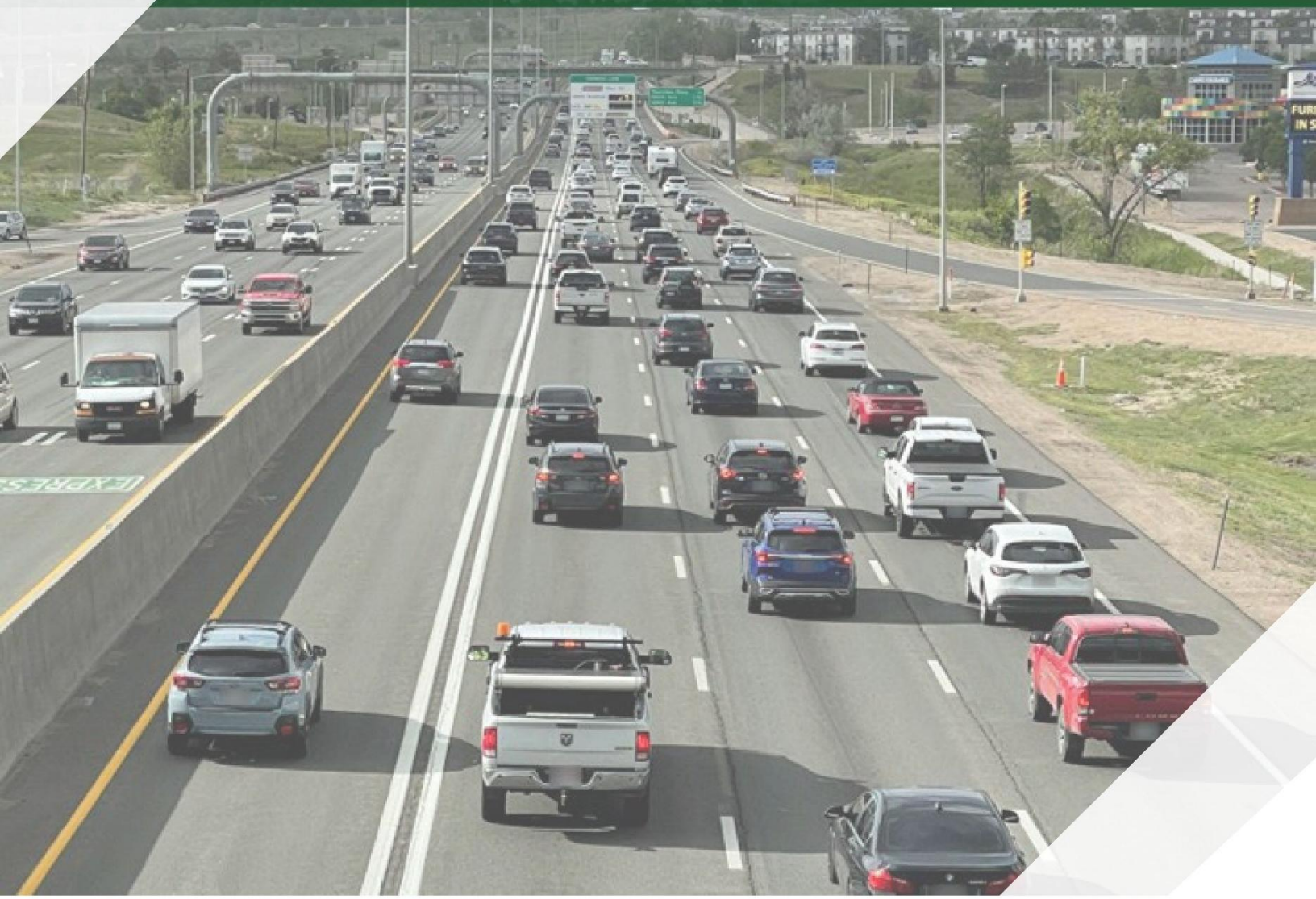
# I-25 (US 36 to 104th Avenue)

Safety and Operations Improvements Project



# Appendix D8: Hazardous Materials Technical Memorandum

**May 2026**

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# Appendix D8. Hazardous Materials Technical Memorandum

May 22, 2026 – Version 5
Project Number: PM 0253-299
Subaccount Number: 25563

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### Attachments

Attachment A. Project Information
Attachment B. Modified Environmental Site Assessment (MESA)
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# Acronyms and Abbreviations

| Acronym or Abbreviation | Full Name |
|---|---|
| AAI | All Appropriate Inquiry |
| ACM | Asbestos Containing Materials |
| ASTM | American Society for Testing and Materials |
| bgs | Below Ground Surface |
| CABI | Certified Asbestos Building Inspector |
| CCR | Code of Colorado Regulations |
| CDOT | Colorado Department of Transportation |
| CDPHE | Colorado Department of Public Health and Environment |
| CDPS | Colorado Discharge Permit System |
| CERCLA | Comprehensive Environmental Response, Compensation and Liability Act |
| CFR | Code of Federal Regulations |
| CORRACTS | RCRA Corrective Action Sites |
| EA | Environmental Assessment |
| EIS | Environmental Impact Statement |
| EPA | U.S. Environmental Protection Agency |
| EPB | Environmental Programs Branch |
| ESA | Environmental Site Assessment |
| FHWA | Federal Highway Administration |
| ft | Feet |
| GIS | Geographic Information System |
| HASP | Health and Safety Plan |
| I-25 | Interstate Highway 25 |
| I-76 | Interstate Highway 76 |
| I-270 | Interstate Highway 270 |
| LAST | Leaking Aboveground Storage Tank |
| LST | Leaking Storage Tank |
| LUST | Leaking Underground Storage Tank |
| LUSTTRUST | Leaking Underground Storage Tank Trust Fund |
| MESA | Modified Environmental Site Assessment |
| MMP | Materials Management Plan |
| NAD | No Action Determination |
| NEPA | National Environmental Policy Act |
| NFA | No Further Action Determination |
| OPS | Colorado Department of Labor and Employment - Division of Oil and Public Safety |
| OSHA | Occupational Health and Safety Administration |
| PEC | Potential Environmental Condition |
| PCB | Polychlorinated Biphenyl |
| PFAS | Per- and Polyfluoroalkyl Substances |
| RCRA | Resource Conservation and Recovery Act |
| REC | Recognized Environmental Condition |
| ROW | Right-of-Way |
| RP | Responsible Party |
| SEMS | Superfund Enterprise Management System |
| US 36 | United States Highway 36 |
| USGS | United States Geological Survey |
| UST | Underground Storage Tank |
| VCP | Voluntary Clean-Up Program |
| WQCD | Colorado Department of Public Health and Environment, Water Quality Control Division |

# 1.0 Introduction and Background

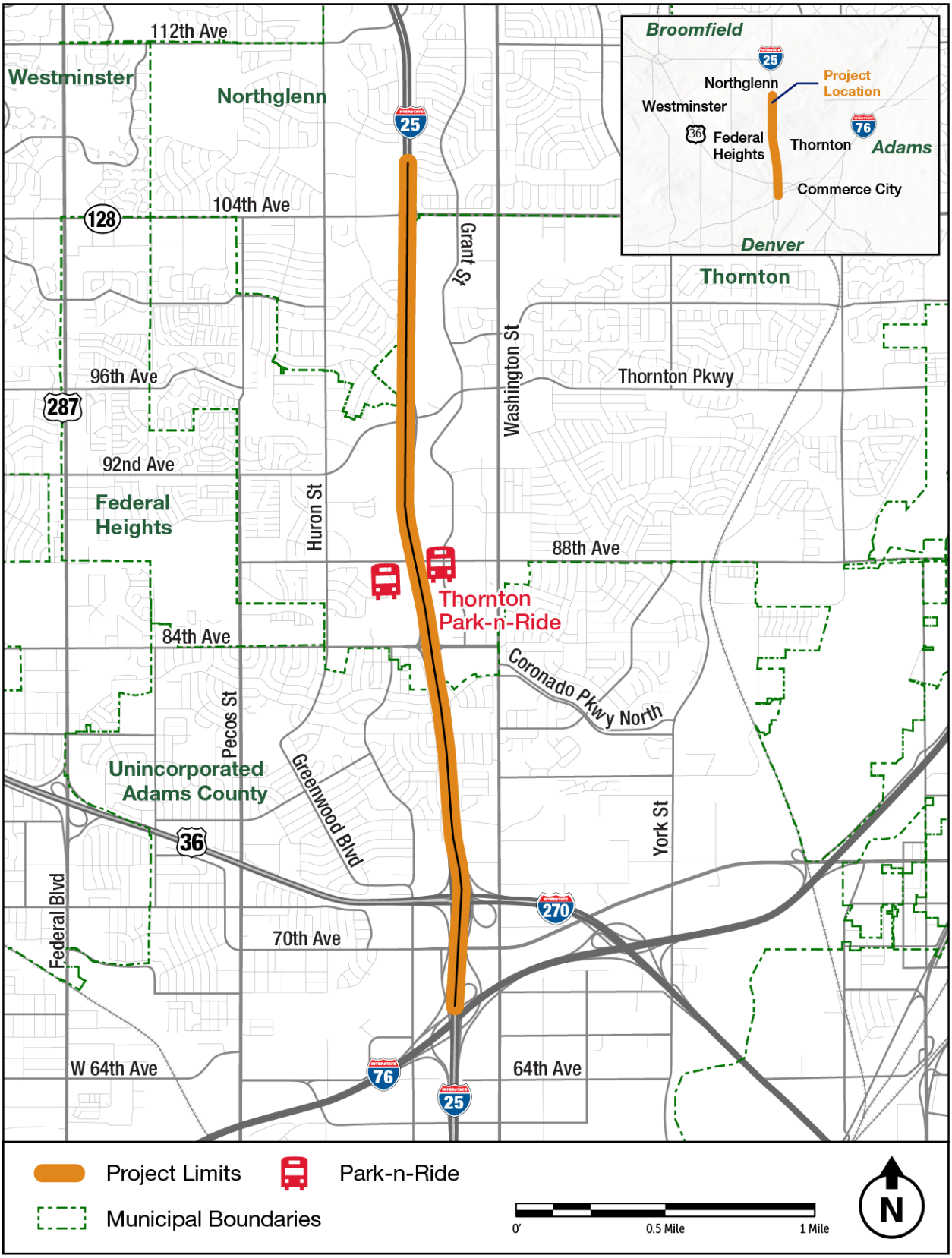
The Colorado Department of Transportation (CDOT) and the Federal Highway Administration (FHWA) are proposing transportation improvements to Interstate 25 (I-25) between United States Highway 36 (US 36)/I-76/I-270 interchange and 104th Avenue (**Figure 1**). This Hazardous Materials Technical Memorandum was prepared to support evaluation of the I-25 (US 36 to 104th Avenue) Safety and Operations Improvements Project (the Project).

CDOT has previously completed an Environmental Impact Statement (EIS) and other planning efforts that recommended improvements to this segment of I-25. The current project evaluates proposed transportation improvements that reflect and build upon previous recommendations. Because the current project includes elements that were not evaluated and approved in the **North I-25 Record of Decision 1** (ROD1) (FHWA and CDOT, 2011), this project is undergoing new evaluation under the National Environmental Policy Act (NEPA).

The following project information can be found in **Attachment A**: Project Information:

- Project History
- Project Limits
- Purpose and Need
- Proposed Action Description

**Figure 1. Project Limits**



# 2.0 Regulatory Setting

There are multiple federal, state, and local environmental regulations that provide for the use, transport, and disposal of hazardous materials and clean-up of soil and groundwater that have been impacted by the improper use, storage, and disposal of these materials.

The following section details common regulations that pertain to hazardous materials and hazardous waste.

- **Comprehensive Environmental Response, Compensation, and Liability Act** (42 United States Code [USC] Part 103, Sec. 9601 et seq.) or CERCLA, was enacted in 1980 and subsequently amended by the Superfund Amendments and Reauthorization Act. CERCLA (also known as "Superfund") is designed to clean up closed and abandoned sites contaminated with hazardous substances. The law authorizes the United States (U.S.) Environmental Protection Agency (EPA) to identify parties responsible for contamination of sites and compel the parties to clean up the sites.
- **EPA Standards and Practices for All Appropriate Inquiries/American Society for Testing and Materials International (ASTM)** (40 Code of Federal Regulations [CFR] Part 312). The EPA has established federal standards and practices for conducting all appropriate inquiries related to the previous ownership and uses of a property to qualify for landowner liability protections under CERCLA. As of February 13, 2024, ASTM International Standard E1527–21 procedures shall be used.
- **Resource Conservation and Recovery Act** (40 CFR Parts 260-299) or RCRA, (42 USC §321 et seq.), enacted in 1976, established a framework for the management of both solid waste and hazardous waste. RCRA Subtitle C authorizes the EPA to develop regulations for cradle-to-grave management of these wastes. In Colorado, the Colorado Department of Public Health and Environment (CDPHE) has promulgated regulations for management of both solid waste (6 Code of Colorado Regulations [CCR] 1007-2) and hazardous waste (6 CCR 1007-3).
- **The Occupational Safety and Health Act** of 1970 created the Occupational Safety and Health Administration (OSHA), which is tasked with setting and enforcing national standards for workplace health and safety. The Occupational Safety and Health Standards in 29 CFR 1910 and the Safety and Health Regulations for Construction outlined in 29 CFR 1926 provide the regulatory background for standards and/or regulations affecting highway project development and construction. These include worker exposure to asbestos, lead, and hazardous materials. Additionally, 1910 Subpart I and 1926 Subpart E stipulate the requirements for personal protective equipment.
- **CDPHE Hazardous Materials and Waste Management Division Regulations**, including Radiation Control (6 CCR 1007-1) provides guidance on radiation management, and Solid Waste Regulations (6 CCR 1007-2 Part 1) provides guidance pertaining to solid waste sites/landfills and facilities and asbestos waste management.
- **Aboveground and Underground Storage Tank Remediation, Colorado Department of Labor and Employment— Division of Oil and Public Safety** (7 CCR 1101-14). Under the auspices of the Colorado Department of Labor and Employment — Division of Oil and Public Safety (OPS), this regulation identifies responsibilities of the owner/operators of underground tanks and provides technical guidance for response to releases from underground tanks.

- **Air Quality Control Commission Regulation No. 8** (5 CCR 1001-10, Part B). The identification of asbestos-containing material (ACM) and collection of samples shall be conducted by a Certified Asbestos Building Inspector (CABI). The CABI must be trained and certified in accordance with Air Quality Control Commission Regulation No. 8 (5 CCR 1001-10, Part B). The CDPHE has aligned the standards and requirements related to the control of hazardous air pollutants with the federal standards set by the EPA under the Clean Air Act.
- **CDPHE Water Quality Control Commission Regulations**. The CDPHE Water Quality Control Commission promulgates rules regarding the discharge of stormwater and groundwater to waters of the state. Colorado Department of Public Health and Environment, Water Quality Control Division (WQCD) administers these rules. With regards to the project and the build alternatives, the most relevant regulations are Regulation 31 (The Basic Standards and Methodologies for Surface Water [5 CCR 1002-31]), Regulation 38 (Classifications and Numeric Standards for South Platte River Basin, Laramie River Basin, Republican River Basin, Smoky Hill River Basin [5 CCR 1002-38]), and Regulation 41 (The Basic Standards for Ground Water [5 CR 1002-41]).
    - **Colorado Discharge Permit System** (CDPS) provides guidance on discharge permits. This regulation includes Construction Stormwater permits (COR040000) and Construction Dewatering permits (COG070000). Remediation Activities for Discharges to Surface Water or Groundwater (COG315000 or COG316000) permit is required for projects with hazardous materials concerns.
    - **Policy 20-1**: Policy for Interpreting the Narrative Water Quality Standards for Per- and Polyfluoroalkyl Substances (PFAS).
    - Overview of PFAS Requirements under the Dewatering General Permit Program.
- EPA's PFAS Strategic Roadmap and the PFAS Enforcement Discretion Settlement Policy under CERCLA.

The U.S. Department of Transportation and the Colorado Department of Public Safety, State Patrol Hazardous Materials Section are responsible for regulating hazardous materials transported on I-25. The Colorado State Patrol is responsible for reporting spills associated with highway transportation incidents to CDPHE. For spills occurring within the CDOT right-of-way (ROW), the Responsible Party (RP) is liable for completing spill cleanup activities and is subject to CDPHE solid and hazardous waste regulations for the spill site. However, should no RP be identified, then the CDOT Property Management Division may contract the associated response and cleanup activities.

# 3.0 Methodology

A Modified Environmental Site Assessment (MESA) was prepared using methodology consistent with the CDOT Hazardous Materials Guidance (CDOT EPB, 2025) as modified from the ASTM Designation E 1527-21, "Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process" (ASTM 2021) and EPA Standards and Practices for All Appropriate Inquiries (40 CFR Part 312). A full copy of the MESA document is included as **Attachment B** to this memorandum. The MESA was prepared with a level of detail appropriate for the project documentation and identifies sites affected by regulated hazardous materials from Potential Environmental Conditions (PECs) or Recognized Environmental Conditions (RECs) that have the potential to impact the project area. The MESA considers two geographical areas. The first is the project area, which encompasses the actual project limits (i.e., project footprint and/or limit of disturbance) as known at the time of the MESA. The second geographical area is the project vicinity, which includes properties and lands outside, but adjacent to or in proximity to, the project area.

The methodology used to identify sites with environmental conditions in and adjacent to the project area included the following steps:

- Performing a limited site reconnaissance of properties in the project area from public ROWs to identify current site activities and potential contamination sources adjacent to the project area.
- Reviewing readily available standard historical sources, including aerial photographs and United States Geological Survey (USGS) topographic maps, to identify historical land uses in the project area.
- Contracting EDR (2024) to conduct a regulatory database search of readily available local, state, tribal, and federal environmental agency databases for sites up to one mile from the project area.
- Screening of sites identified in the regulatory databases based on distance from the proposed ROW, known environmental site conditions, and, in certain cases, groundwater flow direction.
- Classifying sites identified in the regulatory databases into risk categories (low, medium, or high) in terms of risk to the project area.
- Reviewing previous CDOT, Colorado Department of Public Health and Environment (CDPHE) and Colorado Department of Labor and Employment Division of Oil and Public Safety (CDLE/OPS) records and other available records from local, state, and federal agencies regarding properties with RECs in the project area.
- Identifying properties in the project area requiring additional evaluation or investigation to assist in project design-specific materials management/institutional controls that may be required during construction or the ROW acquisition process, if full acquisition is necessary.

The MESA was nonintrusive. Sampling of soils, groundwater, and surface waters was beyond the scope of this MESA.

## 3.1 Terminology

This section provides a brief explanation of some of the common terminology used in this Hazardous Materials Technical Memorandum.

- **Hazardous Materials** – The term hazardous materials is an all-inclusive term for materials that are regulated as solid waste, hazardous waste, and other wastes contaminated with hazardous substances, radioactive materials, petroleum fuels, toxic substances, and pollutants.
- **Sites with Recognized Environmental Conditions (REC)** – For this MESA, sites in the project area were identified as having RECs as defined by ASTM, "(1) the presence of hazardous substances or petroleum products, in, on, or at the subject property due to a release; (2) the likely presence of hazardous substances or petroleum products in, on, or at the subject property due to a release or likely release to the environment; or (3) the presence of hazardous substances or petroleum products in, on, or at the subject property under conditions that pose a material threat of a future release to the environment" (ASTM E1527-21).
- **Sites with Potential Environmental Conditions (PEC)** – Sites identified in the project area as having potential environmental conditions (i.e., evidence of storage, handling, or disposal of hazardous materials) during site reconnaissance and historical review activities that could not be confirmed without additional inspection or investigation are distinguished in this report as sites with PECs.
- **De Minimis Condition** – Sites identified in the project area that have been identified as having a release that "generally does not present a threat to human health or the environment and that generally would not be the subject of an enforcement action" (ASTM E1527-21).
- Sites identified in the regulatory databases were classified into risk categories (low, medium, or high) in terms of risk to the project area:
  - **Low-Risk Site** – Through investigation, it is determined that it is unlikely that contamination would be encountered during construction.
  - **Medium-Risk Site** – Through initial investigation, it is unclear whether contamination is located in the project footprint. Subsequently, a subsurface investigation or further coordination with regulatory agencies determines it is unlikely that contamination would be in the project footprint. However, there is greater uncertainty than for a low potential site. On a case-by-case basis, a commitment to the contractor and CDOT Project Manager to look for signs of contamination in specific areas can be included in the hazardous materials assessment and subsequently a Materials Management Plan (MMP) (when required) rather than proceeding with a subsurface investigation.
  - **High-Risk Site** – Through file review or subsurface investigation, it is determined that it is likely that contamination would be encountered during construction.

# 4.0 Existing Conditions

## 4.1 Physical Setting

The elevation of the project area ranges from 5,155 to 5,420 feet above sea level, with the highest elevations along a slight ridge where Thornton Parkway crosses I-25 in the north-central portion of the project area. Several drainages cross the project area, generally flowing to the east-southeast toward the South Platte River, including Clear Creek, which adjoins the south end of the project area.

The project area consists of transportation ROW for I-25, US 36, State Highway 224, East 76th Avenue, East 80th Avenue, East 84th Avenue, East 88th Avenue, Thornton Parkway, and 104th Avenue. In addition, the project area consists of undeveloped and commercial private land, a CDOT maintenance facility, a landscaping company maintenance shop and office, open space, ponds and other stormwater drainage features, and RTD park-n-ride parking lots and bus facilities. Highway corridors generally consist of areas where light industrial and commercial businesses historically or currently operate. These types of businesses, such as gasoline service stations, automotive repair facilities, and larger truck stop establishments, typically use underground storage tanks (UST) or aboveground storage tanks (AST) to store petroleum products, waste oil, and/or other hazardous materials. Such facilities are also often regulated based on their current hazardous waste generation management activities. Consequently, areas with light industrial and commercial use present a risk of having the presence of soil and groundwater contamination as the result of past spills or releases of hazardous substances, including petroleum products. Other typical hazardous materials concerns associated with transportation projects include the presence of heavy metal-based paint or asbestos-containing materials on highway structures or within older buildings (pre-1980) that will be demolished during ROW acquisition.

## 4.2 Regulatory Files and Site Screening

**Section 1.0** of this document and **Appendix A** describe the I-25 (US 36 to 104th Avenue) project, location, and project limits. For this hazardous materials assessment, a study area was developed extending up to 1 mile from the project footprint, as dictated by ASTM Standard E1527-21. A discussion of the study area, database search radii for sites with potential to impact the project area and the site screening process is discussed in Section 4.0 of the MESA (**Appendix B**). Of the 500+ environmental regulated facilities listed in the EDR report (2024), 159 listings are on the ASTM-prescribed environmental databases within the ASTM-specified search distance. Sites located within or adjacent to the project area were classified into risk categories (low, medium, or high) in terms of risk to the project area. Sites with medium or high risk were then reviewed in detail using pertinent regulatory files or records associated with the listings. While other non-standard listings were not included in further screening, these sites were briefly evaluated for potential to impact the project area as part of review for corridor-wide issues of concern. Furthermore, staff evaluated the project area and vicinity including parcels that may sustain impacts from ground-disturbance

activities, property acquisitions, or easements (if applicable) as a result of the project. CDOT identified facilities that pose a potential risk in the form of owner liability (i.e., property acquisitions and easements) as a result of environmental impacts from RECs and PECs. Only facilities near the project were considered for liability as having a potential to be acquired or affected (i.e., easements) due to project activities.

## 4.3 Additional Investigations

### 4.3.1 Heavy Metal Paint Sampling

The demolition of the 88th Avenue bridge (E-17-LE) over I-25 and the pedestrian underpass (E-17-FJ) between the Thornton Park-n-Ride parking lots are anticipated as part of the proposed project. The structures were surveyed for lead-based paint and chromium-based paint in 2026 (**Attachments C** and **D**). Two samples were collected from the 88th Avenue Bridge; one sample from the painted steel girder was reported as lead-containing paint and chromium-containing paint (E-17-LE PC-02). Additionally, one sample was collected from pedestrian underpass; this sample from the painted steel girder was reported as lead-based paint and chromium-containing paint (E-17-FJ PC-01).

### 4.3.2 Asbestos Sampling

The demolition of the 88th Avenue bridge (E-17-LE) over I-25 and the pedestrian underpass (E-17-FJ) between the Thornton Park-n-Ride parking lots are anticipated as part of the proposed project. The structures were surveyed for asbestos-containing materials (ACM) in 2026 (**Attachments C** and **D**). ACM were not identified on either of the structures.

## 4.4 Summary of Findings

The project area is generally bounded by commercial, residential, undeveloped, and light industrial land. Federal, state, and local records identified the following sites or incidents typically associated with potential RECs in or near the project area (**Table 1**):

**Table 1. Finding and Opinion Summary**

| Finding | Risk Potential Classification (Low, Medium, High) | REC or PEC? | Rationale |
|---|---|---|---|
| One (1) Superfund Enterprise Management System (SEMS) list site | Low | PEC | Based on the distance and location across Clear Creek from the project area, this facility is classified as a low-risk environmental condition. |
| One (1) SEMS Archive list site | Low | PEC | The CDPHE has no records for this site. Based on the distance from the project area and absence of official records for the site, this facility is classified as a low-risk environmental condition. |
| Four (4) Resource Conservation and Recovery Act (RCRA) Corrective Action Site (CORRACTS) site | Low | PEC | These sites are classified as low-risk environmental conditions due to the locations and distances of the sites from the project area. |

| Finding | Risk Potential Classification (Low, Medium, High) | REC or PEC? | Rationale |
|---|---|---|---|
| Twenty-five (25) RCRA generator sites; | Low | PEC | No evidence of releases was identified for the generator sites adjoining the project area. |
| Twenty-three (23) solid waste disposal sites | Low | PEC | No evidence of releases or solid waste disposal was identified in the project area. |
| Seventy-four (74) Leaking Underground Storage Tank (LUST)/Leaking Aboveground Storage Tank (LAST) sites; | Low | PEC | Based on the absence of releases to the project area, regulatory closure, and location and distance of the LUST sites with respect to the project area and the proposed construction in the project area, these sites are classified as low-risk environmental conditions. |
| Nine (9) registered storage tanks sites; | Low | PEC | Based on the absence of releases to the project area, these sites are classified as low-risk environmental conditions. |
| Eighteen (18) Voluntary Cleanup Program (VCP) sites | Low | PEC | Based on the absence of releases to the project area, No Action Determinations (NADs), or location and distance of the VCP sites with respect to the project area, these sites are classified as low-risk environmental conditions. |
| Four (4) Brownfields sites | Low | PEC | Based on the absence of releases to the project area and the locations and distances of the Brownfields sites with respect to the project area, these sites are classified as low-risk environmental conditions. |
| Electrical transformers in the project area | Low | PEC | While no indications of leakage were observed on or around any of the transformers, should any electrical transformers be disturbed, transformer oils containing polychlorinated biphenyls (PCBs) could potentially be encountered. |
| Painted metal structures in the project area | NA | PEC | The painted metal structures are potentially painted with heavy metal-based paint and, therefore, will require special handling if planned for removal and disposal. |
| Buried utilities potentially containing asbestos | NA | PEC | It is unknown if buried utilities containing asbestos are present in the subsurface of the project area. |
| An AST, drums, and containers of various petroleum products with associated stained concrete were observed at both the CDOT maintenance facility and the adjoining landscaping facility in the project area | Low | PEC | Should these sites be vacated, all ASTs, drums, and containers would likely be inventoried and properly moved or disposed of. Observed spills were *de minimis* in nature. |

In addition to the findings presented in **Table 1**, numerous areas of staining resulting from spills of *de minimis* quantities of petroleum products and automotive fluids, surface trash and litter, and homeless encampments were observed in the project area.

## 4.5 Conclusions

The MESA was performed in conformance with the scope and limitations of the CDOT requirements detailed in CDOT Hazardous Materials Guidance (CDOT EPB, 2025) in support of the I-25 (US 36 to 104th Avenue) Safety and Operations Improvements project located in

Adams County, Colorado. Any modifications or limitations from this practice are described in the Methodology section of this memorandum.

The assessment identified numerous sites in and adjoining the project area as PECs with low-risk potential in connection with the project area (**Table 1**). No medium or high-risk potential sites were identified.

The following PECs associated with the project area were identified during the site reconnaissance:

- An AST, drums, and containers of various petroleum products with associated stained concrete observed at both the CDOT maintenance facility and the adjoining landscaping facility in the project area.
- Electrical transformers potentially containing PCBs in and adjoining the project area.
- The painted metal poles and other items potentially painted with heavy metal-containing paint, which will require special handling if planned for removal and disposal.
- Buried utilities potentially containing asbestos located in the project area.

The following is recommended:

- A follow-up Phase I ESAs shall be conducted for private parcels of land where new roads will be constructed and significant ROWs will be acquired by CDOT.
- If painted metal items identified in the project area are slated for removal and disposal, the contractor shall test for heavy metal-based paint, and, if present, removing, disposing, or recycling of the painted components shall be done in compliance with CDOT Specification 250 - Environmental Health and Safety Management (including, but not limited to, Section 250.04) and all applicable Occupational Safety and Health Administration local, state, and federal regulations.
- Heavy metal-based paint surveys were conducted for structures E-17-LE and E-17-FJ for disposal recommendations. Samples from painted steel girder from both structures were identified as lead-containing paint and chromium-containing paint. The recycling facility must be notified if painted metal project components contain either lead or chromium. Regardless of heavy metal content, the future contractor must comply with Occupational Safety and Health Administration (OSHA) Regulations 1926.62 and 1926.1126 for worker safety.
- Contractors and workers shall comply with CDOT's latest Revision of Section 250 – Environmental, Health and Safety Management of the Standard Specifications for Road and Bridge Construction.
- Workers shall be alert during excavations for any visual or olfactory signs of contamination. If gas, soil, or groundwater contamination is encountered, work will stop immediately, and the procedures outlined in the CDOT Specification 250 and subsection 107.25.(b) shall be followed.
- Structural excavation, such as caisson and retaining wall construction, may require the dewatering of contaminated groundwater. If dewatering is necessary, groundwater brought to the surface will be managed according to Section 107.25 of the CDOT Standard Specifications for Road and Bridge Construction and permitted by the CDPHE Water Quality Control Division In accordance with Section 402 of the Clean Water Act.

- If any drinking water and groundwater monitoring wells are located in the proposed construction area, the wells will be abandoned and plugged according to CDOT Section 202.02 in Standard Specifications for Road and Bridge Construction and in conformance with the Colorado Department of Natural Resources Division of Water Resources State Engineer Water Well Construction Rules, specifically Rule 16, "Standards for Plugging, Sealing, and Abandoning Wells and Boreholes".
- It is recommended that the project team monitors future developments in PFAS regulations and to consider potential project implications (e.g., added costs and schedule delays) that additional PFAS regulations may cause. CDPHE maintains online Geographic Information System (GIS) map viewers of potential PFAS source areas and risk categories associated with business type/land use. At the time of this report, PFAS concentration data were not available for these CDPHE GIS maps. It is recommended that the project team also monitor these CDPHE maps for future developments in PFAS reporting.

# 5.0 Environmental Consequences

## 5.1 No Action Summary

The No Action Alternative is the condition where CDOT would not proceed with a build alternative. The No Action Alternative includes ongoing highway and bridge maintenance and isolated pavement reconstruction. Ongoing maintenance includes work CDOT routinely performs on I-25 as part of its maintenance program, such as mill and overlay, crack sealing, maintenance of bridge, drainage and water quality structures, and guardrail replacement or repair, as warranted.

The No Action Alternative would have no impact on existing areas of contamination due to no physical changes being made by the project. There would be no further changes to the existing conditions with respect to hazardous waste associated with RECs and PECs in the study area. However, if structures or infrastructure are disturbed during maintenance activities, they should be tested for heavy metal-based paint and ACMs for worker protection and disposal purposes.

## 5.2 Proposed Action Summary

The Proposed Action Description can be found in **Attachment A**: Project Information. When compared to the No Action, the Proposed Action has the potential to impact hazardous materials from sites associated with PECs in the study area.

Construction of the I-25 Proposed Action would require excavation, grading and subsurface drilling for highway widening, bridge construction, water quality pond construction, as well as installation of noise barriers, signs and lighting. Grading activities could range from 2 feet to 4 feet depth, while deep foundation drilling activities could extend to depths of up to 60 feet below surface grade (bgs). Depths to groundwater vary highly throughout the study area, but groundwater will likely be encountered during the 88$^{th}$ Avenue bridge construction or in areas where deep foundations may be necessary (e.g., deep retaining wall foundations).

After reviewing regulatory files, numerous listings were identified with potential to affect the project area, including known petroleum and chemical spills, former gas stations, and commercial businesses. While the MESA categorized these listings as low-risk, the Proposed Action still has the potential to encounter hazardous materials during construction. Direct and temporary impacts to hazardous materials from sites associated with PECs in the study area and in the surrounding area may increase costs to the project due to mitigating the effects of the hazardous materials on worker's health and safety and materials/waste handling and disposal issues associated with solid waste generated during construction.

To the extent that contaminated soils and groundwater are treated onsite or removed for safe treatment or disposal, the Proposed Action would result in permanent reduction of contaminated material in the study area. It may be an option to beneficially reuse impacted

soil elsewhere within the project area; however, this would require coordination and approval with CDPHE.

Additionally, the Proposed Action includes the replacement of 88th Avenue bridge over I-25, as well as other major and minor structures. If structures or infrastructure are disturbed or demolished, they must be tested for heavy metal-based paint and ACMs for worker protection and disposal purposes.

# 6.0 Mitigation

The following recommendations (**Table 2**) constitute the mitigations efforts for the project with respect to hazardous materials. Information from this table is generally copied into the NEPA document table, which lists impacts and mitigation commitments for all resources.

**Table 2. Mitigation Commitments**

| Activity Causing Impact | Location of Activity | Impact | Mitigation Commitment | Responsible Branch | Timing/Phase of Mitigation Implementation |
|---|---|---|---|---|---|
| Dewatering of groundwater/ infiltration water in excavations | All locations where groundwater /infiltration water is generated, and dewatering is required | Potential to encounter contaminated groundwater during construction dewatering | Structural excavation, such as caisson construction, may require the dewatering of contaminated groundwater. If dewatering is necessary, groundwater brought to the surface will be managed according to the CDOT Standard Specifications for Road and Bridge Construction, Section 250 regarding monitoring and characterization, and Section 107.25 regarding water quality control. | CDOT Engineering and construction contractor | Construction Phase |
| Dewatering of groundwater/ infiltration water in excavations | All locations where groundwater /infiltration water is generated, and dewatering is required | Potential to encounter contaminated groundwater during construction dewatering | For project areas located within mapped PFAS contaminated groundwater, the contractor will follow revised Section 107.25 entitled “Legal Relations and Responsibility to Public.” CDPHE PFAS source/concentration maps will be reviewed, when available. | CDOT Engineering and construction contractor | Construction Phase |

| Activity Causing Impact | Location of Activity | Impact | Mitigation Commitment | Responsible Branch | Timing/Phase of Mitigation Implementation |
|---|---|---|---|---|---|
| Construction/ excavation activities in potentially contaminated areas | Throughout the project area and/or surrounding properties | Potential to encounter subsurface contamination | Contractors and workers shall comply with CDOT's latest Revision of Section 250 (Environmental, Health and Safety Management) of the Standard Specifications for Road and Bridge Construction.<br><br>Workers shall be alert during excavations for any visual or olfactory signs of contamination. If soil or groundwater contamination is encountered, work will stop immediately, and the procedures outlined in CDOT Specification 250 and subsection 107.25(b) shall be followed. | CDOT Engineering and construction contractor | Construction Phase |
| Bridge replacement, demolition of structures | Throughout the project area and/or surrounding properties. | Potential to encounter hazardous materials – heavy metal-containing paint, asbestos containing material (ACM) | If structures are disturbed or demolished, they must be tested for heavy metal-containing paint and ACMs for worker protection and disposal purposes. Depending on the results of sampling, HASP may be completed prior to construction. CDOT requires that all metal project components (e.g., light poles, metal railing, and bridge girders) be recycled. The recycling facility must be notified if painted metal project components contain either lead or chromium. Regardless of heavy metal content, the future contractor must comply with Occupational Safety and Health Administration (OSHA) Regulations 1926.62 and 1926.1126 for worker safety. | CDOT Engineering and construction contractor | Construction Phase |
| Acquisition of property with potential hazardous material concerns | Throughout the I-25 corridor, surrounding properties located outside the existing CDOT ROW. | Potential to acquire property with potential hazardous material concerns | An individual, property specific ASTM-compliant Phase I ESA should be completed before taking any additional ownership interest for properties considered for acquisition. | CDOT Engineering, Environmental and ROW | Preconstruction/Design |

| Activity Causing Impact | Location of Activity | Impact | Mitigation Commitment | Responsible Branch | Timing/Phase of Mitigation Implementation |
|---|---|---|---|---|---|
| Wells | Throughout the project area and/or surrounding properties. Monitoring wells on adjacent fueling station properties. | Potential to impact drinking water or groundwater wells | If any drinking water and groundwater monitoring wells are located in the proposed construction area, the wells will be mapped, abandoned and plugged according to CDOT Section 202.02 in Standard Specifications for Road and Bridge Construction and in conformance with the Colorado Department of Natural Resources Division of Water Resources State Engineer Water Well Construction Rules, specifically Rule 16, "Standards for Plugging, Sealing, and Abandoning Wells and Boreholes" | CDOT Engineering and construction contractor | Construction Phase |

# 7.0 Required Permits and Clearance Needs

The following permits and/or actions could be required as part of the Proposed Action:

- CDPHE, Hazardous Materials and Waste Management Division – Demolition Permit (Asbestos-Containing Material)
- CDPHE, WQCD - Colorado Discharge Permit System Permit, Construction Dewatering Activities, or Remediation Activities Permit

# 8.0 References

ASTM International. 2021. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E1527-21). ASTM International.

CDOT. 2026. I-25 from US 36 to 104th Avenue Alternatives Evaluation Report. February.

CDOT EPB. 2025. CDOT Hazardous Materials Guidance. CDOT, March 2025.

FHWA and CDOT. 2011. North I-25 Record of Decision 1. December. Accessed April 2024 from https://www.codot.gov/projects/archived-project-sites/north-i-25-eis/Northi25rod.

U.S. Environmental Protection Agency (EPA). 2022. Standards and Practices for All Appropriate Inquiries. Federal Register, 87(240), 76578-76579.

Attachment A.

# Project Information

# Attachment A: Project Information

October 23, 2026 - Version 15

Subaccount number: 25563

## BACKGROUND

The Colorado Department of Transportation (CDOT) and the Federal Highway Administration (FHWA) are proposing transportation improvements to Interstate 25 (I-25) between United States Highway 36 (US 36)/I-270/I-76 interchange and 104th Avenue.

### Project History

CDOT has previously completed an Environmental Impact Statement (EIS), a Planning and Environmental Linkages (PEL) study, a safety audit, previous National Environmental Policy Act (NEPA)-level planning, and supplemental operational and transit and safety analyses that recommended improvements to this segment of I-25.

Some of the previously recommended improvements have been constructed, like the Express Lanes approved in the **North I-25 Record of Decision 1** (ROD1) (FHWA and CDOT, 2011), while others have not yet been implemented. The current Project evaluates proposed transportation improvements that reflect and build upon previous recommendations.

Because the current Project includes elements that were not evaluated and approved in the **North I-25 ROD1**, this Project is undergoing new evaluation under the National Environmental Policy Act.

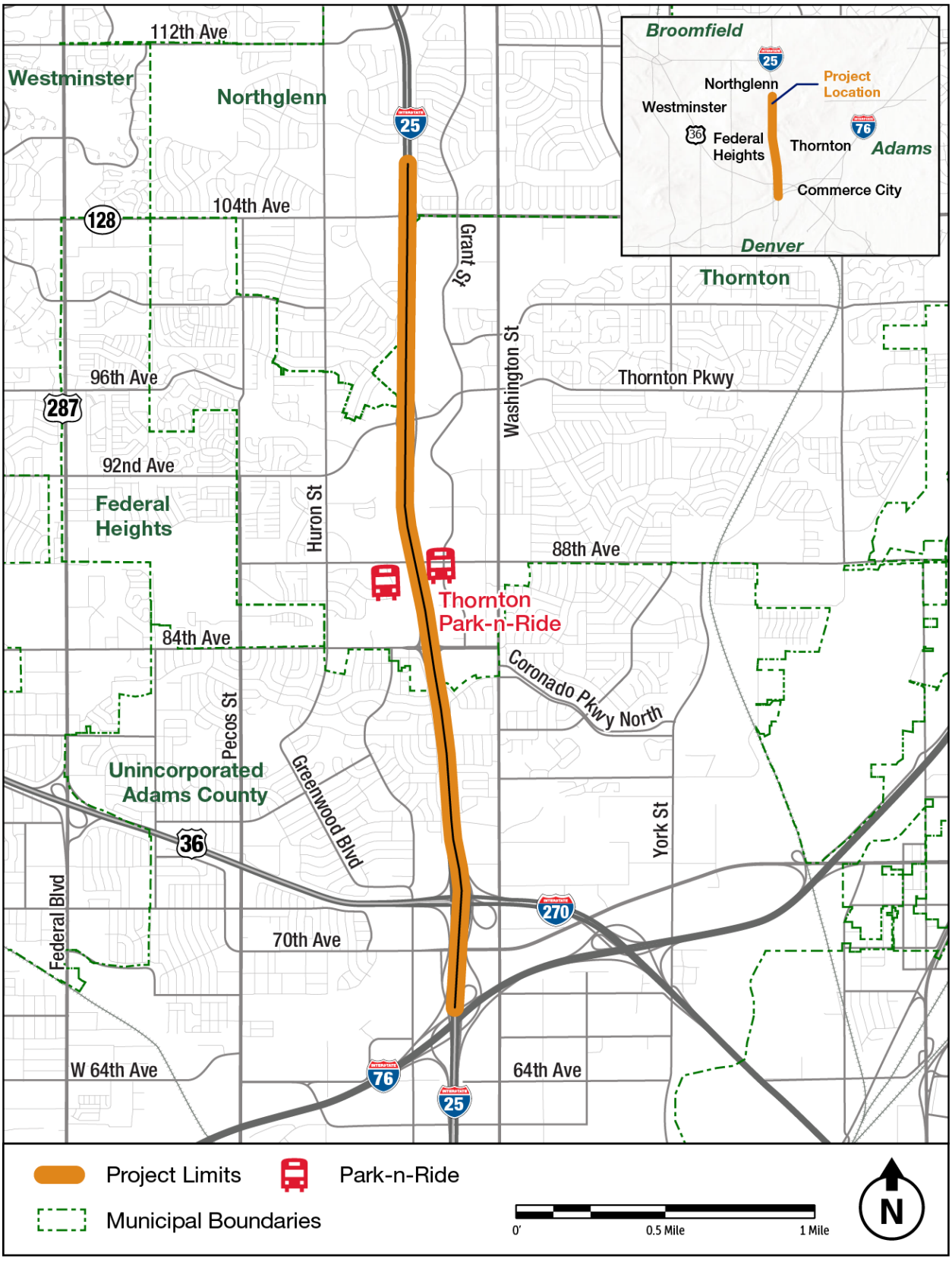
### Study Area

The Project limits, illustrated in **Figure 1**, extend along I-25 from the US 36/I-76/I-270 interchange to 104th Avenue. It includes portions of US 36 and I-270, major arterials crossing I-25, and areas of potential drainage improvements. The study area for the Project varies by resource. Each resource's study area is defined within its corresponding technical report or memorandum.

The interchanges included in the Project limits are:

- I-25/US 36/270/I-76
- I-25/84th Avenue
- I-25/88th Transit Slip Ramps
- I-25/Thornton Parkway
- I-25/104th Avenue

**Figure 1. Project Limits**



# PURPOSE AND NEED

The purpose of the Project is to improve I-25 between US 36 and 104th Avenue to address safety concerns and traffic operations.

The Project is needed to:

- Improve safety
- Improve traffic operations

In addition to addressing Project needs, the Project also has the following goal:

- Minimize environmental and community impacts caused by the Project

# PROPOSED ACTION

The Project would improve approximately five miles of I-25 between US 36 and 104th Avenue. All lanes are 12 feet in width unless otherwise noted. The current cross-section of this segment of I-25 includes:

- Three general-purpose travel lanes in each direction
- One Express Lane in each direction, along the inside shoulder, separated from the adjacent general-purpose lane by a 2-foot buffer
- A southbound auxiliary lane between the 84th Avenue and US 36 interchanges
- A southbound auxiliary lane between the 88th Avenue transit slip ramp and the 84th Avenue interchange
- A northbound auxiliary lane between the 88th Avenue transit slip ramp and Thornton Parkway interchange
- Inside shoulders varying in width between 2 and 12 feet and outside shoulders varying in width between 6 and 12 feet

The Proposed Action on I-25 between US 36 and 104th Avenue, illustrated in **Figure 2**, includes the general-purpose and Express Lanes listed above and adds the following elements to the existing cross-section:

- A new 12-foot wide southbound general-purpose lane from 104th Avenue to south of 84th Avenue (all new lanes will be 12 feet in width)
- A new northbound climbing lane from the I-76 entrance ramp to 104th Avenue
- An expanded buffer of 4 feet between the Express Lane and the adjacent general-purpose lane
- A new continuous auxiliary lane southbound between the 84th Avenue and Thornton Parkway interchanges
- New continuous northbound auxiliary lanes between the interchanges at I-270 and 84th Avenue, 84th Avenue and Thornton Parkway, and Thornton Parkway and 104th Avenue
- Expanded inside and outside shoulders with typical 10-foot widths, and minimum 6.5-foot inside and 7-foot width in restricted locations

In addition to those changes to the cross-section, the Proposed Action would include the following elements:

- Realignment of the combined I-76 and US 36 on-ramp connection
- Expansion of the I-270 exit to northbound I-25 from one to two lanes; I-270 merge with I-25 shifted farther north (See **Figure 3**)
- Removal of bus-only slip ramps along I-25 at the Thornton Park-n-Ride facilities
- Changes to the Park-n-Ride west parking lot including reduction in size and reconstruction of circulation widths, sidewalks, and median areas to accommodate the proposed open channel of Niver Creek
- Changes to the Park-n-Ride east parking lot including reconstruction of bus bays and relocated shelters and amenities
- Replacement of the 88th Avenue bridge over I-25; wider to accommodate improved bicycle and pedestrian facilities and longer to accommodate I-25 widening

- Realignment of the I-25 adjacent existing trail and pedestrian network within the Niver Creek Open Space and its connections to the Thornton Park-n-Ride facilities (see **Figure 4**)
- Replacement of the aging pedestrian and bikeway underpass at the Thornton Park-n-Ride facility
- Removal of Niver Creek from the existing box culvert at the Thornton Park-n-Ride and conversion of the creek into an open channel
- Relocation of the segment of Niver Creek east of I-25, which currently flows south from the Park-n-Ride east parking lot to the creek's intersection with Tributary L, to the west side of I-25
- New water quality treatment features throughout the project area

**Figure 2. Proposed Action**

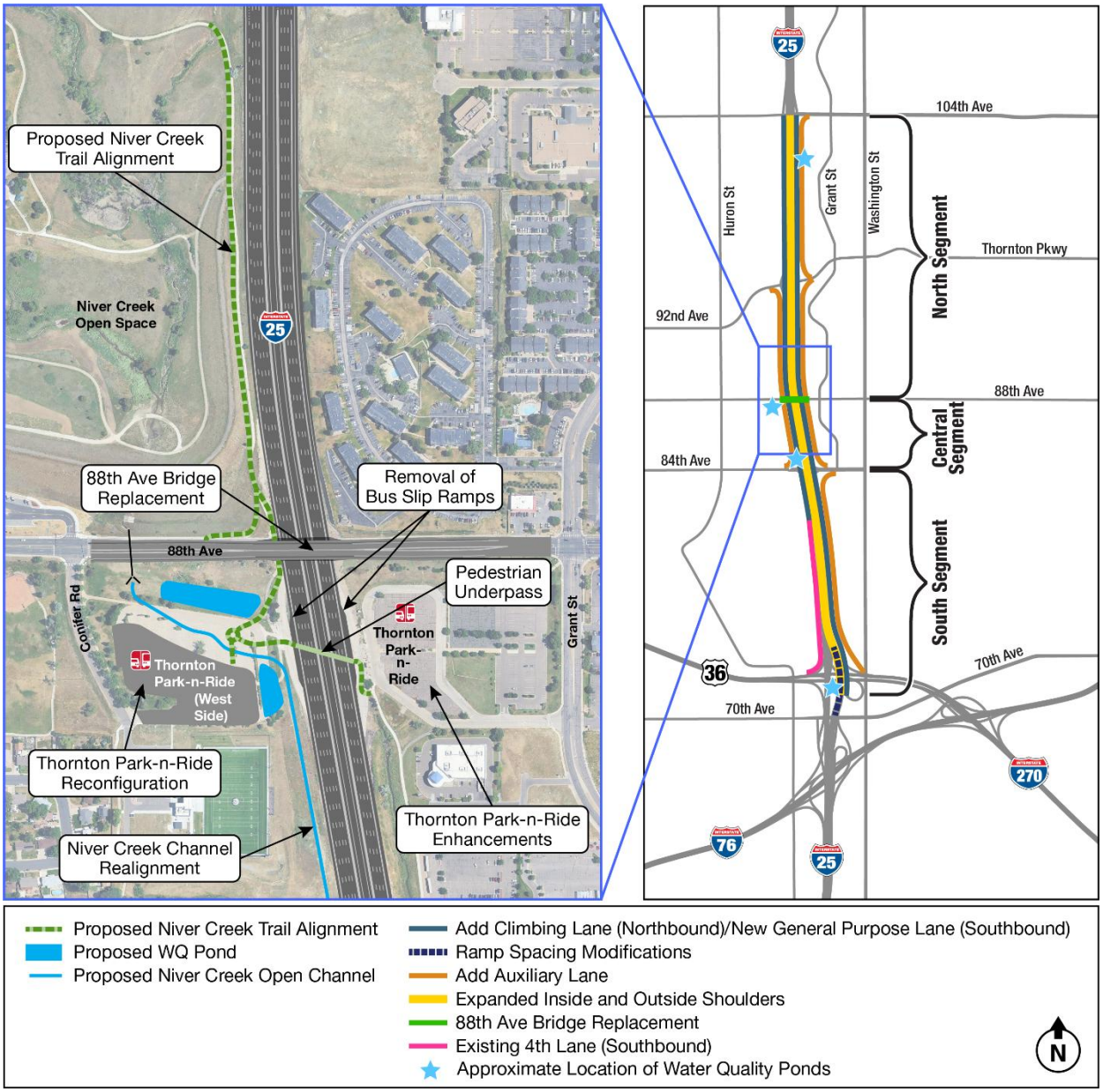


**Figure 3. Proposed Improvements to I-270 Exit to NB I-25**

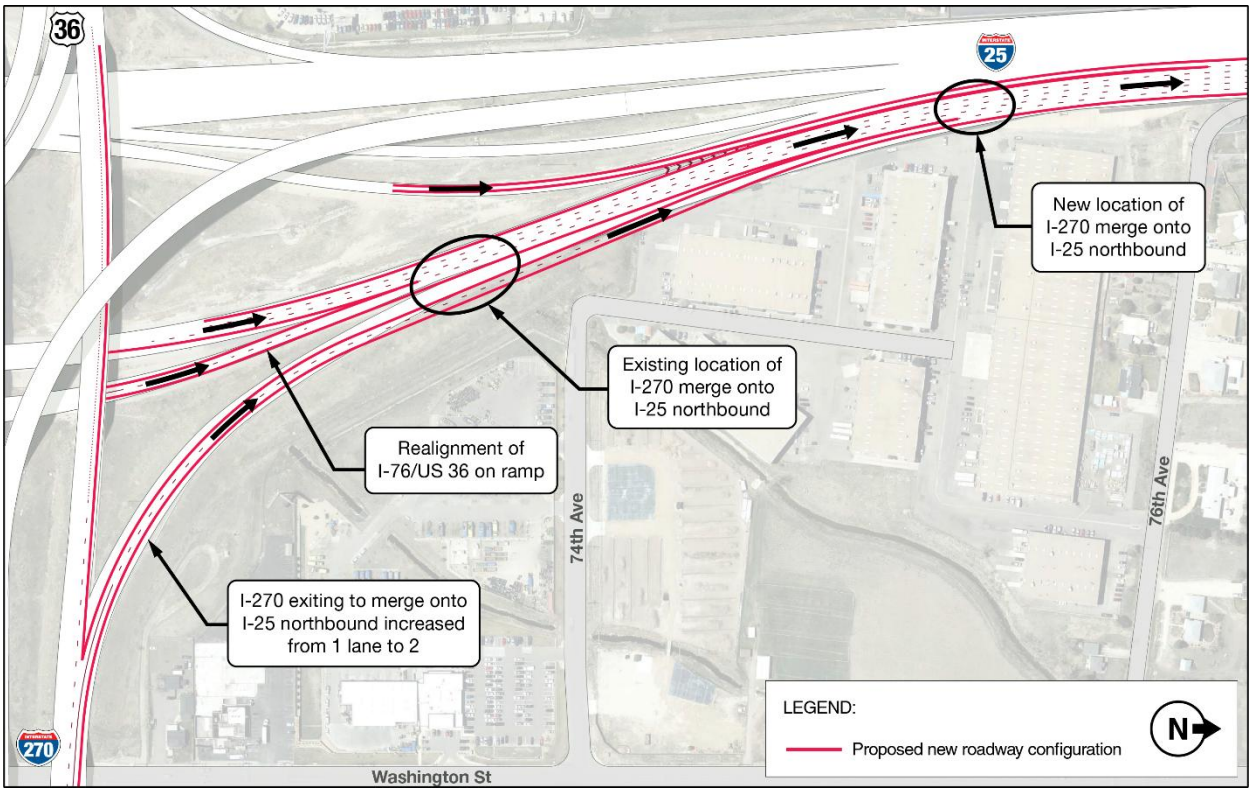
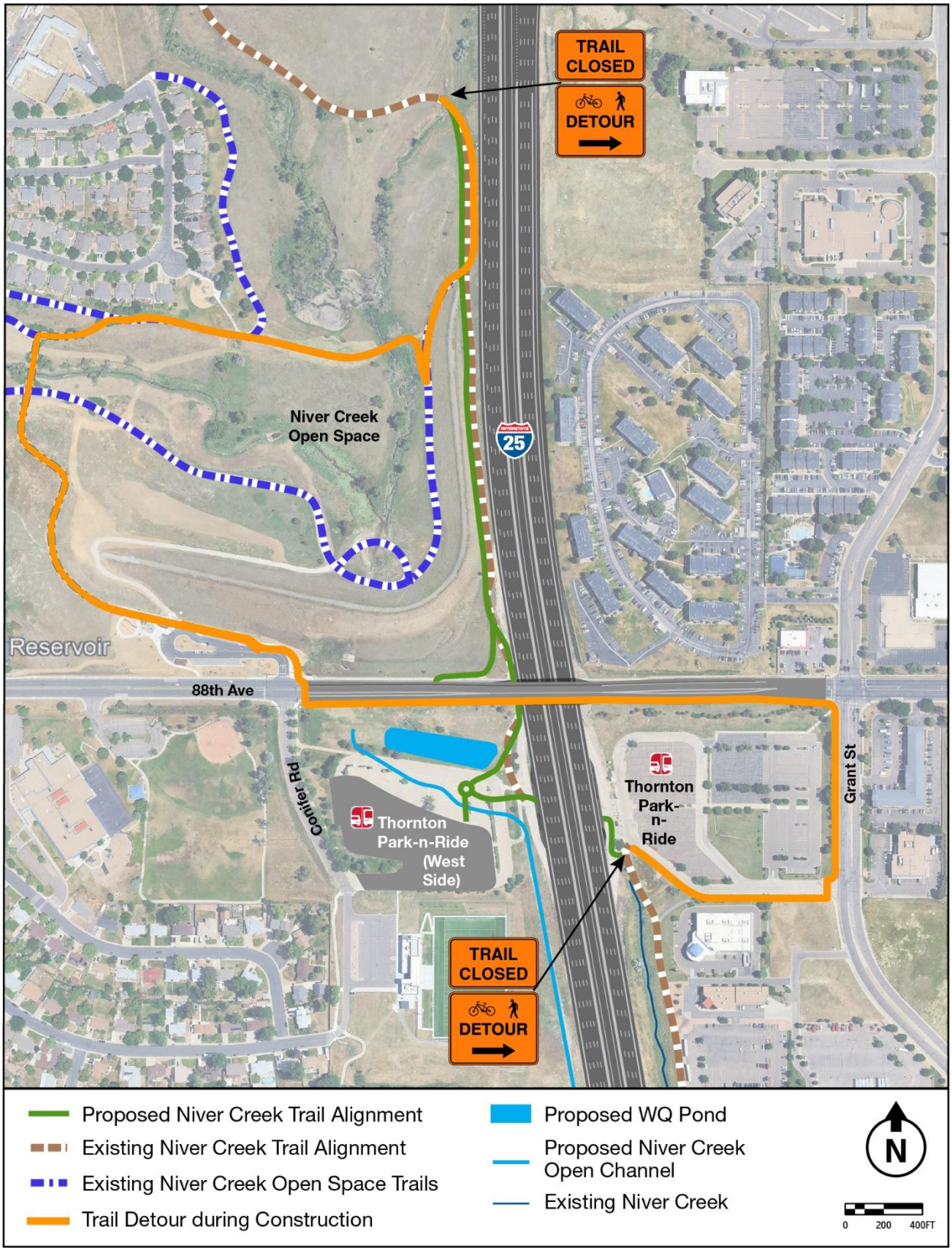


**Figure 4. Proposed Realignment of Niver Creek Trail**



Attachment B.

# Modified Environmental Site Assessment (MESA)

# Attachment B. Modified Environmental Site Assessment (MESA)

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Attachment C.

# Asbestos-Containing Material and Heavy Metals-Based Paint Inspection Report for CDOT Bridge E-17-FJ

# Attachment C. Asbestos-Containing Material and Heavy Metals-Based Paint Inspection Report for CDOT Bridge E-17-FJ

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Attachment D.

# Asbestos-Containing Material and Heavy Metals-Based Paint Inspection Report for CDOT Bridge E-17-LE

# Attachment D. Asbestos-Containing Material and Heavy Metals-Based Paint Inspection Report for CDOT Bridge E-17-LE

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