



LAW-7-The Narrows Project Scoping Document **Drafted 8/11/2026**

Project Justification

There are several major road outcrops located on Route 7 between approximate mile markers (MM) 17 and 19 at the towns of Miller and Crown City, Ohio. Numerous landslides and rockfalls have occurred along this section of roadway throughout at least a 30-year documented history. A review of the geohazard inventory database reveals eighteen inventoried rockslide geohazards and twenty inventoried landslides within this section of roadway. This area is well known to locals in the area who refer to this section of roadway as "The Narrows."

Recent events have prompted action by the District. On January 31, 2025, several small rocks from a recently activated rockslide at MM 17.42 fell onto the roadway. This required closing of one lane and removal of rock promptly by County forces to address. At the same location on February 7, 2025, additional trees and debris from a landslide fell upon the road and required lane closure and County forces to remove the debris/trees.

The District contacted the ODOT Office of Geotechnical Engineering (OGE) who made an evaluation of this area in March, 2025. This resulted in the rockfall geohazard inventoried at MM 17.415 as the only known non-remediated tier 4 rockfall location currently in the State of Ohio.

Recent History of Major Lane/Road Closures

The history of major lane/road closures related to landslides and rockfall along this stretch is summarized below. Please refer to the attached photograph log for context.

- 2/1/2010 – Road closure due to rockslide and debris going into road at about LAW-7-18.0.
- 1/22/2019 – Shoulder closure due to rockslide/debris at LAW-7-17.18.
- 2/11/2019 – Large boulder and debris fell on edge of road at about LAW-7-17.18 causing road closure.
 - Following this incident, the District commissioned a study by Intertek conducted in November 2019 to document the hazards along this

location. Noted potential rockfall and landslide hazards included: MP 17.08, 17.15, 17.22, 17.25, 17.27, 17.38, 17.43, 17.58, 17.78, 17.85, 17.97, 18.08, 18.11, 18.15, 18.16, 18.27, 18.35, 18.44, 18.70, 18.89, 18.94, 19.01, and 19.04.

- 3/15/2019 – Landslide resulting in overturning of trees and debris onto driving lane of road and resulting in road closure at about LAW-7-17.6.
- 1/31/2025 – Rockfall of small cobbles falling onto the edge of pavement and driving lane – with impacts of temporary road closure. County crew documented this occurring rock at night at about LAW-7-17.4 and removed the hazard promptly. This is at the identified Tier 4 rockslide location.
- 2/6/2025 – Rockfall occurred in the same tier 4 rockslide location. Material fell impacting the shoulder of the road with the potential for driving lane to be impacted if not for immediate removal that day by County forces of trees and debris.

Description of Expected Scope

The District envisions two critical phases on this project: (1) the Preliminary Engineering phase, and (2) the Detailed Engineering phase. The Preliminary Engineering phase will have two key deliverables: (1) a scoped alternatives analysis report building upon historical data and supplemented with field data with preliminary cost estimate and (2) Stage 1/2 set of plans with detailed cost estimate and schedule for accomplishing work. A meeting will be held with the District and OGE prior to deciding on the scoped alternative for the Stage 1 plan set. The Detailed Engineer phase will include Stage 3 and Final Tracing Plan Sets, which may require some supplemental geotechnical and survey data.

Alternatives Analysis and Preliminary Cost Estimate

For this analysis, the District anticipates the Designer(s) will use available historical records and previous reports, and then supplement this with field data including relevant survey and geotechnical borings, as required. The District anticipates that there will be significant historical data available in the FSM reports for the geohazards located at MM 17.415 and 18.379, such that field review may only need to confirm existing conditions at these locations.

The District would also like the Designer in the Preliminary Engineering phase to provide a preliminary cost estimate for the following additional geohazards:

Type	Latest Tier Rating	CTL Start (MM)	CTL End (MM)	Recorded Length of Hazard (ft)
Rockfall	4	17.415	17.810	1,732
Rockfall	3	17.810	18.093	1,310
Rockfall	3	18.379	18.508	935
Rockfall	3	18.554	19.055	2,524
Landslide	2	17.411	17.420	48
Landslide	2	18.014	18.033	100
Landslide	3	18.685	18.713	147
Landslide	2	18.840	18.859	102
Landslide	3	18.865	19.029	864

A primary focus of this effort will be the non-remediated, tier 4 geohazard at MM 17.42, but the other geohazards listed above should also be included in the alternative analysis and preliminary cost estimate.

For the alternatives analysis for the above listed geohazards, the District is seeking both specific and innovative approaches to minimize future risk to motorists along Route 7, while also striving to minimize future maintenance for ODOT's Highway Maintenance Team. A hybrid approach could be considered which could include a combination of rock bolting, scaling, construction of catchments, placement of permanent barriers, or less steepened slopes at higher risk areas. Additionally, mitigation of landslides downslope of rockslides should be considered in the development of alternatives.

For example, at MM 17.42, the District preliminarily envisions remediation akin to Option 2 of the FSM Phase II Report, which would use a catchment, variable slopes and benching, and a possible barrier for additional protection. It is anticipated that this approximate 1,732-foot stretch section would require special benching/rock cut with a preliminary estimated removal of between 300,000 to 400,000 cy.

The District would also ask the Designer to consider the following rockfalls for inclusion in a cost estimate (if feasible based on available budget):

Type	Latest Tier Rating	CTL Start (MM)	CTL End (MM)	Recorded Length of Hazard (ft)
Rockfall	2	17.039	17.168	690
Rockfall	2	17.169	17.328	900
Rockfall	2	18.093	18.379	1,513
Rockfall	2	19.055	19.177	642

Stage 1/2 Plan Sets

The District does understand that further development and remediation of **ALL** geohazards listed above into a Stage 1/2 plan set and budget may be beyond ability of current funding levels. The importance of the alternatives analysis is to establish a baseline budget for which the District can seek funding, and to provide a realistic cost estimate for future work going forward, even if applied for as a separate funding project.

Once a chosen alternative and scope are agreed upon, the Designer will furnish the Stage 1/2 plan sets. These plan sets should conform with the expected ODOT standards and will include the submittal of the preliminary R/W plan sets. The District is amenable to the Consultant forgoing a Stage 1 plan set provided that the Stage 2 plan set is sufficiently detailed to establish sufficient limits and directions for development of the R/W Plan Set.

Detailed Design

Detailed Design will consist of Stage 3 and Final Tracings Plan Sets that may need to be supplemented with further survey or geotechnical study, as required. For Detailed Design, the District has established an initial budgetary amount with an assumption that much of this design budget would be used for developing remediation of the geohazard at MM 17.42. The District does understand that depending on many factors including the alternative chosen, and number of sites chosen for remediation, that the cost of producing this plan set could be adjusted in the future.