

W-9-a-

Memorandum Date: 1/4/08
Order Date: 1/30/08

TO: Board of County Commissioners
DEPARTMENT: Public Works
PRESENTED BY: Mike Russell, Road Maintenance Senior Engineering Assoc.
AGENDA ITEM TITLE: ORDER/IN THE MATTER OF APPROVING A PROJECT DESIGN CONCEPT FOR DEERHORN ROAD MP 7.760 TO MP 9.90 BASED ON THE DESIGN CONCEPT IN EXHIBIT A AND THE ADDENDUM IN EXHIBIT B; AND AUTHORIZING STAFF TO CONSTRUCT THE ROAD, PURSUE ALL NECESSARY PLANNING ACTIONS AND, IF NECESSARY, PREPARE PLANS AND SPECIFICATIONS FOR IMPROVEMENT OF SAID ROAD.

I. MOTION

MOVE APPROVAL OF BOARD ORDER CONCURRING WITH THE ALIGNMENT, RIGHT-OF-WAY WIDTHS AND OTHER DESIGN FEATURES FOR THE DEERHORN ROAD PROJECT AS SHOWN IN EXHIBIT A AND B, AND AUTHORIZING STAFF TO CONSTRUCT THE PROJECT.

II. AGENDA ITEM SUMMARY

The Board is being asked to approve the attached Design Concept and provide direction for staff to continue working on the project in order for staff to meet construction milestones for 2008. The project will establish a hard surface on Deerhorn Road from mile post 7.76 to mile post 9.90, which is currently gravel, by applying a triple-shot chip seal in 2008.

III. BACKGROUND/IMPLICATIONS OF ACTION

A. Board Action and Other History

On November 30, 2005, residents from this section of Deerhorn Road were present at a meeting of the Roads Advisory Committee to which they submitted a petition and letters signed by their neighbors in support of paving the gravel portion of Deerhorn Road. The residents cited concerns about lack of maintenance, safety, and visibility due to dust.

The Roads Advisory Committee requested that staff investigate options and report back to them. Due to the current funding situation surrounding the Public Works Department's Capital Improvement program, the project was proposed as a County Force project rather than a full rural standards capital improvement.

On August 16, 2007 Road Maintenance staff hosted an Open House for residents and interested parties to get informed about the project.

On August 29, 2007 the Roads Advisory Committee held a Public Hearing on the proposal to gather testimony. That same night the committee adopted the Design Concept and Findings document attached as Exhibit A to the Board Order.

As per Lane Code, the Committee's recommendation was subject to a 30-day comment period that ended October 2, 2007.

In response to public testimony and the need to address a particular curve at approximately MP 8.9, staff further evaluated options that were in addition to the Road Advisory Committee's recommendation. A discussion of this additional evaluation and staff recommendation is presented in Exhibit B for the Board's consideration and is being presented in addendum to the Design Concept.

B. Policy Issues

This project is proposed as a preservation project rather than a full rural standards capital improvement project. The project proposal is to rehabilitate the road base where needed and apply a triple-shot chip seal coat to the existing road surface using County forces funded under the Road Maintenance budget.

There are some consequences associated with this approach.

1. A chip seal solution will not straighten curves or flatten humps in the existing road.
2. A chip seal will not include guard rail installation where a modernization project might.
3. Due to the nature of transitioning from a gravel surface to a chip sealed surface, travel speeds might increase.
4. A chip seal project will not widen the existing road, but it will maintain the intermittent pull-outs.

The Design Concept and Addendum #1 clearly define which design standards will not be met and are in need of a design exception. Specifically, design exceptions are needed for pavement width, pavement structure, roadway side slopes, clear zone, horizontal curvature and superelevation, and stopping sight

distance requirements.

C. Board Goals

Public Works road maintenance activities are supported by, and consistent with, the following overall goals as presented in Lane County's Strategic Plan:

- Provide opportunities for citizen participation in decision-making, voting, volunteerism and civic and community involvement.
- Contribute to appropriate community development in the areas of transportation and telecommunications infrastructure, housing, growth management, and land development.
- Protect the public's assets by maintaining, replacing or upgrading the County's investments in systems and capital infrastructure.

D. Financial and/or Resource Considerations

The original request from the residents and property owners along this portion of Deerhorn Road was to pave the roadway with asphalt cement. This would have made the project fall under the Capital Improvement Program and required full rural standards as outlined in Lane Code Chapter 15. This portion of Deerhorn Road is classified as a rural local road and would need major realignments and widening to meet the standards requiring a large investment of the capital budget. In light of the reductions experienced by the Capital Improvement Program over the last several years, and competing project priorities, a full-standards project on a dead end local road did not appear to be a viable option under current criteria.

The alternative was to convert the existing gravel surface to a hard surface by applying a triple-shot chip seal. We have done this on several gravel roads throughout the county. This requires significantly less investment and appears to satisfy the neighborhood's desire for a paved surface. The project has been added to the 2008 Chip Seal program and will be funded by the Road Maintenance budget and use Lane County crews to accomplish the work.

E. Analysis

Recent Board of County Commissioner deliberations indicate a desire to better balance the costs of capital projects with the received benefits. This is also important in light of the uncertainty of future Road Fund revenues specifically related to Federal Secure Rural Schools payments. The Board is also interested in ultimately providing projects that are supported by strong public involvement and interests.

The following discussion outlines an effort to satisfy the desires of the Board of

Commissioners while maintaining and supporting the project purpose and need. Discussions with property owners and interested parties also indicate a desire to lessen project impacts and preserve the rural nature of the road.

Options Analysis

Option 1 – Full Standards Modernization

Proposed width:	20'
Surface treatment:	A/C Pavement
Design speed:	45 mph
Other Design Features:	Total reconstruction, horizontal and vertical alignment changes, open ditches, guardrail
Cost Estimate:	\$2,600,000

- This option would apply the level of roadway standards outlined in Lane Code and full AASHTO design standards. Complete guardrail, side slope, horizontal and vertical alignment and surface type improvements would be accomplished.
- This option requires significant embankment and excavation work in the areas being realigned, and increases the potential for undesirable environmental and private property impacts.
- This option would place the project on Public Work's Capital Improvement Program and would compete with other priorities on the road system.

Option 2 – Triple-shot Chip Seal on existing alignment and realigning curve at approximately MP 8.90 to meet a design speed of 45 mph.

Proposed width:	18' – 20' (existing)
Surface treatment:	Triple-shot Chip Seal
Design speed:	Existing measured Safe Driving Speeds range from 22 to 55+ mph
Other Design Features:	Hard surface existing road alignment
Cost Estimate:	\$265,000

- This would be a minimal approach to address resident's concerns and provide improved access to forest uses.
- This is the least expensive construction option and would make more money available to fund other projects of demonstrated need while still providing for some improvement of the road surface.
- Given the scope of work, impact footprint, and type of materials and equipment to be used, there does not appear to be measurable direct impacts to the natural environment which require mitigation, permits, or special protection

measures under normal circumstances.

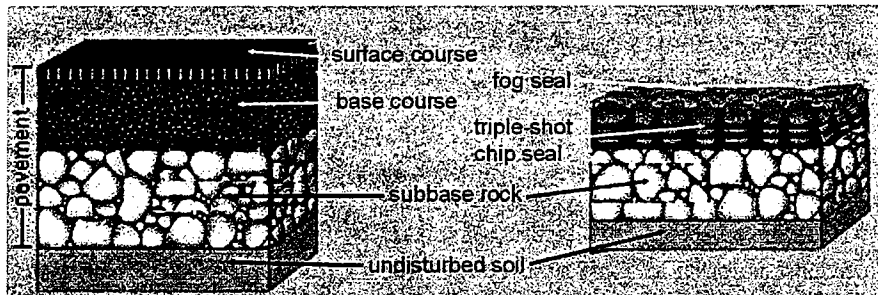
- The project could be constructed entirely with County Maintenance crews and expertise and included in the annual Chip Seal Program.

- Maintenance costs associated with routine blading, rock application, dust abatement, and related public complaints are reduced upon hard surfacing the road.

- While cheaper to construct, the chip seal surface will not have the design life of an asphalt concrete pavement. Typical life of a triple-shot chip seal surface before needing resurfacing treatment is 5 to 7 years. Typical life of an asphalt concrete pavement is 20 years.

Asphalt Pavement vs. Chip Seal

(20 years) (5-7 years)



About \$8 per square yard

About \$2 per square yard

- This option does not include installing guardrail as required by ODOT/AASHTO standards. To add this to the project would increase project costs by another \$200,000 and require widening of 1 to 3 feet to accommodate guardrail installation not included in the estimate. A review of the crash history along this road does not indicate site-specific safety problems related to roadway side slopes that could be addressed by installing guardrail sections.

Option 3 - No Build

Proposed width:	18' – 20'
Surface treatment:	Gravel
Design speed:	Existing measured Safe Driving Speeds range from 22 to 55+ mph
Other Design Features:	Characterized as winding gravel road with steep side slopes along several segments of roadway
Cost Estimate:	\$25,000/yr (Annual average maintenance effort on Deerhorn Road for gravel related activities: Maintenance Rocking, Gravel Road Blading, Dust Oil Preparation and Application)

- Selecting this option would assume that the project is not a priority, at this time, and would not satisfy the purpose and need of the project. The road would remain gravel with no improvements between MP's 7.76 and 9.90.
- This option has no environmental or private property impacts related to construction activities. However, dust from a gravel road will become airborne and gravel may increase wear and tear on vehicles.
- This option does not address the concerns submitted in writing by the neighborhood.
- In general, gravel roads require more maintenance effort than hard surfaced roads. Labor, Materials and Equipment costs associated with routine blading, rock application, dust abatement, and related public complaints are reduced upon hard surfacing the road.

E. Alternatives/Options

1. Adopt Board Order concurring with the recommendation from the Roads Advisory Committee on the design features for the Deerhorn Road project as shown in Exhibit A and as amended in Exhibit B to realign the curve at approximately MP 8.90, consistent with Option 2 in the Analysis section of this Cover Memo, and authorizing staff to construct the project.
2. Redirect staff to modify the design concept as the Board sees fit.
3. Do nothing at this time.

V. TIMING/IMPLEMENTATION

The project is proposed to be added to the 2008 Chip Seal program performed by the Road Maintenance Division. In order to prepare the roadway for the application of a chip seal, Board action is needed to keep the project on track.

VI. RECOMMENDATION

It is hereby recommended that the Board approve chip sealing Deerhorn Road as more precisely described in the design concept in Exhibit 'A' as recommended by the Roads Advisory Committee and as amended in Exhibit B to realign the curve at approximately MP 8.90.

VII. FOLLOW-UP

Upon approval of the Board, Public Works Road Maintenance staff will begin preparing Deerhorn Road for the application of a chip seal in the summer of 2008. This includes repairing the road base where needed, replacing failing culverts, updating driveway approaches, vegetation clearing and removal, ditch maintenance, and removal of unauthorized objects within the right-of-way.

VII. ATTACHMENTS

Attachment 1 – Public Record for Deerhorn Road MP 7.76 to MP 9.90
Order

Exhibit 'A' – Design Concept with findings

Exhibit 'B' – Addendum #1 to the Design Concept

EXHIBIT A

**IN THE BOARD OF COMMISSIONERS OF LANE COUNTY
STATE OF OREGON**

ORDER NO.

) ORDER/IN THE MATTER OF APPROVING A PROJECT
) DESIGN CONCEPT FOR DEERHORN ROAD MP 7.760 TO
) MP 9.90 BASED ON THE DESIGN CONCEPT IN
) EXHIBIT A AND THE ADDENDUM IN EXHIBIT B; AND
) AUTHORIZING STAFF TO CONSTRUCT THE ROAD,
) PURSUE ALL NECESSARY PLANNING ACTIONS AND, IF
) NECESSARY, PREPARE PLANS AND SPECIFICATIONS
) FOR IMPROVEMENT OF SAID ROAD.

WHEREAS, On November 30, 2005, residents from this section of Deerhorn Road submitted a petition and letters signed by their neighbors to the Roads Advisory Committee in support of paving the gravel portion of Deerhorn Road ; and

WHEREAS, Lane Manual 15.580 establishes a process for citizen involvement for individual road improvement projects; and

WHEREAS, an Open House was held by the Public Work staff on August 16, 2007 to inform residents and property owners of the proposal to chip seal the road; and

WHEREAS, a public hearing was held by the Roads Advisory Committee on August 29, 2007 to consider improvement of this portion of Deerhorn Road; and

WHEREAS, on August 29, 2007 the Roads Advisory Committee reviewed the public meeting record and the report prepared by County staff, and adopted recommendations and findings specifying a design concept for Deerhorn Road, MP 7.76 TO MP 9.90; and

WHEREAS, the recommendations and findings were mailed to property owners within the project area; and

WHEREAS, The Board considered the Roads Advisory Committee's recommendation on January 30, 2008; and

WHEREAS, full improvements typically associated with paved road standards are very expensive; and

WHEREAS, Deerhorn Road is a dead end, low volume, local road; and

WHEREAS, in light of the uncertain outlook for the continuation of payments under the Secure Rural Schools and Self-Determination Act of 2000 ("payments to counties") and its impact on the Road Fund; and

WHEREAS, applying a chip seal to the existing roadway accomplishes resident's desire for a hard surface at much less expense than full improvements; and

WHEREAS, funding for full improvement of this portion of Deerhorn Road in excess of a chip seal option is needed for other Lane County road purposes; and

WHEREAS, the Board has concurred in the necessity of the project and believes that the proposed project is most compatible with the greatest public good and the least private injury; **NOW THEREFORE, BE IT**

EXHIBIT A

ORDERED, that the Board approve the project design concept identified in EXHIBIT A and amended in Exhibit B for the resurfacing of Deerhorn Road, MP 7.76 TO MP 9.90 by applying a chip sealed surface and realigning the curve at approximately MP 8.90, ;

AND, BE IT

ORDERED, that the Board delegates authority for determination of all other project design standards not identified in the design concept, and exceptions to design standards, to the County Engineer consistent with this Order;

AND, BE IT

ORDERED, that staff pursue all necessary planning actions and prepare the roadway, and, if necessary, prepare plans and specifications for resurfacing of Deerhorn Road, pursuant to this order.

DATED this _____ day of _____ 2008.

Faye Stewart, Chair
Lane County Board of Commissioners

ORDER/IN THE MATTER OF APPROVING A PROJECT DESIGN CONCEPT FOR DEERHORN ROAD MP 7.760 TO MP 9.90
BASED ON THE DESIGN CONCEPT IN EXHIBIT A AND THE ADDENDUM IN EXHIBIT B; AND AUTHORIZING STAFF TO
CONSTRUCT THE ROAD, PURSUE ALL NECESSARY PLANNING ACTIONS AND, IF NECESSARY, PREPARE PLANS AND
SPECIFICATIONS FOR IMPROVEMENT OF SAID ROAD.

**LANE COUNTY BOARD OF COMMISSIONERS
ADOPTED DESIGN CONCEPT AND FINDINGS**

Deerhorn Road Chip Seal Project

October 4, 2007

EXECUTIVE SUMMARY

The existing Deerhorn Road from MP 7.76 to MP 9.90 is characterized as a low-speed, low-volume, mostly winding gravel road. It runs along the southern banks of the McKenzie River serving local residents and private and federal forests.

The purpose and need of the project is to respond to local residents expressed desire to pave the road by establishing a hard surfaced cross-section that is bounded by adequate drainage ditches.

The proposed improvement is subject to the standards outlined in Lane Code chapter 15 for Rural Local roads. The proposal also utilizes the 2001 American Association of State Highway and Transportation Officials (AASHTO) publication, *Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400)*. This document recognizes that it is not cost effective to build low-volume local roads as set forth in its full standard Green Book. AASHTO finds that due to the characteristics of these roads, the Green Book standards can be relaxed without significantly impacting the overall safety of the roadway.

Due to the desire to minimize right-of-way, financial, and potential social/environmental impacts of a full-standards project, the recommendation is to apply a triple-shot chip seal to the existing travel surface using County forces. This will require the adoption of design exceptions for pavement width, pavement structure and clear zone design standards.

Upon approval of the proposal, the Road Maintenance Division intends to construct the project during the summer of 2008 at an estimated cost of \$200,000.

BACKGROUND

On November 30, 2005, residents from this section of Deerhorn Road were present at a meeting of the Roads Advisory Committee to which they submitted a petition and letters signed by their neighbors in support of paving the gravel portion of Deerhorn Road. The residents cited concerns about lack of maintenance, safety, and visibility due to dust.

Due to the current funding situation surrounding the Public Works Department's Capital Improvement program, this project is proposed as a County Force project rather than a full rural standards capital improvement. The proposal is to rehabilitate the road base where needed and apply a triple-shot chip seal coat to the existing road surface using County forces funded under the Road Maintenance budget.

EXISTING ROAD CONDITIONS

• **Right-of-Way Widths**

In general, the existing right-of-way width along the alignment is between 50 to 60 feet and is determined to be adequate for the proposed treatment.

EXHIBIT A

- **Average Daily Traffic**

Traffic counts performed by the Department show an average daily traffic volume of 250 and a maximum projected traffic volume of 340 in 2020. It is assumed that Deerhorn Road primarily serves drivers who are familiar with the roadway (repeat drivers). The main uses include passenger cars and log trucks.

- **Crash History**

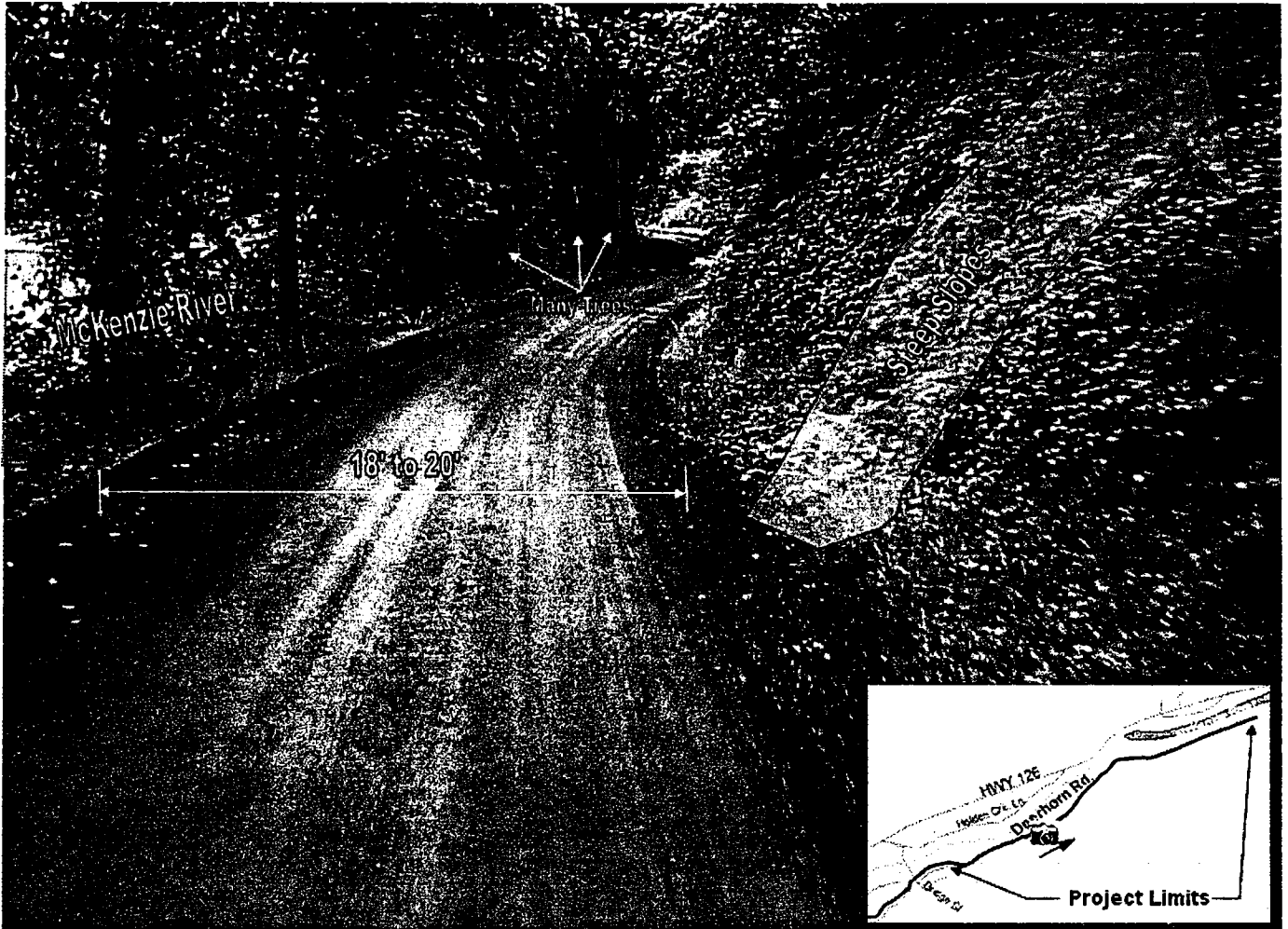
Crash data (2004) show 2 reported crashes since 1996. Data show that the crashes were due to “driving too fast for conditions – not speeding”. These crashes do not indicate a documentable site-specific safety problem that can potentially be corrected by a roadway or roadside improvement, although providing a chip sealed surface may provide better tire grip in moderate weather, less tire grip in icy or snowy weather.

- **Maintenance History**

Although cited by the neighborhood as a concern, Lane County Road Maintenance has been maintaining Deerhorn Road as part of its annual maintenance program. Periodic reshaping of the roadway occurs as a matter of routine for Lane County’s gravel roads as well as inclusion in the annual dust palliative application program.

The photos below illustrate the typical existing condition of the roadway.

EXHIBIT A

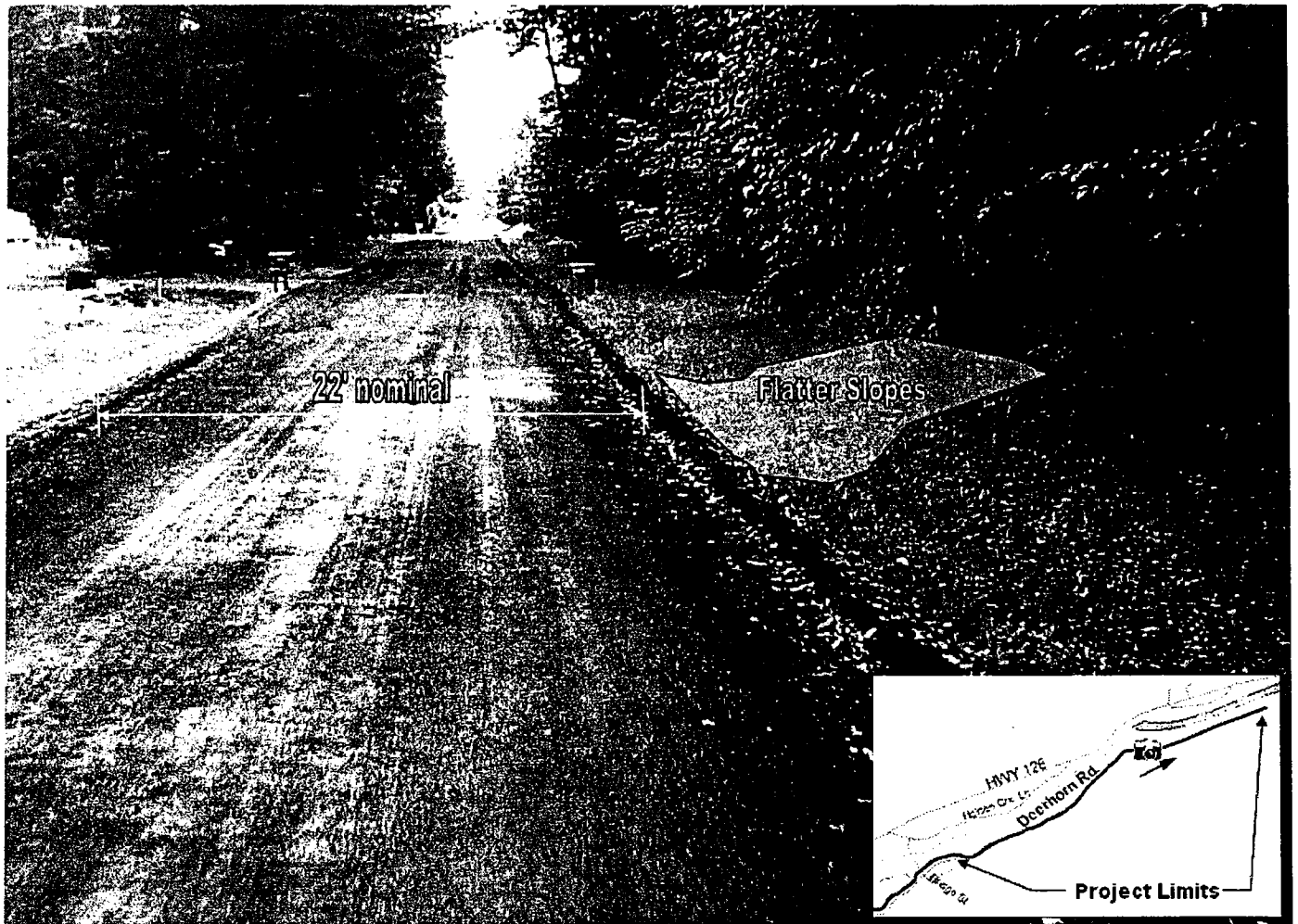


Deerhorn Road – MP 8.11 Looking East

The majority of the route is bounded by the McKenzie River on the north and steep side slopes on the south although there are portions that “open up” in flatter terrain.

Along the route, there are intermittent pull-outs to allow for larger vehicles to pass one another.

EXHIBIT A



Deerhorn Road – MP 9.20 Looking East

At approximately MP 9.20 the roadway becomes wider and straighter.

The existing road ends at a private gate that enters privately owned forest lands.

STANDARDS

Except for the specific design exceptions discussed below, the project shall be designed in accordance with Lane Code Chapter 15, and the 2001 American Association of State Highway and Transportation Officials (AASHTO) publications *Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400)*. Traffic control, signing, and signal devices shall comply with the *Manual on Uniform Traffic Control Devices, Millennium Edition* and Oregon Supplements.

- **Proposed use of “Low-Volume” Road Design Standards**

This design concept is supported by AASHTO’s 2001 publication *Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400)*, which recognizes that it is not cost effective to build low-volume local roads as set forth in its full standard Green Book. AASHTO finds that due to the characteristics of these roads, the Green Book standards can be relaxed without significantly impacting the overall safety of the roadway. Examples of the characteristics discussed include:

- ADT is less than 400 vehicles per day,
- The low traffic volumes suggest that multiple-vehicle collisions are rare events,
- The local nature of the road means that most motorists using the road have traveled it before and are familiar with its features.

Findings supporting use of “Low-Volume Road Standards” include:

- Deerhorn Road is classified as a Rural Local Road.
- Traffic counts performed by the Department show an average daily traffic volume of 250 and a maximum projected traffic volume of 340 in 2020. It is assumed that Deerhorn Road primarily serves drivers who are familiar with the roadway (repeat drivers).
- Main uses include passenger cars and log trucks.
- Accident data (2004) show 2 accidents since 1996. Data show that accidents are predominately due to “driving too fast for conditions – not speeding”. These accidents do not indicate a documentable site-specific safety problem that can potentially be corrected by a roadway or roadside improvement.

With the rationale above, the Board of Commissioners finds that use of “AASHTO Low-volume Road Standards” is appropriate.

DESIGN OPTIONS AND RECOMMENDATION

Recent Board of County Commissioner deliberations indicate a desire to better balance the costs of capital projects with the received benefits. This is also important in light of the uncertainty of future Road Fund revenues specifically related to Federal Secure Rural Schools payments. The Board is also interested in ultimately providing projects that are supported by strong public involvement and interests.

The following discussion outlines an effort to satisfy the desires of the Board of Commissioners while maintaining and supporting the project purpose and need.

EXHIBIT A

Discussions with property owners and interested parties also indicate a desire to lessen project impacts and preserve the rural nature of the road.

Options Analysis

Option 1 – Full Standards Modernization

Proposed width:	20'
Surface treatment:	A/C Pavement
Design speed:	45 mph
Other Design Features:	Total reconstruction, horizontal and vertical alignment changes, open ditches, guardrail
Cost Estimate:	\$2,600,000

- This option would apply the level of roadway standards outlined in Lane Code and full AASHTO design standards. Complete guardrail, side slope, horizontal and vertical alignment and surface type improvements would be accomplished.
- This option requires significant embankment and excavation work in the areas being realigned, and increases the potential for undesirable environmental and private property impacts.
- This option would place the project on Public Work's Capital Improvement Program and would compete with other priorities on the road system.

Option 2 – Triple-shot Chip Seal on existing alignment and realigning curve at approximately MP 8.90 to meet a design speed of 45 mph.

Proposed width:	18' – 20' (existing)
Surface treatment:	Triple-shot Chip Seal
Design speed:	Existing measured Safe Driving Speeds range from 22 to 55+ mph
Other Design Features:	Hard surface existing road alignment
Cost Estimate:	\$265,000

This would be a minimal approach to address resident's concerns and provide improved access to forest uses.

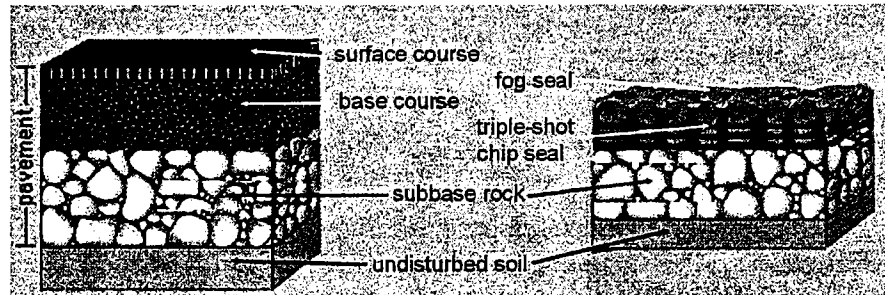
- This is the least expensive construction option and would make more money available to fund other projects of demonstrated need while still providing for some improvement of the road surface.
- Given the scope of work, impact footprint, and type of materials and equipment to be used, there does not appear to be measurable direct impacts to the natural environment which require mitigation, permits, or special protection measures under normal circumstances.
- The project could be constructed entirely with County Maintenance crews and expertise and included in the annual Chip Seal Program.
- Maintenance costs associated with routine blading, rock application, dust abatement, and related public complaints are reduced upon hard surfacing the road.
- While cheaper to construct, the chip seal surface will not have the design life of an asphalt concrete pavement. Typical life of a triple-shot chip seal surface before needing

EXHIBIT A

resurfacing treatment is 5 to 7 years. Typical life of an asphalt concrete pavement is 20 years.

Asphalt Pavement vs. Chip Seal

(20 years) (5-7 years)



About \$8 per square yard

About \$2 per square yard

- This option does not include installing guardrail as required by ODOT/AASHTO standards. To add this to the project would increase project costs by another \$200,000 and require widening of 1 – 3 feet to accommodate guardrail installation not included in the estimate. A review of the accident history along this road does not indicate site-specific safety problems related to roadway side slopes that could be addressed by installing guardrail sections.

Option 3 - No Build

Proposed width:	18' – 20'
Surface treatment:	Gravel
Design speed:	Existing measured Safe Driving Speeds range from 22 to 55+ mph
Other Design Features:	Characterized as winding gravel road with steep side slopes along several segments of roadway
Cost Estimate:	\$22,000/yr (Annual average maintenance effort on Deerhorn Road for gravel related activities: Maintenance Rocking, Gravel Road Blading, Dust Oil Preparation and Application)

Selecting this option would assume that the project is not a priority, at this time, and would not satisfy the purpose and need of the project. The road would remain gravel with no improvements between MP's 7.76 and 9.90.

- This option has no environmental or private property impacts related to construction activities.

- This option does not address the concerns submitted in writing by the neighborhood.

- In general, gravel roads require more maintenance effort than hard surfaced roads. Labor, Materials and Equipment costs associated with routine blading, rock application, dust abatement, and related public complaints are reduced upon hard surfacing the road.

Recommendation

Considering the above analysis, the Board of Commissioners finds that Option 2 is the preferred design alternative.

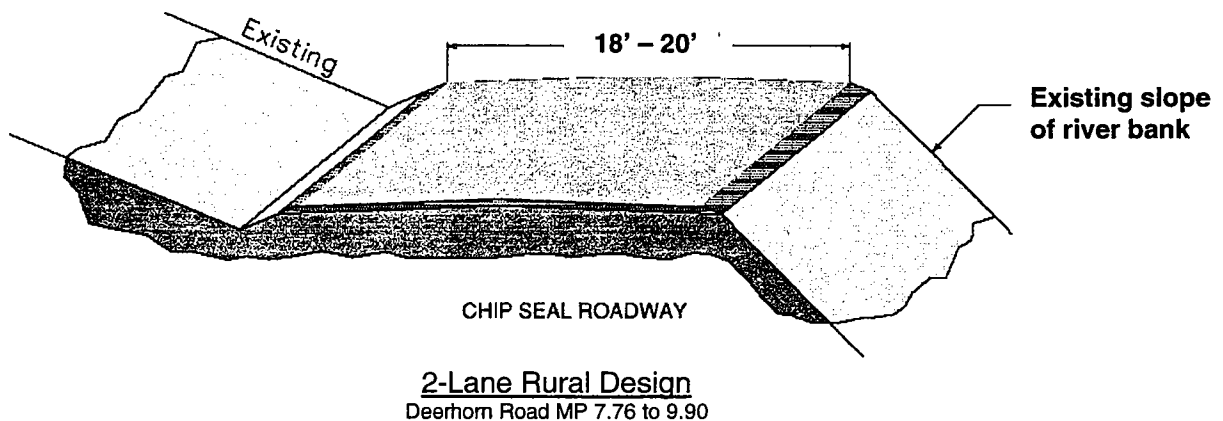
DESIGN EXCEPTIONS

Design exceptions to County road standards will be needed to construct Option 2 because the proposed treatment will not bring the road up to current standards. The needed design exceptions are outlined below.

The Board of Commissioners recommends hard surfacing the existing roadway and approving the design exceptions necessary to construct the project being fully informed as follows:

- Typical Section

The following typical section will apply:



- Two travel lanes within existing roadway width no less than 18 feet wide total (1 each direction)
- Match existing side slopes and ditches

DESIGN EXCEPTION FOR PAVEMENT WIDTH:

Relevant Design Standard: LC 15.705 (4) & Table 9

The pavement width below 20 feet does not meet Lane County standards for rural local roads as outlined in LC 15.705 (4) Table 9, which calls for a minimum pavement width of 20 feet for an ADT of 251-400 in mountainous terrain.

DESIGN EXCEPTION FOR CLEAR ZONE:

Relevant Design Standard: LC 15.705 (11)

The standard calls for a minimum clear zone width of 10 feet from the edge of the travel lane. Application of this standard would require the removal of many large trees that exist immediately adjacent to the roadway and extensive cuts into the hillside.

EXHIBIT A

- **Surface Treatment**

The project shall use a triple-shot chip seal as a wearing course placed on a standard rock leveling course and existing base. Existing road base may be rehabilitated prior to applying chip seal.

DESIGN EXCEPTION FOR PAVEMENT STRUCTURE:

Relevant Design Standard: *LC 15.707 (6) & Table 13*

The standard calls for a minimum pavement structure of 2 inches of asphalt concrete over 12 inches of rock base. The proposed treatment will establish a triple-shot chip seal over the existing rock base that has been rehabilitated where needed.

The chip sealed surface will have a nominal thickness of 0.75 inches.

- **Additional Design Exceptions**

The County Engineer is authorized to approve design standards and exceptions to design standards for features not specifically addressed in this document.

Addendum #1 To The Design Concept

for
Deerhorn Road Chip Seal Project
January 8, 2008

In response to public testimony and the need to address a particular curve at approximately MP 8.9, staff further evaluated options that were in addition to the Road Advisory Committee's recommendation. A discussion of this additional evaluation and staff recommendation is presented as follows for the Board's consideration and is being presented in addendum to the Design Concept.

A summary of the design standards that apply to this project are presented in Table 1.

Table 1
Design Standards for Construction of Rural Local roads

Design Feature		Reference
Terrain	Mountainous	ODOT Highway Design Manual, Table 7-2
Design Speed	45 mph	ODOT Highway Design Manual, Table 7-2
Right-of-Way Width	50 feet	Lane Code 15.705 (3)
Roadway Width	20 feet	Lane Code 15.705 (4) Diagram 9
Surface Type	Pavement	Lane Code 15.705 (5)
Pavement Structure	2" Pavement on 12"-15" Gravel Base	Lane Code 15.705 (6)
Vehicle Travel Lane Width	Travel lane striping not required	Lane Code 15.705 (7)
Shoulders	Not required	Lane Code 15.705 (8)
Roadway and Ditch Side-slopes	1) Ditch slopes no steeper than 4H:1V 2) For slopes greater than 3H:1V consider guardrail per ODOT Highway Design Manual	Lane Code 15.705 (9)
Ditch Depth	Ditch depth 1 foot below the elevation of the roadway subgrade	Lane Code 15.705 (10)
Clear Zone	10 feet	Lane Code 15.705 (11)
Pedestrian Facilities	Sidewalks or walkways are permissible but not required	Lane Code 15.705 (12)
Bike Lanes	Not required	Lane Code 15.705 (13)
On-street parking	Not allowed	Lane Code 15.705 (14)
Maximum Grade	16%	Lane Code 15.705 (15)
Maximum Superelevation	6%	ODOT Highway Design Manual, AASHTO's A Policy on Geometric Design of Highways and Streets, Lane County Public Works Policy
Maximum Degree of Curvature	8°45' for 6% Superelevation maximum (10°30' in Table 7-2)	ODOT Highway Design Manual, Table 7-2
Stopping Sight Distance	360 feet	ODOT Highway Design Manual, Table 7-2

CURVE INVENTORY

A survey was conducted of the existing roadway to measure the horizontal curvature of the various curves along the gravel portion of Deerhorn Road. This was accomplished using a vehicle equipped with a Ball Bank Indicator to determine Safe Driving Speeds. Staff also evaluated Stopping Sight Distances for each of the curves. The data are presented in Table 2.

**Table 2
Evaluation of Existing Horizontal Curvature, Superelevation, Safe Driving Speed, and Stopping Sight Distance along Deerhorn Road MP 7.76 to MP 9.90**

Curve No.	Station of Curve Midpoint	Mile Point of Curve Midpoint	Degree of Curvature	Curve Radius	Curve Superelev.	Safe Driving Speed	SSD	SSD Speed
Curve 1	23+05	7.830	05-15-00	1091.35	-0.02	45	335	43
Curve 2	25+30	7.870	02-15-00	2546.48	-0.02	61	555	58
Curve 3	27+60	7.910	03-30-00	1637.02	-0.02	52	510	56
Curve 4	31+20	7.980	08-45-00	654.81	-0.02	35	325	42
Curve 5	33+25	8.020	11-30-00	498.22	-0.02	32	245	34
Curve 6	34+30	8.040	11-30-00	498.22	-0.02	32	220	32
Curve 7	35+40	8.060	10-30-00	545.67	-0.02	33	210	31
Curve 8	37+05	8.090	14-15-00	402.08	-0.02	29	180	28
Curve 9	38+58	8.120	23-00-00	249.11	-0.02	22	140	23
Curve 10	40+50	8.160	05-00-00	1145.92	-0.02	46	425	50
Curve 11	43+35	8.210	14-15-00	402.08	-0.02	29	220	32
Curve 12	44+90	8.240	12-00-00	477.46	-0.02	31	240	34
Curve 13	48+85	8.320	15-15-00	375.71	-0.02	28	180	28
Curve 14	50+60	8.350	06-00-00	954.93	-0.02	42	335	43
Curve 15	53+20	8.400	06-00-00	954.93	-0.02	42	395	47
Curve 16	58+05	8.490	03-00-00	1909.86	-0.02	55	550	58
Curve 17	62+00	8.570	04-00-00	1432.39	-0.02	50	350	44
Curve 18	67+40	8.670	06-00-00	954.93	-0.02	42	335	43
Curve 19	69+35	8.710	08-15-00	694.49	-0.02	36	360	45
Curve 20	72+30	8.760	09-30-00	603.11	-0.02	34	220	32
Curve 21	75+25	8.820	10-30-00	545.67	-0.02	33	220	32
Curve 22	80+30	8.910	19-00-00	301.56	-0.02	25	175	27
Curve 23	83+85	8.980	02-00-00	2864.79	-0.02	63	>360	>45
Curve 24	87+15	9.040	00-30-00	11459.16	-0.02	87	>360	>45
Curve 25	89+65	9.090	00-30-00	11459.16	-0.02	87	>360	>45
Curve 26	91+85	9.130	02-00-00	2864.79	-0.02	63	>360	>45
Curve 27	94+40	9.180	07-15-00	790.29	-0.02	38	315	41
Curve 28	99+35	9.270	01-00-00	5729.58	-0.02	76	>360	>45

00-00-00 Denotes value that does not meet design standards

Highlighted data denotes values that do not meet design standards.

In considering which curves to address with this project several factors were identified.

1. The existing paved portion of Deerhorn Road has many winding narrow sections similar to the gravel portion, therefore driver expectations are set well in advance to the gravel portion.
2. Geographic constraints such as rock outcroppings and proximity to the McKenzie River bank limit the ability to realign curves without requiring more extensive excavation and right-of-way acquisition.
3. Intermittent turn-outs are available
4. AASHTO and ODOT Low Volume Road guidelines allow for some variance in the design standards when there is no documented crash history or safety issue.
5. Many of the curves identified are grouped together and are reversing which when taken together provide acceptable stopping sight distances.
6. There is a relatively low reported crash history along this road.
7. See the Design Exception analysis discussions.

RECOMMENDATION

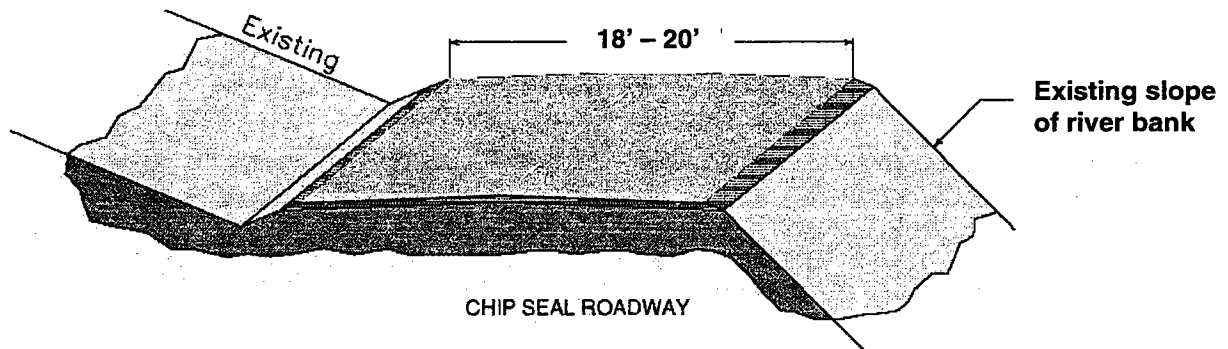
With these factors in mind staff is recommending that Curve #22 at MP 8.910 be realigned to meet the design speed of 45 mph as it can be addressed at relatively low cost and has specific public comment associated with it.

For other curves and curve groups, staff is recommending advisory signing with appropriate speed riders to inform drivers of upcoming road conditions.

DESIGN EXCEPTIONS

Design Exceptions are needed to construct this project. The following is a list of Design Exceptions needed. Those listed may already be identified in the Design Concept, but are reiterated here for completeness.

The following typical section will apply:



2-Lane Rural Design
Deerhorn Road MP 7.76 to MP 9.90

- Two travel lanes within existing roadway, total width no less than 18 feet. (1 lane each direction)
- Match existing side slopes and ditches

DESIGN EXCEPTION FOR ROADWAY WIDTH:

Relevant Design Standard: Lane Code 15.705 (4) & Diagram 9

The standard calls for a minimum roadway width of 20 feet.

Analysis

Application of this standard would require cut or fill to expand the roadway prism. Expanding the roadway at the two existing stream crossings would require replacing the culverts and obtaining Federal and state permits. There is no crash history or other indications of site-specific safety problems related to roadway width.

DESIGN EXCEPTION FOR PAVEMENT STRUCTURE:

Relevant Design Standard: Lane Code 15.707 (6) & Table 13

The standard calls for a minimum pavement structure of 2 inches of asphalt concrete over 12 inches of aggregate.

Analysis

The project shall use a triple-shot chip seal as a wearing course placed on a standard aggregate leveling course and existing base. Existing road base may be rehabilitated prior to applying chip seal. The chip sealed surface will have a nominal thickness of 0.75 inches.

DESIGN EXCEPTION FOR ROAD WAY SIDE-SLOPES:

Relevant Design Standard: Lane Code 15.705 (9)

The standard calls for consideration of guardrail installation where the roadway side-slopes are 3H:1V or greater.

Analysis

"The use of guardrail or other traffic barriers to shield or protect drivers from roadside obstructions is not generally cost-effective for very low-volume local roads. guardrail itself is an obstacle, and a significant proportion of vehicle impacts with guardrail produce injuries. The costs to maintain guardrail and the low frequency of collisions with the guardrail that is provided generally make it impractical for use on roads with very low traffic volumes."

Reference: Page 49, AASHTO-Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT < 400), 2001

Application of this standard would require shifting the road 1-3 feet away from the slope in places to provide adequate space for guardrail installation and the removal of trees that exist immediately adjacent to the roadway and cuts into the hillside. There is no crash history or other indications of site-specific safety problems related to roadway side-slopes.

DESIGN EXCEPTION FOR CLEAR ZONE:

Relevant Design Standard: Lane Code 15.705 (11)

The standard calls for a minimum clear zone width of 10 feet from the edge of the travel lane.

Analysis

"The risk assessment discussed in Section 3 of this guide found that it is not generally cost-effective to provide clear zones, also known as clear recovery areas on very low-volume local

roads. Nevertheless, a clear zone of any width should provide some contribution to safety. Thus, where clear zones can be provided on very low-volume local roads at little or no additional cost, their incorporation in designs should be considered. However, major expenditures to provide clear zones will generally have only limited safety benefits and are unlikely to be cost effective."

Reference: Page 48, AASHTO-Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT < 400), 2001

Application of this standard would require the removal of many large trees that exist immediately adjacent to the roadway and extensive cuts into the hillside. In general there is an existing clear zone about 6 feet wide throughout the length of the project. There is no crash history or other indications of site-specific safety problems related to clear zones.

While preparing the roadway for the application of the chip seal, Road Maintenance will perform activities to reclaim the right-of-way by cutting back brush, ditch maintenance, and removal of unauthorized objects.

DESIGN EXCEPTION FOR HORIZONTAL CURVATURE & SUPERELEVATION:

Relevant Design Standard: *ODOT Highway Design Manual, Table 7-2, AASHTO's A Policy on Geometric Design of Highways and Streets, Lane County Public Works Policy.*

The standard calls for a maximum degree of curvature of 8°45' for a maximum superelevation rate of 6%.

Analysis

"For improvement projects on existing very low-volume local roads, the existing horizontal curve geometry should generally be considered acceptable unless there is evidence of a site-specific safety problem related to horizontal curvature."

Reference: Page 30, AASHTO-Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT < 400), 2001

There is no crash history related to horizontal curvature and superelevation.

DESIGN EXCEPTION FOR STOPPING SIGHT DISTANCE:

Relevant Design Standard: *ODOT Highway Design Manual, Table 7-2*

The standard calls for a minimum stopping sight distance of 360 feet.

Analysis

"Given the geometry of stopping sight distance on horizontal and crest vertical curves, the costs for even marginal or incremental improvements make reconstruction of very low-volume local roads to increase stopping sight distance not cost-effective except in unusual cases. Research NCHRP Report 400 (7) found that, even on higher volume roadways, accidents associated with limited sight distance are extremely rare events."

Reference: Page 38, AASHTO-Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT < 400), 2001

There is no crash history related to stopping sight distance.

ATTACHMENT 1

Public Record for Deerhorn Road MP 7.76 to MP 9.90

Open House/ Hearing Notification Letter mailed 8/7/2007	1-1
Information Sheet provided at Open House 8/16/2007	1-3
Original Written Testimony Sorted by Last Name	1-6
Minutes of Roads Advisory Committee meeting on 8/29/2007	1-12
Notification of 30-day Public Review mailed 9/04/07	1-16
Letters Received December 2007/January 2008	1-25



LANE COUNTY

PUBLIC WORKS DEPARTMENT / 3040 North Delta Hwy. / Eugene, OR 97408
Phone: (541) 682-6911/ Fax: (541) 682-8500

July 31, 2007

Deerhorn Road Residents and Interested Parties

PUBLIC NOTICE REGARDING
Deerhorn Road Chip Seal Project
Mile Post 7.76 to Mile Post 9.90
(gravel portion)

<p>OPEN HOUSE Walterville Elementary School 40589 McKenzie Hwy August 16, 2007 6:00pm - 8:00pm</p>	<p>PUBLIC HEARING Lane County Public Works 3040 N. Delta Hwy, Eugene August 29, 2007 7:00pm</p>
---	--

Dear Sir or Madam:

As you may know, Lane County Public Works was approached by some of you in late 2005 to see what we could do to improve the gravel portion of Deerhorn Road. I wanted to update you about our plans to apply a chip seal and invite you to attend public meetings regarding the project.

On November 30, 2005, residents from this section of Deerhorn Road were present at a meeting of the Roads Advisory Committee to which they submitted a petition and letters signed by their neighbors in support of paving this section of Deerhorn Road. The residents cited concerns about lack of maintenance, safety, and visibility due to dust.

Due to the current funding situation surrounding the Public Works Department's Capital Improvement Program, this project is proposed as a preservation project rather than a full rural standards capital improvement project. The project proposal is to rehabilitate the road base where needed and apply a triple-shot chip seal coat to the existing road surface using County forces funded under the Road Maintenance budget.

There are some consequences associated with this approach, however, and we want you to be fully informed of them.

1. A chip seal solution will not straighten curves or flatten humps in the existing road.
2. A chip seal will not include guard rail installation where a modernization project might.
3. Due to the nature of transitioning from a gravel surface to a chip sealed surface, travel speeds might increase.
4. A chip seal project will not widen the existing road, but it will maintain the intermittent pull-outs.

A Design Concept document will be written that clearly defines which design standards, such as stated above, will not be met. We want to hear from neighbors and interested parties regarding this proposed project and make sure any questions you have are answered.

- **Process**

The Open House will be your opportunity to become acquainted with the project and ask questions about the general scope of work. On August 29, 2007, we will offer you an opportunity for formal testimony before the Roads Advisory Committee. The Roads Advisory Committee is a standing committee of the Board of County Commissioners and advises the Board on road related issues.

After the hearing that evening, comments received will be considered along with a staff recommendation on a design concept and findings. After the RAC adopts a recommendation for a project design concept, a packet of the recommended design concept and findings will be mailed to all interested parties and abutting property owners. This mailing starts a 30-day comment period for the public to respond to the recommended design concept and findings. If more than 50% of the abutting property owners oppose the project in writing, the Board of County Commissioners will hold its own public hearing before making a final decision. Ultimately, the Board of County Commissioners will be the deciding body on this project. If the Board of County Commissioners approves the project, the Road Maintenance Division intends to complete the project the summer of 2008.

- **How do I comment on the proposed project?**

We are encouraging you to take advantage of the Open House in an effort to educate yourself about the proposed project. We would like you to develop specific comments and present them at the formal hearing scheduled for August 29, 2007 either verbally or submitted in written form. If you cannot make the hearing, we encourage you to write down your testimony.

Written comments may be submitted anytime up until 5:00pm on August 28, 2007.

Lane County Public Works
Road Maintenance Planning
3040 N. Delta Highway
Eugene OR 97408-1696

E-mail. You may also send your comments electronically to the following address:

mike.russell@co.lane.or.us

- **Notification**

If you comment or request to be on the mailing list, you will be notified of any actions or recommendations regarding the proposed project. Lane County takes care to notify all abutting property owners. If you have received any project mailings, including this letter, then you are already on the mailing list.

If you have any questions regarding this matter, please feel free to contact me directly at (541) 682-6968.

Sincerely,



Mike Russell
Senior Engineering Associate
Road Maintenance Division

Information Sheet
Deerhorn Road Chip Seal Project
Mile Post 7.76 to Mile Post 9.90
(Gravel)



Open House
Walterville Elementary School
40589 McKenzie Hwy
August 16, 2007
6:00pm - 8:00pm

- **Open House Format**

6:15 p.m. Project Presentation by Lane County Public Works Staff

6:45 p.m. Question and Answer Time

*Public Hearing with Roads Advisory Committee (RAC) scheduled for July 29, 2007

- **Why is Lane County Public Works staff here?**

On November 30, 2005, residents from this section of Deerhorn Road were present at a meeting of the Roads Advisory Committee to which they submitted a petition and letters signed by their neighbors in support of paving the gravel portion of Deerhorn Road. The residents cited concerns about lack of maintenance, safety, and visibility due to dust.

Due to the current funding situation surrounding the Public Works Department's Capital Improvement program, this project is proposed as a County Force project rather than a full rural standards capital improvement. The proposal is to rehabilitate the road base where needed and apply a triple-shot chip seal coat to the existing road surface using County forces funded under the Road Maintenance budget.

There are some consequences to choosing this option, however, and we want you to be fully informed of them.

1. A chip seal solution will not straighten curves or flatten humps in the existing road.
2. A chip seal will not include guard rail installation where a modernization project might.
3. Due to the nature of transitioning from a gravel surface to a chip sealed surface, travel speeds might increase.
4. A chip seal project will not widen the existing road, but it will maintain the intermittent pull-outs.

We want to hear from neighbors and interested parties regarding this proposal and make sure any questions you have are answered.

- **General Information**

The existing Deerhorn Road from MP 7.76 to MP 9.90 is characterized as a low-speed, low-volume, mostly winding gravel road. It runs along the southern banks of the McKenzie River serving local residents and private and federal forests.

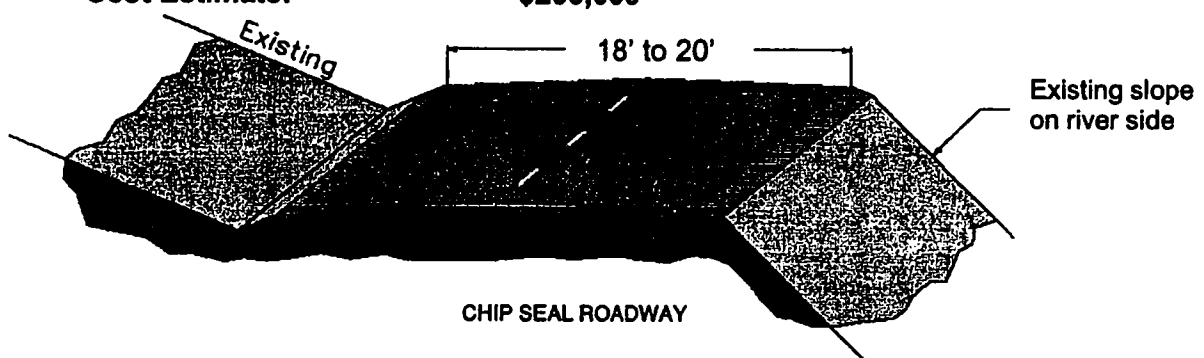
The purpose and need of the project is to respond to local residents expressed desire to pave the road by establishing a hard surfaced cross-section that is bounded by adequate drainage ditches.

Due to the desire to minimize right-of-way, financial, and potential social/environmental impacts of a full-standards project, the recommendation is to apply a triple-shot chip seal to the existing travel surface using County forces. This will require the adoption of design exceptions for pavement width, pavement structure and clear zone design standards.

Upon approval of the proposal, the Road Maintenance Division intends to construct the project during the summer of 2008 at an estimated cost of \$200,000.

- **Design Elements**

Triple-shot Chip Seal on existing alignment	
Proposed width:	18' – 20' (existing)
Surface treatment:	Triple-shot Chip Seal
Design speed:	Existing
Other Design Features:	Hard surface existing road alignment
Cost Estimate:	\$200,000



This would be a minimal approach to address resident's concerns and provide improved access to forest uses.

- This is the least expensive construction option and would make more money available to fund other projects of demonstrated need while still providing for some improvement of the road surface.
- Given the scope of work, impact footprint, and type of materials and equipment to be used, there does not appear to be measurable direct impacts to the natural environment which require mitigation, permits, or special protection measures under normal circumstances.
- The project could be constructed entirely with County Maintenance crews and expertise and included in the annual Chip Seal Program.
- Maintenance costs associated with routine blading, rock application, dust abatement, and related public complaints are reduced upon hard surfacing the road.
- While cheaper to construct, the chip seal surface will not have the design life of an asphalt concrete pavement.
- The project will improve driveway approaches.
- The project will replace existing culverts as needed.
- The project will re-establish the public right-of-way.

- **Process**

Today's open house is your opportunity to become acquainted with the project and ask questions about the general scope of work. On August 29, 2007, we will offer you an opportunity for formal testimony. After that hearing, comments received will be organized and presented to the Lane County Roads Advisory Committee (RAC) along with a staff recommendation on a design concept and findings. After the RAC adopts a recommendation for a project design concept, a packet of the recommended design concept and findings will be mailed to all interested parties and abutting property owners. This mailing starts a 30-day comment period for the public to respond to the design concept and findings. If more than 50% of the abutting property owners oppose the project in writing, the Board of County Commissioners will hold its own public hearing before making a final decision. Ultimately, the Board of County Commissioners will be the deciding body on this project. If the Board of County Commissioners approves the project, the Road Maintenance Division will complete the project the summer of 2008.

- **How do I comment on the proposed project?**

We are encouraging you to take advantage of the open house this evening in an effort to educate yourself about our proposal. We would like you to develop specific comments and present them at the formal hearing scheduled for July 29, 2007 either verbally or submitted in written form. If you cannot make the hearing, we encourage you to write down your testimony.

Written comments may be submitted anytime up until 5:00pm on July 28, 2007.

Lane County Public Works
Road Maintenance Planning
3040 N. Delta Highway
Eugene OR 97408-1696

E-mail. You may also send your comments electronically to the following address:

mike.russell@co.lane.or.us

- **Notification**

If you comment or request to be on the mailing list, you will be notified of any actions or recommendations regarding the proposed project. Lane County takes care to notify all affected property owners. If you have received any project mailings (post card) then you are already on the mailing list.

Note * send before the next meeting on Aug 29 07



COMMENT SHEET

Instructions: **PRINT** legibly, the information requested below. **Return** this comment sheet during today's Open House or no later than ~~Friday, 9, 2006~~ to Mike Russell, CIP Coordinator, at Lane County Public Works Dept., 3040 N. Delta Hwy., Eugene, OR 97408-1696. For more information, call (541) 882-6949.

PROJECT: Deerhorn Road Chip Seal Project

Name DARIN CABALONA

Address 43143 DEERHORN ROAD, SPRINGFIELD

Mailing Address " "

Phone 896-3891

Support

Support with conditions
(please explain in Comments section)

Do Not Support
(please explain in Comments section)


Do you support the improvement of Deerhorn Road as proposed?

Comments: PLEASE SEE ATTACHED

(continue on back)

Please consider widening and straightening one portion of the road. As you travel west from the last home on Baxter Acres, there is a bend in the road (south). This blind spot in the road is extremely dangerous in its current condition. Logging trucks and automobiles tend to turn in the middle of the road. I have had near accidents on this blind spot. If road improvements cause an increase in speed along this bend (without widening or straightening the bend), accidents are highly probable. Since logging trucks vary in speed, an accident caused by a speeding logging truck will cause a major accident. As an Insurance Loss Control professional for 16 years, Lane County would appear to be partially liable for the accident due to unsafe road conditions at the bend in the road. My recommendation is to straighten and widen this particular blind spot, reducing Lane County's liability exposure along the gravel portion of Deerhorn Road.

Sincerely,



Darin Cabalona

Resident

43143 Deerhorn Rd

Springfield, OR 97478

(541) 896-3891

8/23/07

COMMENT SHEET



Instructions: **PRINT** legibly, the information requested below. **Return** this comment sheet during today's Open House or no later than Friday February 6, 2003 to Mike Russell, CIP Coordinator, at Lane County Public Works Dept., 3040 N. Delta Hwy., Eugene, OR 97408-1696. For more information, call (541) 682-8949.

by *aug 28²*
682-

PROJECT: **Deerhorn Road
Chip Seal Project**

Name Sandy Mueller
Address 43147 Deerhorn Road
Mailing Address Springfield OR 97478
Phone (541) 896 3457

	Support	Support with conditions (please explain in Comments section)	Do Not Support (please explain in Comments section)
Do you support the improvement of Deerhorn Road as proposed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: We would like the chip seal
to go to the bridge at
Richie Creek.

(continue on back)

COMMENT SHEET



Instructions: **PRINT** legibly, the information requested below. **Return** this comment sheet during today's Open House or no later than Friday February 6, 2003 to Mike Russell, CIP Coordinator, at Lane County Public Works Dept., 3040 N. Delta Hwy., Eugene, OR 97408-1698. For more information, call (541) 682-6949.

PROJECT: **Deerhorn Road
Chip Seal Project**

Name Ray Ostrander
Address 43029 Deerhorn Rd.
Mailing Address Some Springfield OR. 97478
Phone 541-886-3599

	Support	Support with conditions (please explain in Comments section)	Do Not Support (please explain in Comments section)
Do you support the improvement of Deerhorn Road as proposed?	<input checked="" type="checkbox"/>	<input type="checkbox"/>	<input type="checkbox"/>

Comments: Speed limit signs?

(continue on back)

COMMENT SHEET



Instructions: **PRINT** legibly, the information requested below. **Return** this comment sheet during today's Open House or no later than Friday February 8, 2003 to Mike Russell, CIP Coordinator, at Lane County Public Works Dept., 3040 N. Delta Hwy., Eugene, OR 97408-1898. For more information, call (541) 682-6949.

PROJECT: **Deerhorn Road
Chip Seal Project**

Name PAUL ALLIGUIE

Address 43103 DEERHORN RD

Mailing Address _____

Phone 896-3452

	Support	Support with conditions (please explain in Comments section)	Do Not Support (please explain in Comments section)
Do you support the improvement of Deerhorn Road as proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments:

SIGNS 1. CURBS
2. 25 MPH
3. GOES WIDE

(continue on back)

COMMENT SHEET



Instructions: **PRINT** legibly, the information requested below. **Return** this comment sheet during today's Open House or no later than Friday February 6, 2003 to Mike Russell, CIP Coordinator, at Lane County Public Works Dept., 3040 N. Delta Hwy., Eugene, OR 97408-1696. For more information, call (541) 682-8949.

PROJECT: **Deerhorn Road
Chip Seal Project**

Name Dick & Roxie Metzler
Address 43081 Deerhorn Rd.
Mailing Address Springfield OR 97478
Phone 896-9049

	Support	Support with conditions (please explain in Comments section)	Do Not Support (please explain in Comments section)
Do you support the improvement of Deerhorn Road as proposed?	<input type="checkbox"/>	<input checked="" type="checkbox"/>	<input type="checkbox"/>

Comments: Signage! Problems: people don't know there are houses, they are looking for river access, fishermen park in road. Need "Residential Area" standards for speed, signs on curves, as much as possible.

(continue on back)

**ROADS ADVISORY COMMITTEE
August 29, 2007**

MEMBERS PRESENT: John Anderson, George Goldstein, Jody Ogle, Tom Poage,
Jack Radabaugh, Karen Bodner

MEMBERS ABSENT: Rex Redmon

STAFF PRESENT: Ollie Snowden, Sonny Chickering, Bill Morgan, Bobby Green, Mike Russell,
Christy Mosier

Chair John Anderson called the meeting to order at 5:45 p.m.

I. **PUBLIC COMMENT** – No public comment.

II. **APPROVAL OF MINUTES**

Motion: Anderson moved to approve the Minutes for June 27th, 2007 per Radabaugh's revision in VIII, under Motion. Radabaugh seconded. All present voted in favor, motion carried.

III. **UPDATE: RESULTS FROM 7/25 BOARD MEETING TO CONSIDER DESIGNATION OF 13 PARKS AS ROADSIDE REST AREAS-** Snowden said the Board went through with the order resulting in \$12,000 additional dollars to go towards the 13 designated rest areas.

IV. **ORAL REPORT- TRANSPORTATION & FUNDING** – Ollie Snowden:

- Senate Bill 808 – Snowden said effective this year through 2014, this bill permits Douglas and Lane Counties to use Timber Receipts to fund highway patrols on county roads. For FY7-08, the Board elected to allocate 15% of Road Fund Timber Receipts to Title II and Title III, as opposed to 20% in the past. This means an additional \$1.2 million that was not originally budgeted is now available for Road Fund use. This money will be used to fund the Sheriff's Traffic Team, allowing the same amount from citations to be directed to the general fund.
- Senate Bill 994 – Snowden said the Legislature redirected approximately \$56 million of the year-end ODOT Fund balance to counties to help offset the loss of Secure Rural Schools Funding. Lane County will get \$9.8 million in FY 08-09 to be used for projects. ODOT was not happy and said the money must come from its modernization program. Area Five is suggesting that the money come from the I-5/Beltline, I-5/Coburg, and Beltline-Coburg to River Road projects. If Congress extends SRS, Snowden opined that he thought the Legislature might take the money back.
- Secural Rural Schools Funding – Snowden reported that DeFazio has introduced a four-year, step-down SRS reauthorization identical to that introduced in the Senate by Wyden. A stand-alone bill will get vetoed by Bush, so DeFazio will look for spending bills to attach to. Snowden mentioned, again, that this is still just a step-down, phase-out plan and it will likely be November/December before Congress acts.
- Countywide Gas Tax – Snowden reported that we've been trying to set-up city meetings to consider a countywide gas tax. Snowden said Bill VanVactor's response is that the county should not lead this, but instead let the cities approach the county and ask that they implement a countywide tax. However, because Commissioner Stewart learned that the Petroleum Dealer Association will fight any local option tax over three cents per gallon, there seemed little point in pursuing a countywide tax at this time. Consequently, there will be no meetings scheduled with the cities on regional transportation funding. Commissioner Green

confirmed Snowden's summary and added that they don't believe the public would receive this well, at this time, coming from the county.

V. COMMITTEE VACANCY UPDATE- Snowden apologized for any misunderstanding on the process of Karen's appointment.

VI. NEXT MEETING – September 26th, fourth Wednesday of the Month.

VII. OTHER BUSINESS

- Anderson asked Goldstein to speak to his email sent out to the group yesterday:
 - a) Goldstein explained his approach in reviewing materials like the public does and would like feedback from the group on using a standardized evaluation form with ratings in order to quantify projects. Goldstein said the current information on projects can be construed as subjective. Goldstein expressed concerns for not having a checks and balances system for projects. Poage responded to Goldstein that the committee has an impressive fact-based process they've used for ten years. Ogle supported Poage's response that the committee has a process that works well.
 - b) Goldstein suggested we have a "lesson learned" session after each project stating that sometimes the numbers don't match up on some of the projects we do and this will also help with a response on contentious projects. Poage responded that he himself visits projects after they are complete and that the committee has always been upfront with criticism at the committee level. Radabaugh said we had a rating system for giving county money to cities and it worked. Radabaugh agreed with Goldstein that he has never seen a very careful review of just the finance, showing before and after like an audit.
 - c) Goldstein stated the documents that were given to him [Bernhardt Heights project] show 600% cost overrun but what they're adding is the value of the county's own work, which typically isn't included in these projects. Goldstein said he's bothered by the amount of money that came from the maintenance budget. Goldstein thinks that the amount was so high that a flag should have gone up. Goldstein doesn't think we should be taking large portions of maintenance money to complete these construction projects. Goldstein added that the public may have a negative perception when they see \$2 million spent with the CIP showing a \$360K bid, but the final report says its actually twice that much (\$700K) and asked if the commissioners and county realize that the value of the work that the staff is putting into these projects? Goldstein added this is why he is nervous about how budgeting is done at the county. Goldstein asked Commissioner Green if this makes an impact on how the Board considers cutbacks and budgeting for these people? Green responded he would generally ask staff what happened when they got into the project because sometimes once you get the project underway there are some unforeseen things.
 - d) Goldstein added this is why he is also questioning errors and omissions in our reporting. Snowden interjects that this is not a budgeting issue; this is a programming issue and explained there is a capital budget and an operations budget. The capital budget includes construction, right-of-way purchases, and consulting costs. The operating budget includes engineering staff costs. The CIP is a capital project programming document. It includes only the cost of contracted work, and serves as the basis for the capital improvement lists that we are required to submit to the Bureau of Labor and Industries each year. The BOLI report is to identify the capital improvements programmed for this year and to indicate projects to be contracted out and not done by county forces. If we were to roll our anticipated engineering costs into the BOLI figures, it would be an over-representation of what we were contracting out. Snowden added that there were no budget irregularities. Goldstein asked if he was correct in the two-million dollar item he saw. Chickering responded that there are three items 1) actual construction contract for the new road, 2) Road Maintenance monies not in the capital budget to do some improvement of existing road, and 3) Engineering costs which would normally be along the percentages that Snowden mentioned, but because of our conflicts with one particular property, county costs were much higher as a percentage of the project, and

therefore could be around the two-million amount Goldstein references. Snowden said what we do according to ORS is prepare a CIP list we submit to Bureau of Labor and Industries every year and we define what we are going to bid out and what we are going to do with county forces. Poage responded this project is a unique one, with a huge amount of problems and we spent thousands of dollars maintaining it every year. In the short term a lot of maintenance monies were used, but in the long-term we saved on a lot of maintenance.

- e) Goldstein raised the other issue from his email regarding safety hazard of driving Berhardt Heights and the potential for head-on collision. Chickering replied that he has passed Goldstein's suggestions to our Traffic Engineer. Snowden commented that these kinds of improvements are discretionary decisions in the state of Oregon and that the design concept was approved by the Board. Snowden added that most of the time improvements are limited due to funding. Anderson stopped the discussion in order to begin public hearing.

VIII. **PUBLIC HEARING** – Chair Anderson called the meeting to order at 7:05p.m. Anderson read script to public for the hearings of Deerhorn Road and Harvey Road, explaining how hearings are conducted and what to expect and that oral testimonies will be limited to three minutes.

- **Deerhorn Road Presentation** – Mike Russell began the presentation via PowerPoint with handouts at 7:08p.m. and finished at 7:27p.m. Russell reiterates that if the committee adopts the concept this evening, a 30-day comment period will begin, and if 50% of abiding property owners object in writing, it will trigger a hearing with the Board of County Commissioners. If this doesn't happen, it will be a regular Board item on the agenda and people can speak to the Board during public comment. Russell stated we hope to go to the Board at the end of October or beginning of November. Russell asked for staff questions.

Anderson opened the public hearing at 7:27p.m. with no public comment received. Anderson closed the public hearing at 7:28 p.m.

Motion: Ogle moved to recommend to the Board of Commissioners proceeding with Deerhorn Road Chip Seal Option and clearing of the right of way for the project. Radabaugh seconded the vote. Radabaugh asked Chair Anderson to take a vote. All approved/motion carried.

- **Harvey Road Presentation** – Bill Morgan began the presentation on Harvey Road via PowerPoint with handouts at 7:35p.m. and finished at 7:50p.m. Morgan reiterated the process with the first record being left open until September 14, then fine-tuning the design concept, another 30 day public comment period, concluding with the Board of County Commissioners in November 2007. Morgan asked for staff questions.
 - Goldstein asked if we expect any issues in the line of sight at the egress/ingress of some of these properties. Morgan responded we don't have a lot of properties set close to the road, leaving a clear and clean driveway in comparison to other projects. Morgan added again, Nieblock is a little tricky because some folks want it widened and some want the impact away from their property. Morgan added that in most cases there is already enough Right of Way.
 - Radabaugh asked what the rules are for payments of assessments? Doug Freeman responded that property owners have four options –Oregon statutes says home owners have 15-20 days to respond to the assessments, with limitations including under the home rule, 2/3 of property owners have to object, under the ORS it's 50% of the property owners who own 50% of the frontage. Freeman said the Board usually goes with the more lenient of the two. Freeman said options for payment include payment up front, a bonded option allowing ten-year period to repay in semi-annual payments, deferrals for senior citizens, non-access deferrals, and large parcel deferral.

- Bodner asked if these road construction costs are typical. Morgan responded that these are typical.

Anderson opened the public hearing at 8:05p.m.

- a) Robert Koczan: 455 North 5th Street, Creswell (formerly 555 N. 5th). His issue is where the project ends-by building a superhighway and having it end at Scott and 5th Street, which is narrow and broken with ditches at the side. Robert provided a binder with pictures and commentary to the committee. Robert had a lot of safety concerns.
- b) Ron Hansen: PO Box 276 Creswell, OR 97426 (acting City Administrator for Creswell) responded with city is looking at a local improvement project from Scott to A Street that should address Robert's concerns.

Anderson closed the public hearing adjourned the meeting at 8:10 p.m.

Christy Mosier
Transcribing Secretary



LANE COUNTY

PUBLIC WORKS DEPARTMENT / 3040 North Delta Hwy. / Eugene, OR 97408
Phone: (541) 682-6911 / Fax: (541) 682-8900

NOTIFICATION OF 30 DAY PUBLIC REVIEW FOR THE RECOMMENDED DESIGN CONCEPT AND FINDINGS OF Deerhorn Road Chip Seal MP 7.76 to 9.90

August 30, 2007

Dear Property Owner or Interested Party:

On August 29, 2007, Lane County's Roads Advisory Committee (RAC) publicly considered and approved a design concept for the above subject road. According to County procedures for public involvement, the RAC's "Recommended Design Concept and Findings" (attached) is now being mailed to abutting property owners and interested parties for review and comment. If the "Recommended Design Concept and Findings" receives general approval from abutting property owners, the document will be presented to the Board of County Commissioners (BCC) for approval and adoption.

However, if within 30 days of this mailing, 50 percent of adjacent land owners of record along the proposed road improvement project object, in writing, to the RAC's "Recommended Design Concept and Findings", the BCC will hold a public hearing before making a final decision on a concept for this project. Comments should be mailed to:

Mike Russell
Lane County Public Works
3040 North Delta Highway
Eugene OR 97408-1696

Maps and drawings describing the proposed road improvement project are available for review at the address above. Should you have any questions, or need additional information, please call me at (541) 682-6968.

Sincerely,

Mike Russell
Senior Engineering Associate
Road Maintenance Division

**LANE COUNTY ROADS ADVISORY COMMITTEE
RECOMMENDED DESIGN CONCEPT AND FINDINGS**

Deerhorn Road Chip Seal Project

August 29, 2007

EXECUTIVE SUMMARY

The existing Deerhorn Road from MP 7.76 to MP 9.90 is characterized as a low-speed, low-volume, mostly winding gravel road. It runs along the southern banks of the McKenzie River serving local residents and private and federal forests.

The purpose and need of the project is to respond to local residents expressed desire to pave the road by establishing a hard surfaced cross-section that is bounded by adequate drainage ditches.

The proposed improvement is subject to the standards outlined in Lane Code chapter 15 for Rural Local roads. The proposal also utilizes the 2001 American Association of State Highway and Transportation Officials (AASHTO) publication, *Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400)*. This document recognizes that it is not cost effective to build low-volume local roads as set forth in its full standard Green Book. AASHTO finds that due to the characteristics of these roads, the Green Book standards can be relaxed without significantly impacting the overall safety of the roadway.

Due to the desire to minimize right-of-way, financial, and potential social/environmental impacts of a full-standards project, the recommendation is to apply a triple-shot chip seal to the existing travel surface using County forces. This will require the adoption of design exceptions for pavement width, pavement structure and clear zone design standards.

Upon approval of the proposal, the Road Maintenance Division intends to construct the project during the summer of 2008 at an estimated cost of \$150,000.

BACKGROUND

On November 30, 2005, residents from this section of Deerhorn Road were present at a meeting of the Roads Advisory Committee to which they submitted a petition and letters signed by their neighbors in support of paving the gravel portion of Deerhorn Road. The residents cited concerns about lack of maintenance, safety, and visibility due to dust.

Due to the current funding situation surrounding the Public Works Department's Capital Improvement program, this project is proposed as a County Force project rather than a full rural standards capital improvement. The proposal is to rehabilitate the road base where needed and apply a triple-shot chip seal coat to the existing road surface using County forces funded under the Road Maintenance budget.

EXISTING ROAD CONDITIONS

- **Right-of-Way Widths**

In general, the existing right-of-way width along the alignment is between 50 to 60 feet and is determined to be adequate for the proposed treatment.

- **Average Daily Traffic**

Traffic counts performed by the Department show an average daily traffic volume of 250 and a maximum projected traffic volume of 340 in 2020. It is assumed that Deerhorn Road primarily serves drivers who are familiar with the roadway (repeat drivers). The main uses include passenger cars and log trucks.

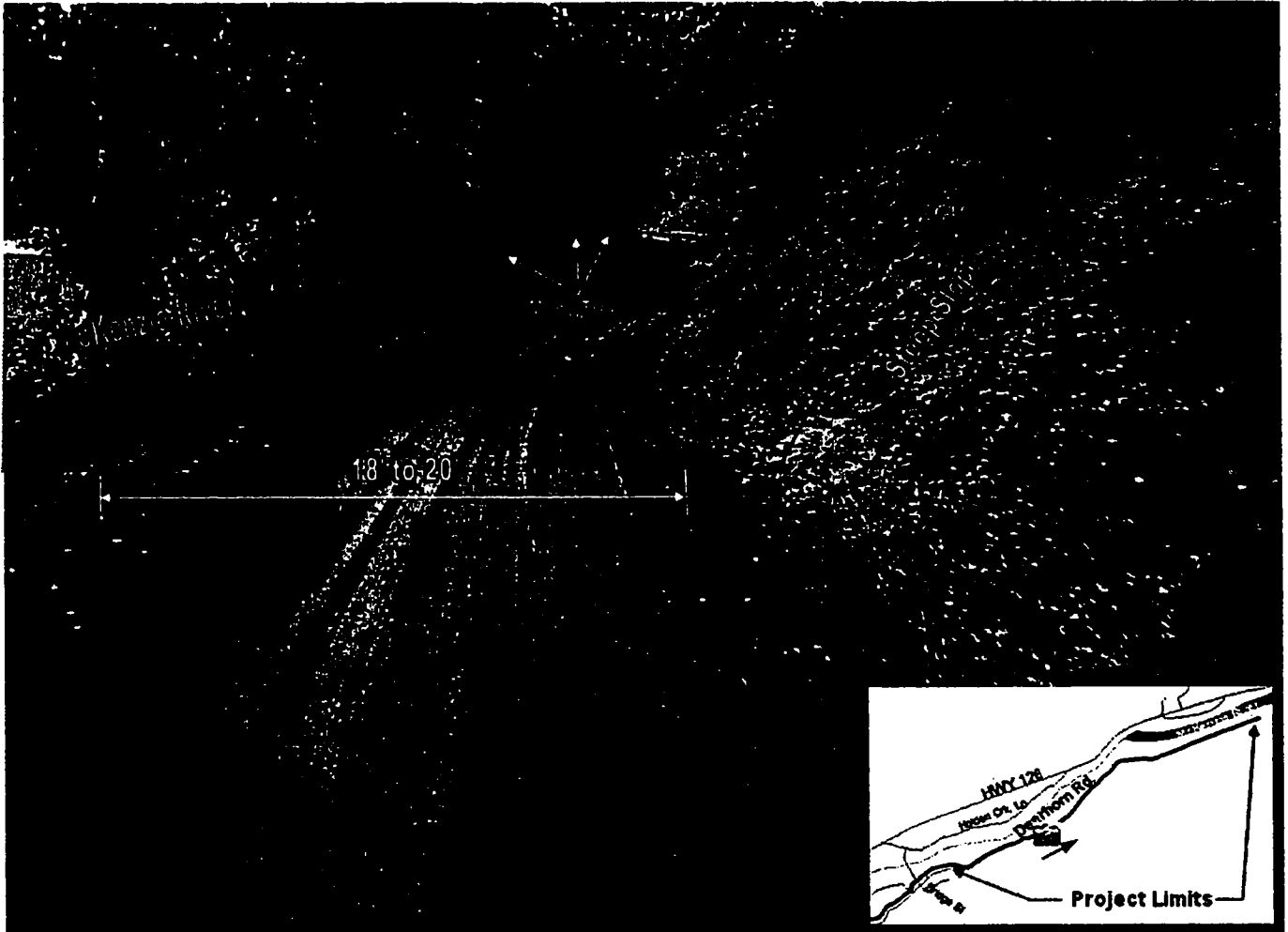
- **Crash History**

Crash data (2004) show 2 reported crashes since 1996. Data show that the crashes were due to “driving too fast for conditions – not speeding”. These crashes do not indicate a documentable site-specific safety problem that can potentially be corrected by a roadway or roadside improvement, although providing a chip sealed surface may provide better tire grip in moderate weather, less tire grip in icy or snowy weather.

- **Maintenance History**

Although cited by the neighborhood as a concern, Lane County Road Maintenance has been maintaining Deerhorn Road as part of its annual maintenance program. Periodic reshaping of the roadway occurs as a matter of routine for Lane County’s gravel roads as well as inclusion in the annual dust palliative application program.

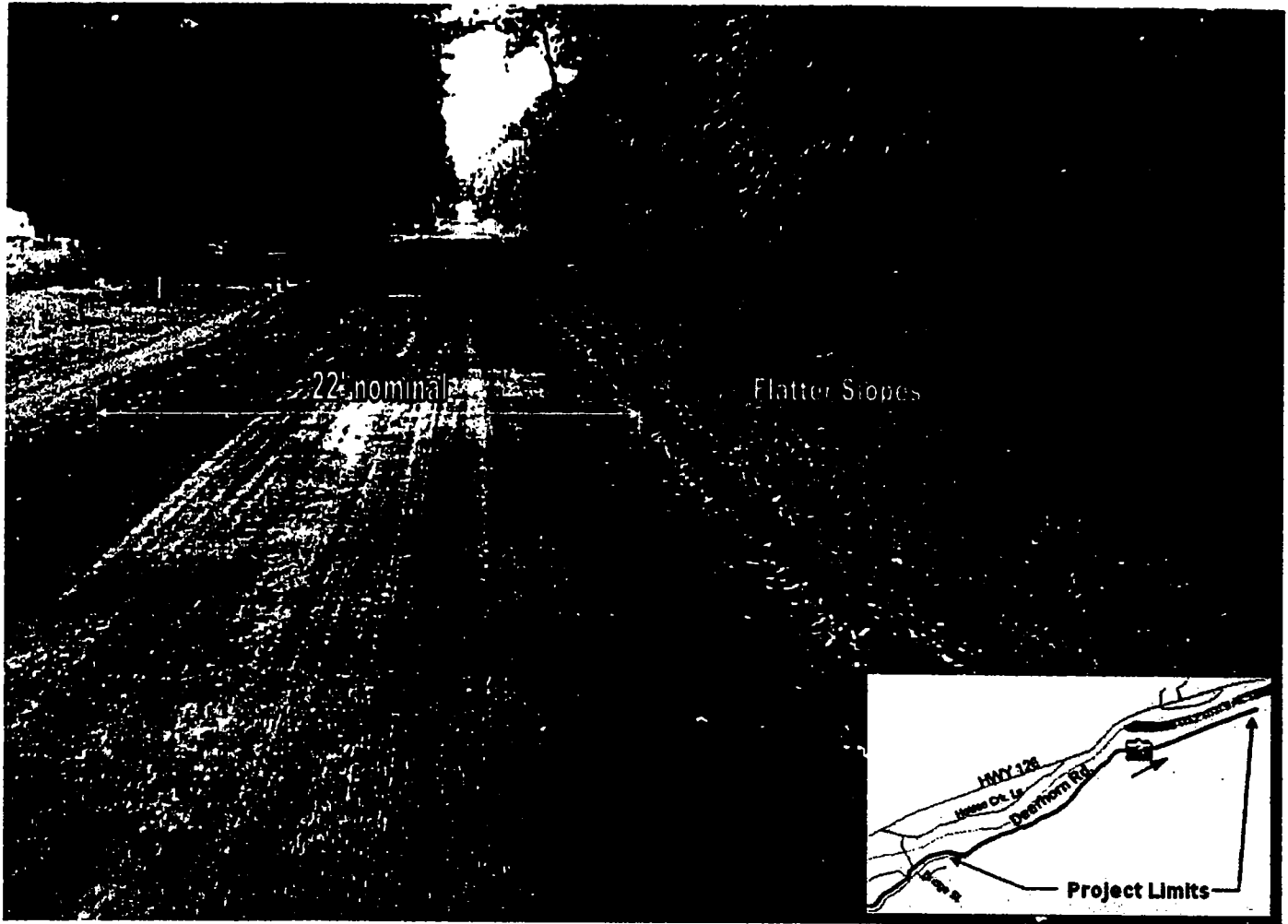
The photos below illustrate the typical existing condition of the roadway.



Deerhorn Road – MP 8.11 Looking East

The majority of the route is bounded by the McKenzie River on the north and steep side slopes on the south although there are portions that "open up" in flatter terrain.

Along the route, there are intermittent pull-outs to allow for larger vehicles to pass one another.



Deerhorn Road – MP 9.20 Looking East

At approximately MP 9.20 the roadway becomes wider and straighter.

The existing road ends at a private gate that enters privately owned forest lands.

STANDARDS

Except for the specific design exceptions discussed below, the project shall be designed in accordance with Lane Code Chapter 15, and the 2001 American Association of State Highway and Transportation Officials (AASHTO) publications *Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400)*. Traffic control, signing, and signal devices shall comply with the *Manual on Uniform Traffic Control Devices, Millennium Edition* and Oregon Supplements.

- **Proposed use of “Low-Volume” Road Design Standards**

This design concept is supported by AASHTO's 2001 publication *Guidelines for Geometric Design of Very Low-Volume Local Roads (ADT ≤ 400)*, which recognizes that it is not cost effective to build low-volume local roads as set forth in its full standard Green Book. AASHTO finds that due to the characteristics of these roads, the Green Book standards can be relaxed without significantly impacting the overall safety of the roadway. Examples of the characteristics discussed include:

- ADT is less than 400 vehicles per day,
- The low traffic volumes suggest that multiple-vehicle collisions are rare events,
- The local nature of the road means that most motorists using the road have traveled it before and are familiar with its features.

Findings supporting use of “Low-Volume Road Standards” include:

- Deerhorn Road is classified as a Rural Local Road.
- Traffic counts performed by the Department show an average daily traffic volume of 250 and a maximum projected traffic volume of 340 in 2020. It is assumed that Deerhorn Road primarily serves drivers who are familiar with the roadway (repeat drivers).
- Main uses include passenger cars and log trucks.
- Accident data (2004) show 2 accidents since 1996. Data show that accidents are predominately due to “driving too fast for conditions – not speeding”. These accidents do not indicate a documentable site-specific safety problem that can potentially be corrected by a roadway or roadside improvement.

With the rationale above, the Roads Advisory Committee finds that use of “AASHTO Low-volume Road Standards” is appropriate.

DESIGN OPTIONS AND RECOMMENDATION

Recent Board of County Commissioner deliberations indicate a desire to better balance the costs of capital projects with the received benefits. This is also important in light of the uncertainty of future Road Fund revenues specifically related to Federal Secure Rural Schools payments. The Board is also interested in ultimately providing projects that are supported by strong public involvement and interests.

The following discussion outlines an effort to satisfy the desires of the Board of Commissioners while maintaining and supporting the project purpose and need. Discussions with property owners and interested parties also indicate a desire to lessen project impacts and preserve the rural nature of the road.

Options Analysis

Option 1 – Full Standards Modernization

Proposed width:	22' (2 – 9' travel lanes with 2 – 2' shoulders)
Surface treatment:	A/C Pavement
Design speed:	30 mph
Other Design Features:	Total reconstruction, horizontal and vertical alignment changes, open ditches, guardrail
Cost Estimate:	\$ Millions

- This option would apply the level of roadway standards outlined in Lane Code and full AASHTO design standards. Complete guardrail, side slope, horizontal and vertical alignment and surface type improvements would be accomplished.
- This option requires significant embankment and excavation work in the areas being realigned, and increases the potential for undesirable environmental and private property impacts.
- This option would place the project on Public Work's Capital Improvement Program and would compete with other priorities on the road system.

Option 2 – Triple-shot Chip Seal on existing alignment

Proposed width:	18' – 20' (existing)
Surface treatment:	Triple-shot Chip Seal
Design speed:	Existing
Other Design Features:	Hard surface existing road alignment
Cost Estimate:	\$150,000

County crews to recondition existing roadway by blading, adding leveling rock, and preparing gravel road surface for chip seal, \$100,000. County crews to chip seal \$50,000. No change to roadway alignment or width, use existing base, 0.75" oil shot.

This would be a minimal approach to address resident's concerns and provide improved access to forest uses.

- This is the least expensive construction option and would make more money available to fund other projects of demonstrated need while still providing for some improvement of the road surface.
- Given the scope of work, impact footprint, and type of materials and equipment to be used, there does not appear to be measurable direct impacts to the natural environment which require mitigation, permits, or special protection measures under normal circumstances.
- The project could be constructed entirely with County Maintenance crews and expertise and included in the annual Chip Seal Program.
- Maintenance costs associated with routine blading, rock application, dust abatement, and related public complaints are reduced upon hard surfacing the road.
- While cheaper to construct, the chip seal surface will not have the design life of an asphalt concrete pavement.

Option 3 - No Build

Proposed width:	18' – 20'
Surface treatment:	Gravel
Design speed:	N/A
Other Design Features:	Characterized as winding gravel road with steep sideslopes along several segments of roadway
Cost Estimate:	N/A

Selecting this option would assume that the project is not a priority, at this time, and would not satisfy the purpose and need of the project. The road would remain gravel with no improvements between MP's 7.76 and 9.90.

- This option has no environmental or private property impacts related to construction activities.
- This option does not address the concerns submitted in writing by the neighborhood.
- In general, gravel roads require more maintenance effort than hard surfaced roads. Labor, Materials and Equipment costs associated with routine blading, rock application, dust abatement, and related public complaints are reduced upon hard surfacing the road.

Recommendation

Considering the above analysis, The Roads Advisory Committee find that Option 2 is the preferred design alternative.

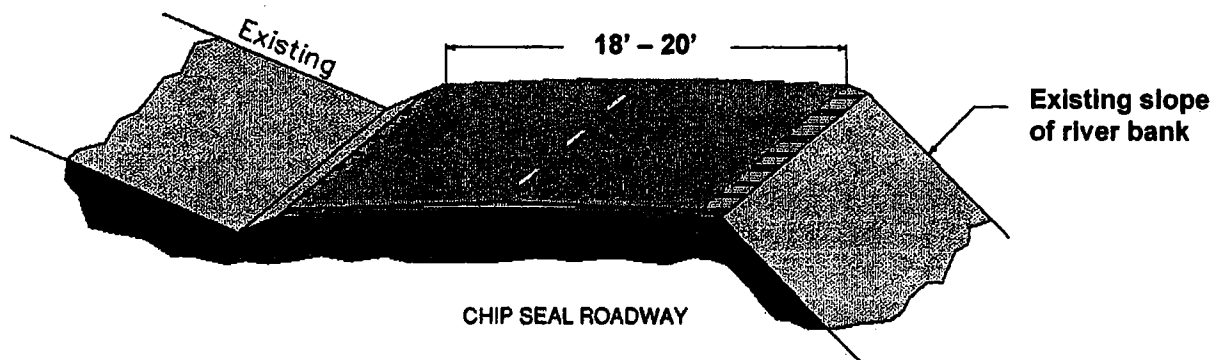
DESIGN EXCEPTIONS

Design exceptions to County road standards will be needed to construct Option 2 because the proposed treatment will not bring the road up to current standards. The needed design exceptions are outlined below.

The Roads Advisory Committee recommends hard surfacing the existing roadway and approving the design exceptions necessary to construct the project being fully informed as follows:

- Typical Section

The following typical section will apply:



2-Lane Rural Design
Deerhorn Road MP 7.76 to 9.90

- Two travel lanes within existing roadway width no less than 18 feet wide total (1 each direction)
- Match existing side slopes and ditches

DESIGN EXCEPTION FOR PAVEMENT WIDTH:

Relevant Design Standard: LC 15.705 (4) & Table 9

The pavement width below 20 feet does not meet Lane County standards for rural local roads as outlined in LC 15.705 (4) Table 9, which calls for a minimum pavement width of 20 feet for an ADT of 251-400 in mountainous terrain.

DESIGN EXCEPTION FOR CLEAR ZONE:

Relevant Design Standard: LC 15.705 (11)

The standard calls for a minimum clear zone width of 10 feet from the edge of the travel lane. Application of this standard would require the removal of many large trees that exist immediately adjacent to the roadway and extensive cuts into the hillside.

- **Surface Treatment**

The project shall use a triple-shot chip seal as a wearing course placed on a standard rock leveling course and existing base. Existing road base may be rehabilitated prior to applying chip seal.

DESIGN EXCEPTION FOR PAVEMENT STRUCTURE:

Relevant Design Standard: LC 15.707 (6) & Table 13

The standard calls for a minimum pavement structure of 2 inches of asphalt concrete over 12 inches of rock base. The proposed treatment will establish a triple-shot chip seal over the existing rock base that has been rehabilitated where needed.

The chip sealed surface will have a nominal thickness of 0.75 inches.

- **Additional Design Exceptions**

The County Engineer is authorized to approve design standards and exceptions to design standards for features not specifically addressed in this document.

December 30.2007

Public Works Department
3040 North Delta Highway
Eugene, Oregon

Attention: Mr. Mike Russel,

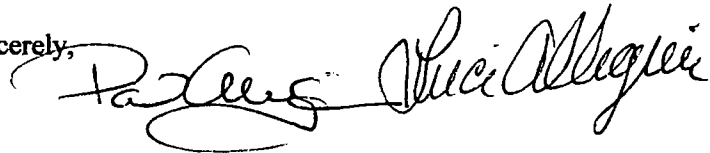
Another year has passed and we have seen no results on the paving of the North East section of Deerhorn Road. The road is now in the worst shape we have ever seen. There are many sections with many large potholes, so many they cannot be avoided. Small cars could have a hard time navigating through them and any vehicle has to almost come to a stop to get past them. Unfortunately people have to drive on the road. We have 2 teenagers and worry every time they go to school and back. Driving is a dreaded necessity and never a pleasure. The condition of the road has also cause undo auto expenses. We have had 5 flat tires and our neighbors have also had many. The other car damages are to numerous to mention.

The mail delivery person, UPS, and many others who have to come out here do complain!!!

We do not mind sharing the road with many logging trucks, but they are the ones destroying the road – where are the road taxes being spent? It should be used to pave the road, especially since they are the ones who do 99% of the damage.

Please make the paving of Deerhorn Road a top urgent priority without holding numerous meetings, postponing meetings, making plans, canceling plans. **The road needs to be paved NOW!!!!!!!!!!**

Sincerely,



Paul and Luci Alliguie

43103 Deerhorn Road

Springfield, Oregon

January 1, 2008

To the Lane County Board of Commissioners,

We have lived on upper Deerhorn road for fifteen years. As you probably know, the last three miles of this County-maintained road is gravel (a nice name for mud). This is not just a lane with a few houses; 24 families call this community home and more houses are in the planning stages. Most of us make multiple trips daily, as do the many logging trucks, other equipment, and work traffic for both Weyerhaeuser and Whitewater. Add to that, there is a significant amount of recreational traffic for fishing, walking, and sightseeing.

This fall, this road is in the worst condition that any of us have seen. At least six places have pot holes so deep and numerous, the vehicles have to slow to a crawl in order to spare front end alignment and tires. It has become truly hazardous as well as irritating.

In 1993 the people of this community packed the commissioners' meeting room with our petitions for paving. We were told to be patient, that our project was on the County list. Even though we have made numerous attempts to speed up the process since then, to our detriment, we have been too patient. We still can't go anywhere without washing the vehicles after every trip. Flat tires and front end alignment problems are a constant problem. I hope you are beginning to see that we have a definite "trust" issue with our County officials. At the very least, we request a road that is solid and that can be driven at a speed that approximates 30 mph. It would be nice if there is a least a bed of rock instead of the mud that plagues us now.

I thank you for your time and consideration. Please come up to see for yourself and stop by for coffee.

Sincerely,

Dick and Roxie Metzler
43081 Deerhorn Rd.
Spfld, OR. 97478
896-9049
dmetzler@pacinfo.com

January 4, 2008

Dear Mike:

We appreciate your efforts in regards to the chip seal project for the gravel portion of Deerhorn as schedule for this coming summer.

We are homeowners on this portion of Deerhorn Road and are writing this letter with great concern for the home owners safety in regards to the road.

This winter has been particularly bad in regards to the potholes. They have become a safety issue. The pot holes are many and deep to the point where we felt my Buick sedan was not safe enough to maneuver the potholes. Thus, we traded it in for a SUV with big tires. We should not have to trade in our cars for SUV's in order to fell safe.

Also, our neighbor did \$1200.00 damage on her car due to dodging potholes. In the dark of night she dodged to much and hit a bolder sticking out from the cliff. We're glad she dodged on the cliff side of the road and not the river side. Again a safety issue.

When we bought on the gravel portion of Deerhorn we were well aware of the potholes but felt they were manageable in regards to safety. The road is much worse and has become a safety issue.

Please consider our safety issue and chip seal the road as promised this summer.

As homeowners we appreciate the county trying to keep our road graded as their schedule allows.

Sincerely,



Robert and Amanda Berry
43087 Deerhorn Road
Springfield, OR 97478