



6.8 Construction

Construction activities will follow good heavy highway construction practices, and will be regulated by INDOT and (Occupational Safety and Health Administration) OSHA standards.

6.8.1 Construction Noise

Noise and vibration impacts will originate from heavy equipment movement and construction activities such as pile driving and vibratory compaction of embankments. Noise and vibrations control measures will include those contained in INDOT *Standard Specifications*.

Noise generated by construction equipment may be an impact of construction. The presence of a sensitive noise receptor within close proximity of the construction limits could raise the concern of potential construction noise impacts. Generally speaking, the potential for construction-related noise impacts will be much higher where an alternative passes through a developed area, and where an alternative follows an existing alignment. The potential in these areas is increased due to the higher number of noise receptors in close proximity to the construction activity.

Noise impacts could be controlled through the regulation of construction time and hours worked, using noise-controlled construction equipment, limitations of construction vehicles during evening and weekend hours and by locating equipment storage areas away from noise sensitive areas.

6.8.2 Erosion Control

Erosion on the construction site is accelerated due to vegetation clearing and the prominence of bare disturbed soils on the site during construction. Procedures to reduce the impact of erosion and runoff into streams will be implemented. Best Management Practices (BMPs) shall be used in the construction of this roadway to minimize impacts of erosion. These measures may include, but are not necessarily limited to the following:

- Minimize disturbance to existing vegetation, including no clearing of vegetation outside of the construction limits.
- Develop site-specific revegetation plans to provide adequate post-construction ground cover.
- Implement temporary erosion and siltation control devices such as covering exposed areas with erosion control materials and grading slopes to retain runoff in sedimentation basins.
- Revegetate all disturbed soil areas immediately upon project completion.

Storm water detention areas may be required and locations will be determined during the design phase of the project. It is likely that they may be outside of the project footprint. Land use for these detention areas would likely be agricultural and impacts will be assessed when the final locations are determined.

6.8.3 Stream Crossings

There are multiple stream crossings under any proposed alternative that could be adversely affected by construction activity. To minimize any adverse effects to these streams, the following measures will be implemented during construction, where reasonable.



- Where appropriate and feasible, restrict low-water work to placement of piers, pilings and /or footings, shaping of spill slopes around bridge abutments, and placement of riprap.
- Where appropriate and feasible, restrict channel work and vegetation clearing to within the width of the normal approach road right-of-way.
- Where appropriate and feasible, minimize the extent of artificial bank stabilization.
- If riprap is utilized for bank stabilization, extend it below low-water elevation to provide aquatic habitat.
- Consideration will be given to tree plantings as part of stream mitigation.

6.8.4 Traffic Maintenance

Traffic flow maintenance and construction sequences will be planned and scheduled to minimize traffic delays on existing public crossroads and US 31, where possible. Signs will be used to notify the traveling public of road closures and other pertinent information.

Access to all properties will be maintained to the extent practical through controlled construction scheduling. Traffic delays will be controlled to the extent possible where many construction operations are in progress at the same time.

6.8.5 Solid Waste Disposal

Solid waste generation resulting from construction activities should be short-term and confined to the vicinity of the project area. Solid waste generated by clearing and grubbing, demolition or other construction practices would be removed from the location and properly disposed.

Burning of construction related debris would be conducted in accordance with all local, state and federal regulations. All burning would be conducted within a reasonable distance from all homes and care will be taken to alleviate any potential atmospheric conditions that may be a hazard to the public. All burning will be monitored.

6.8.6 Air Quality

The main component of air pollution derived from construction activities is fugitive dust. Fugitive dust is the generation of airborne particulate matter which escapes beyond the right-of-way or construction boundary. Fugitive dust emissions can be created by many construction-related activities. Reasonable precautions are typically sufficient to control fugitive dust emissions. Emissions from construction equipment and open burning would be regulated in accordance with appropriate state and federal regulations. During construction the contractor must comply with all regulations governing the control of air pollution.