



# Pineview Loop Pathway

## CONCEPT REPORT

MAY 2017



HORROCKS ENGINEERS | 4905 South 1500 West, Suite 100, Riverdale, UT 84405

# Pineview Loop Pathway

Horrocks Engineers

## 1. Purpose of Report

Currently, the Pineview Loop Pathway is a 7.5 mile paved non-motorized pathway on the north and east sides of Pineview Reservoir that starts at the North Arm Trailhead in Eden and ends at the intersection of 7800 E and 100 S in Huntsville. Horrocks Engineers compiled a cost estimate and analyzed specific aspects and impacts of extending the pathway to form a 16-mile continuous loop around Pineview Reservoir.

This report details assumptions made while compiling the cost estimate, descriptions of how the preliminary pathway alignment was determined, possible funding sources, organizations that will require coordination efforts, potential challenges to consider, and final recommendations.



*Existing section of Pineview Loop Pathway*

## 2. General Purpose of the Pathway



*Biking around Pineview Reservoir*

The Pineview Loop Pathway provides a safe alternative form of transportation to restaurants and shops in Huntsville and Eden for recreationalists and residents alike. Pineview Reservoir attracts many people seeking opportunities for recreation in the form of swimming, boating, camping, picnicking, biking, fishing, and hiking. The completed pathway will be an attractive addition to the many activities that this area has to offer. Currently, if recreationalists and residents choose to bike or walk in the areas where the Pineview Loop Pathway has not yet been completed, they must use the dirt

trails located in certain areas around the reservoir, or share the road with motor vehicles. Providing this pathway will help address these issues. Therefore, the Pineview Loop Pathway will provide a higher level of safety for both cyclists and pedestrians while reducing hazards for motorists. In addition, by completing the Pineview Loop Pathway, tie-ins to other trails such as the Wheeler Canyon Trail and the future Ogden Canyon Trail will be possible.

## 3. Narrative of Alignment

In most cases, the alignment of the pathway, as shown in this report, is parallel to the road on the side nearest the reservoir. This location generally has more room and fewer steep slopes to contend with.

## Pineview Loop Pathway

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The proposed pathway begins at the North Arm Trailhead near the fork between SR-158 and 2200 N at the northwest corner of the reservoir. The proposed pathway follows the North Arm Trail alignment through the wetland area (Figure 1) for approximately a quarter of a mile, then follows property lines adjacent to the Utah Department of Transportation's (UDOT) right-of-way until Pineview Dam. At the dam, the pathway must "share the road" due to the lack of available shoulder across the structure.



*North Arm Trailhead*

On the south side of Pineview Dam, the pathway immediately resumes on the reservoir side of SR-39 and heads east until 7450 E. The pathway continues north along this road, before following an existing trail alignment through the wetland area located on the southeast side of the reservoir. After which, the pathway enters into one of Huntsville's residential neighborhoods to connect with the existing section of the Pineview Loop Pathway at the intersection of 1<sup>st</sup> S. and 7800 E. This alignment can be seen in Figure 2.

It is anticipated that everywhere the proposed section of the Pineview Loop Pathway intersects properties, a 20-foot easement will be placed around it. A breakdown of the types of properties impacted by the pathway can be seen in Figure 3.

### 4. Specifics of the Pathway

For the purposes of cost estimating, the proposed pathway is currently designed to be 10 feet wide with 6% fill slopes and 4% cut slopes on either side, as required. Simple retaining walls will be used on both the fill and cut slopes in locations where the impact to the surrounding area becomes too great. It is assumed that the proposed pathway will be comprised of 6" of untreated base and 3" of asphalt. Where the pathway crosses into wetland areas, it will change from asphalt to a raised wooden boardwalk, similar to the bridges on the existing section of the pathway, to mitigate impacts to the wetlands. In narrow areas where the pathway is close to the road, barriers will be required to delineate the travel lanes from the pathway, and in some locations the pathway itself narrows to a minimum of 5 feet to fit between the road and the reservoir. Railing or some other form of positive protection may also be required on the reservoir



*Pineview Loop Pathway through wetland areas*



# Pineview Loop Pathway

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side of the pathway where the slopes become very steep. A cross section of the trail can be seen in Figure 4.

## 5. Cost Estimate

The estimated cost of the proposed section of the Pineview Loop Pathway is \$18,089,000; the breakdown of this preliminary estimate is included in the Appendix. The cost estimate includes easements, materials, excavation and fill, and concrete barrier. It is assumed that mobilization costs will likely be higher than normal due to the difficulties with transporting construction materials and equipment through Ogden Canyon or Trapper's Loop. Also, costs for asphalt are assumed to be greater per ton than usual since there is not a staging plant in Huntsville or Eden. Wherever the pathway crosses into private property a 20-foot easement centered on the pathway alignment is assumed. The cost of acquiring easements on all intersecting right-of-way, with the exception of both Weber County and UDOT, is included in the cost estimate.

## Funding Opportunities

Funding opportunities can be explored through several different avenues. The Wasatch Front Regional Council has federal funding through the Transportation Alternative Program (TAP) for the construction and planning of bicycle and pedestrian facilities in which the Pineview Loop Pathway would be eligible. In addition, the Federal Highway Administration (FHWA) is responsible for distributing funds to each state through the Recreational Trails Program (RTP). Funding through the RTP must be used for the construction or maintenance of trails or trail related facilities but requires a 50/50 sponsor match in the form of sponsor cash, in-kind services, volunteer labor, or donations. The Weber Area Council of Governments (WACOG) is another potential source of funding, as well as local funding from both Huntsville and Eden, and local sponsors and grants through Weber Pathways.

## 6. Coordinating Groups

Stake holders that may be impacted by this project and require coordination include:

- UDOT
- U.S. Forest Service
- Army Corps of Engineers
- Bureau of Reclamation (BOR)
- Weber County
- Ogden City
- Huntsville private property owners
- Others

The pathway often encroaches on UDOT's right-of-way. Coordination with UDOT will be necessary to determine how to handle the construction, placement and use of the pathway so that UDOT's standards can be maintained. It will also be necessary to coordinate with private property owners when easements are required for the pathway alignment. A list of the property owners surrounding Pineview Reservoir can be seen in Appendix B. The U.S. Forest Service owns the wetland area on the southeast side of Pineview Reservoir and is potentially planning to upgrade the bridge that the

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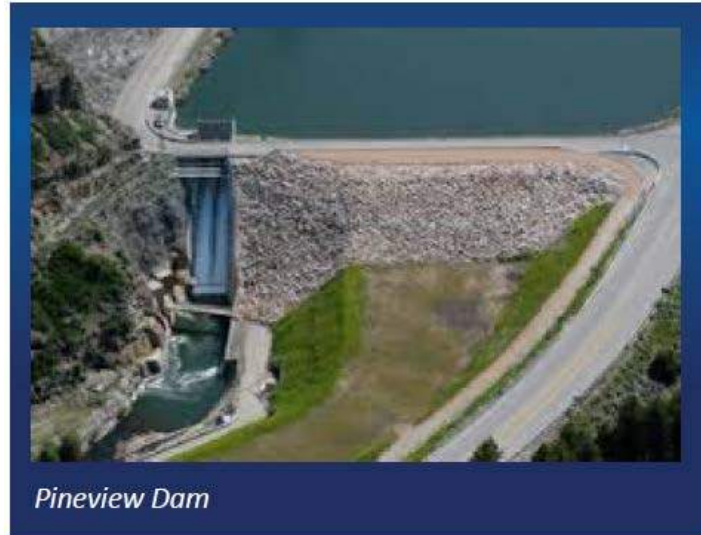
Pineview Loop Pathway will utilize with the proposed alignment. The BOR will require coordination to determine if the construction and use of the trail will have any effect on the reservoir and whether the Department of Homeland Security (DHS) will allow pedestrian crossing over the Pineview Dam.

## 7. Challenges for the Project

There are several challenges associated with this project. The main challenge will be how to approach the situation of trail users crossing Pineview Dam. Shoulder space is extremely limited with little room for expansion. The BOR and DHS are concerned with protecting the dam from vandalism and acts of terror, and therefore may be opposed to the pathway crossing the dam.

Bicyclists using the pathway could potentially share the road with motor vehicles. However, pedestrians using the trail will have a more difficult time crossing the dam.

Construction mobilization will be another challenge. Getting construction equipment and paving materials up to the reservoir and surrounding area may be more expensive. Additional costs may be incurred if special equipment is required to pave the pathway since it ranges between 5 and 10 feet wide.



*Pineview Dam*

## 8. Recommendations

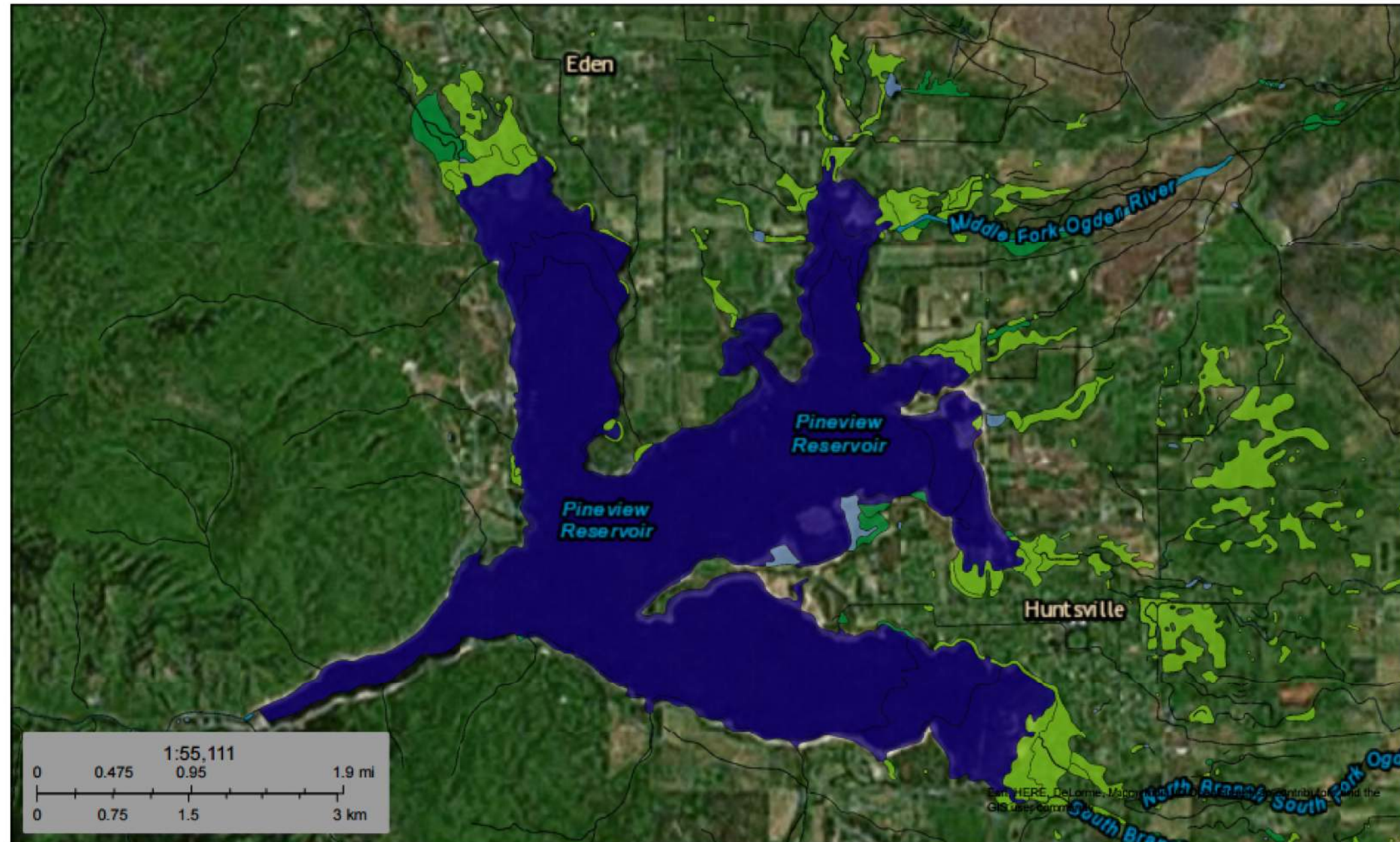
In conclusion, this report outlined the purpose of the Pineview Loop Pathway, a narrative of the alignment, specifics in the design of the pathway, a preliminary cost estimate, future funding opportunities, coordinating groups, and potential challenges for the project. We recommend that Weber County use this report as the basis to submit applications for funding of this important project. Since the cost of construction will likely exceed any single year funding sources, we recommend the project be constructed in three or four phases, as determined during final design. Additionally, we recommend that Weber County inquire of any UDOT projects that would be happening in Ogden Canyon or near Pineview Reservoir and construct this pathway around the same time. Doing so may reduce costs associated with the mobility of construction equipment and the accessibility of asphalt for the pathway.





U.S. Fish and Wildlife Service  
National Wetlands Inventory

Pineview Reservoir Wetlands



April 6, 2017

- |                                |                                   |          |
|--------------------------------|-----------------------------------|----------|
| Estuarine and Marine Deepwater | Freshwater Forested/Shrub Wetland | Other    |
| Estuarine and Marine Wetland   | Freshwater Pond                   | Riverine |
| Freshwater Emergent Wetland    | Lake                              |          |

This map is for general reference only. The US Fish and Wildlife Service is not responsible for the accuracy or currentness of the base data shown on this map. All wetlands related data should be used in accordance with the layer metadata found on the Wetlands Mapper web site.

National Wetlands Inventory (NWI)  
This page was produced by the NWI mapper

**PRELIMINARY**  
NOT FOR CONSTRUCTION

SCALE  
HORIZONTAL  
N/A  
VERTICAL  
N/A

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4905 SOUTH 1500 WEST,  
SUITE 100  
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**PINEVIEW LOOP PATHWAY**  
WETLANDS

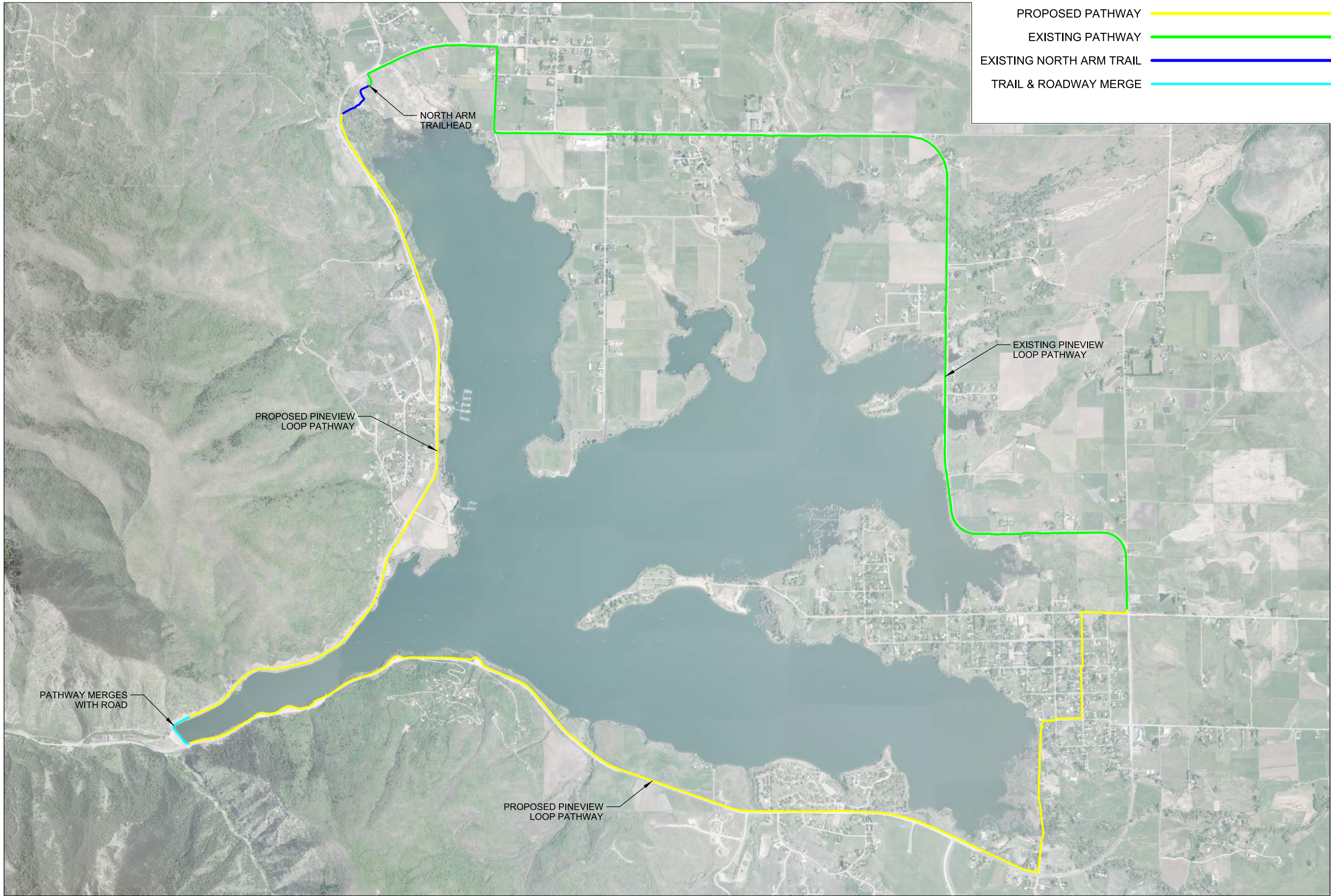
**FIGURE 01**



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**PRELIMINARY**  
NOT FOR CONSTRUCTION

SCALE  
HORIZONTAL  
1" = 2200'  
VERTICAL  
N/A

**WARNING**  
0 1/2 1  
IF THIS BAR DOES NOT  
MEASURE 1" THEN  
DRAWING IS NOT TO SCALE

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**PINEVIEW LOOP PATHWAY**  
OVERALL PLAN

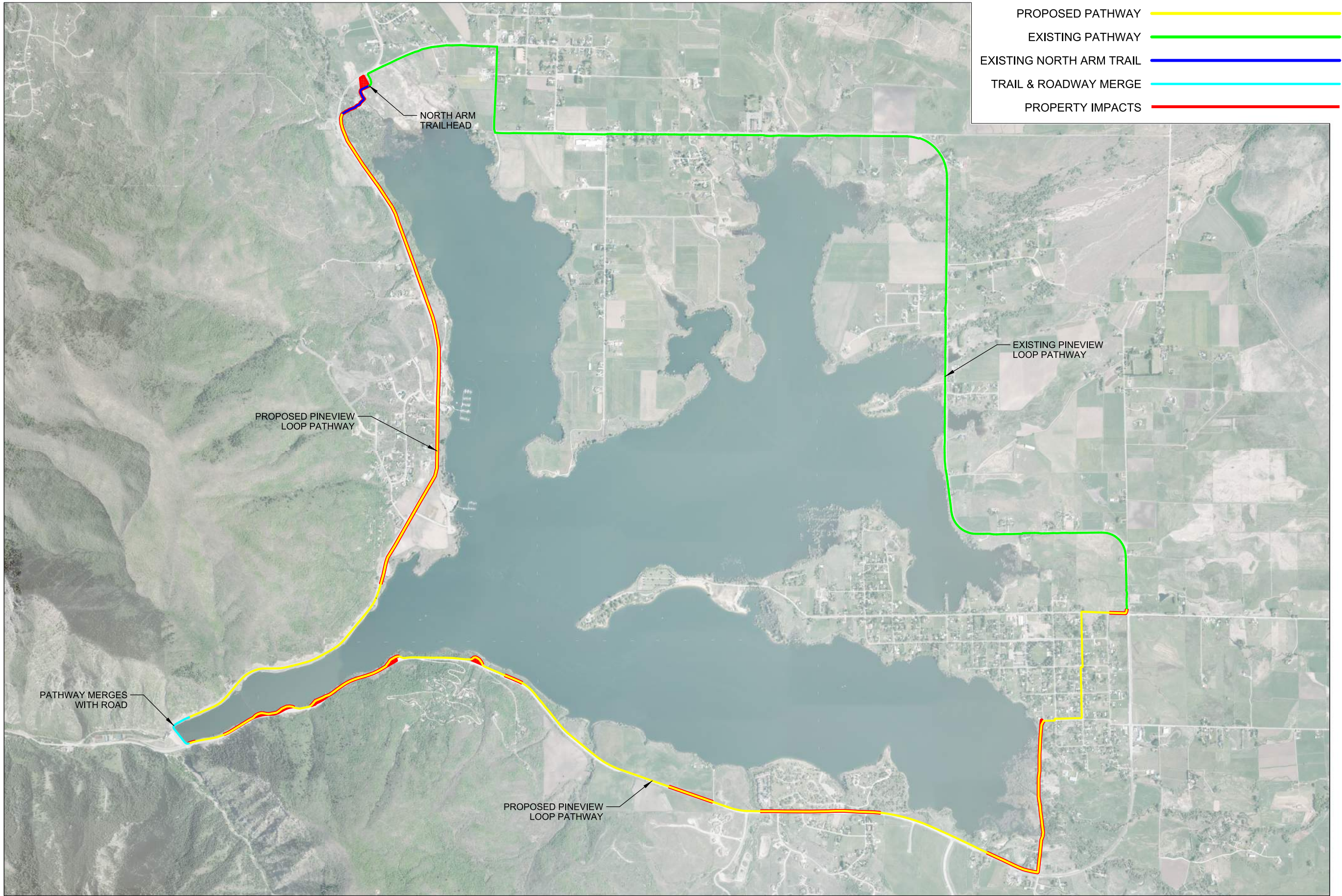
**FIGURE 02**



untitled

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- PROPOSED PATHWAY
- EXISTING PATHWAY
- EXISTING NORTH ARM TRAIL
- TRAIL & ROADWAY MERGE
- PROPERTY IMPACTS



**PRELIMINARY**  
NOT FOR CONSTRUCTION

SCALE  
HORIZONTAL  
1" = 2200'  
VERTICAL  
N/A

**WARNING**  
0 1/2 1  
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**HORROCKS**  
ENGINEERS

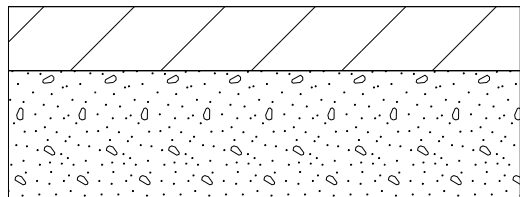
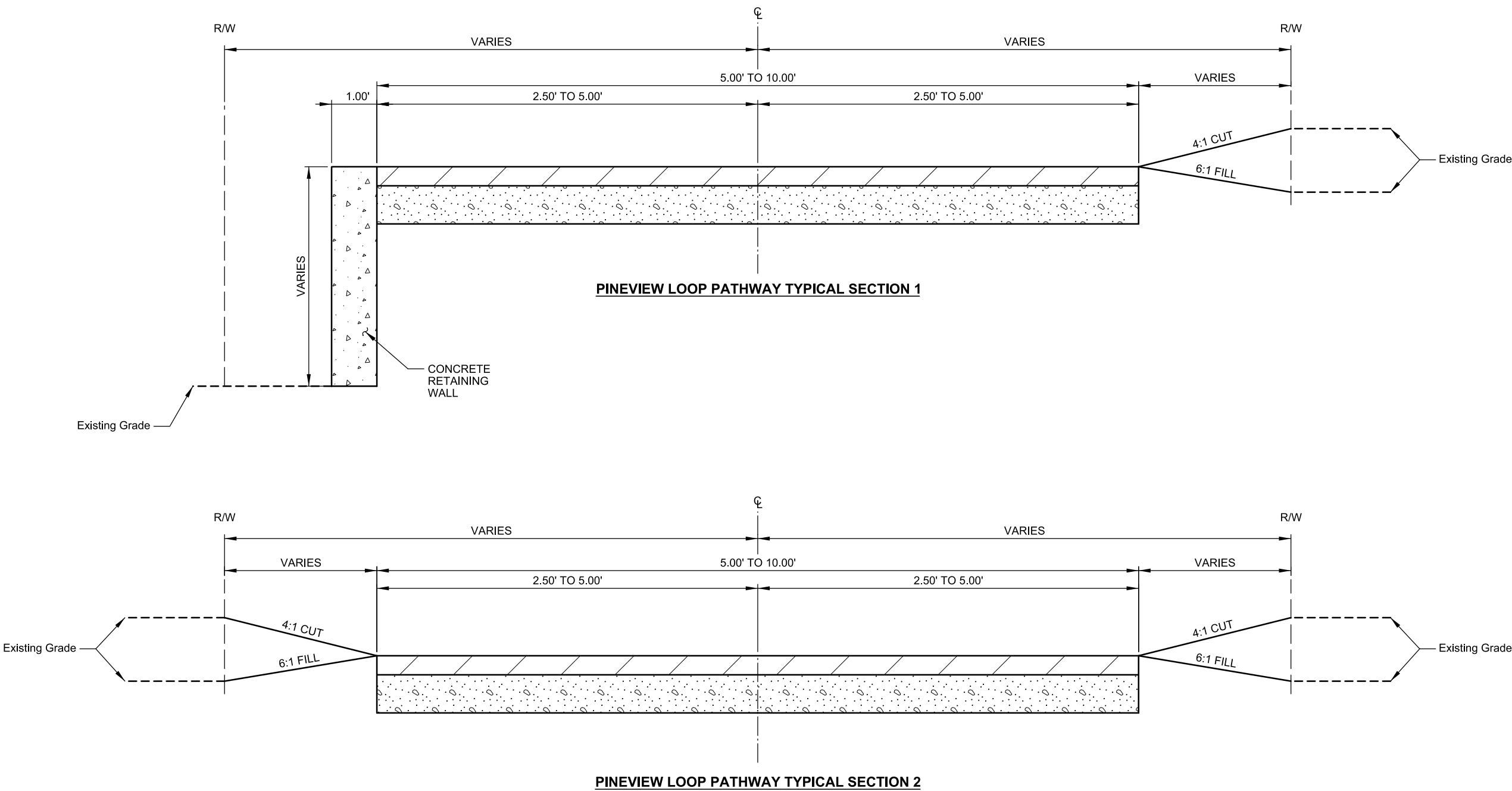
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**PINEVIEW LOOP PATHWAY**  
PROPERTY IMPACTS

**FIGURE 03**



# TYPICAL SECTIONS PINEVIEW LOOP PATHWAY



PINEVIEW TRAIL PAVEMENT SECTION

3" HMA  
6" UNTREATED BASE COURSE

- NOTES:
1. RETAINING WALL CAN BE ON EITHER SIDE OF PATHWAY AND IN CUT OR FILL CONDITIONS.