

Overall, the proposed transportation improvements bring more of the same to the study area without causing a major visual disruption to community centers, neighborhoods, or recreational areas. There are some locales for which design treatment are warranted to lessen visual or other human disturbance. For those areas, specific mitigation may be evaluated and addressed in Tier Two of the process.

4.10 Special Waste

Various databases were examined to locate known or potential contamination from regulated substances near the build alternatives. Information used for this analysis was obtained from known federal, state and local environmental databases, which are described below. The databases represent historical records of known special waste sites, spills, or enforcement actions. A Special Waste Assessment (SWA) will be completed in Tier Two to better characterize the likelihood of involvement with special waste sites and determine whether a Preliminary Environmental Site Assessment (PESA) is required. Because right-of-way may be acquired and building demolition and utility relocation would be required, a PESA most likely would be required in Tier Two.

A broad risk assessment was applied to the types of sites encountered. Risks to human and environmental health and estimated cleanup costs were considered. Special waste sites were placed in the following categories:

- **High Risk.** Active Comprehensive Environmental Response, Compensation, Liability Act (CERCLA) sites and Toxics Release Inventory (TRI) sites using volatile organic compounds (VOCs) and engaged in enforcement action or that formerly had hazardous waste processing activity onsite.
- **Moderate Risk.** Archived CERCLIS sites (except those with a No Further Remediation Action Planned designation); RCRA large-quantity generators; leaking UST (LUST) sites not reclassified as non-LUST; Site Remediation Program (SRP) sites; TRI sites using VOCs with no known violations; UST sites; and landfills.
- **Low Risk.** CERCLIS sites with No Further Remediation Action Planned designation; RCRA small-quantity or conditionally exempt generators; LUST sites redesignated as Non-LUST sites; and other TRI sites with no enforcement action.

The database search revealed that each alternative could potentially encounter special waste sites during construction. The potential impacts each build alternative and south bypass connection option would have on such sites are described in the following subsections and shown in Exhibit 4-10.

4.10.1 Hazardous Waste Sites

One active CERCLIS site within the footprint of Alternatives 203 and 402 is considered a high risk site. Two archived CERCLIS sites are within the footprints of Alternatives 203 and 402. They have received a “No Further Remediation Action Planned” status and are characterized as low risk. An archived CERCLIS site is within the footprint of both Options A and D. The site has a “No Further Remediation Action Planned” designation and is characterized as low risk. Nine additional active CERCLIS sites are located within one mile of Alternative 203, and

eight are within one mile of Alternative 402. Nineteen additional archived CERCLIS sites are within one mile of Alternatives 203 and 402. One additional Active CERCLIS site is within one mile of Options A and D. Nine more archived CERCLIS sites are within one mile of Options A and D.

4.10.2 Nonhazardous Sites

Alternatives 203 and 402 could affect nonhazardous waste sites in each of the categories listed in Table 4-26, many of which are common to both alternatives. Table 4-26 lists the number of nonhazardous waste sites within the footprints of both alternatives. Alternatives 203 and 402 would involve the same number of high risk sites. Alternative 203 would affect one more RCRA large-quantity generator and four more USTs than Alternative 402. Alternatives 203 and 402 would affect the same number of LUST, TRI, and SRP sites and landfills categorized as moderate risk. Both alternatives would affect the same number of low-risk sites. Although Alternative 203 would affect one more RCRA small quantity or conditionally exempt generator than Alternative 402, Alternative 402 would affect one more LUST site reclassified as non-LUST than Alternative 203. Another 177 LUST sites are within 1,000 feet of Alternative 203; 123 LUST sites are within 1,000 feet of Alternative 402. The preliminary review of readily available special waste information for the alternatives found that Alternative 203 would have slightly greater involvement of special waste sites than Alternative 402.

Options A and D would also potentially involve non-hazardous waste sites, many of which are common to both options. The number of non-hazardous waste sites within the footprints of Options A and D are identified in Table 4-26. Neither option impacts a high risk site. Option A would affect three more moderate risk LUST sites than Option D. Option D would affect ten more USTs than Option A. Option D impacts two TRI sites categorized as moderate risk and one SRP site, whereas Option A does not impact any. Option D would impact four more low risk sites than Option A, specifically three more low risk RCRA sites and one more low risk LUST site. Forty-two additional LUST sites are within 1,000 feet of Option A; 42 additional LUST sites are within 1,000 feet of Option D. The preliminary review of the available special waste data for the area found that Option D potentially impacts more special waste sites than Option A (i.e., ten more moderate risk sites, four more low risk sites). Regardless of the option selected, further evaluation will take place in Tier Two.

TABLE 4-26
Nonhazardous Waste Sites within the Build Alternative and South Bypass Connection Option Footprints

	Alternative 203	Alternative 402	Option A	Option D
High Risk Sites				
TRI sites using VOCs and undergoing enforcement action or formerly had hazardous waste processing activity on site	2	2	0	0
Moderate Risk Sites				
RCRA large-quantity generators	2	1	0	0
LUST sites not reclassified as non-LUST	19	19	12	9
TRI sites using VOCs but not engaged in enforcement action	5	5	0	2
USTs	100	96	21	31
Landfills	1	1	0	0

TABLE 4-26
Nonhazardous Waste Sites within the Build Alternative and South Bypass Connection Option Footprints

	Alternative 203	Alternative 402	Option A	Option D
SRP sites	1	1	0	1
Low Risk Sites				
RCRA small quantity or conditionally exempt generators	49	48	15	18
LUST sites reclassified as non-LUST	1	2	0	1
Other TRI sites not engaged in enforcement action	1	1	2	2

4.11 Construction Impacts

Construction impacts generally would be of short duration and end shortly after project completion. The expected short-term construction impacts associated with the build alternatives are identified below.

4.11.1 Transportation

Access to all properties would be maintained by staged construction, temporary access roads, or other appropriate means. Traffic may be stopped for short periods, temporarily inconveniencing motorists and businesses while construction equipment is moved on or across the highway. Emergency service routes and access for emergency vehicles would be maintained.

Road construction activities would involve lane closures and detours. These activities interrupt normal traffic flow and generally impede travel nearby. Construction on existing roadways would cause greater traffic delay than construction on new alignments. Motorists may experience noise and fugitive dust associated with construction/demolition related activities. These impacts would be temporary and of relatively short duration (i.e., most likely two to three years). Refer to subsections 4.11.3 and 4.11.4.

4.11.2 Water Resources

Construction typically associated with bridges, culverts, and roadway approaches would involve grading, filling, and excavation. These activities increase the erosion potential by the reduction in vegetative cover resulting from soil disturbance by heavy equipment. Placement of structures in streams may increase turbidity (suspended solids) and sedimentation and temporarily alter downstream hydraulics and substrate conditions.

Increased sedimentation during construction could cover natural substrate, thereby affecting habitat for some species of fish, mussels, and macroinvertebrates. The degree of impact would vary based on site-specific conditions, such as the type of crossing structure, stream substrate, stream depth, and stream velocity. To help reduce the release of sediment into the study area streams during construction, the IDOT *BDE Manual*, Chapter 59, Landscape Design and Erosion Control, would be implemented. Compliance with Section 280 of the IDOT *Standard Specification for Road and Bridge Construction*, adopted January 1, 2007, would also be met. Soil