

ROAD MANAGEMENT PLAN

FOR

CROOKED RIVER RANCH

SPECIAL ROAD DISTRICT

AND

CLUB AND MAINTENANCE ASSOCIATION

Rev 11.16.09
Amended 1.21.2013

INTRODUCTION:

Roads within Crooked River Ranch ("CRR") are the highest priority for the CRR residents, the Crooked River Ranch Club and Maintenance Association (Association), and the Crooked River Ranch Special Road District (District). The unofficial total miles of roads within CRR are approximately 90 miles. There are 11.9 miles of roads maintained by Jefferson County. The balance of the road system is maintained by the District and the Association. This currently consists of approximately 25.7 miles of paved roads and 51.3 miles of non-paved (gravel and/or dirt) roads.

The counties of Deschutes and Jefferson have jurisdiction over public roads as stated in ORS Chapter 368. However, they only maintain roads accepted into the "County Road System". To be considered for adoption into the county road system a road must comply, in all respects, with the design standards of the county. However, they are not likely to accept any additional roads for maintenance into their road system due to budgetary constraints. The District and Association therefore need to plan on being responsible for the improvements and maintenance of the balance of the road system.

This Road Management Plan deals with the roads in CRR that are not accepted into the County Road System ("CRR roads"). It establishes agreed upon roles and responsibilities for the District and the Association, highlights road issues, develops construction and maintenance standards, and identifies roads planned for improvements.

HISTORY:

In 1972, Bill MacPherson developed the original CRR subdivision. It was the developer's responsibility to construct and maintain the road system as stated in the Covenants, Conditions and Restrictions: The Association is "obligated for the cost of removal of snow from and the maintaining of all roads, streets, avenues and places within this plat..." (CC&R's Articles IX).

Until 1982, CRR was zoned as Rural Recreation, lots were sold and intended to be used for recreational purposes. As owners started to build permanent residences, the zoning was changed to Rural Residential to accommodate the needs of a growing, permanent population. The road system, as maintained by the Association, was thought to be inadequate to meet the needs of this growing population. In 1982, an election was held to create a "Special Road District" empowered to assess, levy and collect taxes on all taxable real property within the district. The District encompasses all platted property within the CRR. All properties within the District pay \$0.814/\$1000 of the taxable value of their property to the District as property taxes each year. This amounts to an annual income of approximately \$175,000 to be used for road improvement and maintenance.

On June 27, 2000, the District and the Association entered into a settlement agreement that designated the District as having primary authority and jurisdiction over the public

roads within the boundaries of the District except roads accepted by Deschutes or Jefferson County. The agreement also delegates to the Association the authority to perform road maintenance on the District managed roads. The District shall determine, and the Association shall comply with, District road maintenance standards.

ROLES AND RESPONSIBILITIES:

The District has the primary responsibility for CRR roads. It is a form of local government with three elected Board of Directors who meet monthly at a public meeting. Their primary roles and responsibilities are as follows:

1. Implement construction and improvement of CRR roads;
2. Notify Association of all improvement projects;
3. Develop road construction and maintenance standards;
4. Provide a forum to receive public input on road issues;
5. Develop an annual budget;
6. Have open and timely communication with the Association;
7. Notify Association of all District meetings;
8. Have a representative attend all Association meetings where road issues are discussed;
9. Advise Association of road maintenance issues; and
10. Work jointly with Association to develop and maintain a Road Management Plan.

The District encourages residents of the ranch to attend the monthly meetings in order to be informed and to offer input to help the District better serve the ranch residents.

The Association is delegated with the authority to perform road maintenance on District managed roads. The Association is a private non-profit mutual benefit corporation with members incorporated under ORS Chapter 65. The Association is governed by a nine-elected Board of Directors that hold monthly meetings open to all CRR members. Their primary roles and responsibilities related to road management are as follows:

1. Perform required maintenance on all CRR roads in accordance with District standards;
2. Perform snow removal and sanding of roads as needed;
3. Construct gravel road improvements;
4. Develop an annual road maintenance budget;
5. Develop and maintain a continual six-month schedule of road improvements and maintenance activities with time projections;
6. Notify the District of all road improvement projects to be performed;
7. Notify the District of all regular or anticipated maintenance activity;
8. Have open and timely communication with the District;
9. Notify the District of all meetings that road issues will be discussed; and
10. Work jointly with District to develop and maintain a Road Management Plan.

ISSUES:

Drainage of roadways, dust abatement, washboard roads, speed, emergency exit route, missing street signs, and safety of non-motorized traffic are among just some of the issues that are being identified, and reviewed.

Many roads have a flat parabolic crown or no crown. This allows water to stand on the road surface, weakening the structure and causing potholes and washboard surfaces. Many of the roads had ditches that were filled with roadway aggregate that has been bladed off the surface. The roadway material that was bladed to the ditch, further exacerbating the drainage problems often blocked crossing culverts and driveway culverts.

Dust abatement is a concern for many residents on the ranch. The policy of the District and the Association has been to not spend District or Association funds on dust abatement. Dust abatement can be contracted for and funded by individual or groups of individuals on District managed roads. Contact the Association administration office for the process and application forms to apply dust abatement.

Wash boarded road surfaces are accelerated by hard braking, fast acceleration, and excessive speed on both gravel and native material roads. Grading the roads to eliminate the wash boarding creates more dust and allows for higher speeds which cause the surface to develop wash boards again. This is a never ending cycle, which has been difficult to resolve.

Speeding is a problem and safety issue. There are no speed limits established on district roads. Speed limits can only be established by the State Traffic Engineer. This is usually done after a speed limit investigation is completed. The speed is then set at the 85th percentile, which is the speed that 85 percent of the traffic is traveling. However, this may not be the speed that is desired by the community, but what may be designated once the study is completed. Another process to establish speed limits on some District managed roads is to identify the roads that are residential and ask the county to pass a resolution that sets the speed at 25 mph. ORS 801.430 defines a residential district as a territory not comprising a business district that is contiguous to a highway that:

- (1) Has access to property occupied primarily by multifamily dwellings; or
- (2) Has an average of 150 feet or less between accesses or approaches to:
 - a. Dwellings, churches, public parks within cities or other residential facilities; or
 - b. Dwellings and buildings used for business.

Missing street signs are being replaced as they are identified and funds are available.

Separation of non-motorized users of roads from vehicular traffic is a safety issue. Currently, this is being addressed through an ongoing process of identification of safe community pathway routes and development of appropriate standards.

STANDARD ROAD SECTION:

The roads within the District that meet the criteria to be classified as Arterial or Major Collector, in accordance with the criteria in the county road standards, are currently a part of the county road system. Roads that will be improved and maintained by the District and Association would all be classified as Minor Collectors or Local Roads, with the majority meeting the Local Roads classification. Road classifications are as shown on the attached map.

The County Code requires that improvements on any roads within the county shall be completed in accordance with the minimum road design standards. However, neither the District nor the Association has the resources to initially improve roads to these standards. The minimum road design standard initially will be to provide an adequate base that can be further improved in the future. When funds become available, improvements will be made to the roads to bring them up to county standard.

INITIAL MINIMUM ROAD DESIGN STANDARDS

	Collector	Local Road	Commercial
Min R/W width	60 ft	60 ft	60ft
Lane Width	11 ft	10 ft	11ft
Shoulder Width	2 ft	2 ft	2ft
Shoulder Surface	Gravel	Gravel	Gravel
Sub-base Depth		4 inch	
Base Depth	6 inch	2 inch	8 inch
Road Surface	AC or Oil Mat	Gravel	AC or Oil mat
Surface Depth	2 inch AC/3 shot	2 inch	2 ½ in AC

All thickness refer to compacted thickness

It should be noted, that Oil Mat (Chip Seal) roads might not be as smooth as AC constructed roads. However, the intent for using Oil Mat surface is to get additional hard surface roads with the cost savings.

All roads shall be constructed in accordance with current edition of the Oregon Department of Transportation "Standard Specifications for Highway Construction".

Sub-base gravel shall be well graded "reject gravel" that can be easily graded and compacted, without an excess of organic material, which is approved by the Association road supervisor.

Base and surface gravel shall comply with Section 02630 of the 2002 Oregon Department of Transportation Standard Specifications. Gradation shall comply with Table 02630-1, English measurement, 3/4"-0" requirement, sand equivalent shall be not less than 22. It is the intent that aggregates shall be such that when watered, shaped and compacted, the

base material will be firm and stable and there will be minimum raveling under moderate traffic conditions.

All road sections shall be graded with a 4 percent slope on gravel roads and a 2 percent slope on hard surface roads from the center down to the edge and a minimum one foot ditch on each side with a 3 to 1 slope and an 1 1/2 to 1 back slope. A lesser depth ditch may be approved by the Association road supervisor based on sub base conditions and/or topography of the surrounding area.

Where practical, all road sections shall be graded with a pedestrian/equestrian pathway between the ditch and the right of way line as the roads are improved. The minimum width for these pathways will be five (5) feet. Due to limited resources, these pathways will be roughed in only, and may not include removal of large trees and larger rocks.

CULVERTS Rev. 11/16/2009

A culvert is required for all driveways when the drainage pattern requires one. Driveway construction and maintenance is the responsibility of the property owner. However, when a culvert is required for a driveway on a District improvement project, the District will install a culvert as required. ~~On an Association improvement project, the Association will bill the property owner for the cost of the culvert materials. The District will then reimburse the property owner for up to a twenty foot culvert.~~ The District participation will be limited to a maximum of \$5000 total in any given fiscal year.

Culverts Amended SRD (Minutes) 12/12/2012

A discussion of culvert reimbursement to property owners was held. Director Williams made a motion to reimburse the CRRC&MA directly for 20 feet of culvert when a new culvert is required for a road improvement project approved by the SRD. Currently the property owner is billed and a reimbursement is made to them. Director Palm seconded. The vote was unanimous in favor. A letter is being drafted to the CRRC&MA regarding the policy change. (See Attached Explanation - Attachment A)

Culverts Amended CRRC&MA (Minutes) 1/21/2013

SRD approved changes - Director Dunham explained the process for payment of culverts installed on properties was at times negatively impacting our property owners. Currently, the CRR Road Department installs the culvert, bills the property owner who then must pay the Ranch. They then must submit the receipt to the SRD for reimbursement. To simplify the process and lessen the strain on our members, the policy was changed to allow for direct billing from the CRR Road Department to the SRD, eliminating the member involvement. Director Dunham motioned to approve the modification which states that the SRD will be billed directly by the CRRC&MA for 20 feet of culvert when a new culvert is required for a road improvement project approved by the SRD. The motion was seconded by Director Martin, and approved unanimously. (See Attached Explanation - Attachment B)

INTERSECTIONS

Whenever a roadway is improved with a hard surface, the intersecting roadways shall be improved to a distance of 30 feet (The radius of the intersection) minimum and 50 feet maximum to help keep gravel from encroaching into the hard surfaced roadway and to provide working space when grading the non-hard surfaced road.

MAINTENANCE:

Paved and oil mat roads are to be surveyed annually to identify the number and location of surface cracks. The cracks will then be sealed to exclude water from entering the roadway structure.

All roadways will be crowned to maintain proper drainage. Roadway crowns shall be a sloped "A" shape, rather than a curved or rounded shape. The slope from the center of the road to the outer edge should slope down in a straight line at four to six percent.

Ditches are necessary for adequate drainage and shall be kept free of obstructions. To allow proper drainage culverts are also critical and must be unobstructed to allow proper drainage. Surface material previously bladed to the sides of roadways shall be removed to allow proper drainage.

All gravel and natural surfaced roads will be bladed as needed.

Pathway maintenance will be limited at this time due to budgetary constraints. Other recourses, owners or volunteers will need to accomplish any needed maintenance of pathways.

Driveway maintenance is the responsibility of the property owners. Owners whose driveways are accessed from a paved road should be inspected by them and maintained to insure against damaging the pavement. To prevent damaging the pavement, it is recommended that the property owner provide a concrete or asphalt driveway approach extending a minimum of three feet from the pavement edge, matching the cross-slope of the roadway, and a minimum of twelve feet wide. This is a minimum recommendation for existing driveways and does not meet the county standard. The county standard driveway approach will be required with any new construction or improvement.

PLANNED IMPROVEMENTS:

Limited funds are available for road improvements and maintenance. The primary objective is to provide for a safe and sustainable road surface for a network of roads that benefits residents by reducing the distance and time traveled on unimproved roads. A secondary objective is to reduce the time and expense of maintaining CRR roads. Available funds will be utilized in a balance between maintenance, improvements by graveling native surfaced roads, and improvements of roads to a hard surface.

The second objective is to separate motorized vehicle traffic from pedestrians and equestrians.

Factors in determining road improvements and maintenance are:

1. Safety,
2. Designated traffic routes/emergency routes,
3. Driveway density and density at build-out,
4. Road grade/slope, and
5. Maintenance cost and/or savings.

The Association budgets funds annually for road maintenance. This includes purchasing material for improving roads and the cost of operating and maintaining the Association Road Maintenance Department. The Association improves roads to the Local Road standard listed in the Standard Road Section. The goal of the Association is to improve as many miles of roads as possible each year to this standard.

In 2006, the District applied for and received funds from a program called "flex lease". This program allows for funding from borrowed moneys to complete some paving projects sooner than they could with just their normal income. The majority of the tax income for the next 10 years will be used to repay this loan.

Projects that are unscheduled, but are prioritized for future improvement, as available funds and scheduling permits.

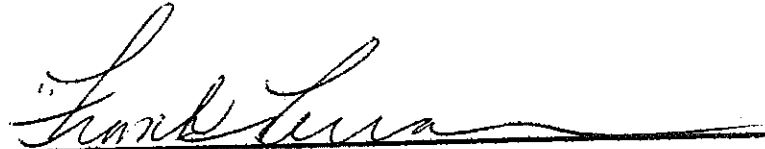
1. Rainbow Dr. from Quail Rd. to Bullhead Rd (Being graveled by Association in 2009)
2. Bullhead Rd. from Rainbow Dr. to Badger Rd (Being graveled by Association in 2009).
3. Badger Rd. hill modifications.(Needs feasibility report and preliminary design study)
4. Pave Dove Rd. from River Rd. to the end of the pavement at the BLM boundary.
5. Gravel Dove Rd. from the top of hill to Parkey Dr. (By Association)

Property owners may have the road adjacent to their property improved with a hard surface through a Local Improvement District (LID) process. The property owners along a road agree to pay for the improvement and petition the County to have the work accomplished. Property owners who want to proceed in having their road improved and are willing to pay for it should contact the Association administration office for information. The road to be improved must connect to an existing hard surfaced road. The District and the Association may participate in the cost of the improvement depending on resources and funding.

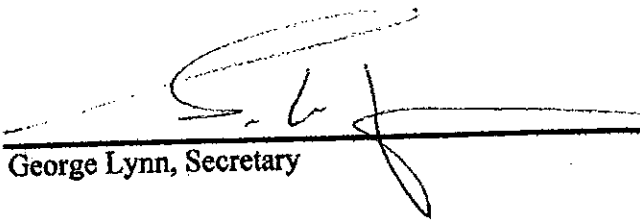
Adopted:

Crooked River Ranch Club and Maintenance Association

On the 2nd day of December 2009



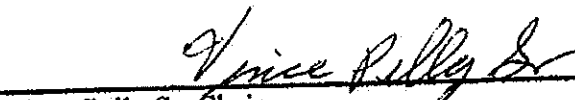
Frank Ferraro, President



George Lynn, Secretary

Crooked River Ranch Special Road District

On the 2nd day of December 2009



Vince Pelly Sr, Chair



John Williams, Secretary

Amended:

Crooked River Ranch Club and Maintenance Association

On the 21st day of January, 2013



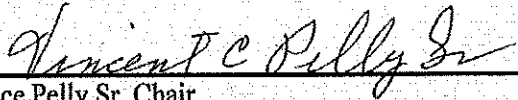
Ben Johnson, President



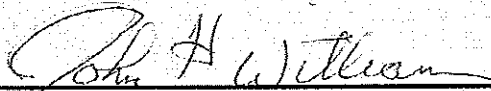
Paula Bartolomei, Secretary

Crooked River Ranch Special Road District

On the 21st day of January, 2013



Vince Pelly Sr, Chair



John Williams, Secretary

Attachment A

To: CRRC&MA Board of directors
From: John Williams, Secretary of the CRR Special Road District
Date: December 29th, 2012
Subject: SRD Culvert Reimbursement for Road Improvements

History:

In 2008, the Special Road District began reimbursing land owners for reimbursement of a 20 foot long culvert when road improvements approved by the SRD required them. The land owner paid for the cost of the culvert to the CRRC&MA, and the Road Department installed them. A bill was then submitted to the SRD for reimbursement of the cost of a 20 foot culvert. If the land owner wanted a culvert longer than 20 feet, or more than one driveway, the land owner was responsible for the additional cost. This has been a budget item of a \$5,000.00 per year maximum as line item 13 for culvert reimbursement since the 2009-2010 budget.

At the November SRD meeting, the subject of reimbursement directly to the CRRC&MA was brought up and a proposal made that the SRD be billed directly for the 20 feet of culvert, rather than owner pay it and wait for approval and reimbursement. This proposal was made to prevent an unnecessary hardship for the land owner while waiting for their reimbursement. This proposal was made as a first read so that public comment could be made.

With no negative input, at the December SRD meeting, a vote was passed unanimously by the SRD Directors that the SRD will be billed directly by the CRRC&MA for 20 feet of culvert when a new culvert is required for a road improvement project approved by the SRD. The SRD will then reimburse the CRRC&MA for the cost of the 20 feet of culvert. We feel that this will streamline the process and limit some of the administrative burden.

Attachment B

**DRAFT FOR REVIEW AND APPROVAL BY BOARD AT
BOD MEETING ON JANUARY 21, 2013**

**Crooked River Ranch Club and Maintenance Association
Board of Directors
Work Session Meeting – January 7th, 2013**

CALL TO ORDER: President Johnson called the meeting to order at 10:00 am and led in the Pledge of Allegiance.

Roll Called:

Ben Johnson (Pres.)	x	Herb Parker (Treas.)		Vene Dunham	x
Kit Henderson (VP)	x	Michelle DeSapio	x	Jim Dille	x
Paula Bartolomei (Sec.)	x	George "Mitch" Poppert	x	Jim Martin	x

WORK SESSION ITEMS:

- b. SRD approved changes – Director Dunham explained the process for payment of culverts installed on properties was at times negatively impacting our property owners. Currently, the CRR Road Department installs the culvert, bills the property owner who then must pay the Ranch. They then must submit the receipt to the SRD for reimbursement. To simplify the process and lessen the strain on our members, the policy was changed to allow for direct billing from the CRR Road Department to the SRD, eliminating the member involvement. Director Dunham motioned to approve the modification which states that the SRD will be billed directly by the CRRC&MA for 20 feet of culvert when a new culvert is required for a road improvement project approved by the SRD. The motion was seconded by Director Martin, and approved unanimously.

Amended:

Crooked River Ranch Club and Maintenance Association

On the 21ST day of January, 2013



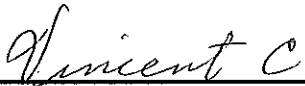
Ben Johnson, President



Paula Bartolomei, Secretary

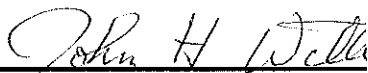
Crooked River Ranch Special Road District

On the 21ST day of Janu



Vince Pelly Sr, Chair

original



John Williams, Secretary