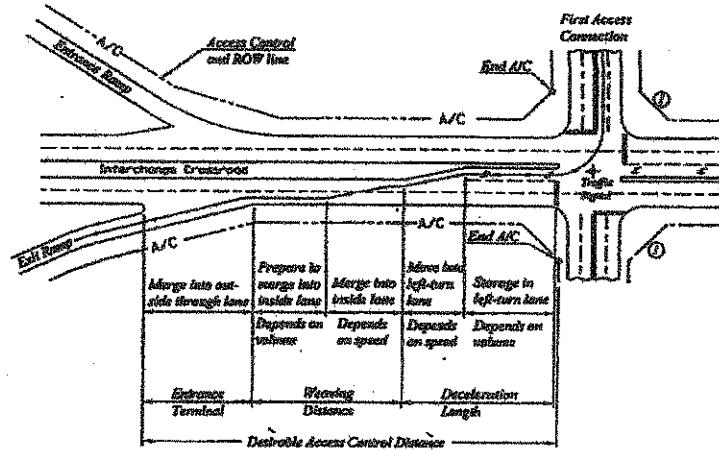
Attachment H

Not To Scale



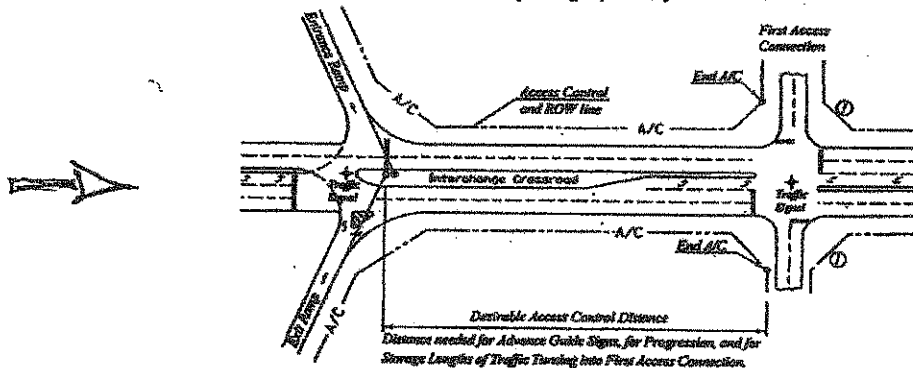
the distances needed to enter and weave across the through-traffic lanes, move into the left-turn lane, store left turns with a low likelihood of failure, and extend from the stop line to the centerline of the intersecting road or driveway. In addition, driver perception-reaction distance may be included in the computation. Where only right-turn access is involved and there are no left turns or median breaks, the weaving distance governs.

Exhibit 10-2B illustrates factors affecting access separation and control distances along a crossroad where there is a diamond interchange and the ramp termini are controlled by either a traffic signal or stop sign (1).



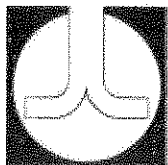
-A- Free-Flow Ramps Entering and Exiting From Crossroad

Note: (1) Consider providing access control in all four quadrants of the first access connection to improve traffic operations of the intersection.



-B- Diamond Interchange Design with Crossroad
(Intersection control could be either stop signs or traffic signals)

Exhibit 10-2. Factors Influencing Length of Access Control along an Interchange Crossroad



JOEL P. LEISCH

To: Chuck Daughtry, Port of Cascade Locks
From: Joel Leisch, Consultant
Date: May 4, 2008
Re: DEIS, Resort/Casino, Cascade Locks

This memo describes the documents/publications I have reviewed for the Port of Cascade Locks in preparation for adding to and editing the previously drafted comments on the DEIS for the proposed Resort/Casino and the interchange on I-84. Also, I have listed follow-up recommendations after submittal of the DEIS comments.

The following documents were reviewed:

1. DEIS, Volumes 1 and 2
2. Access Point Decision Report (APDR)
3. White paper prepared by David Evans and Associates responding to the DEIS
4. Draft comments on the DEIS
5. Relevant "standards" in the ODOT Design Manual including:
 - Interchange Spacing (3/6 miles)
 - Intersection/Interchange Spacing (1320')
 - Design Exception Process
6. AASHTO, "A Policy on Geometric Design of Highways and Streets", 2004 including:
 - Interchange Spacing Guidelines (general rule of thumb)
 - Intersection Spacing Guidelines (operational based methodology)
7. City of Cascade Locks, Resolution No. 1119, "....to oppose the closure of the East Cascade Locks Interchange."
8. Memos of Access Working Group Meetings
9. Presentations by Tim Lee, Port of Cascade Locks Commission President

Recommendations

- A. Submit the revised/edited comments on the DEIS with attachments.
- B. Request that BIA/HDR begin the Design Exception Process to keep the ECLI open. The comments (with attachments) on the DEIS should serve as a good foundation for the design exception request.
- C. Consider redesign of the proposed interchange interface with access to the Industrial Park/Resort/Casino site, Forest Lane and the south frontage road to comply with the AASHTO guideline for intersection spacing. If the ECLI remains then a single

roundabout on the north side of I-84 could be developed to accommodate the intersection of the west bound exit and entrance ramps with Forest Lane and the Industrial Park/Resort/Casino access. A single intersection or roundabout could be developed on the south side of I-84 where the east bound exit and entrance ramps would intersect with the south frontage road and Forest Lane. This is not a redesign of the diamond interchange. This could reduce construction cost, right-of-way and discourage traffic from using Forest Lane if designed appropriately.

- D. Recommend that a grade separation for trucks exiting the weigh station be constructed similar in concept to Alternative L3 in the APDR.
- E. Request a meeting with BIA and HDR to discuss the comments on the DEIS and the recommendations above.

Chuck
Follow up to our conversation

Table 4: December 2005 Access Alternatives

Class of Alternative	Identifier [Figure]	Description
Interstate Modification/New Access	21G/22G Forest Lane Roundabouts [Figure 17]	Construct full diamond interchange at Forest Lane overcrossing. Use roundabouts at ramp termini. Roundabout at Forest Lane, industrial park access, and westbound ramps on structure so that industrial park access overcrosses railroad. Close Herman Creek Interchange. Option 22G keeps Herman Creek Interchange open.
	21H/22H New West Forest Lane Diamond [Figure 18]	Construct full diamond interchange west of Forest Lane overcrossing. Interchange road overcrosses Forest Lane and railroad north of I-84 and overcrosses Frontage Road south of I-84. Connection of interchange road with Frontage Road access between new interchange and Forest Lane overcrossing. Close Herman Creek Interchange. Option 22H keeps Herman Creek Interchange open.
	21I/22I Frontage Road Flyover [Figure 19]	Relocated Frontage Road flies over I-84 west of Forest Lane overcrossing where diamond interchange is constructed. New access road intersects Forest Lane at signal. Old Frontage Road cul-de-sac west of Forest Lane overcrossing. Close Herman Creek Interchange. Option 22I keeps Herman Creek Interchange open.
	21J/22J Forest Lane Interchange [Figure 20]	Construct new diamond interchange at realigned Forest Lane overcrossing. Realign Frontage Road south of interchange to connect with Forest Lane east of new interchange. Access to industrial park overcrosses railroad and Forest Lane. Access to industrial park from Forest Lane by a ramp that intersects with Forest Lane to the west of existing access road. Close Herman Creek Interchange. Option 22J keeps Herman Creek Interchange open.
	20J Forest Lane Interchange [Not illustrated – see note on Figure 20]	Construct new diamond interchange at realigned Forest Lane overcrossing. Realign Frontage Road south of interchange to connect with Forest Lane east of new interchange. Access to industrial park overcrosses railroad and Forest Lane. Access to industrial park from Forest Lane by a ramp that intersects with Forest Lane to the west of existing access road. Close Herman Creek Interchange. Close westbound off-ramp at East Cascade Locks Interchange. Restrict eastbound on-ramp at East Cascade Locks Interchange to trucks only (exiting from Weigh Station).

Is this similar to "Joll's napkin"?

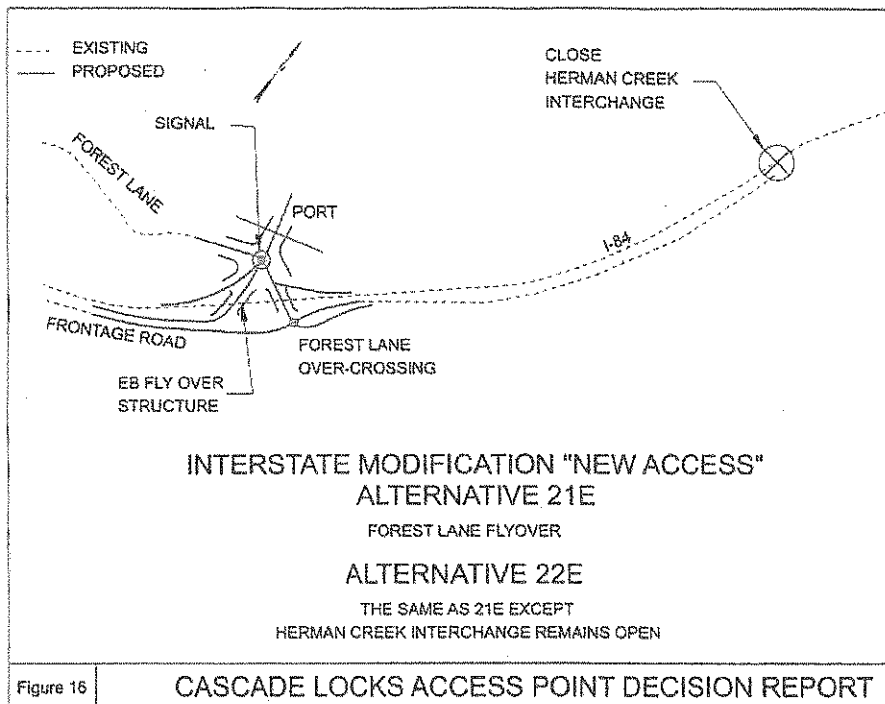
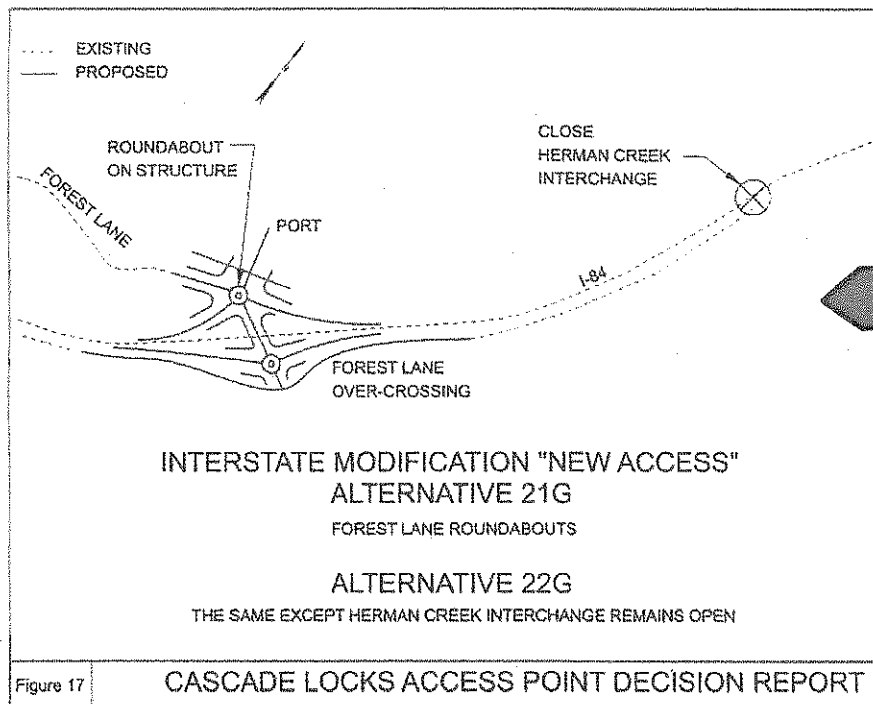


Figure 16: Interstate Modification/New Access Option 21E



The picture of that alternative

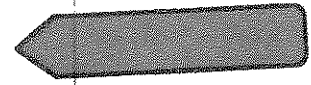


Figure 17: Interstate Modification/New Access Option 21G

Table 8: Alternatives Eliminated in the Screening Process

Alternative	Issues Leading to Elimination
L7 – 5-Lane Facility South With Direct Connection With Bridge of the Gods	A 5-lane roadway through the majority of vacant urban land within the urban area of Cascade Locks would be inconsistent with the city's comprehensive plan. A high-volume arterial roadway, with a potentially high level of truck volume through a residential area would impose impacts on future residents and would have a potential of spurring zone changes (residential to commercial). Access to the industrial park from I-84 would involve a greater travel distance on the local street system. A 5-lane crossing of Herman Creek would have environmental permitting issues. Topography may constrain this alternative. Ramps from bridge to WaNaPa may not be able to be maintained; if ramps to WaNaPa are removed, there would likely be impacts to downtown businesses as traffic between downtown Cascade Locks and Washington would be required to take a circuitous route (e.g., across Bridge of the Gods, onto I-84, off I-84 at the earliest opportunity, and either local streets or back on I-84 in the opposite direction to reach downtown Cascade Locks).
12 – Full Herman Creek Interchange With "Golden Gate" Access to Industrial Park From Government Rock	There would be major environmental impacts from the large bridge structure ("Golden Gate" – including visual impacts to National Scenic Area). Imposes out-of-direction travel on the highest future volumes of traffic (to and from the west).
14 – East Cascade Locks – Forest Lane Consolidation	Major environmental impacts and challenging topography for the construction of new access road crossing Herman Creek. This alternative would require a complex connection to maintain access to Forest Lane. Large right-of-way impact to limited urban residential land supply. Potential impact to fish hatchery. IAMP goals may be difficult to meet with this alternative.
21A – Forest Lane Tight Diamond	While this alternative scored among the highest, discussion suggested that the elimination of the continuity of Forest Lane south of I-84 and the retention of the at-grade crossing of the railroad were significant negative factors for this alternative.
21C – East Cascade - Forest Lane Split Diamond	The large right-of-way impact, additional Herman Creek crossings, retention of the at-grade crossing of the railroad, and the challenge of maintaining Frontage Road as a local access roadway were negative characteristics of this alternative.
21D – Forest Lane Buttonhook	This alternative had a low score based on potential impacts to the historic highway and displacement of an existing business. IAMP goals may be difficult to meet with this alternative.
21E – Forest Lane Flyover	This alternative received a low total score based on the visual and land use impact of large structures, the likely environmental impact of new Herman Creek crossings, and displacement of an existing business, in addition to creating a challenge to meet IAMP goals.
21G – Forest Lane Roundabouts	Roundabouts, particularly those with greater than four legs, are contrary to driver expectations. The north roundabout would need to be on a structure to allow for railroad overcrossing, which would involve significant structures with large visual impacts. The additional elevation of Forest Lane to reach the north roundabout may have adverse impacts on the historic highway. Alternative involves right-of-way impacts, including potential existing business displacement.
21H – New West Forest Lane Diamond	This new interchange would involve a large area of structure and may require a large acquisition of right-of-way. That also may have a significant impact, including potential existing business displacement. Access to the city would be indirect (traffic would go into the industrial park first, then exit to reach the city).

Why it was screened out



RESOLUTION NO. 1119

revised 7/4/07

A RESOLUTION to Oppose the Closure of the East Cascade Locks Interchange and Pursue a Variance from Standard Urban Spacing Requirements Which Will Allow the East Cascade Locks Interchange to Remain Open After a New Interchange is Constructed at Forest Lane to Accommodate New Development at the Cascade Locks Industrial Park.

WHEREAS, The City/Port of Cascade Locks, Oregon, and Hood River County, Oregon have been and remain supportive of the proposed Cascade Locks Resort and Casino Project (Project) which will be built at the Port of Cascade Locks Industrial Park and is projected to create 1700 family wage jobs and provide \$2.1 million annually in local revenue sharing to the City, Port and County;

WHEREAS, Since, December, 2005, City representatives have participated in an Access Working Group (AWG) that has been meeting regularly to assist the Bureau of Indian Affairs (BIA) in preparing the Access Point Decision Report which evaluated proposed access improvements to and from Interstate I-84 to accommodate the Project;

WHEREAS, The Draft Environmental Impact Statement (DEIS) on the proposed Project is expected to be published by the BIA within the next 30 days;

WHEREAS, The DEIS is expected to include a recommendation to construct a new I-84 Interchange at Forest Lane *and* also recommend the closure of the East Cascade Locks Interchange (ECLI);

WHEREAS, City representatives participating in the AWG have consistently expressed their support for a new Interchange at Forest Lane but have also consistently expressed the City's strong opposition to closing the ECLI;

WHEREAS, The ECLI serves as a primary west-bound access road from I-84 to and from the Bridge of Gods, is an important freight corridor, allows direct access to the downtown business community, and acts to reduce through traffic on the residential Forest Lane section of the Historic Columbia River Highway -- a nationally recognized Scenic Byway and All American Road;

WHEREAS, Keeping ECLI open is consistent with the Oregon Highway Plan Goal #1 "to maintain and improve the safe and efficient movement of people and goods and contribute to the health of Oregon's local, regional, and statewide economies and livability of its communities;"

WHEREAS, A variance process exists which can lead to the adoption of deviations from the 1999 Oregon Highway Plan interchange spacing standards;

THE COMMON COUNCIL FOR THE CITY OF CASCADE LOCKS, HOOD RIVER COUNTY, OREGON, RESOLVES AS FOLLOWS: That the City of Cascade Locks continues to strongly oppose the closure of the ECLI and that the City, working with the BIA,

the Oregon Department of Transportation, the Federal Highway Administration, the Confederated Tribe of the Warm Springs, the Port of Cascade Locks, and Hood River County, will vigorously pursue a variance from standard urban spacing requirements which will allow the ECLI to remain open after a new interchange is constructed at Forest Lane to accommodate new development at the Cascade Locks Industrial Park.

SECTION 1. Effective Date. This resolution shall become effective upon adoption by the City Council and approval by the Mayor.

SECTION 2. Expiration. This resolution shall remain in effect until repealed by the City Council.

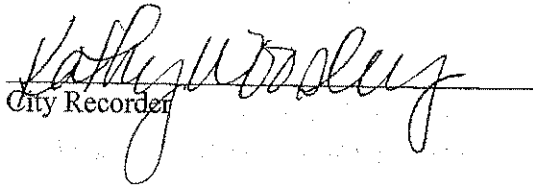
ADOPTED by the City Council this 25th day of June, 2007.

APPROVED by the Mayor this 25th day of June, 2007.



Mayor

ATTEST:



City Recorder

**Port of Cascade Locks
Cascade Locks, Oregon
RESOLUTION NO. 2007-4**

A RESOLUTION to Oppose the Closure of the East Cascade Locks Interchange and Pursue a Variance from Standard Urban Spacing Requirements Which Will Allow the East Cascade Locks Interchange to Remain Open After a New Interchange is constructed at Forest Lane to Accommodate New Development at the Cascade Locks Industrial Park.

WHEREAS, The City/Port of Cascade Locks, Oregon, and Hood River County, Oregon have been and remain supportive of the proposed Cascade Locks Resort and Casino Project (Project) which will be built at the Port of Cascade Locks Industrial Park and is projected to create 1700 family wage jobs and provide \$2.1 million annually in local revenue sharing to the City, Port and County;

WHEREAS, Since, December 2005, Port representatives have participated in an Access Working Group (AWG) that has been meeting regularly to assist the Bureau of Indian Affairs (BIA) in preparing the Access Point Decision Report, which evaluated proposed access improvements to and from Interstate I-84 to accommodate the Project;

WHEREAS, The Draft Environmental Impact Statement (DEIS) on the proposed Project is expected to be published by the BIA within the next 30 days;

WHEREAS, The DEIS is expected to include a recommendation to construct a new I-84 Interchange at Forest Lane *and* also recommend the closure of the East Cascade Locks Interchange (ECLI);

WHEREAS, Port representatives participating in the AWG have consistently expressed their support for a new Interchange at Forest Lane but have also consistently expressed the Port's strong opposition to closing the ECLI;

WHEREAS, The ECLI serves as a primary west-bound access road from I-84 to and from the Bridge of Gods, is an important freight corridor, allows direct access to the downtown business community, and acts to reduce through traffic on the residential Forest Lane section of the Historic Columbia River Highway -- a nationally recognized Scenic Byway and All American Road;

WHEREAS, Keeping ECLI open is consistent with the Oregon Highway Plan Goal #1 "to maintain and improve the safe and efficient movement of people and goods and contribute to the health of Oregon's local, regional, and statewide economies and livability of its communities;"

WHEREAS, A variance process exists which can lead to the adoption of deviations from the 1999 Oregon Highway Plan interchange spacing standards;

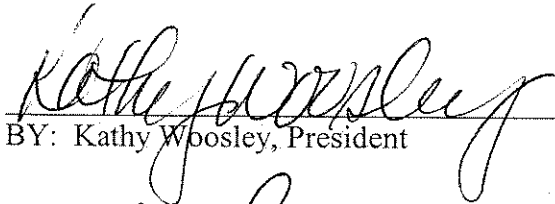
THE COMMISSION OF THE PORT OF CASCADE LOCKS, HOOD RIVER COUNTY, OREGON, RESOLVES AS FOLLOWS: That the Port of Cascade Locks continues to strongly oppose the closure of the ECLI and that the Port, working with the BIA, the

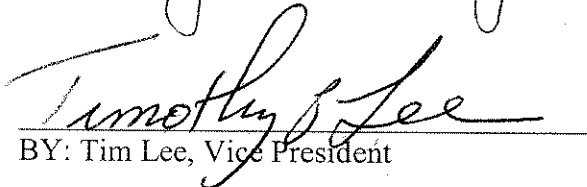
Oregon Department of Transportation, the Federal Highway Administration, the Confederated Tribe of the Warm Springs, the City of Cascade Locks, and Hood River County, will vigorously pursue a variance from standard urban spacing requirements which will allow the ECLI to remain open after a new interchange is constructed at Forest Lane to accommodate new development at the Cascade Locks Industrial Park.

SECTION 1. Effective Date. This resolution shall become effective upon adoption by the Port Commission.

SECTION 2. Expiration. This resolution shall remain in effect until repealed by the Port Commission.

ADOPTED by the Port Commission this 21st day of June, 2007.


BY: Kathy Woosley, President


BY: Tim Lee, Vice President