

**BEFORE THE BOARD OF COUNTY COMMISSIONERS
OF LEWIS COUNTY, WASHINGTON**

IN THE MATTER OF:)
Fixing a maximum speed limit on a)
portion of Airport Road in Lewis)
County, defining offenses and)
providing penalties for the violation)
thereon)

RESOLUTION #15- 167

WHEREAS, RCW 46.61.415 authorizes local authorities to determine the maximum speeds permitted on roadways based on an engineering and traffic investigation; and

WHEREAS, an engineering and traffic investigation has been prepared by Lewis County Public Works to assess the appropriate speed limit on Airport Road in Lewis County, Washington; and

WHEREAS, the results of these investigations recommend lowering the speed limit on a portion of Airport Road; and

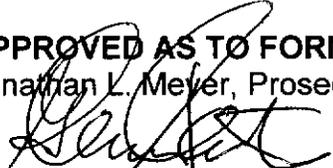
WHEREAS, said investigation, all related materials, and a proposed Traffic Ordinance have been reviewed by the Board and found appropriate for further proceedings.

NOW THEREFORE BE IT RESOLVED that the 6th day of July 2015, at or after the hour of 10:00 a.m., in the Commissioners Hearing Room on the 2nd floor of the Historic Courthouse in Chehalis, Washington, has been fixed by the Board as the time and place for the hearing on an Ordinance reducing a speed limit when and where all persons may appear and be heard regarding the passing of the Ordinance;

BE IT FURTHER RESOLVED that the Clerk of the Board is hereby instructed to proceed with all appropriate and necessary notifications, posting and publication as required by RCW 34.05.320.

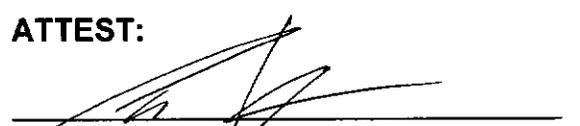
DONE IN OPEN SESSION this 8th day of June, 2015.

APPROVED AS TO FORM:
Jonathan L. Meyer, Prosecuting Attorney

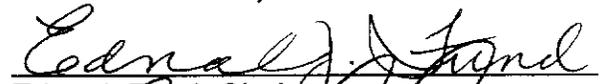
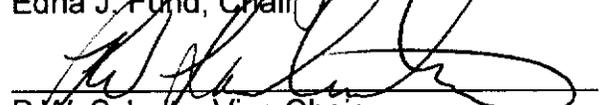
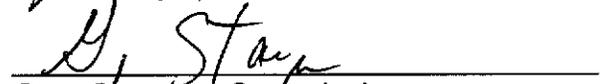


By: Glenn Carter
Deputy Prosecuting Attorney

ATTEST:


Karri Muir, CMC, Clerk of the Lewis
County Board of County Commissioners

**BOARD OF COUNTY COMMISSIONERS
LEWIS COUNTY, WASHINGTON**


Edna J. Fund, Chair
P.W. Schulte, Vice Chair
Gary Stamper, Commissioner

**LEWIS COUNTY PUBLIC WORKS
ENGINEERING AND TRAFFIC INVESTIGATION REPORT**

REASON FOR INVESTIGATION: Need to lower speed limit on Airport Road based on approved WSDOT deviation (see attached).

COUNTY ROAD: Airport Road

LOCATION: Mile Post 1.4 to Chehalis city limits.

IN THE MATTER OF: Lowering posted speed limit to 35 mph.

FINDINGS :

- a.) Current Speed Limit: [45] MPH
85% Prevailing Vehicle Speed: [52] MPH
Average Daily Traffic: [2965] VPD
Truck percentage: [7.7%]

- b.) Physical Features: Airport Road has been recently reconstructed in this area. It is now a 24' road with a separated multi-use pathway.

- c.) Accident Characteristics : n/a

- d.) Remarks / Recommendations: An approved deviation by WSDOT in 2011 agreed to lower the speed limit at the bridge (MP 1.42) to 35 mph. Based on an evaluation of the designed radius at the bridge compared to the attached AASHTO table 3-13b, 35 mph is the appropriate speed limit for this section of roadway. From the bridge it is approximately 0.3 miles to the Chehalis city limits where the speed limit is further reduced to 30 mph.

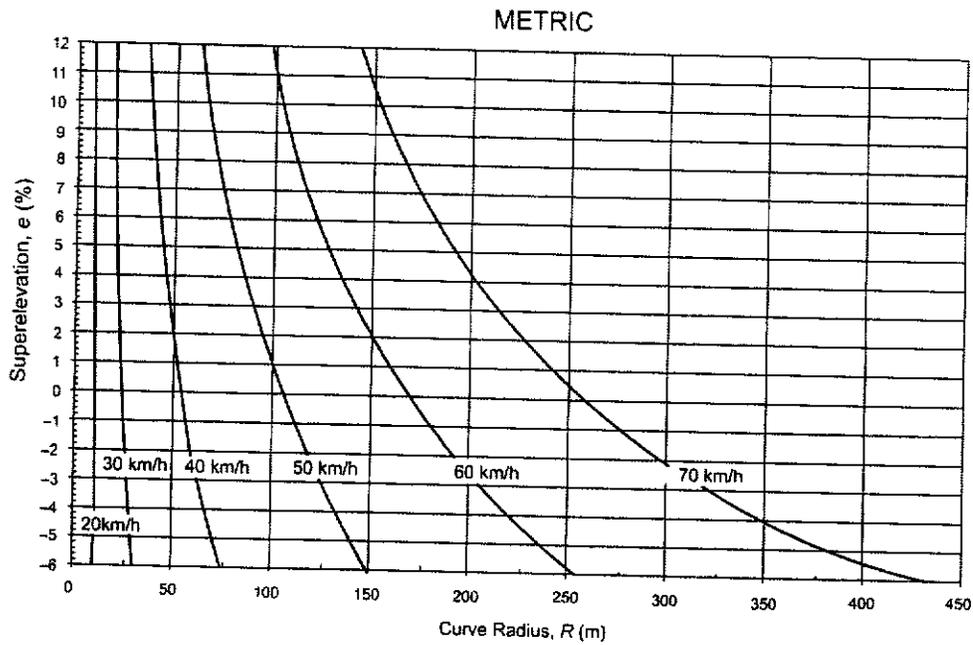
Erik Martin, PE
Maintenance and Traffic Engineer

Table 3-13b. Minimum Radii and Superelevation for Low-Speed Urban Streets

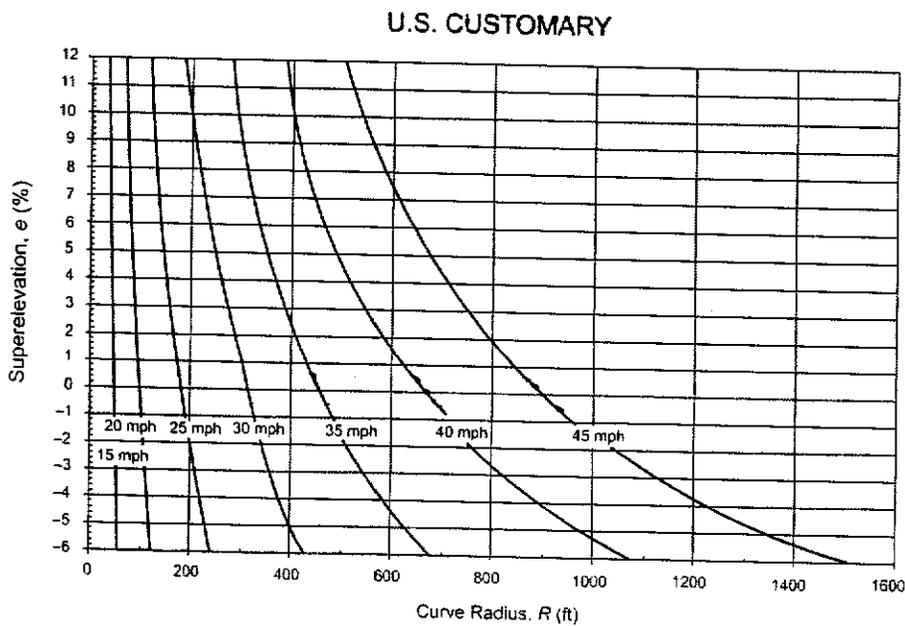
U.S. Customary							
e (%)	V _d = 15 mph	V _d = 20 mph	V _d = 25 mph	V _d = 30 mph	V _d = 35 mph	V _d = 40 mph	V _d = 45 mph
	R (ft)						
-6.0	58	127	245	429	681	1067	1500
-5.0	56	121	231	400	628	970	1350
-4.0	54	116	219	375	583	889	1227
-3.0	52	111	208	353	544	821	1125
-2.8	51	110	206	349	537	808	1107
-2.6	51	109	204	345	530	796	1089
-2.4	51	108	202	341	524	784	1071
-2.2	50	108	200	337	517	773	1055
-2.0	50	107	198	333	510	762	1039
-1.5	49	105	194	324	495	736	1000
0	47	99	181	300	454	667	900
1.5	45	94	170	279	419	610	818
2.0	44	92	167	273	408	593	794
2.2	44	91	165	270	404	586	785
2.4	44	91	164	268	400	580	776
2.6	43	90	163	265	396	573	767
2.8	43	89	161	263	393	567	758
3.0	43	89	160	261	389	561	750
3.2	43	88	159	259	385	556	742
3.4	42	88	158	256	382	550	734
3.6	42	87	157	254	378	544	726
3.8	42	87	155	252	375	539	718
4.0	42	86	154	250	371	533	711
4.2	41	85	153	248	368	528	703
4.4	41	85	152	246	365	523	696
4.6	41	84	151	244	361	518	689
4.8	41	84	150	242	358	513	682
5.0	41	83	149	240	355	508	675
5.2	40	83	148	238	352	503	668
5.4	40	82	147	236	349	498	662
5.6	40	82	146	234	346	494	655
5.8	40	81	145	233	343	489	649
6.0	39	81	144	231	340	485	643
6.2	39	80	143	229	337	480	637
6.4	39	80	142	227	335	476	631
6.6	39	79	141	226	332	472	625
6.8	39	79	140	224	329	468	619
7.0	38	78	139	222	327	464	614
7.2	38	78	138	221	324	460	608
7.4	38	78	137	219	322	456	603
7.6	38	77	136	217	319	452	597
7.8	38	77	135	216	317	448	592
8.0	38	76	134	214	314	444	587
8.2	37	76	134	213	312	441	582
8.4	37	75	133	211	309	437	577
8.6	37	75	132	210	307	434	572
8.8	37	74	131	208	305	430	567
9.0	37	74	130	207	302	427	563
9.2	36	74	129	205	300	423	558
9.4	36	73	129	204	298	420	553
9.6	36	73	128	203	296	417	549
9.8	36	72	127	201	294	413	544
10.0	36	72	126	200	292	410	540
10.2	36	72	126	199	290	407	536
10.4	35	71	125	197	288	404	531
10.6	35	71	124	196	286	401	527
10.8	35	71	123	195	284	398	523
11.0	35	70	123	194	282	395	519
11.2	35	70	122	192	280	392	515
11.4	35	69	121	191	278	389	511
11.6	34	69	120	190	276	386	508
11.8	34	69	120	189	274	384	504
12.0	34	68	119	188	272	381	500

Notes:

1. Computed using Superelevation Distribution Method 2.
2. Superelevation may be optional on low-speed urban streets.
3. Negative superelevation values beyond -2.0 percent should be used for unpaved surfaces such as gravel, crushed stone, and earth. However, a normal cross slope of -2.5 percent may be used on paved surfaces in areas with intense rainfall.



Note: Negative superelevation values beyond -2.0 percent should be used for unpaved surfaces such as gravel, crushed stone, and earth. However, areas with intense rainfall may use normal cross slopes of -2.5 percent on paved surfaces.



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Figure 3-14. Superelevation, Radius, and Design Speed for Low-Speed Urban Street Design



Administration
Engineering Services
Traffic Engineering & Operations
Road Maintenance & Operations
Real Estate Services
Waste Management

Department of Public Works

2025 NE Kresky Avenue, Chehalis WA 98532 • 360-740-1123 • Fax: 360-740-1479 • TDD: 360-740-1480
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Design Deviation Request Report March 10, 2011

Agency: Lewis County Public Works
Project Title: Airport Road Extension Project
Project No.: CRP 2100



Lewis County was previously awarded a TIB Grant to complete corridor improvements between Louisiana Ave. in Chehalis, Washington and Mellon Street in Centralia, Washington via improvements to Lewis County's Airport Road. Planned corridor improvements include roadway rehabilitation with Cement Treated Base (CTB), Crushed Surfacing, HMA, traffic marking/signing, and other improvements along with a separated bicycle/pedestrian pathway. This Deviation Request outlines Lewis County's justification to leave the existing Airport Road Bridge crossing Salzer Creek in-place for vehicular traffic while providing a new separated bicycle/pedestrian bridge immediately downstream. The following report utilizes WSDOT's Deviation Analysis format to compare standard and deviated features associated with the project:

1. Posted Speed Limit: 50

2. Physical Comparison:

(a.) Standard Geometrics

Page 385 of the 2004 AASHTO Manual "Geometric Design of Highways and Streets" discusses the high replacement costs involved with replacing an existing bridge and the advisability of replacing these structures when they are not posted and fit within the design alignment and profile. The guidance given allows the structure to remain providing it is at least an H15 capacity and 24 feet wide for design volumes below 2000 ADT.

(b.) Deviation Geometrics

The proposed design shall maintain the existing bridge for vehicular traffic and provide a separate structure downstream from the existing structure for pedestrian traffic.

(c.) Discussion

Airport Road is classified as an Urban Collector (FFC 17) route that functions as the main transportation link parallel to I-5 on the west side of the freeway between the City of Chehalis and the City of Centralia (see Attachment A – vicinity map). This 3R rehabilitation project will complete a connection for vehicular traffic and pedestrians between Louisiana Avenue in the City of Chehalis and Airport Road and it will also connect to the WSDOT Mellon-to-Blakesly project. Planning for improvements began in 2003. This project will rehabilitate the failing roadway base, widen the roadway shoulders, provide a multiuse pathway, improve roadway drainage features and improve transportation safety between M.P. 0.39 Airport Road and in the City of Chehalis Louisiana Avenue at the Home Depot entrance.

This project is funded with TIB funds and local matching funds and therefore is subject to the project development standards included in the Local Agency Guidelines Manual. The design matrix checklist used for this project is the "3R Project Checklist". The design element "Bridge" design approval is covered in section 43.3 of the LAG manual. The bridge in question would not fall under category "c" or "d" and therefore falls under category "b" and the local agency is the approving authority for the design.

This project has one bridge contained within the project limits. The current ADT is 590 with a projected 2020 ADT of 1150. The existing bridge does not meet the new roadway AASHTO design width of 34 feet for projected ADT, the existing bridge has a width of 24 feet. The inventory rating for this bridge is 30 tons and has an operating rating of 50 tons. This bridge has a sufficiency rating of 83. With projected ADT less than 1500 vehicles per day and minimal truck traffic, the 2004 AASHTO Manual's "tolerable criteria" guidance for the existing structure to remain in-place would be exceeded.

3. Safety Issues

(a.) Accident History

There have been two accidents at this site since 1985, one in February of 1985 (injury) and one in March of 2004 (property damage only).

(b.) Accident Projections

No increase in accidents are projected as a result of this deviation.

(c.) Discussion

A pedestrian bridge will be built adjacent to the existing bridge. This will decrease the potential for accidents by removing pedestrian and bicycle traffic from the roadway.

4. Cost Comparison

	Standard Cost	Deviation Cost	Several improvement measures will be made to mitigate this deviation:
Structure	\$1,000,000	\$250,000	<ol style="list-style-type: none"> 1. The bridge will be augmented with a separate bridge for pedestrian and bicycle traffic. 2. The taper from the new roadway section to the bridge will be 150 feet long. 3. The guardrail will follow the taper. 4. The posted speed limit will be lowered from 50 mph to 35 mph. 5. Appropriate Road Narrows signage will be placed. 6. No work will be inside the ordinary high water mark. 7. Street Lights will be provided on each end of the existing bridge.

5. Reasons Standard Cannot be Achieved at This Time:

There is an unwarranted extra expense of \$750,000 to provide a new bridge at this location. Removal and construction of a new vehicle bridge would create additional environmental impacts to Salzer Creek (a salmon bearing stream).

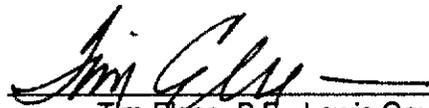
Conclusions:

Based on the above justifications and proposed mitigation measures the decision was made to leave the existing bridge in place. This document shall serve as the basis for the decision and documentation of the design exception approval by the local agency approving authority.

Certification:

I have approved this design exception and believe it to be in the best public interest.

3/14/11
Date


Tim Elsea, P.E., Lewis County Engineer

Attachments:

- 1.) Vicinity Map
- 2.) Existing Configuration
- 3.) Proposed Configuration
- 4.) Roadway Sections



Department of Public Works

General Vicinity Sheet

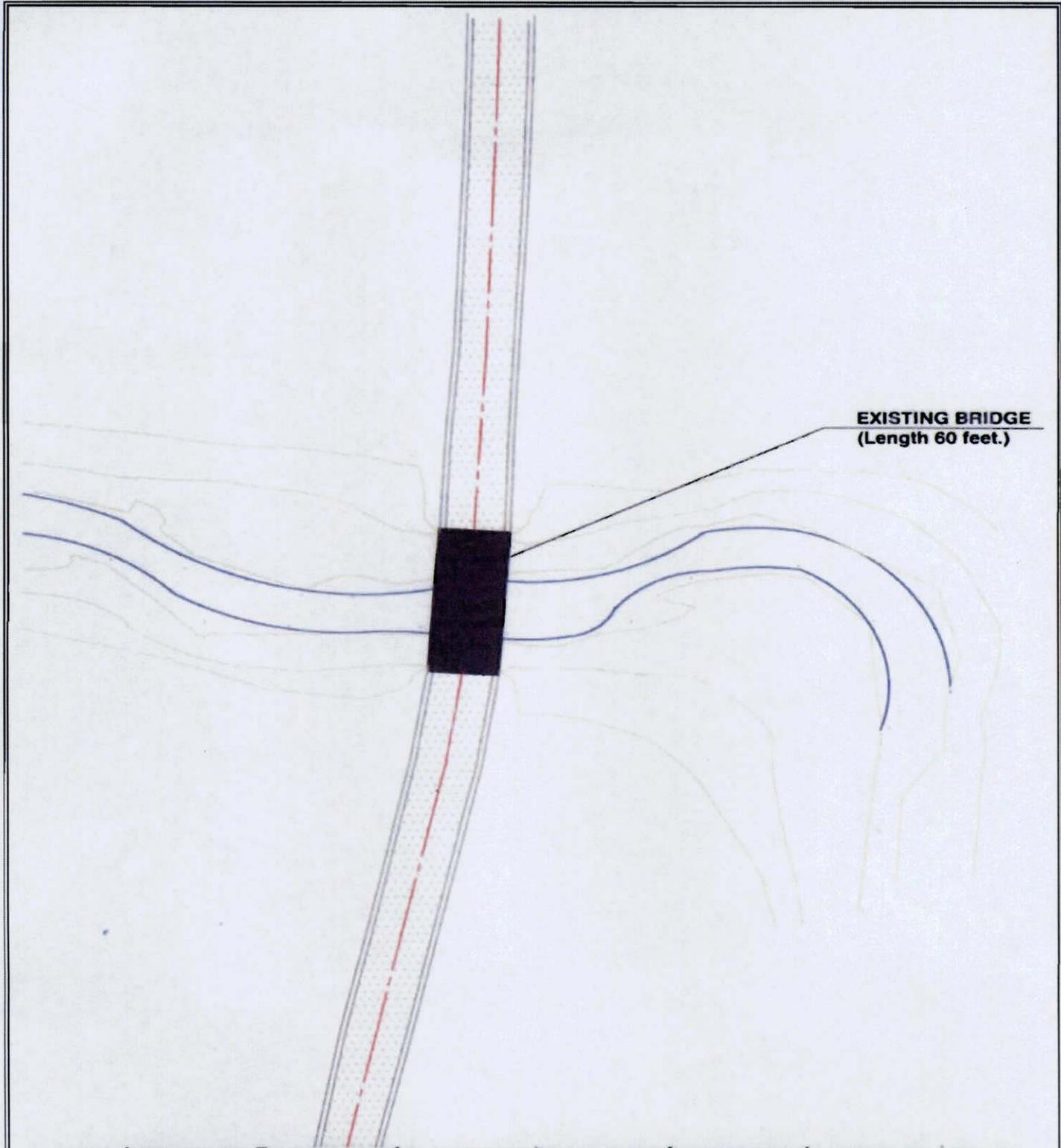
Lewis County, Washington

Airport Road Extension Project CRP 2100

Airport Road Bridge Milepost 1.43

Lat 46° 41' 30" Long 122° 58' 6" Sec 19 T14N R2W





EXISTING BRIDGE
(Length 60 feet.)



Department of Public Works

Existing Configuration Sheet

Lewis County, Washington

Airport Road Extension Project CRP 2100

Airport Road Bridge Milepost 1.43

Lat 46° 41' 30" Long 122° 58' 6" Sec 19 T14N R2W

SEPARATE MULTIMODEL PATH BRIDGE (prefab)
(Approximate length 110 feet.)

Transition Sta = 111+10
Sta = 111+00

Sta = 110+00

EXISTING BRIDGE
(Length 60 feet.)

Sta = 109+00

Sta = 108+00

Transition Sta = 107+50.00

Sta = 107+00



Department of Public Works

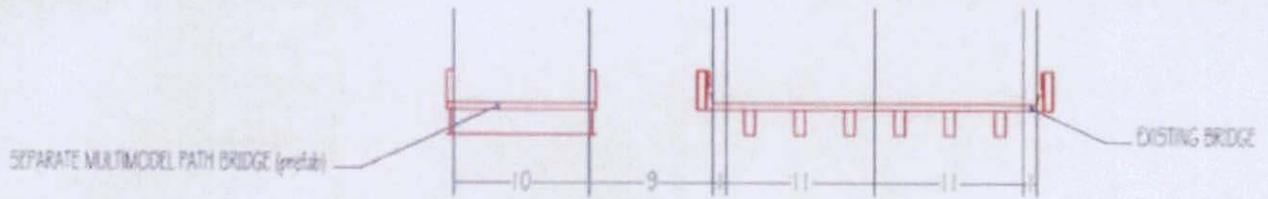
Proposed Configuration Sheet

Lewis County, Washington

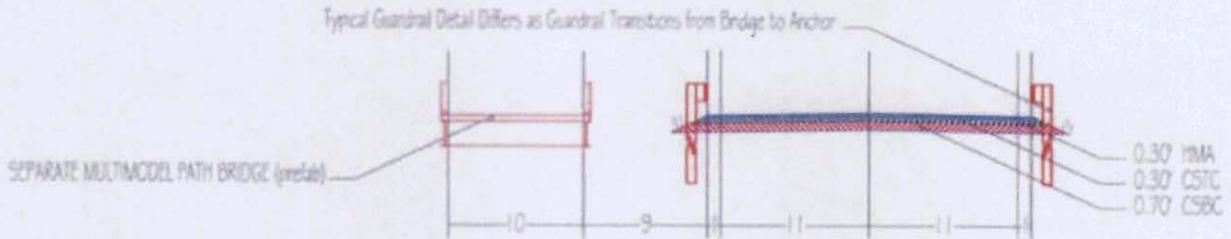
Airport Road Extension Project CRP 2100

Airport Road Bridge Milepost 1.43

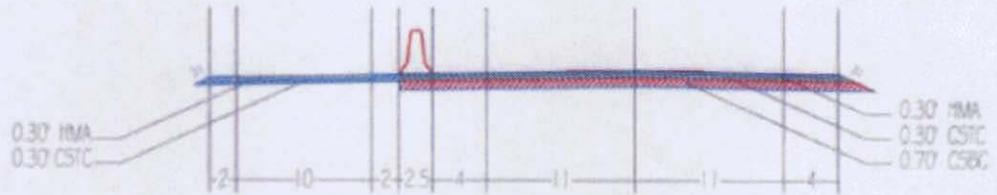
Lat 46° 41' 30" Long 122° 58' 6" Sec 19 T14N R2W



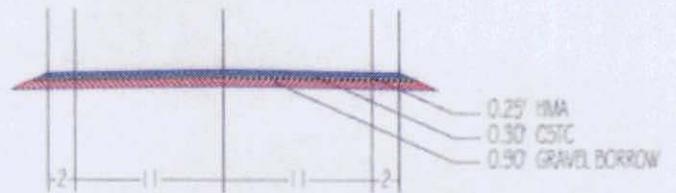
BRIDGE SECTION
STA 109+00 - STA 109+60



ADJOINING ROADWAY TO BRIDGE SECTION
STA 107+50 - STA 109+00 & STA 109+60 - STA 111+10



TYPICAL TWO LANE SECTION PROPOSED



CURRENT ROADWAY SECTION



Department of Public Works

Roadway Sections Sheet

Lewis County, Washington

Airport Road Extension Project CRP 2100

Airport Road Bridge Milepost 1.43

Lat 46° 41' 30" Long 122° 58' 6" Sec 19 T14N R2W



**Washington State
Department of Transportation**
Paula J. Hammond, P.E.
Secretary of Transportation

Transportation Building
310 Maple Park Avenue S.E.
P.O. Box 47300
Olympia, WA 98504-7300

360-705-7000
TTY: 1-800-833-6388
www.wsdot.wa.gov

March 18, 2011

Mr. Tim Elsea
Public Works Director
Lewis County
2025 NE Kresky Avenue
Chehalis, Washington 98532-2308

**Lewis County
Airport Road Extension
Design Deviation
CRP 2100**

Dear Mr. Elsea:

Your deviation request signed, stamped, and dated March 10, 2011, to utilize an existing 24 foot wide structure in lieu of widening it to the current standards has been approved.

If you have any questions regarding this approval, please contact Ken Hash your Region Local Programs Engineer, at (360) 905-2215.

Sincerely,

Kathleen B. Davis
Director
Highways and Local Programs Division

KBD:dln:sas

cc: Ken Hash, Southwest Region Local Programs Engineer

NOTICE OF HEARING

NOTICE IS HEREBY GIVEN that the Board of County Commissioners, Lewis County, Washington, is intending to reduce the current maximum speed limit to 35 mph on a portion of Airport Road in Lewis County.

An Engineer's Report has been prepared and all related materials have been reviewed by the Board and found appropriate for further proceedings.

A hearing on the reduction of speed limit on a portion of Airport Road in Lewis County will be held on the 6th day of July, 2015, at or after the hour of 10:00 a.m., in the Commissioners Hearing Room on the 2nd floor of the Historic Courthouse in Chehalis, Washington, when and where all persons may appear and be heard regarding the reduction of speed.

Lewis County policy requires that notice of hearing regarding the proposed reduction of speed limits be advertised at least 10 days before the day fixed for hearing, and also published once in the official newspaper of the county. A copy of proposed Ordinance #217 is available for public inspection with the Clerk of the Board on the 2nd floor of the Historic Courthouse in Chehalis, Washington.

Dated: June 8, 2015