

## Phase I Environmental Site Assessment Report

April 2023



# VIA Advanced Rapid Transit North/South Corridor Project

# Phase I Environmental Site Assessment Report

Prepared for:



Prepared by:

## **TABLE OF CONTENTS**

| CHAPTER 1. | INTRODUCTION   | 1  |
|------------|--|----|
| 1.1        | Scope of Work  | 1  |
| 1.2        | Term of Report Viability                                 | 2  |
| 1.3        | Environmental Professional Declaration                   | 2  |
| CHAPTER 2. | SUBJECT PROPERTY   | 3  |
| 2.1        | Site Setting   | 3  |
| 2.2        | Subject Property Operations and Conditions               | 3  |
| 2.3        | Previous Environmental Reports                           |    |
| 2.4        | Materials Handling and Storage Practices                 |    |
| 2.5        | Solid and Hazardous Waste                                |    |
| 2.6        | Underground and Aboveground Tanks                        | 4  |
| 2.7        | Water, Wastewater, and Storm Water                       |    |
| 2.8        | Air Emissions  |    |
| 2.9        | Polychlorinated Biphenyls                                | 5  |
| CHAPTER 3. | ADJOINING PROPERTIES                                     | 5  |
| 3.1        | Current Uses of Adjoining Properties                     | 5  |
| 3.2        | Historical Uses of Adjoining Properties                  | 5  |
| CHAPTER 4. | RECORDS REVIEW/USER PROVIDED INFORMATION                 | 5  |
| 4.1        | Historical Records                                       |    |
| 4.2        | Regulatory Database Search                               | 9  |
| 4.3        | Regulatory Agency and Local File Reviews                 | 13 |
| 4.4        | Environmental Cleanup Liens/Activity and Use Limitations |    |
| 4.5        | User Provided Information                                |    |
| CHAPTER 5. | DATA GAPS  | 13 |
| CHAPTER 6. | NON-SCOPE CONSIDERATIONS                                 | 13 |
| CHAPTER 7. | FINDINGS AND OPINION                                     | 13 |
| 7.1        | Phase I Environmental Site Assessment                    |    |
|            | 7.1.1 Recognized Environmental Conditions                |    |
|            | 7.1.2 Controlled Environmental Conditions                |    |
|            | 7.1.4 De Minimis Conditions                              |    |
|            | 7.1.5 Other Environmental Matters                        |    |
| 7.2        | Recommendations  | 15 |
| CHAPTER 8. | REFERENCES   | 16 |

## **List of Tables**

| Table 1-1. N/S ART Project Area Physical Site Setting | 3 |
|---|---|
| Table 4-1. Aerial Photograph Findings                 |   |
| Table 4-2. Topographic Map Findings                   |   |
| Table 4-3. City Directory Findings                    |   |
| Table 4-4. ERIS Database Report Findings              | 9 |

## **List of Appendices**

Appendix A – Figures

Appendix B – ASTM 1527-13 Key Definitions

Appendix C – Photographs

Appendix D - Summary of Qualifications

Appendix E – ERIS Environmental Database Report

## **ACRONYMS**

| Acronym/Abbreviation | Definition  |
|----------------------|---|
| AAI                  | All Appropriate Inquiries   |
| ACM                  | asbestos-containing material  |
| APAR                 | Affected Property Assessment Report   |
| ART                  | Advanced Rapid Transit  |
| AST                  | aboveground storage tank  |
| ASTM                 | American Society for Testing and Materials  |
| CERCLA               | Comprehensive Environmental Response, Compensation, and Liability Act                             |
| CERCLIS              | Comprehensive Environmental Response, Compensation, and Liability Act Information System database |
| CFR                  | Code of Federal Regulations   |
| DENR                 | Department of Environmental and Natural Resources   |
| ERIS                 | Environmental Risk Information Services   |
| EPA                  | U.S. Environmental Protection Agency  |
| ESA                  | Environmental Site Assessment   |
| FTA                  | Federal Transit Administration  |
| GWCC                 | groundwater contamination case  |
| IHW                  | industrial and hazardous waste  |
| IHWCA                | industrial and hazardous waste corrective action  |
| IMD                  | incident management database  |
| LUST                 | leaking underground storage tank database   |
| LUST TRUST           | leaking underground storage tank trust database   |
| LPST                 | Leaking Petroleum Storage Tank  |
| N/S                  | North/South   |
| NEPA                 | National Environmental Policy Act   |
| NOE                  | notice of enforcement   |
| NOV                  | notice of violation   |
| NRCS                 | Natural Resource Conservation Service   |
| O&M                  | operations and maintenance  |
| OSHA                 | Occupational Safety and Health Administration   |
| PACM                 | presumed asbestos-containing material   |
| PCBs                 | polychlorinated biphenyls   |
| PCE                  | tetrachloroethene   |

| Acronym/Abbreviation | Definition                                     |
|----------------------|--|
| ppm                  | parts per million                              |
| PST                  | petroleum storage tank                         |
| RCRA                 | Resource Conservation and Recovery Act         |
| REC                  | Recognized Environmental Condition             |
| SARA                 | Superfund Amendments and Reauthorization Act   |
| SEMS                 | superfund enterprise management system         |
| SIC                  | standard industrial classification             |
| SPCC                 | spill prevention, control, and countermeasures |
| TCE                  | trichloroethene                                |
| TCEQ                 | Texas Commission on Environmental Quality      |
| UST                  | underground storage tank                       |
| TSCA                 | Toxic Substances Control Act                   |
| USFWS                | U.S. Fish and Wildlife Service                 |
| USGS                 | U.S. Geological Survey                         |
| VIA                  | VIA Metropolitan Transit                       |
| VOC                  | volatile organic compounds                     |
| VSQG                 | very small quantity generator                  |

## Chapter 1. **INTRODUCTION**

The Federal Transit Administration (FTA) has initiated National Environmental Policy Act (NEPA) compliance for VIA Metropolitan Transit's (VIA) North/South (N/S) Advanced Rapid Transit (ART) project. FTA has determined that the project, an approximately 12-mile bus rapid transit line, locally known as ART, in San Antonio, Texas is a federal undertaking subject to NEPA. The project comprises 75 percent dedicated transit lanes and 25 percent mixed traffic operations and would include 27 branded stations with off-board fare collection, next bus messaging, public announcement systems, bike parking, and safety features such as security cameras and lighting. This Phase I environmental site assessment (ESA) identifies recognized environmental conditions (RECs) in connection with the subject property based on a records review, site visit, and interviews. **Appendix A** includes a project location map.

## 1.1 Scope of Work

The project team conducted a Phase I ESA of the VIA N/S ART Project. The Phase I ESA was conducted in accordance with the U.S. Environmental Protection Agency (EPA) Standards and Practices for All Appropriate Inquiries (AAI) as required under Section 101(35)(B) of the Comprehensive Environmental Response, Compensation, and Liability Act (CERCLA); referenced in Title 40 Code of Federal Regulations (CFR), Part 312; the FTA Standard Operating Procedure for Hazardous Materials, and the American Society for Testing and Materials (ASTM) International Standard E 1527-13, Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process (ASTM E 1527-13). Key definitions from ASTM E 1527-13 that serve as the basis for the team's findings are included in **Appendix B**.

The assessment is based on a visit to the site by a Senior Environmental Scientist of the project team. This Phase I ESA was modified from ASTM 1527-13; site reconnaissance was limited to drive by inspections.

The following work was conducted during completion of the ESA:

- A site visit at the project area was conducted on May 9, 2022. The site visit was limited to drive-by inspection of the project and surrounding area. In addition, adjoining properties were observed from the site or adjacent public thoroughfares.
- Photographs of the project were taken to document conditions during the site visit and to highlight potential environmental concerns. The photographs are presented in **Appendix C**.
- No interviews were conducted as part of this Phase I ESA.
- The team conducted a review of information contained in federal and state environmental databases,
   as obtained from the sources noted below:
  - The team retained Environmental Risk Information Services (ERIS) to conduct a database search of the site and properties within AAI- and ASTM-specified search radii to identify releases or threatened releases and to help assess the likelihood of problems from migrating hazardous substances or petroleum products. The search (including the approximate minimum search distances) was conducted in accordance with the standards established by Section 101(35)(B) of CERCLA, 40 CFR 312.26, and ASTM E 1527-13. The results of the database search are presented in **Appendix E**.
  - Texas Commission on Environmental Quality (TCEQ) Online File Room, which lists spills, releases, and remediation activities.
- The team conducted a review of standard historical sources and state and local agency inquiries, as defined by the ASTM Standard. The following sources were reviewed:

- Aerial photographs, historic topographic maps, and city directories as summarized in Section 4.1 of this report.
- A chain of title was not provided for the project.

This Phase I ESA was conducted in accordance with ASTM E 1527-13. Asbestos-containing building materials, biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality (except as related to a potential release of a hazardous substance or petroleum product), industrial hygiene, lead-based paint, lead in drinking water, polychlorinated biphenyls (PCBs) in building materials (e.g. paint or caulk), mold, radon, regulatory compliance, and wetlands are non-scope considerations under Section 13.1.5 of ASTM E 1527-13 and were not included in the team's Phase I ESA.

#### 1.2 Term of Report Viability

In accordance with ASTM E 1527-13 and AAI, this report is presumed to be valid for a period of up to 180 days before the date of a future property transaction by the intended user. In addition, this report may be used for a period of up to one year before the date of a future property transaction by the intended user, provided that the following components are conducted or updated within 180 days of the date of purchase or the date of the intended transaction:

- interviews with owners, operators, and occupants
- searches for recorded environmental clean-up liens
- reviews of federal, tribal, state, and local government records
- visual reviews of the property and adjoining properties
- declaration of the environmental professional responsible for the assessment or update

#### 1.3 **Environmental Professional Declaration**

This report was Matthew Boyle, Senior Environmental Scientist of WSP. Mr. Boyle's resume is included in Appendix D.

I declare that, to the best of my professional knowledge and belief, I meet the definition of Environmental Professional as defined in Section 312.10 of 40 CFR Part 312. I have the specific qualifications based on education, training, and experience to assess a property of the nature, history, and setting of the subject property. I have developed and performed all the appropriate inquiries in conformance with the standards and practices set forth in 40 CFR Part 312.

| Matthew | Boyle. | Senior | <b>Environ</b> i | mental | Scientist |
|---------|--------|--------|------------------|--------|-----------|

## Chapter 2. SUBJECT PROPERTY

## 2.1 Site Setting

The subject property is an approximately 12-mile linear corridor that leads from San Antonio International Airport to south San Antonio at Stevens Avenue. The project is comprised of paved city streets and potentially adjoining properties. Key roadways within the project area include US 281 frontage roads, Isom Road, San Pedro Avenue, St. Mary's Street, Navarro Street, and Roosevelt Avenue.

Table 1-1 provides an overview of the physical setting for the site based on information contained in the ERIS Physical Setting Report (2022) or onsite observations, unless otherwise noted.

Table 2-1. N/S ART Project Area Physical Site Setting

| Physical Site Setting   |  |
|---|--|
| Topographic Gradient  | The ground elevation of the subject property is approximately 850 feet above mean sea level at the north part of the project and slopes south to an elevation of 600 feet above mean sea level. Regional topography slopes gently to the south.  |
| Surface Water Runoff  | Surface water flows from the paved streets into curb inlets and gutters along the streets. The runoff enters the City of San Antonio storm sewer system and discharges to creeks and streams along the path.   |
| Nearest Surface Water Body to<br>the Subject Property and<br>Groundwater Flow | The project crosses several creeks and streams including Olmos Creek, the San Antonio River, and associated intermittent tributaries of each.  |
|   | Based on surface topography the overall groundwater gradient is to the south; however, given the length of the project, specific groundwater gradients were indistinguishable.   |
| Floodplain  | Small sections of the project cross designated 100-year floodplains. The impacts of floodplains would be limited due to the drainage system of the streets.  |
| Wetlands  | Federally designated wetlands were not identified; however, individual properties were not assessed as part of the report.   |
| Soils   | The project crosses numerous mapped soils including Austin silty clays, Loire clay loam, Heiden-Ferris complex, Houston Black clay, Branon Clay, Lewisville silty clay, Eckrant cobbly clay, Tinn and Frio soils, and Sunev clay loam. Often soils located within urban area lose their original characteristics due to cut and fill activities associated with urban development. |

Source: ERIS Physical Setting Report

## 2.2 Subject Property Operations and Conditions

## 2.2.1 Current Operations

The project crosses several areas of the city, starting in the north at the San Antonio International Airport and progresses south along San Pedro Avenue through an area of commercial and retail development (Northgate Mall, restaurants, car dealerships, etc.). South of Basse Road, the project passes through residential areas with some commercial businesses. South of West Ashby Place, the project passes through a mixed area of commercial and residential development before entering the downtown area with commercial office and government buildings. South of downtown to Stevens Avenue, the project

passes through a mixed-use area of residences and commercial development along South Street, Mary Street, and Roosevelt Avenue.

## 2.2.2 Past Operations

San Antonio is one of the oldest cities in Texas and continued to grow since its founding in the 1700s. Modern San Antonio has grown at exponential rates, especially northwards with the development of the airport in the 1940s. Properties along the project have changed over time from residential to commercial or updated to new development. Past operations of specific properties were not included as part of this report.

## 2.3 Previous Environmental Reports

No previous environmental reports were available for the subject property.

## 2.4 Materials Handling and Storage Practices

The subject property is the project, which has no material handling or storage. No specific properties were inspected for this report.

### 2.5 Solid and Hazardous Waste

The project has no solid or hazardous waste handling. While no specific properties were inspected for this report, properties were identified in the environmental database report are discussed in Section 4.2.

## 2.6 Underground and Aboveground Tanks

The project has no underground storage tanks (UST) or aboveground storage tanks (AST); adjoining properties, both historical and current, may have operated UST or ASTs. Properties with a potential to impact the project are evaluated in Section 4.2. It is possible that through historical road expansion encroaching business along any of the project roadways, USTs may have been paved over prior to current environmental regulations.

## 2.7 Water, Wastewater, and Storm Water

No previous environmental reports were available for the property.

#### Water

Access to the City of San Antonio potable water system is available along the length of the project.

#### Wastewater

Access to the City of San Antonio sanitary sewer system is available along the length of the project.

#### **Stormwater**

Access to the City of San Antonio storm sewer system is available along the length of the project.

#### 2.8 Air Emissions

Air emissions along the project would consist of exhaust from automobiles (car, trucks, buses) and the business adjoining the project area.

## 2.9 Polychlorinated Biphenyls

Given the age of the project area, electric transformers, both pad-mounted and pole-mounted, along the project may contain PCBs. Prior to moving or altering transformers, the owner and/or utility should be contacted to inquire about the PCB content of the transformer fluids.

## Chapter 3. ADJOINING PROPERTIES

## 3.1 Current Uses of Adjoining Properties

The adjoining properties along the project consist of residences, parks, small and large commercial businesses (banks, grocery stores, car dealerships, restaurants, shopping malls, dry cleaners, automotive repair facilities, retail gasoline stations), San Antonio International Airport, office buildings, and schools.

## 3.2 Historical Uses of Adjoining Properties

The individual historical uses of all adjoining properties were not researched. The area adjoining the project has changed and expanded over time with multiple redevelopments.

## Chapter 4. RECORDS REVIEW/USER PROVIDED INFORMATION

### 4.1 Historical Records

The project team researched historical information at the U.S. Geologic Survey (USGS) online map repository, online resources, and the City of San Antonio Public Library, including:

- aerial photographs dated 1972, 1985, 1989, 1995, 2005, 2010, 2016, and 2021
- historical topographic maps from 1953, 1967, 1973 and 1992
- city directories from 1955 to 2021

The historical records are summarized below.

#### **Aerial Photographs**

The team reviewed aerial photographs taken in 1972, 1985, 1989, 1995, 2005, 2010, 2016, and 2021. Significant changes in the use of the subject property and adjoining properties are summarized in Table 4-1. **Appendix A** includes aerial and topographic maps of representative sites along the corridor.

**Table 4-1. Aerial Photograph Findings** 

| Photograph   | Subject Property  | Adjoining Properties   |
|--|---|--|
| 1972 Scale 1" = 1,00' The quality of the photo is poor. Source: Natural Resource Conservation Service (NRCS) | The project area is a developed street, due to the scale and quality of the photograph, characteristics of individual properties are indistinguishable. | The properties adjoining the project are developed. Due to the scale and quality of the photograph, characteristics of individual properties are indistinguishable. The area consists of commercial development and residential areas. |
| 1985 Scale 1" = 1,000'<br>Source: Natural<br>Resource Conservation<br>Service (NRCS)                         | The project area is a developed street. Due to the scale and quality of the photograph, characteristics of individual properties are indistinguishable. | The properties adjoining the project are developed. Due to the scale and quality of the photograph, characteristics of individual properties are indistinguishable. The area consists of commercial development and residential areas. |
| 1989 Scale 1" = 500'<br>Source: Google Earth   | The project area is a developed street. Due to the scale and quality of the photograph, characteristics of individual properties are indistinguishable. | The properties adjoining the project are developed. Due to the scale and quality of the photograph, characteristics of individual properties are indistinguishable. The area consists of commercial development and residential areas. |
| 1995 Scale 1" = 500'<br>Source: Google Earth   | The project area is a developed street.   | The properties adjoining the project are developed. Due to the scale and quality of the photograph, characteristics of individual properties are indistinguishable. The area consists of commercial development and residential areas. |
| 2005 Scale 1" = 500'<br>Source: Google Earth   | The project area is a developed street.   | The properties adjoining the project are developed. The area consists of commercial development and residential areas.   |
| 2010 Scale 1" = 500'<br>Source: Google Earth   | The project area is a developed street.   | The properties adjoining the project are developed. The area consists of commercial development and residential areas.   |
| 2016 Scale 1" = 500'<br>Source: Google Earth   | The project area is a developed street.   | The properties adjoining the project are developed. The area consists of commercial development and residential areas.   |
| 2021 Scale 1" = 500'<br>Source: Google Earth   | The project area is a developed street.   | The properties adjoining the project are developed. The area consists of commercial development and residential areas.   |

## **Topographic Maps**

The team reviewed historical topographic maps for the subject property and the surrounding area prepared in 1936, 1940, 1941, 1958, 1969, 1976, and 2013. Significant changes in the use of the subject property and adjoining properties are in Table 4-2:

**Table 4-2. Topographic Map Findings** 

| Topographic Map                                | Subject Property  | Adjoining Properties  |  |
|--|---|---|--|
| 1953 Scale 1:24,000                            | The project area is largely identified as developed land. The northern end has less density, individual streets and small buildings are shown | The area adjoining the project is largely identified as developed land. The northern end has less density, individual streets and small buildings are shown |  |
| 1967 Scale 1:24,000                            | The project area is largely identified as urban land, streets are shown, only larger buildings are depicted.                                  | The area adjoining project is largely identified as urban land, streets are shown, only larger buildings are depicted.                                      |  |
| 1973 Scale 1:24,000                            | The project area is largely identified as urban land, streets are shown, only larger buildings are depicted.                                  | The area adjoining project is largely identified as urban land, streets are shown, only larger buildings are depicted.                                      |  |
| 1992 Scale 1:24,000                            | The project area is largely identified as urban land, streets are shown, only larger buildings are depicted.                                  | The area adjoining project is largely identified as urban land, streets are shown, only larger buildings are depicted.                                      |  |
| Source: US Geological Survey Map Store, online |   |   |  |

## **City Directories**

The project team reviewed Polk's and Cole's city directories at the City of San Antonio Public Library for the streets that comprise the project area. The team reviewed the general makeup of the project area and did not research specific address or businesses. The city directory findings for surrounding properties are summarized in Table 4-3.

**Table 4-3. City Directory Findings** 

| City Directory Year | Location   | Description  |
|---------------------|--|--|
| 1960                | San Pedro Avenue   | Businesses (auto sales/repair, shopping), residences   |
|                     | St. Mary's Street  Navarro Street  Roosevelt Avenue                | Various businesses Various businesses  |
|                     |  | Commercial businesses, schools   |
| 1965                | San Pedro Avenue   | Businesses (auto sales/repair, shopping), residences   |
|                     | St. Mary's Street Navarro Street Roosevelt Avenue                  | Various businesses Various businesses Commercial businesses, schools   |
| 1975                | San Pedro Avenue St. Mary's Street Navarro Street Roosevelt Avenue | Businesses (auto sales/repair, restaurants, shopping), residences Various businesses, residences Various businesses Commercial businesses, schools, residences |

| City Directory Ye | ear Location                          | Description   |
|-------------------|---------------------------------------|---|
| 1980              | San Pedro Avenue                      | Businesses (auto sales/repair, restaurants, shopping), residences |
|                   | St. Mary's Street Navarro Street      | Various businesses, residences                                    |
|                   |                                       | Various businesses  |
|                   | Roosevelt Avenue                      | Commercial businesses, schools, residences                        |
| 1985              | San Pedro Avenue St. Mary's Street    | Businesses (auto sales/repair, restaurants, shopping), residences |
|                   | Navarro Street                        | Various businesses, residences                                    |
|                   | Roosevelt Avenue                      | Various businesses  |
|                   | Noosevelt Aveilue                     | Commercial businesses, schools, residences                        |
| 1995              | San Pedro Avenue<br>St. Mary's Street | Businesses (auto sales/repair, restaurants, shopping), residences |
|                   | Navarro Street                        | Various businesses, residences                                    |
|                   | Roosevelt Avenue                      | Various businesses  |
|                   | Troosevelt/Wellde                     | Commercial businesses, schools, residences                        |
| 2005              | San Pedro Avenue<br>St. Mary's Street | Businesses (auto sales/repair, restaurants, shopping), residences |
|                   | Navarro Street                        | Various businesses, residences                                    |
|                   | Roosevelt Avenue                      | Various businesses  |
|                   |                                       | Commercial businesses, schools, residences                        |
| 2010              | San Pedro Avenue<br>St. Mary's Street | Businesses (auto sales/repair, restaurants, shopping), residences |
|                   | Navarro Street                        | Various businesses, residences                                    |
|                   | Roosevelt Avenue                      | Various businesses  |
|                   |                                       | Commercial businesses, schools, residences                        |
| 2015              | San Pedro Avenue<br>St. Mary's Street | Businesses (auto sales/repair, restaurants, shopping), residences |
|                   | Navarro Street                        | Various businesses, residences                                    |
|                   | Roosevelt Avenue                      | Various businesses  |
|                   |                                       | Commercial businesses, schools, residences                        |
| 2020              | San Pedro Avenue St. Mary's Street    | Businesses (auto sales/repair, restaurants, shopping), residences |
|                   | Navarro Street                        | Various businesses, residences                                    |
|                   | Roosevelt Avenue                      | Various businesses  |
|                   |                                       | Commercial businesses, schools, residences                        |

Based on the team's review of historic documents, the team did not identify any evidence of suspect land contaminating activities, such as landfills or bulk storage tank farms, on or in the immediate vicinity of the project.

## 4.2 Regulatory Database Search

The team retained ERIS to conduct a database search of the project within AAI and ASTM-specified search radii, between 1/8-mile and 1-mile, to identify releases or threatened releases and to help assess the likelihood of problems from migrating hazardous substances or petroleum products. The specific search radii are listed in the database report. As allowed by Section 101(35)(B) of CERCLA, 40 CFR 312.26, and ASTM E 1527-13, the approximate search distances were modified. Being that the subject property is a roadway and the majority of the project is located within an existing right-of-way, all search radii were halved. The project team determined the modified search distance would provide sufficient information to make determinations of the presence of RECs. The results of the database search are presented in **Appendix E**.

Being that the subject property is a project without a specific address, it was not listed on any of the federal or state environmental regulatory databases searched by ERIS.

Federal and state databases also were searched to determine the potential for the project to be affected by releases from neighboring properties. The sites that have the greatest potential to have caused environmental contamination are those that have had releases or spills of hazardous substances or petroleum products located upgradient or in close proximity to the project. Given the length of the project (approximately 12 miles), a single direction of localized groundwater flow was not identifiable. The team reviewed properties of concern and evaluated the likely groundwater flow gradient on a case-by-case basis. Table 4-4 outlines findings of the environmental database report.

Table 4-4. ERIS Database Report Findings

| Database (Case No.)                              | Summary                     | Status  |
|--|-----------------------------|---|
| Affected Property<br>Assessment Report<br>(APAR) | 11 sites within 500 feet    | One case discussed below, the other sites were evaluated and the team does not consider them a Recognized Environmental Condition (REC) to the project. |
| Brownfield/Federal<br>Brownfield                 | Eight sites within 500 feet | The sites are small clean-up and redevelopment projects. The team does not consider these sites to represent a REC to the project.                      |
| Drycleaners/Fed<br>Drycleaners                   | 11 sites within 500 feet    | Five sites are identified as active dry cleaners, the remaining are listed a drop off only facilities. The five sites are discussed below.              |
| Spills   | 17 sites within 500 feet    | Spill cases have been closed or referred to the appropriate program. No RECs identified.  |
| Emergency<br>Response<br>Notification System     | Five sites within 0.50-mile | The cases have been closed or remediated to the satisfaction of the state. No RECs identified.  |
| Superfund<br>Enterprise<br>Management<br>System  | One site within 0.50-mile   | A train collision in 2004, clean up began immediately; no site assessment was required. The team does not consider this listing to                      |

| Database (Case No.)                                  | Summary                      | Status   |
|--|------------------------------|--|
|  |                              | represent a REC due to the area being remediated.  |
| SEMS Archive   | Two sites within 0.50-mile   | Based on distance, the team does not consider either site to represent a REC.  |
| CECLIS/CERLIS<br>NFRAP                               | Two sites within 0.50-mile   | Based on distance, presumed groundwater gradient or closed status, the team does not consider either site to represent a REC.      |
| RCRA Corrective<br>Action                            | Two sites within 0.50-mile   | Based on distance, the team does not consider either site to represent a REC.  |
| RCRA –<br>Transportation,<br>Storage and<br>Disposal | One site within 0.50-mile    | Based on distance, the team does not consider this site to represent a REC.  |
| RCRA Small<br>Quantity Generator                     | Seven sites within 0.50-mile | Based on distance or lack of violations, the team does not consider these sites to represent a REC.                                |
| RCRA Very Small<br>Quantity Generator                | 15 sites within 0.50-mile    | Based on distance, presumed groundwater gradient or lack of violations, the team does not consider these sites to represent a REC. |
| RCRA Non-<br>Generator                               | 68 sites within 0.50-mile    | Based on distance, presumed groundwater gradient or lack of violations, the team does not consider these sites to represent a REC. |
| Superfund/State<br>Superfund                         | Two sites within 0.50-mile   | Based on distance, the team does not consider either site to represent a REC.  |
| Closed Landfill/Solid<br>Waste Landfill              | 10 sites within 0.50-mile    | Based on distance, presumed groundwater gradient or closed status, the team does not consider these sites to represent a REC.      |
| Leaking Petroleum<br>Storage Tanks<br>(LPSTs)        | 232 sites within 0.50-mile   | Based on distance, presumed groundwater gradient or case status, the team does not consider these sites to represent a REC.        |
| Petroleum Storage<br>Tanks                           | 171 sites within 0.50-mile   | Based on distance, presumed groundwater gradient or tank status, the team does not consider these sites to represent a REC.        |
| Aboveground<br>Storage Tanks                         | 21 sites within 0.50- mile   | Based on distance or tank status, the team does not consider these sites to represent a REC.                                       |
| Activity use<br>Limitations                          | Three sites within 0.50-mile | Based on distance or presumed groundwater gradient, the team does not consider these sites to represent a REC.                     |

| Database (Case No.)                                      | Summary                      | Status   |
|--|------------------------------|--|
| Voluntary Clean-up<br>Program                            | 18 sites within 0.50-mile    | Based on distance, presumed groundwater gradient or program status, the team does not consider these sites to represent a REC. |
| Innocent Owner<br>Program                                | Three sites within 0.50-mile | Based on distance, presumed groundwater gradient or program status, the team does not consider these sites to represent a REC. |
| Industrial and<br>Hazardous Waste –<br>Corrective Action | 15 sites within 500 feet     | Based on distance or program status, the team does not consider these sites to represent a REC.                                |
| Industrial and<br>Hazardous Waste<br>Generator           | 71 sites within 0.50-mile    | Based on distance or program status, the team does not consider these sites to represent a REC.                                |
| Industrial and<br>Hazardous Waste<br>Transporter         | Five sites within 0.50-mile  | Based on distance or program status, the team does not consider these sites to represent a REC.                                |
| Notice of Violation                                      | 27 sites within 0.50-mile    | Based on distance or program status, the team does not consider these sites to represent a REC.                                |
| Notice of<br>Enforcement                                 | Five sites within 0.50-mile  | Based on distance or program status, the team does not consider these sites to represent a REC.                                |

The following sites are in close proximity to the project with the potential to impact the project area:

- Former Benson AMC Jeep/Circle K, 3820 San Pedro Avenue, adjoining the project on the east side in the vicinity of the Rampart Station, was identified in the LPST database. The facility operated as a car dealership since at least 1976 until the late 1990s. The facility reported a release in 1990, it was closed by the TCEQ in 1991, and the tanks were removed. The property was redeveloped as a retail gasoline station and restaurant in 2016. The current USTs meet the state requirements for leak protection. The team considers the closed case LPST incident to represent a historical environmental condition to the subject property.
- Maverick Cleaners, 7122 San Pedro Avenue, adjoins the project on the east side and operated as a drycleaner with onsite operations from at least 2004 to 2009. The dry-cleaning operations utilized chlorinated solvents. Due to the proximity of the facility in relation to the project, the team considers the former dry-cleaning operations a REC.
- Rex Formal Wear, 7038 San Pedro Avenue, adjoining the project on the east side in the vicinity, was identified in the Drycleaner database with operations from at least 2004 to 2009. The drycleaning operations utilized chlorinated solvents. Due to the proximity of the facility in relation to the project, the team considers the former dry-cleaning operations a REC.
- VIA Metropolitan Transit Authority, adjoining the subject property, was identified in the APAR database. VIA purchased a former Red Mac maintenance facility with leaking hydraulic lifts. An APAR was submitted in 2001 to the TCEQ with selenium as the contaminant of concern. The workload is listed as incomplete, and no closure has been identified. The area has been redeveloped as a parking lot. The area of concern is located approximately 200 feet to the west

of the project. The team does not consider this facility to represent an REC to the subject property.

- Exxon gasoline station, 802 San Pedro Avenue, located adjoining the east side of the project in the vicinity of the Cypress Station was identified on the LPST database. The release was reported in 1989 and received closure in 1996. The tanks have been replaced and meet the state requirements for leak protection. The team considers the closed case LPST incident to represent a historical REC to the subject property.
- Former Mobil gasoline station, located adjoining the east side of the project, 1506 South St. Mary Street, in the vicinity of the West Carolina Street Station, was identified in the LPST database. The facility reported a release in 1999 and received closure from the TCEQ in 2000. Based on the regulatory closure for the LPST case, the team considers this facility to represent a historical REC.
- Astro Plating, 915 Roosevelt Avenue, 400 feet west of the project, was identified in the Resource Conservation and Recovery Act (RCRA) very small quantity generator (VSQG) database, industrial and hazardous waste generator (IHW), industrial and hazardous waste corrective action (IHWCA), petroleum storage tank (PST), notice of violation (NOV), notice of enforcement (NOE), institutional controls, liens, groundwater contamination case (GWCC), and superfund enterprise management system (SEMS) archive. The former plating company was identified with several state and federal waste violations, institutional controls (deed restrictions for groundwater usage), and liens due to groundwater contamination associated with the former plating operations. The identified contaminants of concern include volatile organic compounds (VOC) and chromium. The team reviewed the available files from the TCEQ including a groundwater gradient map, which identified the groundwater flow direction to the southwest. Astro has not been operating since 2013, but the deed restrictions remain in place. Based on the deed restriction, groundwater flow direction, and cessation of the plating activities, the team does not consider Astro Plating to represent a REC to the subject property.
- Three additional facilities identified as cleaners are located along the project. No violations have been identified; however, based on the reasonable potential for releases associated with dry cleaners, the team considers the following sites to represent RECs to the subject property: Lauras Laundry 515 San Pedro Avenue, Clothesline Cleaners 1006 South St. Mary Street, Southtown Laundry 520 Roosevelt Avenue.

Sixteen facilities within a 0.5-mile radius of the subject property were identified as unplottable sites, or "orphan sites" in the ERIS database report. These sites are identified as unmappable sites due to imprecise or limited address information (e.g., an incomplete street address or a P.O. box). Therefore, it is difficult to determine the potential for activities at these sites to have affected the subject site. Based on the facilities' database address information, the team was able to locate 12 of the unplottable sites. The team did not observe any of the "orphan sites" in the vicinity of the subject property.

## 4.3 Regulatory Agency and Local File Reviews

The team retained ERIS to conduct a database search of the site and properties within AAI- and ASTM-specified search radii to identify releases or threatened releases and to help assess the likelihood of problems from migrating hazardous substances or petroleum products. As part of the assessment, the project team performed file reviews form regulatory agencies and local government offices, where necessary.

## 4.3.1 Subject Property

The subject property consists of the Project Area, no listings were identified.

No "commonly known" information was identified during the local records review.

### 4.3.2 Adjoining Properties

Adjoining properties identified on regulatory databases searched by ERIS were compared with the ROW supplied by the client. Based on the ROW in relation to the identified sites, the team did not identify sites requiring a regulatory file review. Two adjoining properties of concern, 1001 and 1014 Roosevelt Avenue, were not identified on the regulatory database, which indicated no files would be available to review.

## 4.4 Environmental Cleanup Liens/Activity and Use Limitations

The subject property consists of the project, no individual addresses were researched for liens or activity and use limitations.

## 4.5 User Provided Information

The subject property consists of the project, which entails public streets, no user provided information was identified.

## Chapter 5. **DATA GAPS**

The project team did not identify any data gaps during the Phase I ESA that affect the team's ability to identify RECs at the subject property. However, the team was unable to interview any current or previous property owners or occupants along the project; when available, the team reviewed environmental records for suspect properties along the route. However, the lengthy period of the area's development predates common environmental regulations and recordkeeping practices.

## Chapter 6. NON-SCOPE CONSIDERATIONS

Non-scope items including biological agents, cultural and historic resources, ecological resources, endangered species, health and safety, indoor air quality (except as related to a potential release of a hazardous substance or petroleum product), industrial hygiene, lead in drinking water, polychlorinated biphenyls (PCBs) in building materials (e.g. paint or caulk), mold, regulatory compliance, and wetlands are non-scope considerations under Section 13.1.5 of ASTM E 1527-13 and were not evaluated as part of this modified Phase I ESA. Some properties along the project are of age where hazardous building materials including asbestos and lead-based paint may be present. Prior to any renovations or demolition of adjoining properties, the team recommends the properties be evaluated for hazardous building materials.

## Chapter 7. FINDINGS AND OPINION

#### 7.1 Phase I Environmental Site Assessment

#### 7.1.1 Recognized Environmental Conditions

The team identified the following known or suspect REC in connection with the subject property:

 Maverick Cleaners, 7122 San Pedro Avenue, adjoins the project on the east side and operated as a drycleaner with onsite operations from at least 2004 to 2009. The dry-cleaning operations

- utilized chlorinated solvents. Due to the proximity of the facility in relation to the project, the team considers the former dry-cleaning operations a REC.
- Rex Formal Wear, 7038 San Pedro Avenue, adjoining the project on the east side in the vicinity, was identified on the Drycleaner database with operations from at least 2004 to 2009. The drycleaning operations utilized chlorinated solvents. Due to the proximity of the facility in relation to the project, the team considers the former dry-cleaning operations a REC.
- Three additional facilities identified as cleaners are located along the project. No violations have been identified however based on the reasonable potential for releases associated with dry cleaners, the team considers the following sites to represent a REC to the subject property:

   Lauras Laundry 515 San Pedro Avenue, Clothesline Cleaners 1006 South St. Mary Street,
   Southtown Laundry 520 Roosevelt Avenue.
- 1001 Roosevelt Avenue and 1014 Roosevelt Avenue have lengthy histories of operations as a construction yard and an auto service facility. Neither facility was identified in the environmental regulatory database report; however, their operations likely predated environmental regulations. Given the outward appearance of the facilities and the lack of knowledge concerning waste handling procedures, the team considers these facilities to represent RECs.

#### 7.1.2 Controlled Environmental Conditions

The team did not identify any controlled RECs in connection with the subject property.

## 7.1.3 Historically Recognized Environmental Conditions

The team identified the following historical RECs in connection with the subject property.

- Former Benson AMC Jeep/Circle K, 3820 San Pedro Avenue, adjoining the project on the east side in the vicinity of the Rampart Station, was identified on the LPST database. The facility operated as a car dealership since at least 1976 until the late 1990s. The facility reported a release in 1990 and it was closed by the TCEQ in 1991 and the tanks were removed. The property was redeveloped as a retail gasoline station and restaurant in 2016. The current underground storage tanks meet the state requirements for leak protection. The team considers the closed case LPST incident to represent a historical REC to the subject property.
- Exxon gasoline station, 802 San Pedro Avenue, located adjoining the east side of the project in the vicinity of the Cypress Station was identified on the LPST database. The release was reported in 1989 and received closure in 1996. The tanks have been replaced and meet the state requirements for leak protection. The team considers the closed case LPST incident to represent a historical REC to the subject property.
- Former Mobil gasoline station, located adjoining the east side of the project, 1506 South St. Mary Street, in the vicinity of the West Carolina Street Station, was identified on the LPST database.
   The facility reported a release in 1999 and received closure from the TCEQ in 2000. Based on the regulatory closure for the LPST case, the team considers this facility to represent a historical REC.

## 7.1.4 De Minimis Conditions

The team did not identify any *de minimis* conditions in connection with the subject property. A *de minimis* condition constitutes a condition 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 if brought to the attention of appropriate governmental agencies.

#### 7.1.5 Other Environmental Matters

The team identified the following noteworthy issues at the site that may be considered business environmental risks, that while not considered RECs, are defined as a risk that can have a material environmental or environmentally driven impact on the business associated with the current or planned use of commercial real estate, and is not an issue required to be investigated under the ASTM standard:

 Given the age span between properties, the potential exists for asbestos and lead-based paint in some buildings. Prior to renovation or demolition of specific properties, the team recommends performing hazardous building material surveys.

#### 7.2 Recommendations

The project team considers the properties located a 1001 Roosevelt Avenue and 1014 Roosevelt Avenue to be RECs. The properties have been identified as proposed right-of-way acquisitions; therefore, the team recommends full ASTM 1527-13 Phase I ESAs, including site reconnaissance and site-specific historical research, for these properties.

The two properties noted above were unable to be accessed due to lack of right-of-entry. Further assessment and/or investigation into the properties would be conducted during the right-of-way acquisition process. If any hazardous material issues were identified, those issues would be addressed prior to construction.

During construction, contractors would be advised of the following requirements for hazardous materials:

- If hazardous materials are used during construction, they would be required to be managed and disposed of according to applicable rules and regulations.
- Accidental hazardous material spills would be reported, contained, and remediated using safe work practices to prevent contamination.
- If unanticipated hazardous materials are encountered, work would stop in the affected location until appropriate hazardous material specialist can document, contain, and remediate the location using safe work practices.

## Chapter 8. **REFERENCES**

ASTM. 2021. Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process.

City of San Antonio. 2022. Texas Historical Room. Polk's and Cole's City Directories.

Environmental Risk Information Services (ERIS). 2022. Database Report. Order Number: 22051300309.

ERIS. 2022. Physical Setting Report. Order Number: 22051300309.

Federal Transit Administration. 2016. SOP No. 19 Consideration of Contaminated Properties including Brownfields. Retrieved from <a href="https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/SOP%2019.pdf">https://www.transit.dot.gov/sites/fta.dot.gov/files/docs/SOP%2019.pdf</a>.

Texas Commission on Environmental Quality (TCEQ). Central Registry Search. May 2, 2022.

U.S. Environmental Protection Agency. 2021. Envirofacts Online Database Search. May 3, 2022.

U.S. Geological Survey. 2022, Topographic Map Store. May 18, 2022



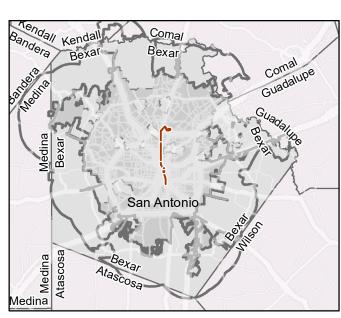


## APPENDIX A MAPS

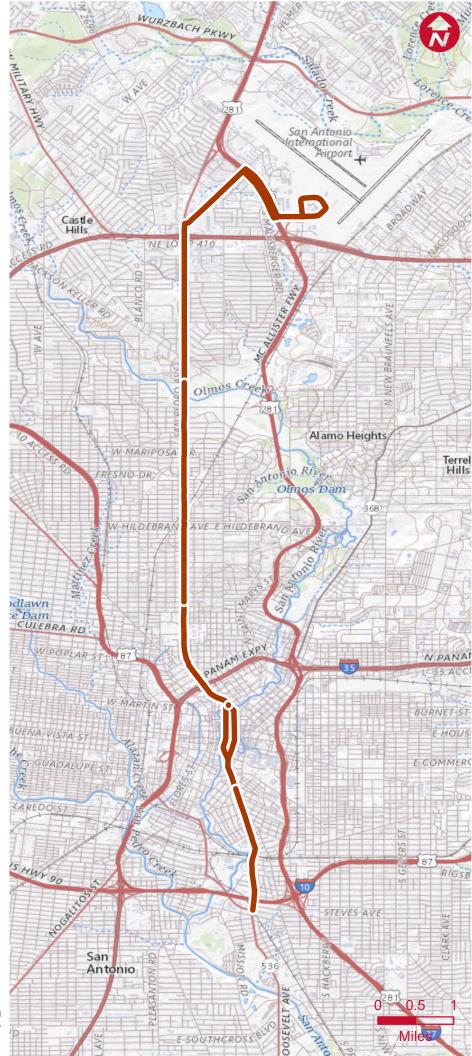


## **LEGEND**

ART North/South Project Alignment



Sources: VIA (N/S proposed corridor and N/S Stations); TxDOT (city and county boundaries, roads, railroads); City of San Antonio (channels, central business district boundary)

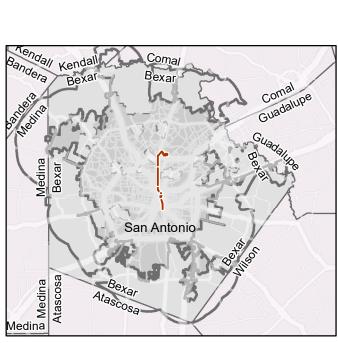




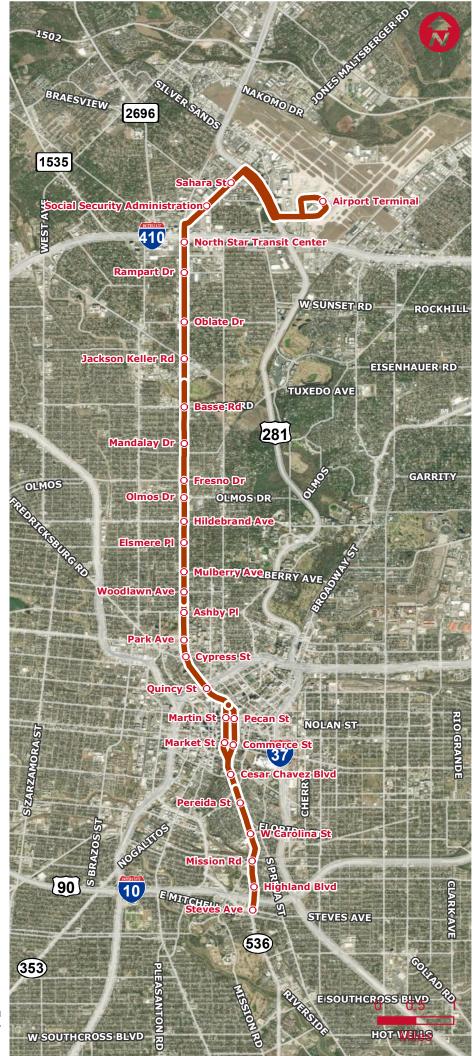
### **LEGEND**

ART North/South Project Alignment

N/S Stations



Sources: VIA (N/S proposed corridor and N/S Stations); TxDOT (city and county boundaries, roads, railroads); City of San Antonio (channels, central business district boundary)





## APPENDIX **B** KEY DEFINITIONS FROM ASTM E 1527-13

## Key Definitions from ASTM E 1527-13 Standard Practice for Environmental Site Assessments: Phase I Environmental Site Assessment Process

As stated in ASTM E 1527-13, the goal of the Phase I site assessment process is to identify recognized environmental conditions. A recognized environmental condition means:

... the presence or likely presence of any hazardous substances or petroleum products in, on, or at a property: (1) due to any release to the environment; (2) under conditions indicative of a release to the environment; or (3) under conditions that pose a material threat of a future release to the environment.

In addition, WSP used the following definitions from ASTM E 1527-13 to identify certain findings for this Phase I site assessment:

<u>Controlled Recognized Environmental Condition</u> – a recognized environmental condition resulting from a past release of hazardous substances or petroleum products that has been addressed to the satisfaction of the applicable regulatory authority (for example, as evidenced by the issuance of a no further action letter or equivalent, or meeting risk-based criteria established by regulatory authority), with hazardous substances or petroleum products allowed to remain in place subject to the implementation of required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

<u>Historical Recognized Environmental Condition</u> – a past release of any hazardous substances or petroleum products that has occurred in connection with the property and has been addressed to the satisfaction of the applicable regulatory authority or meeting unrestricted use criteria established by a regulatory authority, without subjecting the property to any required controls (for example, property use restrictions, activity and use limitations, institutional controls, or engineering controls).

<u>De minimis Condition</u> – a condition 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 if brought to the attention of appropriate governmental agencies.



## **APPENDIX C** SITE PHOTOGRAPHS

| PHOTOGRAPHIC LOG |                    |  |
|------------------|--------------------|--|
| VIA              | VIA N/S PROJECT    |  |
|                  | San Antonio, Texas |  |

| Photo No. | Date        |
|-----------|-------------|
| 1         | May 9, 2022 |

Looking north along San Pedro Avenue from Rampart Avenue



| Photo No.                     | Date        |  |
|-------------------------------|-------------|--|
| 2                             | May 9, 2022 |  |
| Looking south along San Pedro |             |  |

Looking south along San Pedro Avenue from Rampart Avenue



| PHOTOGRAPHIC LOG |                    |  |
|------------------|--------------------|--|
| VIA              | VIA N/S PROJECT    |  |
|                  | San Antonio, Texas |  |

| Photo No. | Date        |
|-----------|-------------|
| 3         | May 9, 2022 |

Looking north along San Pedro Avenue from Jackson Keller



| Photo No.                     | Date        |  |
|-------------------------------|-------------|--|
| 4                             | May 9, 2022 |  |
| Looking south along San Pedro |             |  |

Looking south along San Pedro Avenue from Jackson Keller



| PHOTOGRAPHIC LOG |                    |  |
|------------------|--------------------|--|
| VIA              | VIA N/S PROJECT    |  |
|                  | San Antonio, Texas |  |

| Photo No. | Date        |
|-----------|-------------|
| 5         | May 9, 2022 |
| T 1' (1   | 1 C D 1     |

Looking north along San Pedro Avenue from Hildebrand Avenue



| 6 August 5, 202 | 21 |
|-----------------|----|

Looking south along San Pedro Avenue from Hildebrand Avenue



| PHOTOGRAPHIC LOG |                    |  |
|------------------|--------------------|--|
| VIA              | VIA N/S PROJECT    |  |
|                  | San Antonio, Texas |  |

| Photo No.                          | Date        |  |
|------------------------------------|-------------|--|
| 7                                  | May 9, 2022 |  |
| Looking south along Narvarro Stree |             |  |

downtown, from Martin Street



| Photo No. | Date        |
|-----------|-------------|
| 8         | May 9, 2022 |

Looking north along N. St. Mary Street downtown, from Commerce Street



| PHOTOGRAPHIC LOG |                    |  |
|------------------|--------------------|--|
| VIA              | VIA N/S PROJECT    |  |
|                  | San Antonio, Texas |  |

| Photo No.                       | Date        |  |
|---------------------------------|-------------|--|
| 9                               | May 9, 2022 |  |
| Looking north along S. St. Mary |             |  |



| Photo No.                     | Date        |  |
|-------------------------------|-------------|--|
| 10                            | May 9, 2022 |  |
| Looking north along Roosevelt |             |  |
| Avenue from Stevens Avenue.   |             |  |



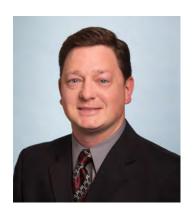


## **APPENDIX D** SUMMARY OF QUALIFICATIONS



## **MATTHEW BOYLE**

#### Lead Environmental Scientist



Years with the firm

6

**Years total** 

22

#### **Professional qualifications**

Certified Professional in Erosion and Sediment Control

#### **Areas of practice**

Environmental Due
Diligence, Environmental
Remediation,
Environmental
Compliance,
Environmental, Health and
Safety Auditing, Indoor Air
Quality Assessments

#### **CAREER SUMMARY**

Matthew Boyle has over 20 years of diverse environmental due diligence, remediation, inspection, and auditing experience in manufacturing, oil and gas, commercial real estate, and insurance which includes the performance of environmental compliance audits, multi-media permitting (air and water), environmental due diligence, insurance risk control and claims support, Phase I/II Environmental Site Assessments and remediation oversight. Mr. Boyle has conducted numerous environmental multi-media compliance audits across five states in sectors including metalworking, automotive parts, plastics, printing, electronics components, petroleum production and bulk terminal facilities. He manages and provides compliance services to industrial clients including: storm water management and permitting, emergency response planning, Tier II hazardous substances reporting/Community Right-to-Know, air permitting and reporting, and comprehensive EHS audits.

#### **EDUCATION**

B.S. Applied Science, Texas A&M University-Commerce, Commerce, Texas

2007

#### **ADDITIONAL TRAINING**

OSHA-40 Hour Health and Safety for Hazardous Waste Site Personnel Hydrogen Sulfide Awareness Training Mold Assessment Consultant

#### PROFESSIONAL EXPERIENCE

#### **Environmental Auditing**

- Manufacturing Facility Texas: Environmental auditor evaluating compliance at a manufacturer of industrial control systems. The facility's operations included metal machining and welding, spray painting, metal etching, parts washing, assembly, hydrostatic and air testing. Operations included machining, metal fabrication, parts cleaning/washing, spray painting and assembly. Program areas included compliance TCEQ industrial waste requirements including waste characterization/Registration for Industrial and Hazardous Wastes, applicable TCEQ air PBR regulations (including Surface Coating Facility PBR), TPDES Multi-Sector Storm Water General Permit, wastewater discharge permit and SARA Reporting.
- Oil and Gas Field Service Company, Texas, Oklahoma, New Mexico: lead environmental auditor for multi-media environmental compliance audits at numerous oil and gas field service facilities which included tool manufacturing, metal working, painting, explosives handling, and hazardous material storage. Industrial processes include metal pressing operations, metal finishing, metal cutting and grinding, caustic baths, painting and assembly. Program areas included compliance with TCEQ industrial waste requirements including waste characterization/Notification of Registration for Industrial and Hazardous Wastes, applicable TCEQ air PBR regulations, Multi-Sector Storm Water General Permit, aboveground/underground storage tanks, SIU sewer discharge permit and SARA Reporting.



## **MATTHEW BOYLE**

#### **Lead Environmental Scientist**

#### **Environmental Compliance**

- Metal Recycling Facility, Storm Water Pollution Prevention Program, Fort Worth,
  Texas: led storm water pollution prevention program development and permitting
  for a metal recycling facility in Fort Worth, Texas. Coordinated Storm Water
  Pollution Prevention Plan (SWPPP) preparation and implementation, and Notice of
  Intent (NOI) submittals for permitting and provided ongoing quarterly/annual
  storm water monitoring support.
- Oil and Gas Production Facilities, Spill Prevention Control and Countermeasure Compliance Audits, Texas, Oklahoma, New Mexico. Inspection of production facilities for compliance with existing SPCC plans, prepare new SPCC plans, and provide training on the plans.

#### Environmental Due Diligence

- Oil and Gas Production Facilities, Due Diligence and Compliance Assessments,
  Texas and New Mexico: Lead an audit team evaluating over 3,000 production
  facilities (tank batteries and wellheads). Areas of concern at the facilities included
  air permitting status; SPCC compliance, petroleum bulk storage facilities/above
  ground storage tank compliance, and legacy remediation activities.
- Multi-Site Due Diligence, Dallas, Texas: Coordinated and performed assessments for an acquisition project for a light rail expansion project, responsible for preparation of Phase I Environmental Site Assessments and Phase II Scopes of Work for 65 locations in four months.

### **Environmental Remediation**

- Fuel Line Removal, Love Field Expansion, Dallas Love Field Airport, Dallas, Texas: daily management of fuel line removal beneath runways and tarmacs; and management of hydrocarbon impacted soils. Process included excavation oversight, soil assessment, dewatering, stormwater control and sampling.
- Soil Excavation and Disposal for Lead Impacted Soils, Austin, Texas: Project
  management and oversight for the removal of lead impacted soils at a multi-family
  construction site. Responsible for soil assessment, mapping, excavation oversight,
  and disposal documentation.

#### **Environmental Insurance**

- Aspen Insurance Pollution Insurance Liability Assessment, Diamondback Energy, Midland, Texas: liability assessment for 1,608 oil wells and 450 miles of pipeline.
- Aspen Insurance Pollution Insurance Liability Assessment, Blueknight Energy, Tulsa, Oklahoma: liability assessment for 54 asphalt and emulsion terminals in 26 states and 670 miles of crude oil pipeline.
- Aspen Insurance Pollution Insurance Liability Assessment, Scout Energy Management, Dallas, Texas: liability assessment for 10,147 oil wells and 1,385 miles of pipeline in five states.