

# **Inventory of Current Conditions and Land Uses**

## **Red Rock Road, Douglas County**



**Prepared cooperatively by:**

**Oregon Department of Environmental Quality  
and  
The Weyerhaeuser Company**

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# Introduction

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In December 2007, the Oregon Department of Environmental Quality (DEQ) and Weyerhaeuser Company (Weyerhaeuser), and their respective consultants, performed a field inventory along the 17-mile stretch of the former railroad grade known as Red Rock Road (RRR). The purpose of the inventory was to gain an understanding of current potential for direct human contact with exposed mine tailings that may be accessible on RRR. This report documents the approach, rationale, and procedures used by DEQ and Weyerhaeuser in completing the inventory, and presents their conclusions. This report is a public document intended for distribution to Sutherlin Valley residents who may be interested in the work performed by DEQ and Weyerhaeuser.

The main objectives of the inventory were:

- To identify ownership, including contact information, for properties that include or are next to RRR
- For each property, determine the location of RRR relative to features such as site boundaries, structures, gardens and play areas
- To determine current uses of RRR on each property (for example, driveway, pasture, park land, recreational path, etc.)
- To assess the physical condition of RRR (for example, presence of visible red soil indicative of mine tailings; presence of gravel cover, vegetation, or pavement)
- To collect digital photographs of each property showing the condition of RRR and its proximity to important features

DEQ completed the inventory for the western 10 miles of RRR (Part A) and Weyerhaeuser completed the inventory for the eastern 7 miles of RRR (Part B). DEQ and Weyerhaeuser identified 12 properties where existing land uses and the presence of accessible RRR material indicate that there is potential for contact with exposed mine tailings. DEQ will use the information gathered from this inventory to determine what segments of Red Rock Road need sampling to evaluate potential human health risk that may be posed to nearby residents. If DEQ determines there is a potential risk, then interim cleanup actions will be taken where necessary on the affected properties.

# Background

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RRR is a 17-mile-long abandoned railroad grade that originates in the City of Sutherlin and extends east past the community of Nonpareil in Douglas County, Oregon (Figure 1). Stretches of the road still surface across numerous properties in some areas where the road was constructed.

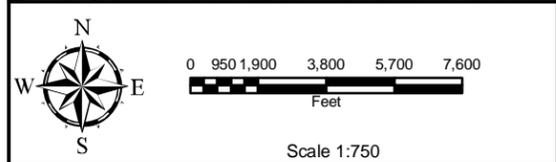
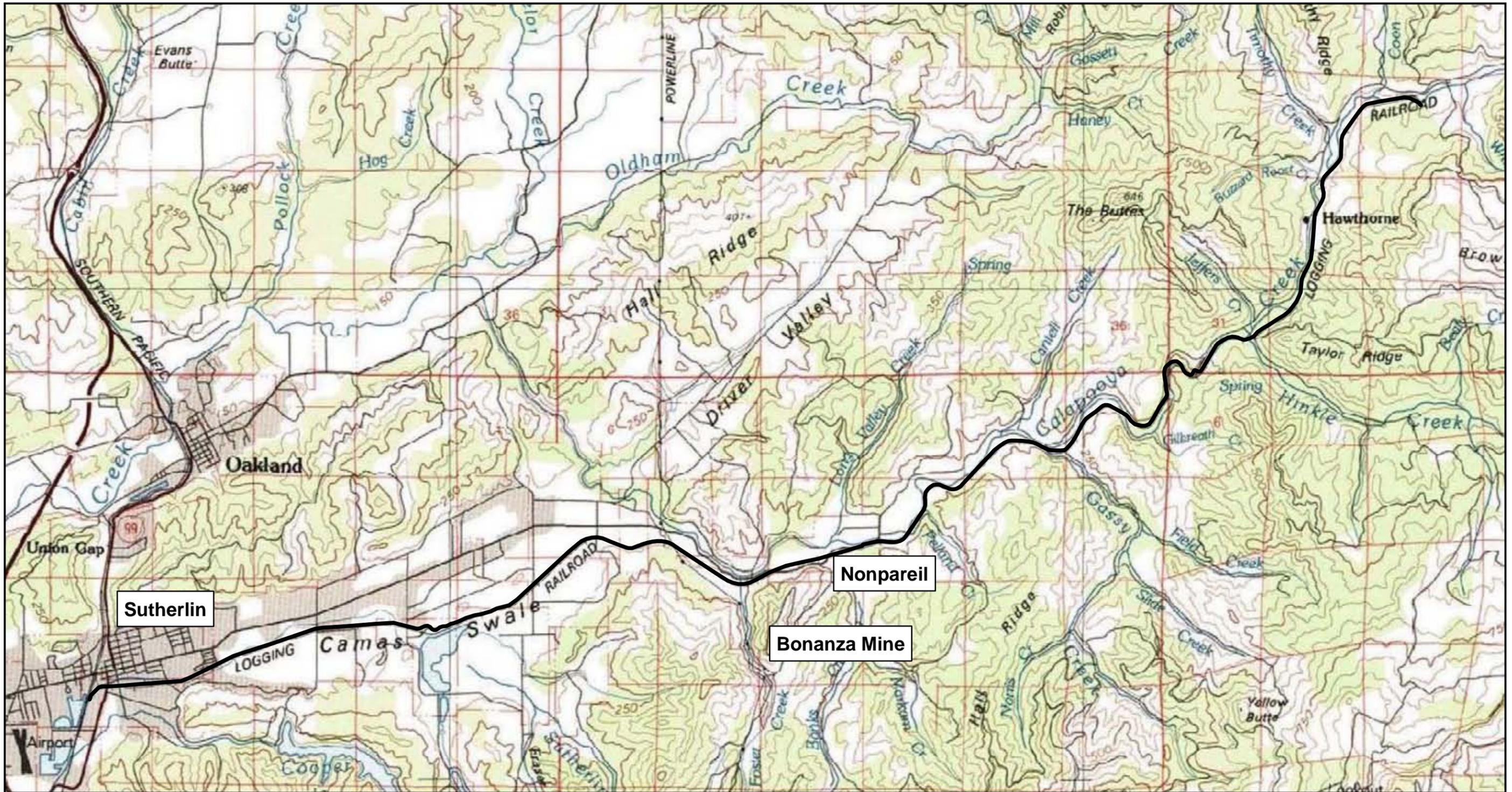
The western 10 miles of RRR were constructed in the early 1900s by the Roach Timber Company, which used arsenic-rich mine tailings from the abandoned Bonanza Mercury Mine near Nonpareil to construct the railroad grade. The mine tailings, which appear red in color, were also used as fill material in many areas around Sutherlin during this period. In 1949, Weyerhaeuser purchased various real estate assets from the Roach Timber Company and constructed the eastern 7 miles of the railroad grade using mine tailings. After decommissioning the railroad in 1966 and removing rails and ties from the tracks, Weyerhaeuser began selling some segments of the alignment to adjacent private and public property owners.

The remnants of the 17 miles of railroad grade are currently surrounded by businesses, residences, farmland and undeveloped forest. Uses of RRR include driveways for access to residences, recreational paths, city rights-of-way, access through farmland, and forest roads. Most of RRR is covered in a thin layer of moss and grass with mine tailings visible in some areas. A few portions of RRR are overgrown with vegetation, submerged, or have been removed entirely and are barely recognizable as a railroad grade.

After initial studies of RRR by DEQ and the U.S. Environmental Protection Agency in the 1990s, Weyerhaeuser voluntarily initiated an environmental investigation of RRR in 2000 with DEQ oversight. The investigation included an initial evaluation of the risks posed to human health and the environment by heavy metals occurring in the mine tailings that were used to construct RRR. Based on the results, Weyerhaeuser evaluated cleanup alternatives that could reduce potential risks from direct contact (such as installing fencing or signs, or installing a vegetative cover or gravel cover), and identified site-specific actions for each of Weyerhaeuser's RRR properties. In October 2006, the Oregon Public Health Division's Environmental Health Assessment Program (EHAP), formerly known as the SHINE Program, independently performed a Public Health Assessment for RRR (OHS, 2006). EHAP's report concluded that exposure to arsenic from residential use of RRR could exceed acceptable levels at some locations along RRR, triggering DEQ to raise its priority for possible site action.

In 2006, DEQ decided and Weyerhaeuser agreed to further evaluate the current conditions of RRR and evaluate the land use of properties on and immediately adjacent to the entire 17-mile stretch of RRR. The results would be used subsequently to evaluate the current potential for direct human contact with mine

tailings that may be accessible on Red Rock Road, and to prioritize areas for further action. DEQ and its contractor, Ecology & Environment, would evaluate the 10 western miles of RRR (Figure 2, Part A). With oversight from DEQ, Weyerhaeuser agreed to evaluate the 7 eastern miles of Red Rock Road (Figure 2, Part B) with its contractor, CH2M HILL.



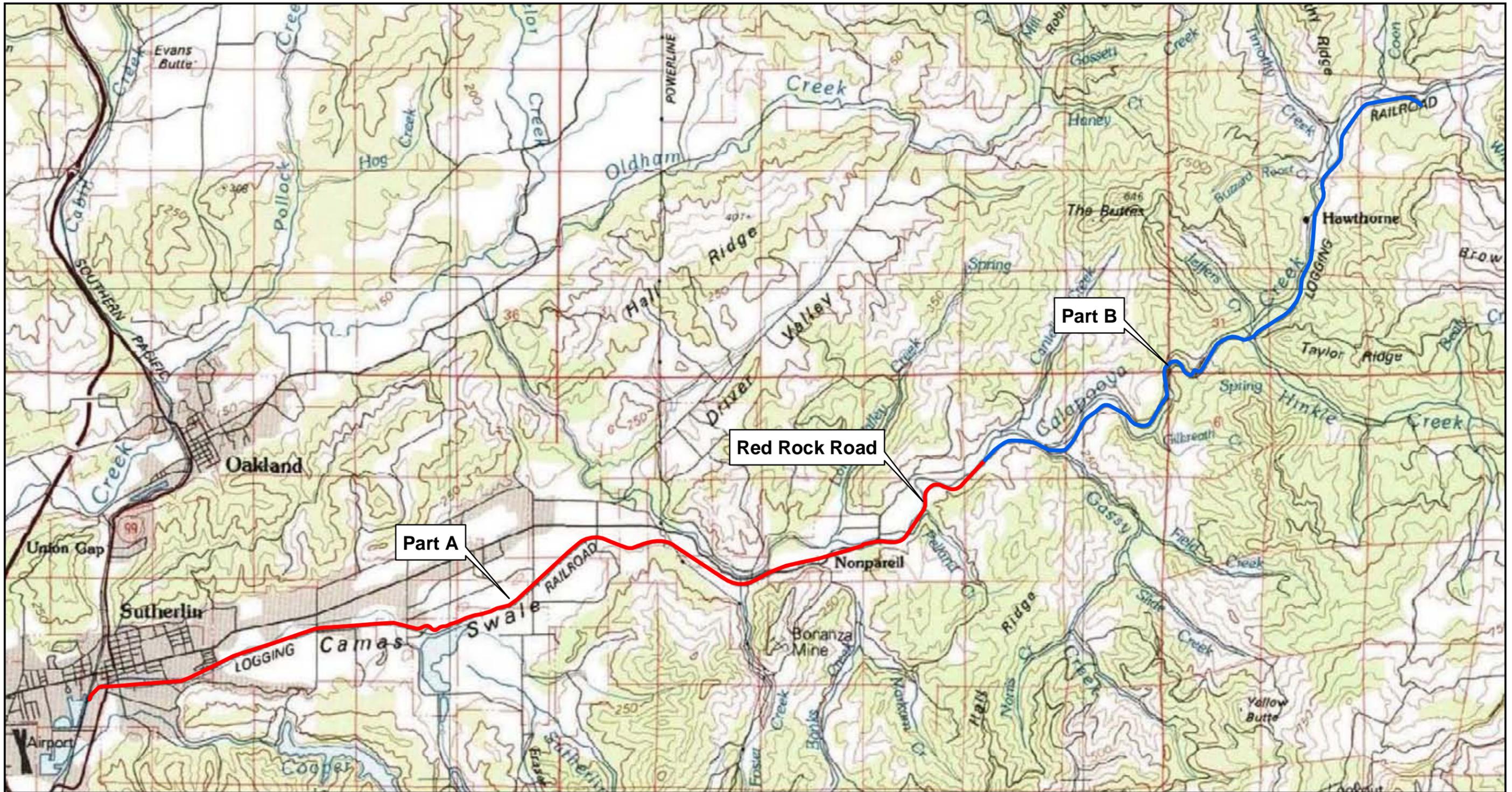
**RED ROCK ROAD  
INVENTORY OF ROAD CONDITIONS  
AND CURRENT LAND USE**

**Douglas County, Oregon**

Figure 1  
**SUTHERLIN VALLEY**

Map Source Information: USGS 24K Topo Quads Sutherlin, Nonpareil, Hinkle Creek	
Date: 5/22/2008	GIS Analyst: pdg
Project ID: Figure1_Sutherlin_Valley.mxd	

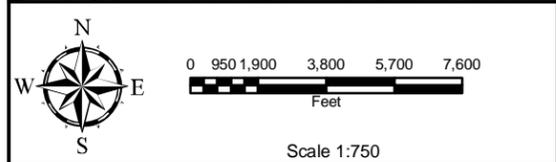




Red Rock Road

Part A

Part B



**RED ROCK ROAD  
INVENTORY OF ROAD CONDITIONS  
AND CURRENT LAND USE**

Douglas County, Oregon

Figure 2  
**RED ROCK ROAD**

Map Source Information: DEQ (Part A), Weyerhaeuser Company (Part B)	
Date: 5/22/2008	GIS Analyst: pdg
Project ID: Figure2_Red_Rock_Rd.mxd	



# Methods

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DEQ and Weyerhaeuser separately directed their contractors to take the following steps to complete the inventory for Parts A and B of RRR, respectively:

## **1. Identify Property Ownership**

The names and contact information for owners of each property intersected by RRR were identified. This work included reviewing aerial photographs, county maps, and county assessor records, and identifying tax lots within 100 feet of RRR. Much of this information was available from the Douglas County Tax Assessment office.

## **2. Inform Property Owners**

Letters were sent to inform property owners of the inventory, provide notice that their property was being evaluated, and request permission for access to their property. The letters were followed up with phone calls to property owners and visits were scheduled for the week of December 10 – 14, 2007.

## **3. Develop Field Checklist**

A field checklist was developed for the inventory to standardize collection of data relevant to how people may be coming into contact with the RRR mine tailings. The checklist included the following items:

- Owner information (for example, name, address, township)
- Digital photographs of each property showing the condition of RRR and its proximity to important features on each property
- A sketch of each property and the location of RRR relative to features such as site boundaries, structures, gardens, play areas, and topography
- Observed land use information on or adjacent to RRR (for example, residence, driveway, pasture, park land, etc.)
- RRR cover material (for example, red soil, gravel, pavement/concrete, vegetation/type, no cover, buildings/structures)
- Estimated area of red-colored soil visible on RRR and adjacent areas
- Access information (for example, private versus public property, physical accessibility to RRR, presence of fencing and gates)

## **4. Field Work and Documentation**

DEQ and Weyerhaeuser directed their contractors to perform the field work during the week of December 10 – 14, 2007. Field personnel drove to known access points along RRR and, subject to property owner permission, walked accessible portions of RRR to collect the data. At each property that contained a portion of RRR, a field inventory sheet was filled out, representative photographs were taken, Global Positioning System (GPS) locations were recorded at entry points onto RRR and at

suspected tailings exposure locations, and a detailed sketch of RRR was superimposed onto aerial photographs or maps.

## **5. Results Evaluation**

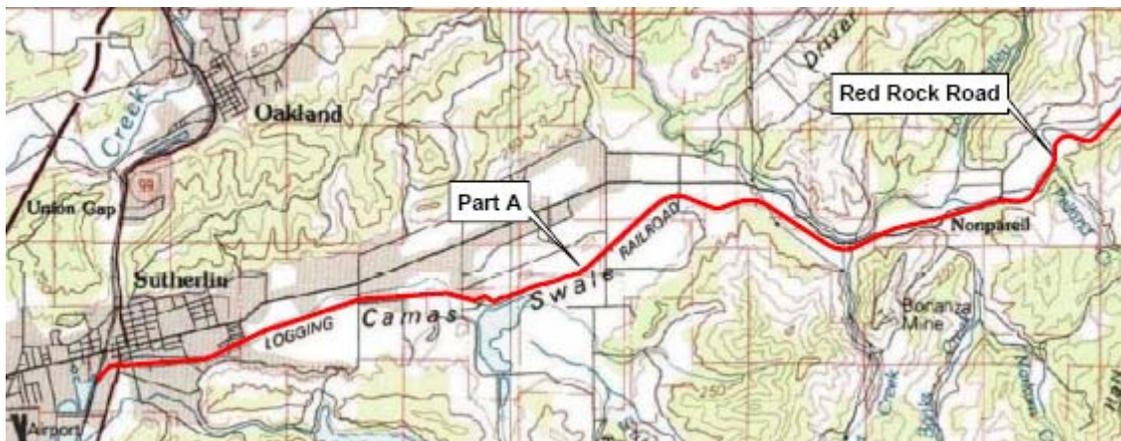
After completing the field work, the inventory results were evaluated to identify which of the inventoried properties had a likelihood of direct human contact with the mine tailings comprising RRR. Each property was evaluated on the basis of several factors, including current land uses on and next to RRR, extent of exposed mine tailings, human access to exposed tailings, and proximity of people to exposed tailings.

The specific properties identified in this manner are discussed in detail in either Part A (first 10 miles) or Part B (last 7 miles) of this report, depending on where the properties are located in relation to the two sections of RRR evaluated by DEQ and Weyerhaeuser.

# Results – Part A

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## Western 10 Miles of Red Rock Road Inventoried by Oregon DEQ



The following section describes the results of the inventory of current road conditions and land uses along and adjacent to the western 10 miles of RRR identified as Part A (Figure 3). Details are included for the properties observed to have the greatest likelihood of direct contact by owners, occupants, and/or nearby residents to exposed tailings in RRR. These properties are distinguished on Figure 3 by a six-character code that is used by the Douglas County Tax Assessor for property identification. Inventory results are summarized in Table 1.

### **Current Conditions of Red Rock Road**

Current conditions along the western 10 miles of RRR range from being remote, heavily vegetated, and inaccessible, to uncovered tailings exposed in a residential backyard. Beginning at the western end of RRR in Sutherlin, the first mile of the road is beneath industrial or residential properties where the typical covers are pavement, structures, or grass. Where there is no exposure of the tailings, there is no increased risk. There is no evidence of RRR under the residential properties along Azalea Court. Red Rock Road then becomes a City of Sutherlin right-of-way and continues east through residential neighborhoods, school property, and a park. In these areas, RRR is typically covered with grass and has localized tailings exposed in more traveled areas. Many of the residents' backyards abut RRR.

The second mile of RRR begins as a City of Sutherlin right-of-way and continues through residential neighborhoods where backyards end at RRR. Red Rock Road through these areas is covered with grass and has small tailings exposures. Red Rock Road becomes privately owned and continues into residential/agricultural properties where it is used as an access road for farming. The third mile of RRR is used for farming access to residential/agricultural properties, and as a gravel-covered driveway (Red Road) for residential properties. Red Road is a gravel-covered road with tailings exposed in potholes. Most of the fourth mile of RRR follows the north bank of the Plat I Reservoir. Red Rock Road has been removed west of the dam, but it is visible from the park boat ramp, along the bank, and extending east into Plat I Reservoir. Through Plat I Reservoir, tailings are exposed along RRR. From the fourth through the sixth mile, RRR is privately owned and continues through agricultural/residential properties. Through these areas, RRR is typically grass-covered and is used for farm vehicle access.

RRR is used for residential access at parcels R36739 and R36747. Beginning just past the sixth mile at West Avenue, RRR is aligned directly adjacent to a residential neighborhood. However, this part of RRR is heavily vegetated and not easily accessible.

Past the residential neighborhood RRR continues into residential or agricultural properties, where it is mostly used for farming access. This continues until RRR crosses Nonpareil Road, about halfway past the seventh mile. For the next half-mile, RRR continues through residential properties, where the condition of RRR is highly

variable, depending on how the property owner uses RRR. In some cases, homes are constructed directly on RRR.

The last section of RRR, from miles 8 through 10, continues mostly through residential and agricultural properties. The condition of RRR through this area ranges from having a vegetative cover with two uncovered tracks made by farm vehicles, to having no cover and exposed tailings. Property M93347 uses an exposed section of RRR as their driveway.

### **Properties with the Highest Potential for Direct Contact with Tailings**

The following 10 properties have been identified as having the highest potential for direct contact by owners, occupants, and/or nearby residents to exposed tailings (see Figure 3).

#### **Property #1. Parcels R36739 and R36747**

Parcels R36739 and R36747 (Figure 4) are west of Plat B Road. Red Rock Road extends from the southwest to the northeast on the southern property boundary. Two structures are located on this property, including 1) a barn in the southwestern corner, directly on top of RRR, and 2) a residence approximately 300 feet to the northeast and directly adjacent to RRR.

Red Rock Road is used as the driveway to the residence and barn. It is covered with packed gravel, and tailings can be seen in potholes. Some reworking of the original RRR alignment appears to have occurred near the barn. Children's toys can be seen along RRR near the barn. To the north of parcels R36739 and R36747 is property R124713, where a children's play area is less than 100 feet from RRR.

#### **Property #2. Parcel R17504**

Parcel R17504 is south of Nonpareil Road 8.5 miles east of Sutherlin (Figure 5). Red Rock Road extends along the northern edge of the property from west to northeast paralleling Calapooya Creek. The property is used for cattle grazing and for access by the City of Sutherlin to a dam on Calapooya Creek. The only structures on the property are a barn and corral.

Red Rock Road is used as a driveway to access the residence to the south. A 0.25-mile-long section of RRR is uncovered and tailings are visible for its entire length. Sections of RRR are also covered with gravel, but tailings are visible in potholes.

#### **Property #3. Parcel M91364**

Parcel M91364 is 3.5 miles east of Sutherlin (Figure 6) where RRR extends from west to east along the northern shore of Plat I Reservoir. The dam that forms this reservoir is adjacent to the western side of this property. In conjunction with the reservoir, this property is managed by the Sutherlin Water Control District. A 5-acre public park is located on the northern shore of this reservoir, directly adjacent to RRR.

Beginning from the western side of the property, RRR has been removed where the driveway to Plat I Reservoir Park is located. No tailings were observed on the gravel driveway or in the grass surrounding RRR. Red Rock Road is first seen at the boat ramp for the Plat I Reservoir, where it is located under the dam. Red Rock Road then extends along the reservoir bank adjacent to the park. Tailings can be seen in the bank and are exposed during low-water conditions. In the adjacent grassy picnic area, tailings can be found in some of the gopher mounds. The reservoir bank and gopher mounds are close to a nearby children's playground at the park. Red Rock Road then continues east into the reservoir where it is exposed and easily accessible during periods of low water levels in the reservoir, typically occurring in the winter months. Red Rock Road intersects the northern shore of Plat I Reservoir, where tailings can be seen eroding into the water. On the eastern end of the property, RRR becomes covered with vegetation and is exposed along a hiking trail.

**Property #4. Parcels R37979 and R38027**

The property (parcels R37979 and R38027) located east of Southside Road (Figure 7) is known as Red Road where the RRR alignment is used regularly for access to nearby residential and agricultural properties. It is covered by a densely packed layer of gravel, with tailings exposed in numerous potholes. Red Road eventually turns south and becomes Hosanna Road. At that point, the RRR alignment continues east to a locked gate, where tailings are exposed. Past the gate, RRR appears to be used for farm equipment access.

**Property #5. Parcel R36219**

This property (Parcel R36219) is approximately 6 miles east of Sutherlin on Nonpareil Road (Figure 8). The parcel is about 6 acres in size and includes a single-family residence with a large outbuilding. Red Rock Road parallels the southern boundary of the property for about 550 feet, in an east-west direction. The condition of RRR on this parcel varies from heavily vegetated with blackberries and Scotch broom on the southwestern portion of the parcel, to patchy lawn/grass on the southeastern portion of the parcel. There is an archery range about 15 feet north of RRR in the center of the southern boundary of the parcel. Tailings are visible in portions of the lawn where grass is sparse.

**Property #6. Parcels R42979 and R40315**

This property (parcels R42979 and R40315) is located (Figure 9) near Southside Road. Tailings are exposed in the full length of the RRR alignment within two narrow parcels comprising this property. Red Rock Road is used to access the parcel to the north, which contains three large barns or storage structures, a garage, and a small shack. The land owners use RRR to access their shops, barns, possibly their home, and several large agricultural fields lying directly adjacent to RRR. Access to RRR from Southside Road is gated, and it appears to be used frequently for vehicular travel.

**Property #7. Parcel R16904/M86313**

This property (Parcel R16904) is about 300 feet south of Nonpareil Road on Bonanza Mine Road (Figure 10). The property has a house, a large garage, and a barn. Access to RRR is gated on this property, with a fence on the eastern side connecting to Bonanza Mine Road.

Tailings are exposed along the full length of RRR across this property, with only limited vegetation cover. A creek runs directly adjacent to (or within) the western boundary of the property and across exposed tailings along RRR. Erosion from high-flow events has caused major changes to the RRR crossing. Exposed tailings from RRR are visible and are currently being eroded by the creek on the western edge of the property.

**Property #8. Parcel R40635**

This property (Parcel R40635) is directly behind a mobile home park (Figure 11) about one-half mile east of Sutherlin. It is primarily used by local residents for walking and recreation. A creek runs adjacent to the parcel on the southern side and multiple mobile home units are on the northern side.

Several large areas of tailings are exposed on RRR in this property. Some of these exposed areas are used for footpaths and bird feeding areas. On the creek side of the property, erosion appears to be causing tailings to be exposed. Little or no fencing occurs between the mobile home park and the right-of-way, leading to a high level of access to the exposed areas.

**Property #9. Parcel R57038**

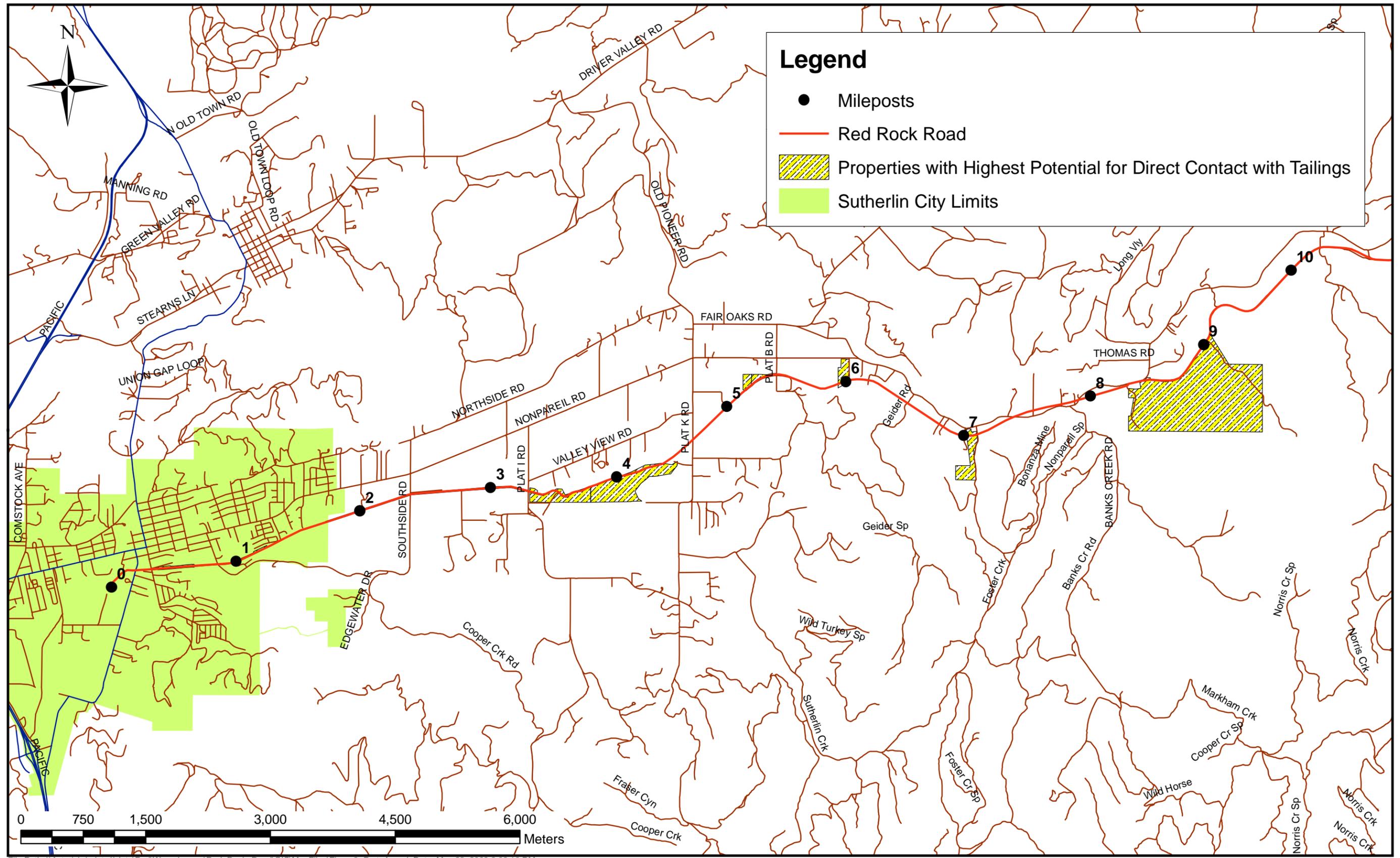
This property (Parcel R57038) is near South State Street (Figure 12) in Sutherlin. The property is being used as a right-of-way, with a fenced and gated entrance on the western side and a cinder block barrier on the eastern side that blocks vehicular access. There are no structures on the parcel.

Tailings are exposed at several locations along RRR on this property. Other areas of RRR are covered by gravel and low vegetation. Several parcels adjacent to RRR have access to RRR by gates large enough for vehicles, and several footbridges cross a ditch that lies parallel to RRR. The majority of the adjacent parcels are single-family residences.

**Property #10. Parcel R40651**

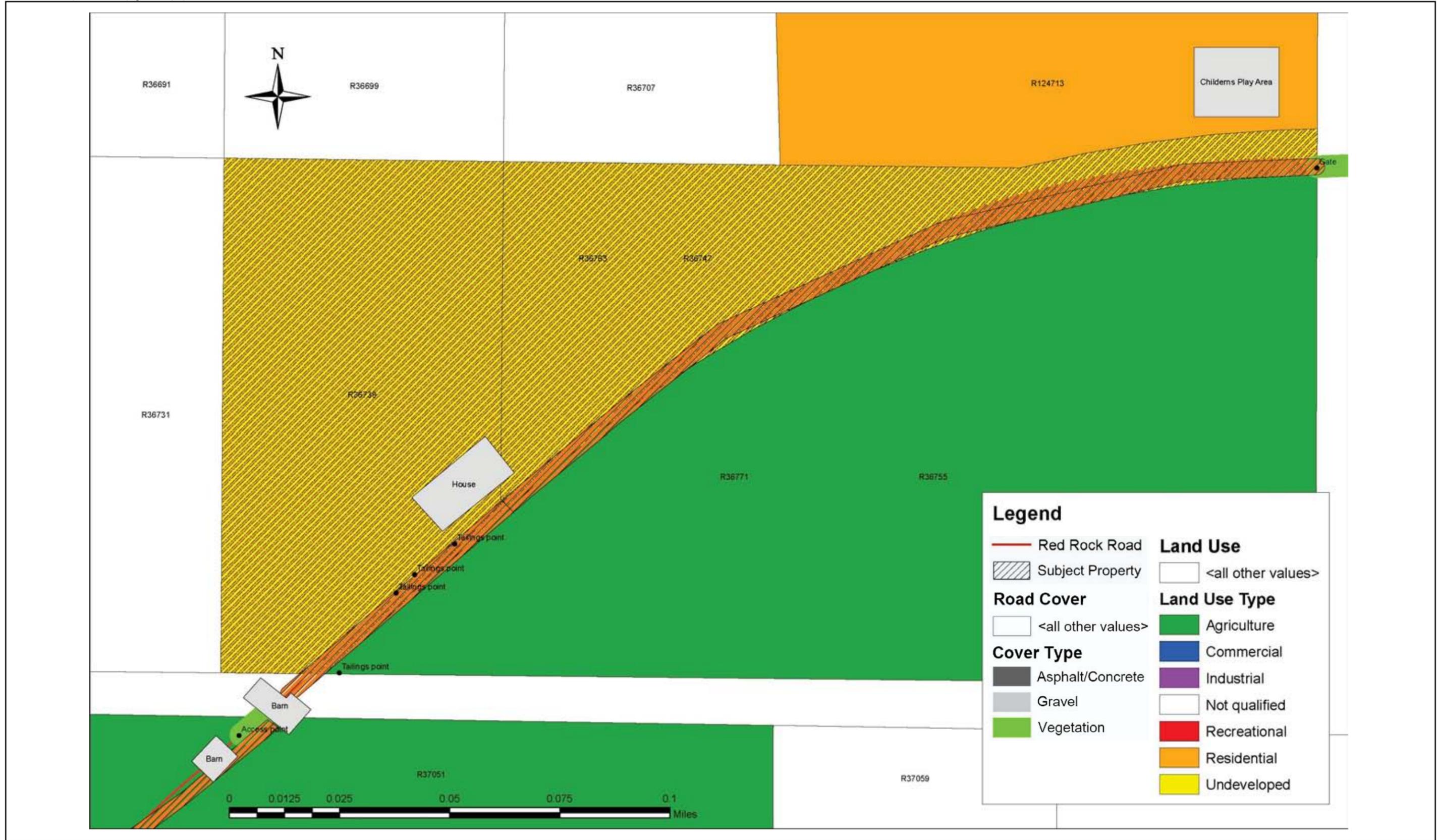
This property (Parcel R40651) is near the southern end of Sunny Lane (Figure 13). The property is bordered on the south by Sutherlin Creek and a mobile home complex, and by a residential area on the north. There are no structures on the property and it has limited fencing. Access to this property appears limited to pedestrians, although one land owner appears to use it for a parking area or turn-around area.

Tailings from RRR are exposed on this property in four areas: 1) a footpath, 2) two areas where Sutherlin Creek is eroding a bank cut into RRR, 3) an area where a feeding trough and bird feeders for local wildlife have been installed behind a mobile home, and 4) an area across a drainage ditch on the eastern side of the property. These areas are accessed by local residents. Most residential parcels to the north have direct access to this property and have footbridges and/or gates providing access to RRR. A few of the mobile home park residents have planted vegetables or decorative plants on the surface, or banks, of RRR.



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Figure 3  
Map of Part A  
Red Rock Road

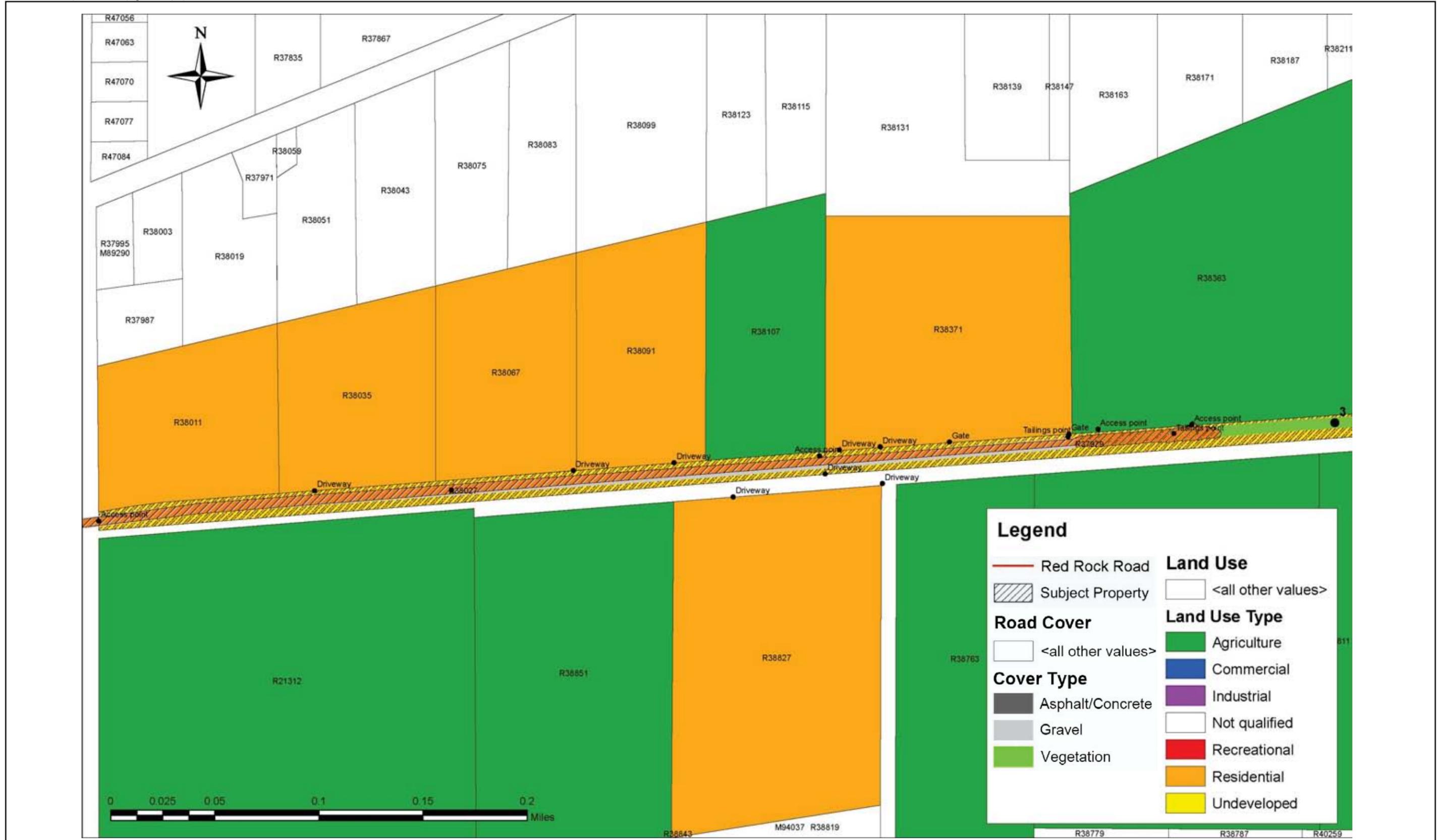


**Figure 4**  
**Map of Property #1**  
**Parcel R36736 and R36747**

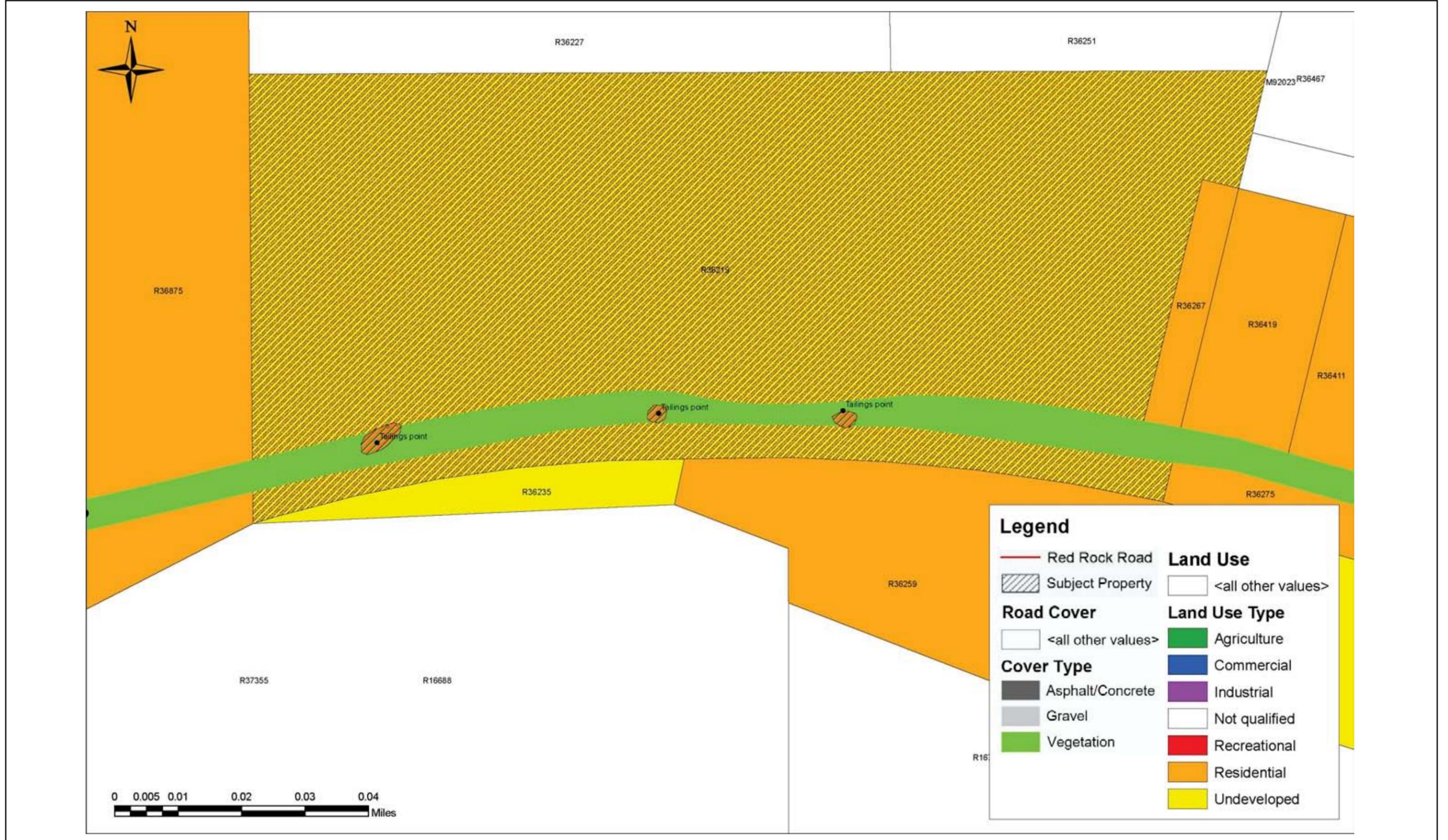


**Figure 5**  
**Map of Property #2**  
**Parcel R17504**





**Figure 7**  
**Map of Property #7**  
**Parcel R37979 and R38027**



**Figure 8**  
**Property #5**  
**Parcel R36219**

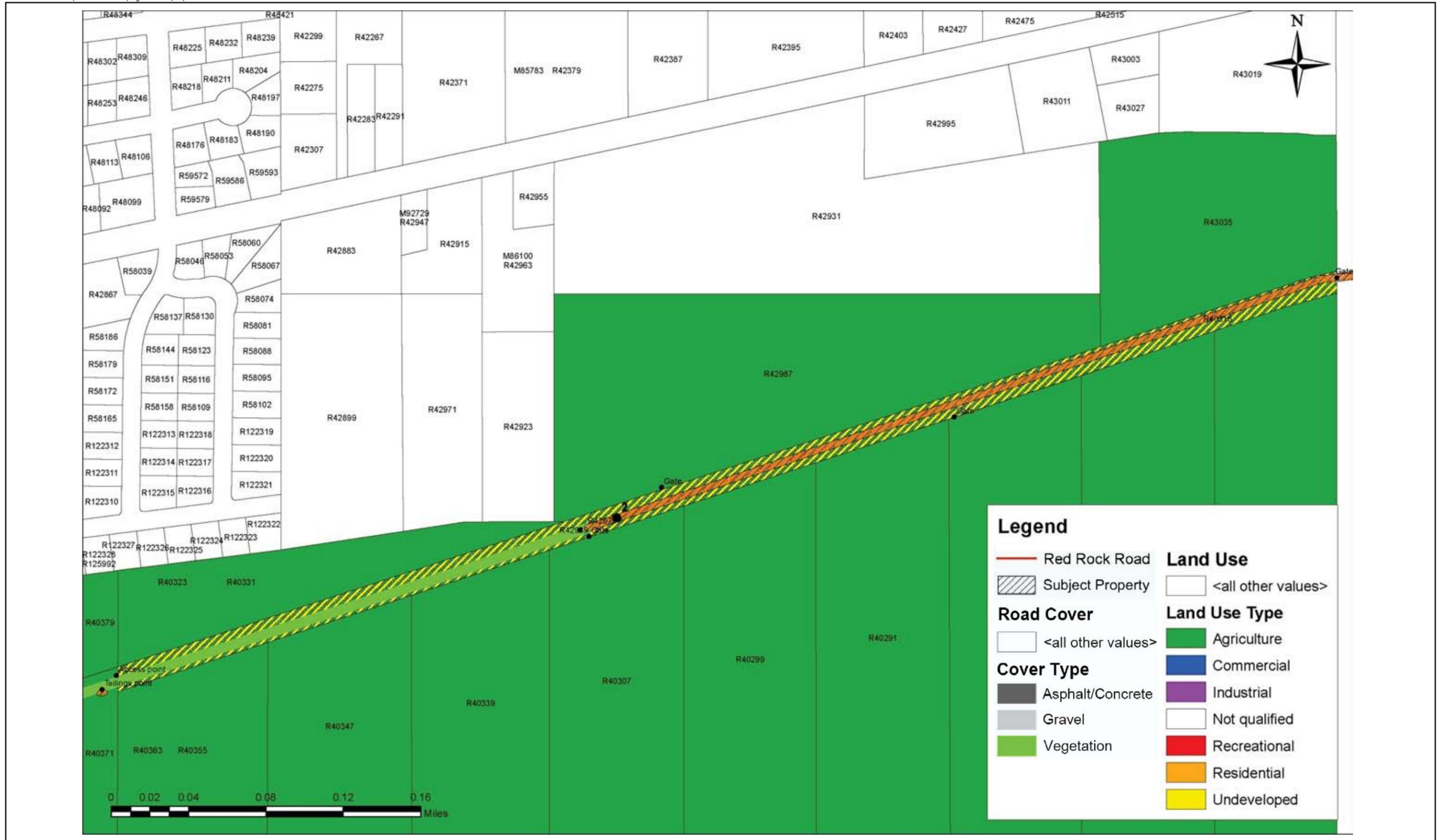
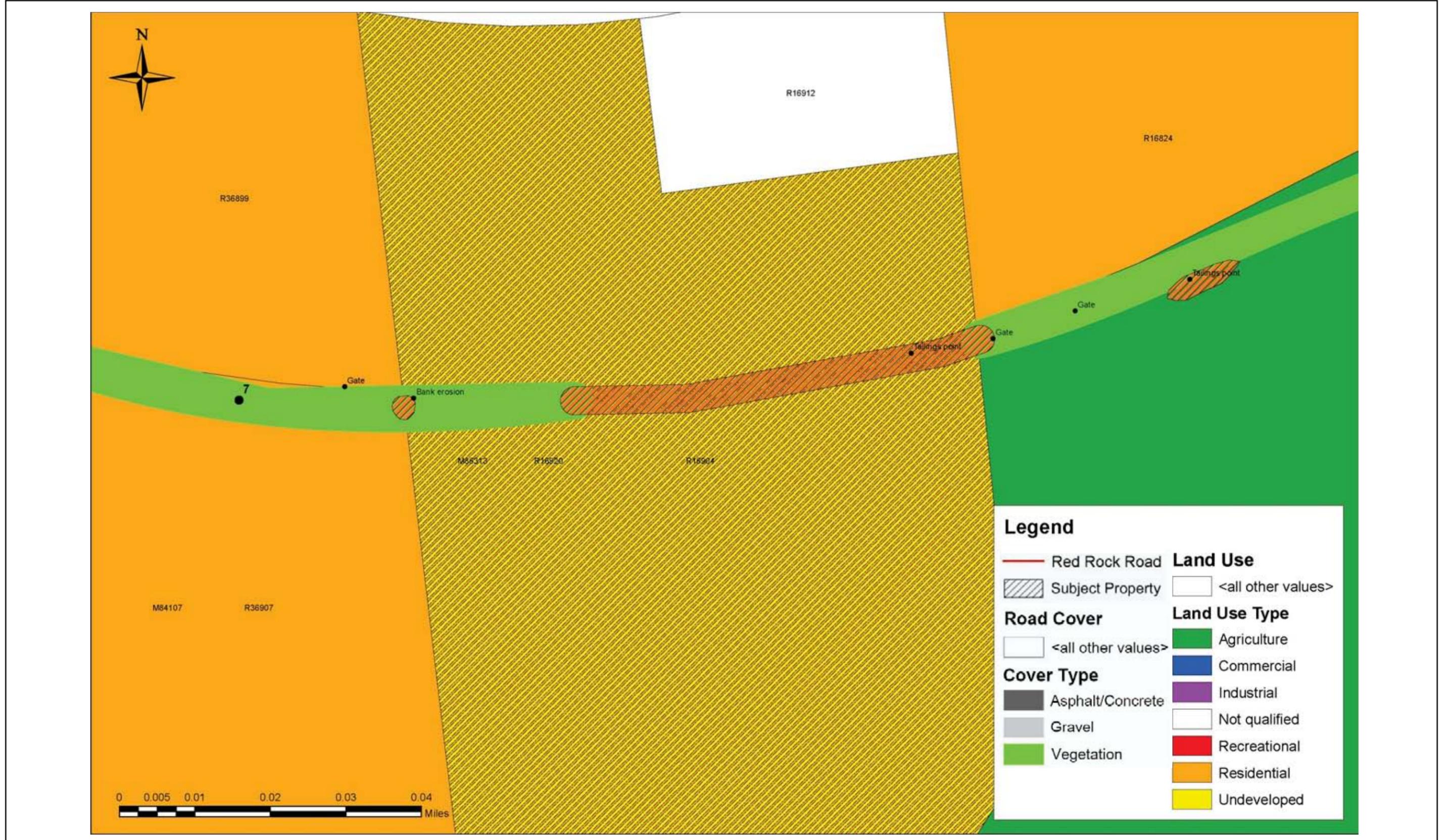
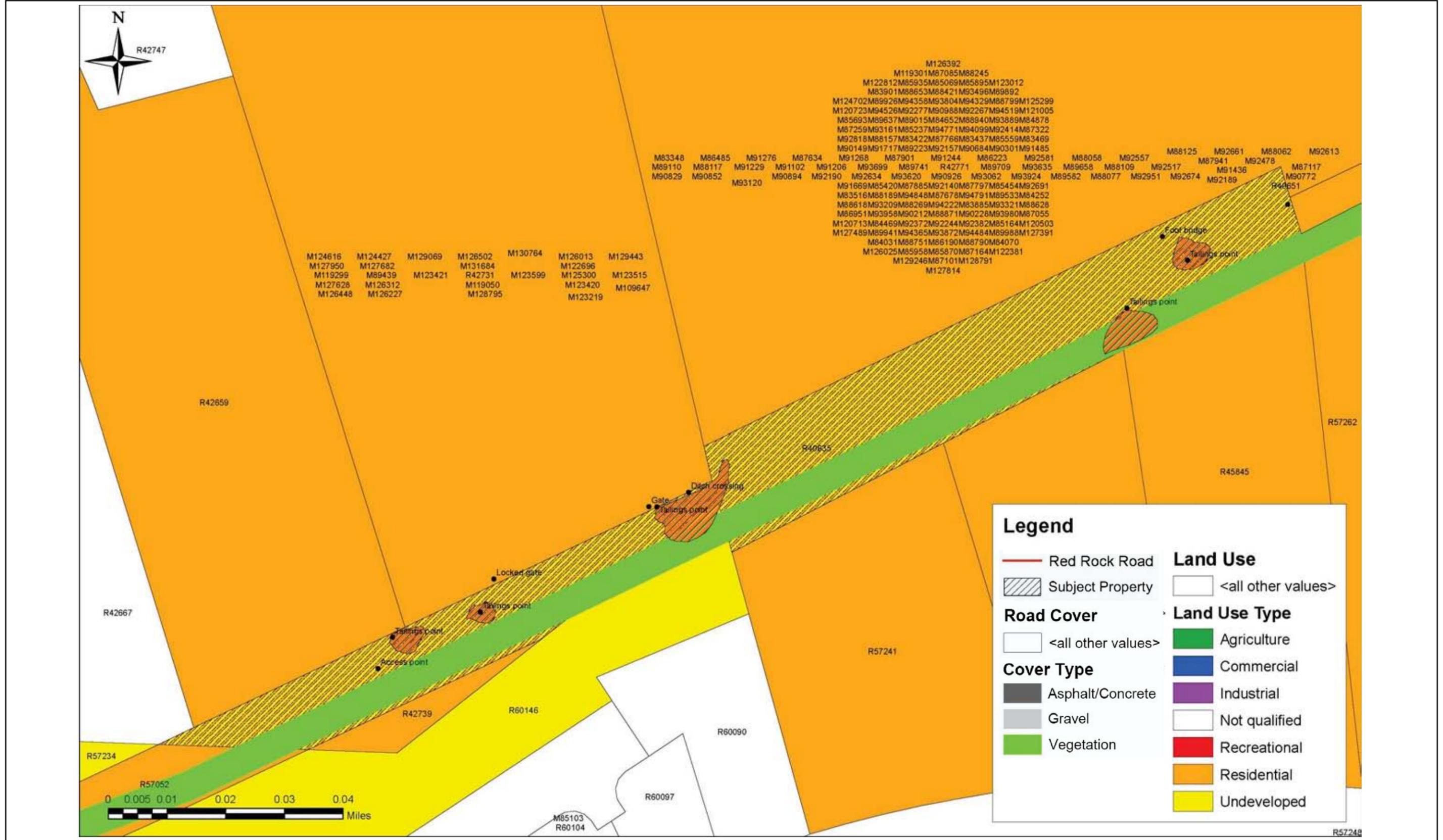


Figure 9  
Map of Property #6  
Parcel R42979 and R40315



**Figure 10**  
**Map of Property #7**  
**Parcel R16904 and M86313**



**Figure 11**  
**Map of Property #8**  
**Parcel R40635**



**Figure 12**  
**Map of Property #9**  
**Parcel R57038**

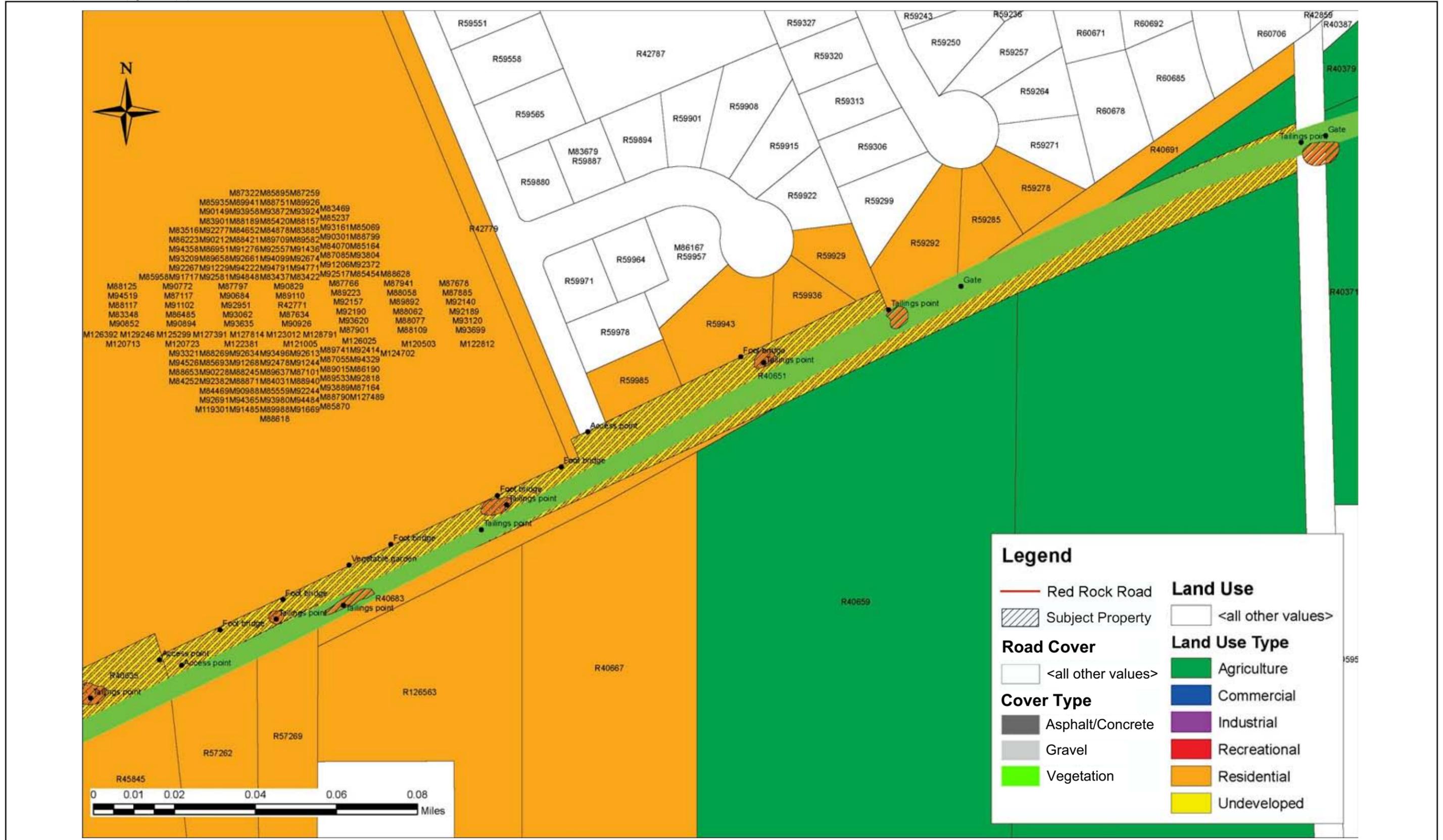


Figure 13  
Map of Property #10  
Parcel R40651

**Table 1: Red Rock Road Field Inventory Results - Part A**

Parcel Number	Survey Date	Land Use	Road Cover	Red Soil Observed	Accessibility to People	Likelihood of Human Contact	Comments
R36739 & R36747	12/12/2007	Residential	Gravel	Yes	Good	High	Used daily as driveway with tailings exposed along entire length of road.
R17504	12/12/2007	Residential	No Cover	Yes	Good	High	Used daily as driveway with tailings exposed along entire length of road.
M91364	12/11/2007	Residential	No Cover, Vegetation, Water	Yes	Good	High	Red soil along reservoir beach and in gopher mounds.
R37979 & R38027	12/10/2007	Residential	No Cover, Gravel	Yes	Good	High	Used daily as driveway with tailings exposed along entire length of road.
R36219	12/11/2007	Residential	Vegetation	Yes	Good	High	Tailings are easily accessible in back yard.
R42979 & R40315	12/12/2007	Agriculture	Vegetation	Yes	Good	High	Tailings are completely exposed, Heavy use.
R16904	12/13/2007	Residential	No Cover	Yes	Good	High	Tailings are completely exposed and easily accessible.
R40635	12/11/2007	Residential	No Cover, Vegetation	Yes	Good	High	Used daily to access residences.
R57038	12/11/2007	Residential	No Cover, Gravel, Vegetation	Yes	Good	High	City right-of-way accessible from residential properties.
R40651	12/10/2007	Residential	Vegetation	Yes	Good	Fair	City right-of-way accessible from residential properties.
R36923	12/12/2007	Residential	No Cover, Vegetation	Yes	Good	High	Driveway crosses Red Rock Road.
R17112	12/13/2007	Residential	No Cover, Vegetation	Yes	Good	High	Driveway crosses Red Rock Road.
R16984	12/13/2007	Residential	Vegetation	Yes	Good	High	Road goes through property, but is mostly covered in vegetation.
R16992	12/13/2007	Residential	Vegetation	Yes	Good	High	Road goes through property, but is mostly covered in vegetation.
R17008	12/13/2007	Residential	Vegetation	Yes	Good	High	Road goes through property, but is mostly covered in vegetation.
R58606	12/11/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.
R42771	12/10/2007	Residential	Vegetation	No	Good	High	Mobile home park has multiple access points to Red Rock Road
R38067	12/10/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.
R38035	12/10/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.
R38011	12/10/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.
R38091	12/10/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.
R38107	12/11/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.
R36259	12/11/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access. Driveway crosses Road.
R38827	12/10/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.
R40691	12/10/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.
R57045	12/11/2007	Residential	No Cover, Gravel	Yes	Good	Fair	City right-of-way accessible from residential properties
R36907	12/12/2007	Residential	No Cover, Vegetation	Yes	Good	Fair	Road goes through property, but is mostly covered in vegetation.
R17224	12/13/2007	Residential	Gravel, Vegetation	Yes	Good	Fair	Access is easy for residents, however not many exposed tailings.
R36859	12/12/2007	Residential	No Cover, Vegetation	Yes	Good	Fair	Road is accessible along entire length of property. Used by cattle and horses. Does not appear to have heavy human use.
R17016	12/13/2007	Residential	Vegetation	Yes	Good	Fair	Road has been removed/scoured near residence, well vegetated with several exposures.

**Table 1: Red Rock Road Field Inventory Results - Part A**

Parcel Number	Survey Date	Land Use	Road Cover	Red Soil Observed	Accessibility to People	Likelihood of Human Contact	Comments
R17128	12/13/2007	Residential	Vegetation	Yes	Good	Fair	Road has been removed/scoured near residence, well vegetated with several exposures.
R17144	12/13/2007	Residential	Vegetation	Yes	Good	Fair	Road has been removed/scoured near residence, well vegetated with several exposures.
R16864	12/12/2007	Residential	Vegetation	Yes	Good	Fair	Access is easy for residents, however not many exposed tailings.
R17472	12/12/2007	Residential	Gravel	No	Good	Fair	Easy access , but only contact would be from pile of tailings near dam.
R17032	12/13/2007	Residential	N/A	No	Good	Fair	Road is adjacent to property with driveway crossing Road.
R36795	12/12/2007	Residential	No Cover	Yes	Good	Fair	Access is easy for residents, however not many exposed tailings.
R36803	12/12/2007	Residential	No Cover	Yes	Good	Fair	Access is easy for residents, however not many exposed tailings.
R36827	12/12/2007	Residential	No Cover, Vegetation	Yes	Good	Fair	Access is easy for residents, however not many exposed tailings.
R17192	12/13/2007	Residential	No Cover, Gravel, Vegetation	Yes	Good	Low	Access is good because road is not gated, but residents say that the road is not used.
R39403	12/11/2007	Residential	No Cover, Vegetation	Yes	Good	Low	Only exposed on cut bank, not on road.
R58298	12/11/2007	Residential	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is paved.
R36835	12/12/2007	Residential	Vegetation	No	Good	Low	Accessible by owners, nut road is covered in topsoil
City Road	12/11/2007	Residential	Pavement/Concrete	No	Good	Low	Paved city road in residential neighborhood
R58263	12/11/2007	Residential	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is paved.
R58242	12/11/2007	Residential	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is paved.
R58284	12/11/2007	Residential	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is paved.
R58249	12/11/2007	Residential	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is paved.
R58326	12/11/2007	Residential	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is paved.
R58319	12/11/2007	Residential	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is paved.
R17048	12/13/2007	Residential	Other - Junk	No	Good	Low	Owner believes road was spread out or removed
R17072	12/13/2007	Residential	Other - Junk	No	Good	Low	Owner believes road was spread out or removed
R17136	12/13/2007	Residential	Other - Junk	No	Good	Low	Owner believes road was spread out or removed
R58305	12/11/2007	Residential	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is paved.
R58256	12/11/2007	Residential	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is paved.
M89167	12/11/2007	Residential	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is paved.

**Table 1: Red Rock Road Field Inventory Results - Part A**

Parcel Number	Survey Date	Land Use	Road Cover	Red Soil Observed	Accessibility to People	Likelihood of Human Contact	Comments
R58333	12/11/2007	Residential	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is paved.
R58270	12/11/2007	Residential	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is paved.
R58312	12/11/2007	Residential	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is paved.
R40651-B	12/12/2007	Residential	Vegetation	No	Fair	Low	City right-of-way accessible from residential properties
R37003	12/12/2007	Residential	Vegetation	Yes	Fair	Low	Road is heavily vegetated making access difficult. Tailings are well covered.
R58648	12/11/2007	Residential	N/A	No	Fair	Low	Road is adjacent to property with gated access point.
R58557	12/11/2007	Residential	N/A	No	Fair	Low	Road is adjacent to property with gated access point.
R58676	12/11/2007	Residential	N/A	No	Fair	Low	Road is adjacent to property with gated access point.
R58627	12/11/2007	Residential	N/A	No	Fair	Low	Road is adjacent to property with gated access point.
R58634	12/11/2007	Residential	N/A	No	Fair	Low	Road is adjacent to property with gated access point.
R58564	12/11/2007	Residential	N/A	No	Fair	Low	Road is adjacent to property with gated access point.
R39443	12/11/2007	Residential	N/A	No	Fair	Low	Road is adjacent to property with gated access.
R58592	12/11/2007	Residential	N/A	No	Fair	Low	Road is adjacent to property with gated access point.
R42731	12/10/2007	Residential	N/A	No	Fair	Low	Road is adjacent to property with gated access point.
R58389	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R36875	12/11/2007	Residential	Vegetation	No	Poor	Low	Only accessible through wetland and dense vegetation
R17040	12/13/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with full access, but residences are vacant.
R59033	12/11/2007	Residential	Pavement/Concrete, Vegetation, Structure/Building	No	Poor	Low	Road appears to be under house and driveway.
R40635-A	12/11/2007	Residential	Vegetation	No	Poor	Low	Road is inaccessible due to dense vegetation.
R59026	12/11/2007	Residential	Pavement/Concrete, Vegetation, Structure/Building	No	Poor	Low	Road appears to be under house and driveway.
R17160	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property, but access is difficult due to vegetation.
R59019	12/11/2007	Residential	Pavement/Concrete, Vegetation, Structure/Building	No	Poor	Low	Road appears to be under house and driveway.
R17168	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property, but access is difficult due to vegetation.
R17232	12/13/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property, but access is difficult due to vegetation.
R59012	12/11/2007	Residential	Pavement/Concrete, Vegetation, Structure/Building	No	Poor	Low	Road appears to be under house and driveway.
R59040	12/11/2007	Residential	Pavement/Concrete, Vegetation, Structure/Building	No	Poor	Low	Road appears to be under house and driveway.
R17184	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with full access, but residences are vacant.
R58669	12/11/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.
R57297	12/11/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.

**Table 1: Red Rock Road Field Inventory Results - Part A**

Parcel Number	Survey Date	Land Use	Road Cover	Red Soil Observed	Accessibility to People	Likelihood of Human Contact	Comments
R57290	12/11/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.
R58424	12/11/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.
R60139	12/11/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.
R57066	12/12/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access.
R17024	12/13/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access to exposed tailings
R17064	12/13/2007	Residential	N/A	No	Good	High	Road is adjacent to property with full access to exposed tailings
R37171	12/11/2007	Residential	N/A	No	Good	Fair	Road is adjacent to property with limited access due to a fence.
R130786	12/11/2007	Residential	N/A	No	Good	Fair	Road is adjacent to property with limited access due to a fence.
R130787	12/11/2007	Residential	N/A	No	Good	Fair	Road is adjacent to property with limited access due to a fence.
R59936	12/10/2007	Residential	N/A	No	Good	Fair	Road is adjacent to property with full access.
R59943	12/10/2007	Residential	N/A	No	Good	Fair	Road is adjacent to property with full access.
R59929	12/10/2007	Residential	N/A	No	Fair	Fair	Road is adjacent to property with limited access due to a fence.
R42779	12/10/2007	Residential	N/A	No	Fair	Low	Road is adjacent to property with full access.
R59985	12/10/2007	Residential	N/A	No	Fair	Low	Road is adjacent to property with full access.
R124713	12/12/2007	Residential	N/A	No	Poor	Fair	Road is adjacent to property with no access points, only dust exposure.
R17056	12/13/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R39467	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access.
R36419	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access and Road is covered with dense vegetation.
R118717	12/11/2007	Residential	N/A	No	Poor	Low	Poor access to Road
R38347	12/11/2007	Residential	N/A	No	Poor	Low	Poor access to Road
R57283	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R36507	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access and Road is covered with dense vegetation.
R36387	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access and Road is covered with dense vegetation.
R36371	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access and Road is covered with dense vegetation.
R36395	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access and Road is covered with dense vegetation.
R58683	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R36299	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access and Road is covered with dense vegetation.

**Table 1: Red Rock Road Field Inventory Results - Part A**

Parcel Number	Survey Date	Land Use	Road Cover	Red Soil Observed	Accessibility to People	Likelihood of Human Contact	Comments
R16840	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R58585	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R58662	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R36403	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access and Road is covered with dense vegetation.
R57262	12/10/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access prohibited by a stream and vegetation.
R58571	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R58620	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R58655	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R39411	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access.
R58403	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R36899	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R16824	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R36379	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access and Road is covered with dense vegetation.
R39427	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access.
R58559	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R58641	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R36411	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access and Road is covered with dense vegetation.
R58578	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R57241	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R60146	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R45845	12/11/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R45852	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R42659	12/11/2007	Residential	Vegetation	Yes	Poor	Low	Road is overgrown with vegetation and not easily accessed.

**Table 1: Red Rock Road Field Inventory Results - Part A**

Parcel Number	Survey Date	Land Use	Road Cover	Red Soil Observed	Accessibility to People	Likelihood of Human Contact	Comments
R59285	12/10/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R59278	12/10/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R59292	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R36811	12/12/2007	Residential	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R38851	12/10/2007	Agriculture	N/A	No	Good	High	Road is adjacent to property with full access.
R38363	12/11/2007	Agriculture	N/A	No	Good	High	Road adjacent to property and appears to be used by landowner.
R21312	12/10/2007	Agriculture	N/A	No	Good	High	Road is adjacent to property with full access.
R40371	12/12/2007	Agriculture	Vegetation	Yes	Good	Fair	Road goes through property, but is mostly covered in vegetation.
R37043	12/11/2007	Agriculture	No Cover, Vegetation	Yes	Good	Fair	Road has easy access, but is seldom used
R126941	12/11/2007	Agriculture	No Cover, Vegetation	Yes	Good	Fair	Road has easy access, but is seldom used
R37139	12/11/2007	Agriculture	No Cover, Vegetation	Yes	Good	Fair	Road has easy access, but is seldom used
R37051	12/11/2007	Agriculture	No Cover, Vegetation	Yes	Good	Fair	Road has easy access, but is seldom used
R16104	12/12/2007	Agriculture	No Cover, Vegetation	Yes	Good	Fair	Many exposed tailings, but road is not used often.
R16112	12/12/2007	Agriculture	No Cover, Vegetation	Yes	Good	Fair	Many exposed tailings, but road is not used often.
R39499	12/11/2007	Agriculture	No Cover, Vegetation	Yes	Good	Fair	Road surface is mostly covered with grass and is not used frequently
R37131	12/11/2007	Agriculture	N/A	No	Good	Fair	Road is adjacent to property with full access.
R36939	12/12/2007	Agriculture	N/A	No	Good	Fair	Road is adjacent to property with gated access point.
R36931	12/12/2007	Agriculture	N/A	No	Good	Fair	Road is adjacent to property with gated access point.
R39315	12/11/2007	Agriculture	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is covered with blackberries.
R39339	12/11/2007	Agriculture	N/A	No	Good	Low	Road is adjacent to property with full access, but Road is covered with blackberries.
R17208	12/13/2007	Agriculture	No Cover, Vegetation	Yes	Fair	Fair	Access fair because of vegetation, exposure is fair because tailings are exposed, however the road is not used frequently.
R16832	12/12/2007	Agriculture	Vegetation	Yes	Fair	Fair	Road runs through undeveloped property, seldomly used, some exposed tailings
R40627	12/10/2007	Agriculture	N/A	No	Fair	Fair	Road is adjacent to this unimproved property, access is difficult due to vegetation
R42987	12/12/2007	Agriculture	N/A	No	Fair	Fair	Road is adjacent to property with gated access point.
R17120	12/12/2007	Agriculture	Vegetation	Yes	Fair	Fair	Property is unfenced, but has dense vegetation.
R58375	12/11/2007	Agriculture	N/A	No	Poor	Low	Road difficult to access from property due to stream.
R36979	12/12/2007	Agriculture	NA	No	Good	Low	Easy access, but road was removed ~25 years ago.
R40379	12/12/2007	Agriculture	N/A	No	Poor	Fair	Road is adjacent to property with no access points, only dust exposure.
R40667	12/10/2007	Agriculture	N/A	No	Poor	Low	Road is adjacent to property, but access is difficult due to vegetation and a stream.

**Table 1: Red Rock Road Field Inventory Results - Part A**

Parcel Number	Survey Date	Land Use	Road Cover	Red Soil Observed	Accessibility to People	Likelihood of Human Contact	Comments
R38811	12/11/2007	Agriculture	N/A	No	Poor	Low	Road is adjacent to property, but access is difficult due to vegetation and ditch.
R39387	12/11/2007	Agriculture	N/A	No	Poor	Low	Road is near property with no access points, only dust exposure.
R126563	12/10/2007	Agriculture	N/A	No	Poor	Low	Road is adjacent to property, but access is difficult due to vegetation and a stream.
R39539	12/11/2007	Agriculture	N/A	No	Poor	Low	Road is adjacent to property with no access.
R38771	12/11/2007	Agriculture	N/A	No	Poor	Low	Road is adjacent to property, but access is difficult due to vegetation and ditch.
R16968	12/13/2007	Agriculture	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R38763	12/11/2007	Agriculture	N/A	No	Poor	Low	Road is adjacent to property, but access is difficult due to vegetation and ditch.
R38803	12/11/2007	Agriculture	N/A	No	Poor	Low	Road is adjacent to property, but access is difficult due to vegetation and ditch.
R40659	12/10/2007	Agriculture	N/A	No	Poor	Low	Road is adjacent to property, but access is difficult due to vegetation and a stream.
R39491	12/11/2007	Agriculture	N/A	No	Poor	Low	Road is adjacent to property with no access.
R39475	12/11/2007	Agriculture	N/A	No	Poor	Low	Road is adjacent to property with no access.
R57269	12/10/2007	Agriculture	N/A	No	Poor	Low	Road is separated from property by a creek, only dust exposure.
R36755	12/12/2007	Agriculture	N/A	No	Poor	Low	Road is adjacent to property with no access.
R38355	12/11/2007	Agriculture	N/A	No	Poor	Low	Road is adjacent to property, but access is difficult due to vegetation and ditch.
R53139	12/11/2007	Industrial/Commercial	Pavement/Concrete, Vegetation, Structure/Building	Yes	Poor	Low	Road appears to be under pavement, structures and vegetation.
R53195	12/11/2007	Industrial/Commercial	Vegetation	Yes	Poor	Low	Road is overgrown with vegetation and not easily accessed.
R53328	12/11/2007	Industrial/Commercial	Pavement/Concrete, Vegetation, Structure/Building	No	Poor	Low	Road appears to be under house and driveway.
R37979-B	12/10/2007	Industrial/Commercial	Vegetation	No	Poor	Low	Limited access due to lock gate at Plat I road.
R42667	12/11/2007	Industrial/Commercial	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R57234	12/11/2007	Industrial/Commercial	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R56975	12/11/2007	Industrial/Commercial	N/A	No	Poor	Low	Road is separated from property by a creek, only dust exposure.
R131825	12/11/2007	Industrial/Commercial	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R130608	12/10/2007	Industrial/Commercial	N/A	No	Poor	Low	Road is adjacent to property with no access points, only dust exposure.
R39331	12/11/2007	Industrial/Commercial	Vegetation	No	Poor	Low	Road is overgrown with vegetation and not easily accessed.

**Table 1: Red Rock Road Field Inventory Results - Part A**

Parcel Number	Survey Date	Land Use	Road Cover	Red Soil Observed	Accessibility to People	Likelihood of Human Contact	Comments
R39483	12/11/2007	Industrial/Commercial	Vegetation	No	Poor	Low	Road is overgrown with vegetation and not easily accessed.
R53146	12/11/2007	Industrial/Commercial	N/A	No	Poor	Low	Road can not be located. Possibly beneath property.
R53153	12/11/2007	Industrial/Commercial	N/A	No	Poor	Low	Road can not be located. Possibly beneath property.
R53314	12/11/2007	Industrial/Commercial	N/A	No	Poor	Low	Road can not be located. Possibly beneath property.
R53293	12/11/2007	Industrial/Commercial	N/A	No	Poor	Low	Road can not be located. Possibly beneath property.
R53321	12/11/2007	Industrial/Commercial	N/A	No	Poor	Low	Road can not be located. Possibly beneath property.

**Bolded entries are properties with likely current human exposure to mine tailings in Red Rock Road**

# Results – Part B

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## Eastern 7 Miles of Red Rock Road Inventoried by The Weyerhaeuser Company



The following section describes the current condition of the eastern 7 miles (miles 10 to 17) of RRR based on the December 13, 2007 field survey (Figure 14). The general condition of RRR is summarized for each mile section of RRR. Further details on parcels that have the potential for human exposure to RRR tailings or soils based on accessibility and the potential for direct contact are provided. Inventory results are summarized in Table 2.

## Current Conditions of Red Rock Road

Land uses observed at the eastern 7 miles of RRR included agricultural/forestry, residential, and other (for example, as rights-of-way). In general, this eastern portion consists of limited public access through privately owned rural residential properties, as well as Douglas County-owned riparian areas and rights-of-way parcels used as main access roads to residences. Red soils are visible on some portions of RRR from mile 10 to mile 13 and in a few inaccessible areas around mile 14 to mile 15. The eastern portion of this 7-mile stretch is used infrequently.

### MILE 10 – MILE 11

Mile 10 to mile 11 consists of locked and gated rural residential and undeveloped parcels. For the first one-half mile, RRR has a thin gravel and vegetative cover. Red soils are visible in areas disturbed by infrequent vehicle use. Red Rock Road then crosses a train trestle and joins Gassy Creek Road for approximately 100 yards before continuing through a privately-owned parcel as the main access road. This section of RRR is gravel-covered and shows no visible red soil.

### MILE 11 – MILE 12

The field survey team was not granted access to mile 11 to mile 12. Based on observations made from Nonpareil Road, this privately-owned access road to agricultural/forestry lands has a gravel cover with no visible red soil. Public access is estimated to be minimal to none.

### MILE 12 – MILE 13.5

The field survey team was not granted access to mile 12 to mile 13.5. Based on observations made from Nonpareil Road, RRR has a packed gravel cover at mile 12 and similar packed gravel cover at mile 13.5. Cover on the middle portion is unknown. This portion of RRR includes mixed forest and small meadows of locked, gated parcels before becoming a rural residential driveway/access road. The residential property on the eastern portion includes a home site located approximately 100 feet from RRR, and a barn immediately adjacent to RRR. Red soil is visible on the eastern end.

### MILE 13.5 – MILE 14

This half-mile section of RRR has open access and is used as the main access road from Hinkle Creek. Red Rock Road has a packed gravel road cover with minimal to no red soil visible. This portion of RRR extends mostly through unused, overgrown lots or through a few forested residential parcels where homes are

located within 50 to 100 feet of the road. Red Rock Road is bound on the south side by managed logging areas. At the 13.5 mile point, RRR is immediately adjacent to Calapooya Creek on County-owned property.

#### MILE 14 – MILE 15

At the beginning of this segment, RRR is gated and access is limited. Red Rock Road continues between overgrown rural residential land and managed logging parcels. The field team was granted foot access and walked approximately one quarter mile of RRR. This portion has a thin gravel and overgrown, vegetative cover. It is bordered by steep, inaccessible forest to the south and fenced, overgrown riparian habitat of Calapooya Creek to the north. Red soil is visible where surface soils are scraped away. Discussion with the land owner indicated very limited use by residents and little to no use by the public. A runoff creek from the steep forest lands to the south blocked passage approximately one quarter mile east of the gate. Red soil is visible as a result of erosion by the runoff creek before its confluence with Calapooya Creek. Visual survey indicated the thin gravel and overgrown, vegetative cover continued for at least the next quarter mile. The remaining half-mile portion was inaccessible from either the east or west.

#### MILE 15 – MILE 17

From the previous, inaccessible parcel just prior to Mile 15, there is limited public access but easy residential access to a gated portion of the road that appeared to receive infrequent use. This portion of RRR is bordered by managed forest lands to the south and is separated from rural residential properties by steep, overgrown riparian habitat and Calapooya Creek to the north. Red Rock Road is covered with packed gravel and no red soil was visible on this portion of the road. At Mile 16, Calapooya Creek turns north for approximately one-quarter mile, providing an area for two parcels adjacent to RRR. The western parcel is undeveloped and gated by a simple chain link fence. The second is a residential property with open access to RRR; however, the main residential access is from Nonpareil Road, across Calapooya Creek by bridge. The creek then turns south and abuts RRR and continues to the end of the surveyed portion of road with similar conditions as above: managed forest lands to the south, and steep, overgrown riparian habitat to the north.

## Properties with the Highest Potential for Direct Contact with Tailings

The following 2 properties have been identified as having the highest potential for direct contact by owners, occupants, and/or nearby residents to exposed tailings.

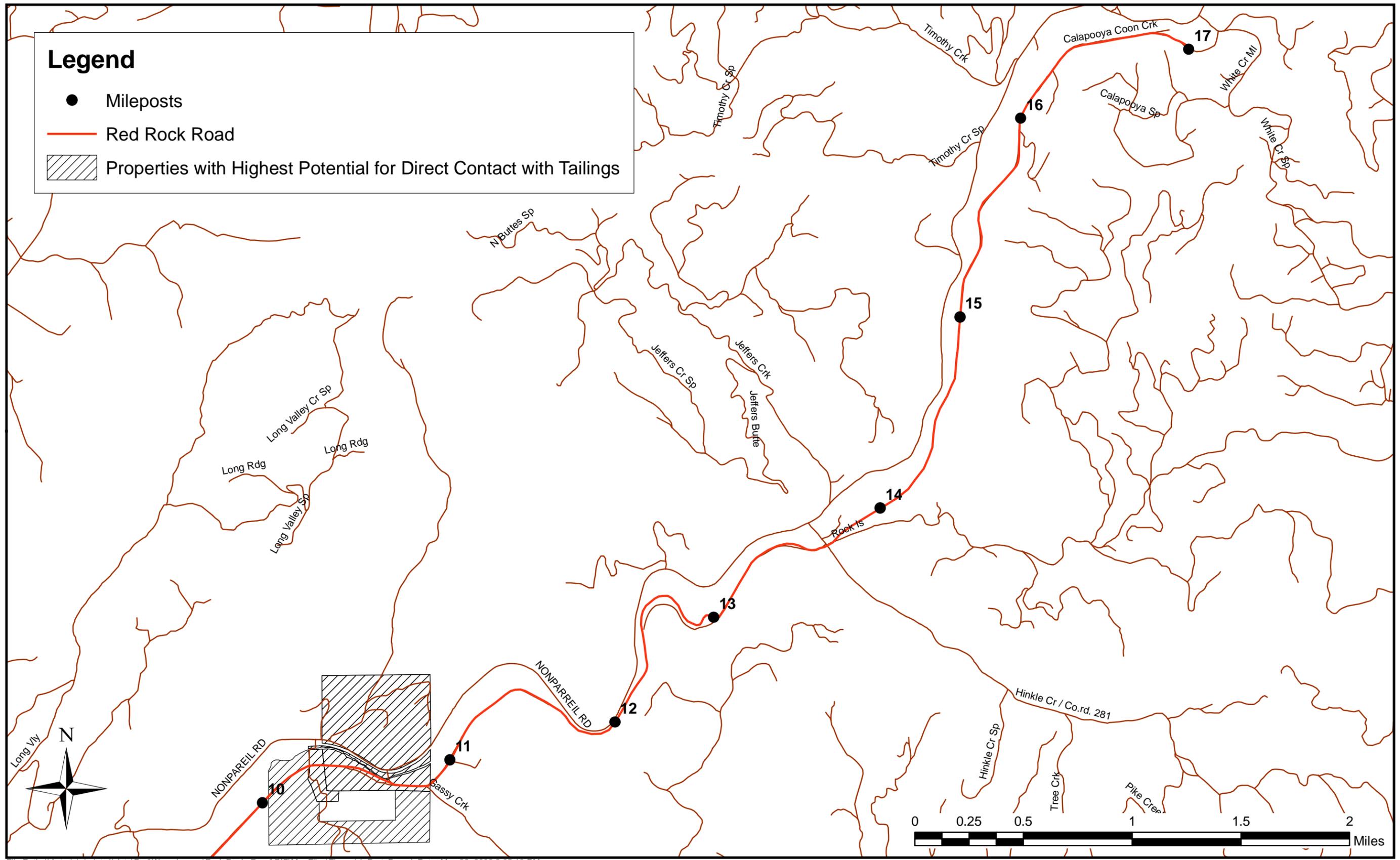
### **Property #11. Parcels R122591 and R16016 (Figure 15)**

These adjacent properties are located at approximately mile 10.5. Red Rock Road crosses a 160-acre, privately owned meadow and mixed forest lands, and at one point is immediately adjacent to Calapooya Creek. Access was not granted to this

property; however, visual inspection from adjacent properties and aerial photos show RRR with a thin gravel cover with visible red soils showing signs of vehicle or tractor activity. No buildings or structures were observed in the immediate vicinity of RRR.

**Property #12. Parcels R16040, R16080, & R16088 (Figure 16)**

These three parcels, located at approximately mile 10, comprise a 114-acre, gated, rural residential property. Red Rock Road crosses the parcels at the base of a steep hill, separating the home site near the top of the hill from the meadow below. The home site is located approximately 300 feet from RRR. Red Rock Road is crossed by the main driveway but is not used as the main access road. Vehicle traffic on RRR is limited to occasional access to fields for mowing and property maintenance. An area of disturbed soil showing use and exposing red soils were observed at the eastern property boundary (immediately adjacent to Property #11, above).



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Figure 14  
Map of Part B  
Red Rock Road

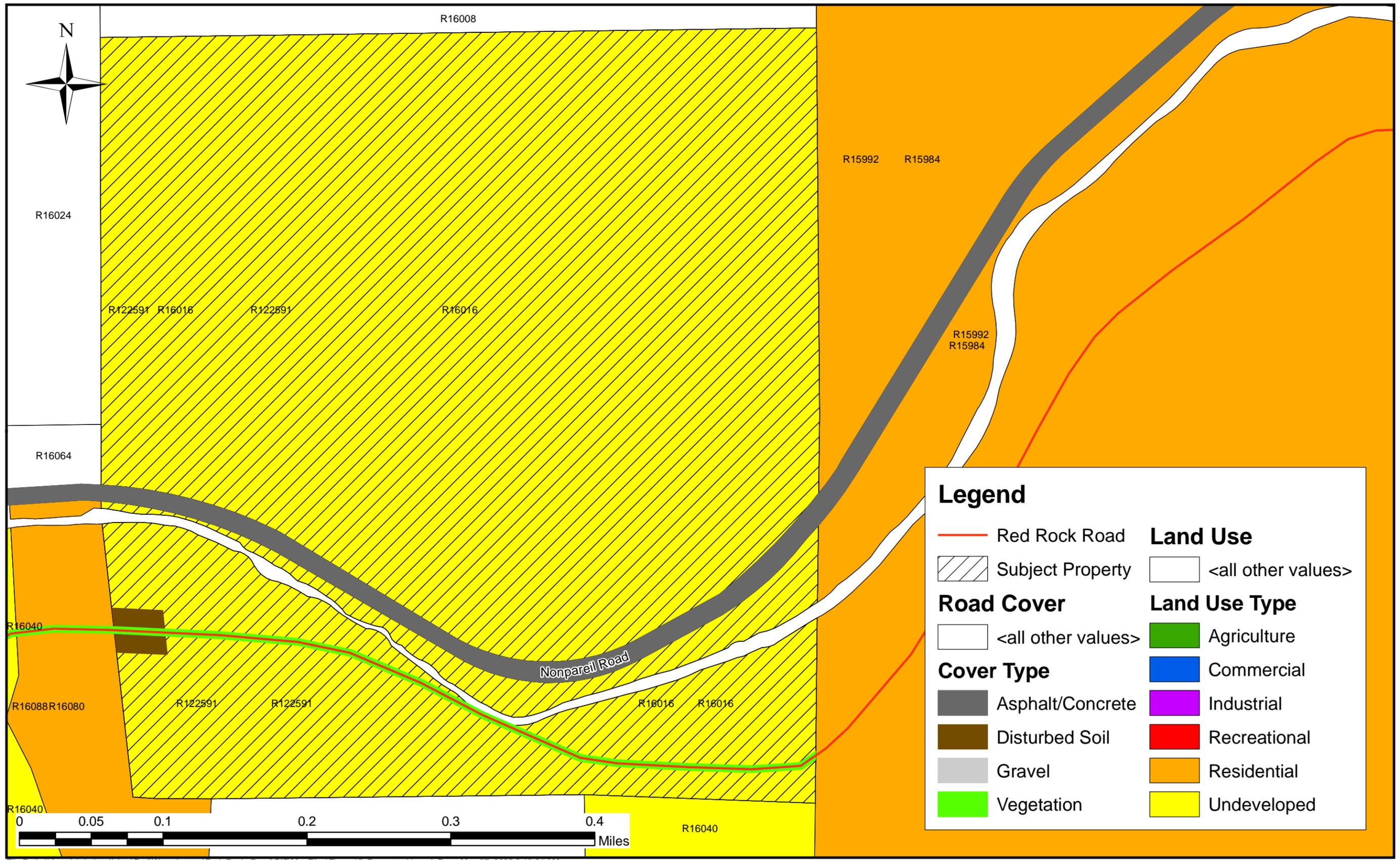


Figure 15  
 Map of Property #11  
 Parcel R122591 and R16016

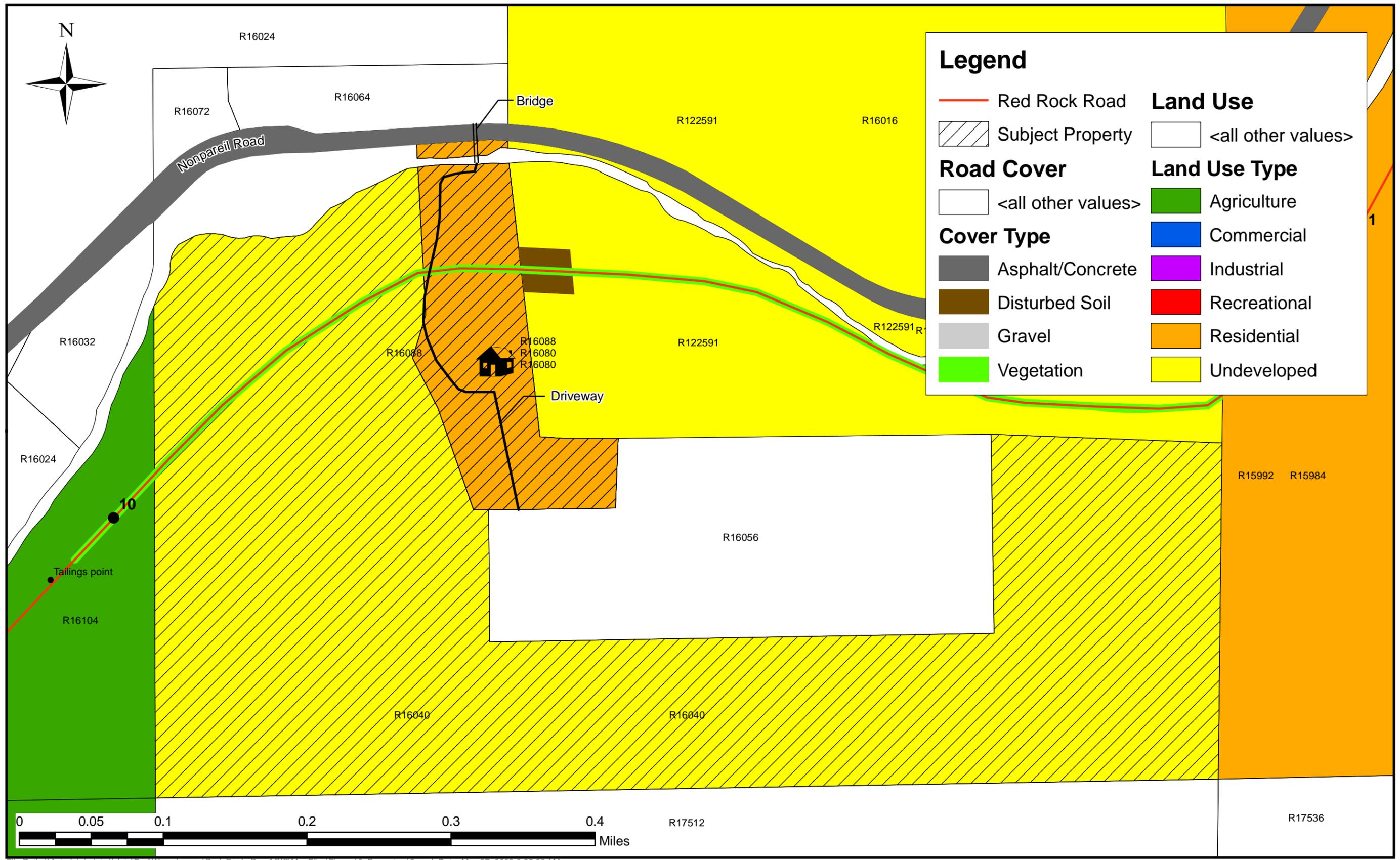


Figure 16  
 Map of Property #12  
 Parcel R16040, R16080 and R16088

**Table 2: Field Inventory Results Summary - Part B**

Property Number	Survey Date	Land Use(s)	Road Cover	Red Soil Observed	Access to RRR	Potential to Contact RRR Soil	Comments
R122591	12/12/2008	Residential	Vegetation	Yes	Good	Good	Disturbed open soil.
R16016	12/12/2008	Residential	Vegetation	Yes	Good	Good	Disturbed open soil.
R16080	12/13/2008	Residential	Vegetation	Yes	Good	Good	Openly crossed property. Disturbed vegetative soil cover.
R16088	12/13/2008	Residential	Vegetation	Yes	Good	Good	Openly crossed property. Disturbed vegetative soil cover.
R16040	12/13/2008	Residential	Vegetation	Yes	Good	Good	RRR crosses driveway, used as access road. Red soil visible.
R64902	12/12/2008	Residential	Gravel, Vegetation	No	Poor	Poor	Road located across creek and up steep embankment.
R64923	12/12/2008	Residential	Gravel, Vegetation	No	Poor	Poor	Road located across creek and up steep embankment.
M84291	12/12/2008	Residential	Gravel, Vegetation	No	Poor	Fair	Gated, private residential property separated from RRR by Calapooya Creek. Access road seldom used.
R65014	12/12/2008	Residential	Gravel, Vegetation	No	Poor	Fair	Private property, gated. No red soil visible.
R65567	12/12/2008	Agricultural/Forestland Recreational	Vegetation	Yes	Good	Fair	Accessible but with vegetation/leaf cover. Red soil just below surface 0-6 in.
R65588	12/12/2008	Agricultural/Forestland Recreational	Vegetation	Yes	Good	Fair	Accessible but with vegetation/leaf cover. Red soil just below surface 0-6 in.
R65595	12/12/2008	Residential	Vegetation	Yes	Good	Fair	Corner property joining tax lot 601. Unused landscaped portion of residential property. No red soil visible, Vegetative cover.
R65168	12/12/2008	Residential	Gravel, Vegetation	No	Fair	Fair	Private property, gated. No red soil visible.
R65175	12/12/2008	Residential	Gravel, Vegetation	No	Fair	Fair	Private property, gated. No red soil visible.
R65252	12/12/2008	Agricultural/Forestland	Gravel, Vegetation	No	Fair	Fair	Private property, gated. No red soil visible.
R65259	12/12/2008	Agricultural/Forestland	Gravel, Vegetation	No	Fair	Poor	Gated inaccessible, graveled.
R65420	12/12/2008	Agricultural/Forestland	Pavement, Concrete	No	Good	Poor	Unused, corner lot adjacent to RRR, overgrown with scrub and trees. Gravel cover on RRR.
R65427	12/12/2008	Other	Gravel	No	Good	Poor	No red soil visible. Gravel cover.
R65350	12/13/2008	Other	Other	NA	NA	NA	No access granted. Surveyed from Nonpareil Road.
R66694	12/13/2008	Other	Other	NA	Poor	Poor	No access granted. Surveyed from Nonpareil Road. Forested property on south side of creek.
R15712	12/12/2008	NA	NA	NA	NA	NA	No access granted. No Field Inventory Forms. Property was not visible from Nonpareil Road. Unable to get near.
R15984	12/13/2008	Residential	Gravel	No	Good	Poor	On property-main road used. No red soil visible.
R15992	12/13/2008	Residential	Gravel	No	Good	Poor	On property-main road used. No red soil visible.
R65070	12/12/2008	Residential	Gravel, Vegetation	No	Good	Fair	Open and adjacent to RRR. No red soil visible.
R65434	12/12/2008	Residential	Gravel	No	Good	Poor	No red soil visible. Gravel cover.
M86785	12/12/2008	Residential	Gravel	No	Good	Poor	No red soil visible. Gravel cover.
R65399	12/12/2008	Residential	Gravel	No	Good	Poor	No red soil visible. Gravel cover.
R65455	12/12/2008	Recreational	Gravel	No	Good	Poor	Main house about 100 feet off road.
M83851	12/12/2008	Residential	Gravel	No	Good	Poor	No red soil visible. Gravel cover.
R64895	12/12/2008	Residential	Gravel, Vegetation	No	Fair	Poor	Limited access. Would need to cross creek to reach.

**Table 2: Field Inventory Results Summary - Part B**

Property Number	Survey Date	Land Use(s)	Road Cover	Red Soil Observed	Access to RRR	Potential to Contact RRR Soil	Comments
R64972	12/12/2008	Recreational	Gravel, Vegetation	No	Poor	Poor	RRR covered. Residence located on other side of fence, forest and creek.
R64965	12/12/2008	Residential	Gravel, Vegetation	No	Poor	Fair	Barbed wire, creek, gated. No red soil visible.
R65182	12/12/2008	Other	Gravel, Vegetation	No	Fair	Fair	Private property, gated. No red soil visible.
R64951	12/12/2008	Residential	Gravel, Vegetation	No	Poor	Fair	Private property, gated. No red soil visible.
R64958	12/12/2008	Residential	Gravel, Vegetation	No	Poor	Fair	Private property, gated. No red soil visible.
M84106	12/12/2008	Residential	Gravel, Vegetation	No	Poor	Fair	Private property, gated. No red soil visible.
M87350	12/12/2008	Residential	Gravel, Vegetation	No	Poor	Fair	Private property, gated. No red soil visible.
R65511	12/12/2008	Residential	Gravel, Other	No	Good	Poor	RRR graveled and sanded. No easy access to red soil.
R64888	12/12/2008	Agricultural/Forestland	Gravel, Vegetation	No	Poor	Fair	Private property, gated. No red soil visible.
R65028	12/12/2008	Agricultural/Forestland	Gravel, Vegetation	No	Poor	Fair	Managed forest land adjacent to RRR. Uses: access road, recreational.
R65063	12/12/2008	Agricultural/Forestland, Recreational	Gravel, Vegetation	No	Good	Poor	Managed forest land adjacent to RRR. Uses: access road, recreational.
R65154	12/12/2008	Agricultural/Forestland, Recreational	Gravel, Vegetation	No	Fair	Poor	Managed forest land adjacent to RRR. Uses: access road, recreational.
R65490	12/12/2008	Other	Gravel	No	Good	Poor	No red soil visible. Gravel cover.
R65630	12/13/2008	Agricultural/Forestland Other	Vegetation	Yes	Fair	Fair	Overgrown, vegetation cover on red soil.
R65448	12/12/2008	Other	Gravel	No	Good	Poor	Paved
R65413	12/12/2008	Other	Gravel	No	Good	Poor	Paved
R65119	12/12/2008	Forest	NA	NA	NA	NA	Property is >600 ft from RRR, with lot 200 in between RRR and this property. Survey not conducted.
R65602	12/12/2008	Agricultural/Forestland	Gravel	No	Good	Poor	No red soil visible. Gravel cover.
R65532	12/12/2008	Forest	NA	NA	NA	NA	Property is >600 ft from RRR, with tax lot 200 in between RRR and this property. Survey not conducted.
R65546	12/13/2008	Agricultural/Forestland	Vegetation	Yes	Fair	Fair	Overgrown road, vegetation cover, difficult access, seldom used.
R65560	12/12/2008	Agricultural/Forestland	Vegetation	Yes	Good	Fair	Overgrown forest land. Little used as access is through owner's property. Vegetative cover.
R15704	12/12/2008	Agricultural/Forestland	NA	NA	NA	NA	No access granted. No Field Inventory Forms. Property was not visible from Nonpareil Road. Unable to get near.
R65441	12/12/2008	Residential	Gravel	No	Good	Poor	No red soil, good gravel cover.
R65392	12/12/2008	Residential	Gravel	No	Good	Poor	No red soil, good gravel cover.
R65371	12/12/2008	Residential	Gravel	Yes	Good	Fair	Light gravel cover.
R65217	12/12/2008	Residential	Gravel, Vegetation	No	Fair	Poor	Graveled
R65140	12/12/2008	Agricultural/Forestland	Inaccessible	NA	Poor	Fair	Inaccessible from east. No access permission from west.

NA = not available

# Inventory Summary and Conclusions

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## **17-Mile Red Rock Road (Parts A and B)**

In December 2007, DEQ and the Weyerhaeuser Company completed a field inventory of current conditions and land uses along RRR. The results of the inventory were used to identify segments of RRR where people are likely to come into contact with arsenic-rich mine tailings in the railroad bed.

DEQ and Weyerhaeuser identified 12 properties where existing land uses and the presence of exposed tailings suggest that there is current potential for people to come into direct contact with arsenic from tailings in the RRR alignment at properties along the 17-mile alignment, as identified schematically on Figure 2.

In mid-2008, DEQ and Weyerhaeuser will develop plans to sample exposed tailings on these 12 properties, subject to landowner permission. The sample results will be used by DEQ to determine the need for specific actions later this year that reduce the exposure of arsenic-contaminated tailings for property owners, occupants, and nearby residents. The actions likely to be considered will include capping exposed tailings on RRR with materials (e.g., gravel) that prevent exposure.

The owners and occupants of the identified properties on RRR will continue to be informed and consulted by DEQ and Weyerhaeuser representatives about this project and any future activities.