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- carvercountymn.gov/highway-5-improvements

Rolling Acres Road Roundabouts Frequently Asked Questions

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Project Background

Arboretum Area Transportation Plan (AATP)

The Arboretum Area Transportation Plan resulted from a study to address transportation needs and priorities in Chaska, Chanhassen, and Victoria. The study began in March 2019 and concluded in early 2021 with approvals from the Cities and the County. The plan included community-guided visions for Highway 5, Highway 41, Rolling Acres Road, Bavaria Road, and West 82nd Street. The plan indicated that the visions were concept level layouts that required more work in the future as projects were developed.

Highway 5 Improvements Project

In 2023, the Highway 5 project team began refining design improvements identified in the AATP for Highway 5 between 80th Street in Victoria and Century Boulevard in Chanhassen, and for Highway 13 (Rolling Acres Road/Bavaria Road) and Highway 41 (Hazeltine Boulevard/Chestnut Street).

Rolling Acres Road Traffic Demands

Highway 13 (Rolling Acres Road/Bavaria Road) is an arterial roadway that carries over 10,500 vehicles per day and is a major connection between Highway 5 (Arboretum Boulevard) and Highway 7. This roadway is projected to carry 13,800 vehicles per day in 2045, which is a **31%** increase over today's volumes.

Crash History on Rolling Acres Road

From 2018 to 2022, there have been 62 crashes along the Rolling Acres Road project area. The corridor has a crash rate of 3.23. In comparison, Minnesota's average crash rate for similar roads is 1.22. This reveals that Rolling Acres Road (Highway 13) is operating with a crash rate nearly three times higher than the statewide average for similar roadways, and the resulting critical crash index of 1.7 indicates the segment is operating well outside of the expected safety range.

The Highway 5 Improvements project is working to improve the safety of Rolling Acres Road by changing the road design from a rural roadway (no curb and gutter) to an urban divided roadway (with curb and gutter with median) with turn lanes at public street intersections. Safe and reliable access to homes and neighborhoods with a new median is further enhanced with the roundabouts with the ability to facilitate U-turns. **Changing the characteristics of the road,**



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as well as the addition of roundabouts, is expected to reduce crashes by 77% along Rolling Acres Road.

Safe and Reliable Access To and From Rolling Acres Road

During morning and evening peak hours, drivers are challenged with a wait time longer than 60 seconds from all the side streets onto Rolling Acres Road. This condition invites poor driver decisions that tend to accompany a longer wait period. With the growing population in the region, the wait times are expected to increase. In addition, none of the intersections on Rolling Acres Road have left-turn lanes to the side streets resulting in a high number of rear-end crashes.

Traffic Calming Vision

Many of the speed and safety complaints received by the City of Victoria are about Rolling Acres Road. **Today, 85% of the drivers on the corridor exceed the speed limit.** Through the AATP study process, the community helped to create the vision for the road, which includes a two-lane divided road with a wide median, reduced lane widths, a roundabout at Interlaken, and biking and walking paths on both sides of the road. These changes serve the goal to reduce speeds and create a neighborhood feel for the road. The wide median provides an opportunity for the City of Victoria to install landscape elements to assist in calming traffic and changing the character of the area.

Frequently Asked Questions

When was the roundabout at Tamarack Trail added to the design?

As standard practice with highway projects greater than \$20M in cost, a Value Engineering Study was completed in the spring of 2023 to critically review the concepts developed during the Arboretum Area Transportation Plan (AATP). The study recommended a roundabout at this location to provide improved traffic calming performance of the entire corridor and to enable Uturn movements due to the added median. The technical team reviewed the findings of the Value Engineering Study in 2023 and concluded that adding the roundabout supports the goals from the AATP. The roundabouts in the design help improve the overall safety of the entire transportation system and road network.



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How were residents informed of the Tamarack Trail roundabout addition?

The project team offered community members the opportunity to comment on the layout for the project at the open house in September of 2023 where this modification was highlighted with other changes to the project since the AATP study. Event notifications were mailed to approximately 2,600 residents and businesses near the project area. The City and County sent email notifications and posted on social media to promote the meeting. The open house materials displayed the roundabout, and attendees were asked to comment on the project layout. Following the open house, the layout with the roundabout was posted to the project website. Project emails alerted the public that the information was posted for those who could not attend. The project team did not receive comments with concerns about the roundabout. The team proceeded with including the roundabout into the detailed design of the project.

How did the project team respond once concerns from property owners at Tamarack Trail were known?

When the adjacent property owners on Tamarack Trail were contacted by the right-of-way acquisition team in the summer of 2024, the impacted property owners expressed concerns to the project team and project partners. The project team met with the technical experts and residents to review the concerns and determine if changes could be made. The project team looked into the following questions:

- Can the Tamarack Trail roundabout be moved to a different location such as the Minnesota Landscape Arboretum AppleHouse entrance?
 - The technical team reviewed relocating the roundabout and determined it was not a viable option. The team found the AppleHouse entrance is too close to the intersection with Highway 5 and would reduce the safety of that intersection.
- Can the Tamarack Trail roundabout be removed and replaced with a full-access intersection?

The technical team reviewed the potential to replace the roundabout with a full-access intersection and concluded that this is not in the best interest of the community. Residents on the west side of Rolling Acres Road including Mount Olivet Rolling Acres and Mount Olivet Church will need to use the roundabout to make a U-turn to safely travel north. With the inclusion of a median on Rolling Acres Road, drivers from these properties will have a right-turn only onto Rolling Acres Road. The median serves the project goal to reduce speeds and improve safety along this roadway.



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A full-access intersection would require construction of leftand right-turn lanes. Constructing turn lanes would expand the footprint of the road and increase the impact to the properties near the intersection (additional information included at the end of this document). The median width would also need to be reduced, which eliminates the opportunity to provide traffic calming elements through the area and would not meet the goal of improving safety and reducing speeds on the road.



What changes have been made at Tamarack Trail based on these concerns?

Tamarack Trail and Overlook Lane do present a unique scenario. Both streets are low volume and only serve a small number of homes. The

diameter of the roundabout was reduced by eight feet to reduce impacts and moves through traffic further away from adjacent properties. This was possible by changing the style of the roundabout from a more typical design to one that better reflects the nature of the connecting streets. The inclusion of both roundabouts on Rolling Acres Road is an effort to improve the safety of the overall system and road network. A roundabout is the best solution to address the issues with speed, median width, and addressing factors for access that come with right-in/right-out intersections with a new median.

In addition to these design changes, the roundabout position within the intersection (center of the roundabout) was shifted to further minimize impacts. To reduce impacts to Overlook Lane, the concrete island was removed because there is not a pedestrian crossing to the south and the roadway design for the connection of Overlook Lane to the roundabout was changed and the property impacts were reduced. Additionally, the trail has been moved closer to the road at the intersection to further reduce adjacent property impacts.

How are roundabouts designed and how is the size of a roundabout determined?

Design of roundabouts are iterative, but determining the proper size of a roundabout is based on design speeds, the size of vehicles using the roundabout, and contextual design considerations. Roundabouts are measured from outer edge of the lane. The size of typical single-lane roundabouts ranges from 130 feet to 165 feet with speeds around 25 mph. Tamarack Trail and Interlaken were initially designed at 120 feet, and both were later redesigned to 112 feet. The project team was able to reduce Tamarack Trail and Interlaken roundabouts to address concerns from residents. Both roundabouts have been reduced to the smallest size practicable to minimize property impacts while accommodating traffic flow safely and efficiently. These two roundabouts will be amongst the smallest in the county on the arterial roadway system.



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Why is the access for Mount Olivet Church moving slightly and how does it affect traffic?

Following the AATP study, the design team worked with Mount Olivet Church to better understand their parking lot operations. The goal was to understand traffic patterns and to evaluate if the design could prevent backups on Rolling Acres Road. The project team observed and documented traffic operations at Mount Olivet Church on a Sunday morning in fall of 2023 to understand how traffic control measures work both on-site and how this influences Rolling Acres Road traffic. These observations were also used to calibrate traffic models to represent observed conditions. Currently, Mount Olivet Church has a significant traffic impulse on Sundays for its services. To operate as safely and efficiently as possible, it employs four flaggers and traffic cones on Highway 13 to assist traffic each Sunday.

How do the roundabouts benefit Mount Olivet Church?

The church currently has two access points, one that is an entrance only, and one that is an exit only. The entrance and exit to the church are currently separated so the parking lot can circulate vehicles and pedestrians safely. Due to the traffic needs of the church, if the entrance were to remain at the Interlaken intersection, at the proposed roundabout, there would still need to be a separate exit from the church. The addition of the roundabout at Tamarack Trail to the south provides an opportunity to change the church access to a right-in/right-out which improves their traffic flow, parking lot layout, and internal circulation. The proposed design of Rolling Acres Road eliminates backups during church services. This is a benefit to churchgoers, neighbors, and the public traveling on Rolling Acres Road.

Has the project team considered mini roundabouts on Rolling Acres Road?

Mini roundabouts are better suited for lower-speed, lower traffic environments and often lack fully traversable features, making it difficult for large vehicles (such as trucks and buses) to navigate them, leading to congestion and safety issues. Mini roundabouts are not designed to effectively handle roads with higher traffic volumes and speeds and are generally considered inappropriate for arterial roadways such as Rolling Acres Road. Higher speeds and traffic volumes on arterial roads increase the risk of crashes if a mini roundabout is installed on that road. Mini roundabouts also lack formal pedestrian refuge areas which leads to unsafe crossing alternatives which is addressed by a more conventional roundabout. For these reasons, mini roundabouts are not recommended on Rolling Acres Road at either Tamarack Trail or Interlaken.



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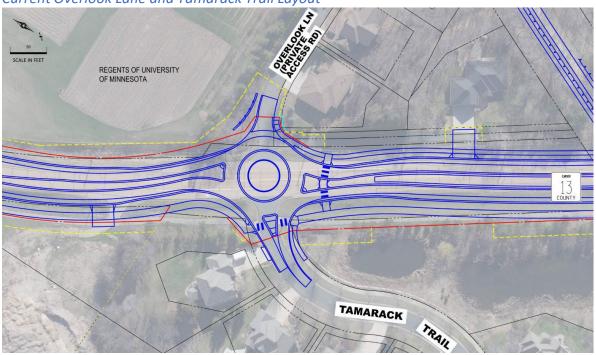
Will this project negatively impact my property value?

Although concerns may exist about generalized reduction in sales value for a property after a public roadway improvement, the typical outcome of a roadway improvement such as this project tend to be positive to sales values of nearby homes based. This is typically due to the general value of safe and reliable access to and from the area.

How does a homeowner get compensated if the project impacts their property?

When a roadway project directly impacts private property, a right of way acquisition process is followed to evaluate the value of the impacts. Property owners are notified about the specific impacts and provided with documentation on their rights. A certified appraiser assesses the property's value before and after the impacts. Property owners can obtain their own appraisal for comparison and negotiation. Each parcel is appraised independently, and an initial offer is made, followed by negotiations. A right of way agent, acting on behalf of Carver County, will work closely with the property owner throughout this process, ensuring they understand their rights and receive fair compensation.







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Layout of Overlook Lane and Tamarack Trail from AATP:



Updated Interlaken Roundabout and Mount Olivet Church Access Design:

