May 22, 2025

Mr. Kelvin Shaw
City of Sedalia
200 South Osage Avenue
Sedalia, Missouri 65301

RE: Soil & Groundwater Management Plan
Proposed Development
East Broadway Boulevard
Sedalia, Missouri 65301
APEC Project #: 2025-157

Dear Mr. Shaw:

This Soil and Groundwater Management Plan (SGMP) has been prepared by AP Engineering & Consulting, Inc. (**APEC**) on behalf of the City of Sedalia to support the safe and compliant redevelopment of the approximately 15-acre parcel located on the north side of East Broadway Boulevard in Sedalia, Missouri. This Site is currently vacant grassland with a long history of industrial and commercial use, including past operation as a rail yard and multiple filling stations and oil companies. The referenced property is referred to as "Site" or "Subject Property" in the remaining report.

Previous environmental investigations at the Site, conducted under the oversight of the Missouri Department of Natural Resources (MDNR) Brownfields/Voluntary Cleanup Program (BVCP), have documented contamination in shallow soil and groundwater. Specifically, elevated concentrations of lead and arsenic had historically been identified in surface soils (0–12 inches), and historical groundwater samples have contained lead above applicable risk-based screening levels. As a result, an environmental deed restriction was recorded in 2021 that limits use of the Site to non-residential purposes and prohibits sensitive uses such as residential housing, lodging, and educational facilities.

This SGMP serves as a technical guidance document to ensure that construction, grading, and redevelopment activities are performed in a manner protective of human health and the environment. The plan outlines procedures for identifying and managing contaminated soils, responding to groundwater encounters during excavation, and implementing protective measures for workers and the surrounding community. The intent is to provide the City, developers, and contractors with an enforceable framework for safe redevelopment while maintaining compliance with existing site restrictions and environmental regulations.

1.0 BACKGROUND AND ENVIRONMENTAL HISTORY

The Subject Property occupies approximately 15 acres on the north side of East Broadway Boulevard, approximately 280 feet west of the intersection with Hancock Avenue. The Site is currently undeveloped but has a long operational history. Historical Sanborn maps, city directories, and topographic records document the presence of oil companies and filling stations along the southern portion of the Site from at least 1925 through the 1990s. In addition, the northern and central areas of the Site were historically occupied by railyard infrastructure beginning in the late 19th century, including rail lines, turntables, oil storage tanks, coal bins, and a machine shop.

Environmental assessments conducted in 2009, including a Phase II investigation under the MDNR Brownfields Program, identified widespread shallow soil contamination by lead and arsenic, particularly within the 0–12-inch interval. Several groundwater samples collected during the same investigation exhibited concentrations of dissolved lead above residential screening thresholds. Based on the nature and extent of contamination, MDNR recommended the City implement institutional controls, including placing a deed restriction prohibiting sensitive uses and implementing engineering controls such as pavement or revegetation to prevent direct contact with contaminated soil.

In 2025, **APEC** conducted a follow-up shallow soil sampling investigation to reassess current conditions and evaluate whether previous contamination had attenuated over time. A total of 18 hand-augered borings were advanced across the Site. Laboratory analysis confirmed that while most samples were below screening levels, localized exceedances of lead and arsenic remain, including a maximum lead concentration of 744 milligrams per kilogram (mg/kg) (B-2) and an arsenic concentration of 18 mg/kg (B-12), slightly above the MRBCA Tier 1 non-residential threshold of 15.9 mg/kg. These findings confirm that while degradation and redistribution may have occurred over time, localized contamination remains present and must be accounted for during redevelopment.

2.0 KNOWN CONTAMINANTS AND IMPACT ZONES

The primary contaminants of concern (COCs) identified at the Site are lead and arsenic in shallow surface soil and lead in groundwater. These contaminants are persistent in the environment and pose direct exposure risks through dermal contact, incidental ingestion, and inhalation of dust during construction activities.

2.1 Soil Contamination

The 2025 shallow soil sampling results indicate that most of the Site is within acceptable risk-based limits for non-residential land use. However, two locations exhibited concentrations exceeding applicable screening levels:

- **Boring B-2**: Lead = 744 mg/kg (above the MRBCA Tier 1 screening level of 660 mg/kg)
- **Boring B-12**: Arsenic = 18 mg/kg (slightly above the MRBCA Tier 1 screening level of 15.9 mg/kg)

Additionally, borings B-12 and B-15 also exhibited elevated, but sub-threshold, lead concentrations (489 mg/kg and 551 mg/kg, respectively), warranting caution and further consideration during any soil disturbance in these areas.

The distribution of impacted soils is consistent with the original 2009 delineation, which identified discrete areas of shallow metal contamination. These areas are generally associated with the former railyard operations. While the extent of impact has decreased over time, isolated hotspots persist and must be managed through engineering controls, soil segregation, and proper disposal practices.

2.2 Groundwater Contamination

Although groundwater was not sampled as part of the 2025 investigation, past studies (2009 Phase II) identified detectable concentrations of lead in groundwater in three of four borings. These findings support the potential for lead-impacted groundwater to be encountered during subsurface construction activities, particularly in the southern portion of the Site or within deep excavations (e.g., utilities, stormwater basins, or pool installations).

The depth to groundwater was historically observed between 7 and 12 feet below ground surface (bgs), and it is possible that certain components of the planned development (e.g., a diving pool or detention basin) may intersect the water table, necessitating dewatering and potential treatment or disposal of extracted water.

3.0 APPLICABLE REGULATIONS AND INSTITUTIONAL CONTROLS

The redevelopment of the Subject Property must be performed in compliance with existing institutional controls and applicable environmental regulations at the federal, state, and local levels. The most critical regulatory driver is the 2021 environmental deed restriction recorded by the City of Sedalia as a condition of entering the MDNR Brownfields/Voluntary Cleanup Program (BVCP). This restriction prohibits any use of the Site for residential, lodging, or educational purposes and mandates that surface soils not be disturbed in impacted areas without a formal plan to manage human exposure.

The Missouri Risk-Based Corrective Action (MRBCA) Tier 1 non-residential soil screening levels are the applicable criteria for evaluating soil quality at the Site. These include thresholds of 660 mg/kg for lead and 15.9 mg/kg for arsenic. Exceedances of these thresholds indicate that soils must be managed to prevent exposure, and in some cases, may need to be removed and properly disposed of depending on the scope of disturbance.

If contaminated groundwater is encountered during development, it must be handled in accordance with the Missouri Clean Water Law and Resource Conservation and Recovery Act (RCRA) regulations. Off-site disposal of contaminated groundwater may require waste characterization (e.g., total metals, TCLP), and dewatering discharges to stormwater infrastructure may require prior approval from MDNR or the local municipality.

Contractors operating on-site must comply with OSHA 29 CFR 1926 Subparts D and E, which govern excavation safety and personal protective equipment (PPE). These standards are especially relevant for soil handling and any construction work within impact zones.

4.0 SOIL MANAGEMENT PROCEDURES

The following procedures shall be implemented during any soil disturbance activities, including grading, trenching, excavation for utilities, or foundation installation. These procedures are intended to protect workers, prevent the spread of contamination, and ensure proper disposal of impacted materials.

4.1 Pre-Construction Delineation

Prior to ground disturbance, the general contractor and site supervisor shall review, and field mark the known locations of lead and arsenic-impacted soils based on the 2025 investigation. These locations will be designated as Soil Management Zones (SMZs) and marked in the field using high-visibility flags, stakes, or temporary fencing. Construction drawings should incorporate SMZ boundaries to alert equipment operators and subcontractors.

Two primary SMZs have been delineated on the Subject Property based on the 2025 shallow soil sampling results and historical contamination data. The first SMZ is centered around Boring B-2, located in the south-central portion of the Site, where lead was detected at 744 mg/kg. The second SMZ is centered around Boring B-12, located near the north-central portion of the Site, where arsenic was detected at 18 mg/kg and lead at 489 mg/kg. For implementation purposes, SMZ boundaries shall extend to a minimum 35-foot radius from each of these borings in all directions, unless additional sampling suggests expansion or reduction is warranted.

The approximate center-point GPS coordinates for each SMZ are as follows:

- **SMZ-1 (B-2 area):** 38.421768° N, 93.131828° W
- **SMZ-2 (B-12 area):** 38.422102° N, 93.131778° W

Figure 1 illustrates a site map with the SMZs overlaid to support contractor orientation and SGMP compliance. Field crews shall treat any soil disturbed within these zones as potentially impacted, and materials shall be managed in accordance with Sections 4.2 through 4.4 of this plan.

4.2 Excavation Protocols

If excavation occurs within an SMZ, the following steps must be followed:

- The upper 12 inches of soil shall be assumed to be contaminated unless site-specific data confirm otherwise.
- Excavated soils must be stockpiled on impermeable sheeting and covered with plastic to prevent stormwater infiltration or dust migration.

- Stockpiles should be clearly labeled ("Contaminated Soil – Do Not Disturb") and located away from drainage pathways, curbs, and public access.

Excavation outside the SMZs may proceed under standard construction protocols unless unexpected conditions (e.g., odors, staining) are encountered.

4.3 Characterization and Disposal

If contaminated soil requires off-site disposal, it may need to be characterized per 40 CFR 261 to determine whether it qualifies as hazardous waste. This requirement will be dependent upon the disposal facility. For most disposal facilities, arsenic and lead-contaminated soil that fails TCLP (D008 waste code) must be transported under a hazardous waste manifest by a licensed hauler to an approved disposal facility.

Non-hazardous contaminated soils (likely scenario for the Project Site) may be sent to a Subtitle D landfill with appropriate approval documentation. All disposal records must be maintained in the construction file.

4.4 Clean Fill and Backfill

Clean fill material used on-site for backfill or grading should be uncontaminated and free of construction debris, regulated waste, or fill containing industrial byproducts. **APEC** recommends using aggregate base stone or documented clean clay/sand from a commercial supplier. Placement of clean fill over impacted areas shall be done to a minimum thickness of 12 inches, or as otherwise required by MDNR, to provide effective separation between contaminated zones and site users.

While commercial sources of aggregate base or certified clean clay/sand are acceptable options, the project team may also reuse on-site soil excavated from outside of the defined SMZs, provided it meets the following conditions:

- The soil must originate from borings or excavation areas where laboratory analytical data indicate concentrations of lead and arsenic are below MRBCA Tier 1 non-residential screening levels.
- The soil must exhibit no visual or olfactory evidence of contamination (e.g., staining, oily sheen, debris).
- The soil must not be mixed with material excavated from within SMZs or any other impacted areas.

To support regulatory defensibility and future documentation, the general contractor or environmental oversight personnel should record the source and placement location of all reused soil. This includes noting the excavation location, approximate volume, and final use area (e.g., utility trench backfill, landscaping berm, building pad).

The reuse of on-site soils from clean zones provides both a cost-effective and sustainable alternative to imported fill, reducing haul-off volumes and minimizing truck traffic.

However, strict separation between clean and impacted materials must be maintained throughout all phases of the project to prevent cross-contamination.

5.0 GROUNDWATER CONTINGENCY AND DEWATERING PROTOCOLS

While shallow soil is the primary focus of this SGMP, the possibility of encountering contaminated groundwater during deep excavation or utility trenching remains. Historic data confirm that lead was detected in groundwater above screening levels during the 2009 Phase II investigation, though no groundwater sampling was performed during the 2025 soil investigation. The following measures apply if groundwater is encountered during redevelopment.

5.1 Expected Conditions

Based on previous site investigations, groundwater may be encountered between 7 and 12 feet below ground surface, with seasonal variability. Excavation for planned improvements such as the proposed diving pool, detention basin, and stormwater utilities may reach or exceed this depth, triggering the need for dewatering.

5.2 Response Actions

If groundwater is encountered during excavation:

- Work in the area shall be temporarily halted and the Site Supervisor notified.
- A sample of groundwater shall be collected for analysis of total and dissolved lead using SW-846 Method 6010B.
- No discharge of groundwater to storm drains, surface water, or sanitary sewers shall occur without prior analytical clearance and coordination with the appropriate agency.

5.3 Management and Disposal

If groundwater is confirmed to be impacted by lead or other contaminants, it must be handled in a controlled manner to prevent environmental release and ensure regulatory compliance. Several options exist depending on the volume of water encountered and the nature of site activities.

One practical option for short-term or localized dewatering events is the use of a vacuum (vac) truck. A vac truck can be mobilized to the Site to extract groundwater directly from sumps, trenches, or open excavations where groundwater accumulates. This method offers several advantages:

- Minimizes on-site handling by eliminating the need for intermediate storage tanks or containment berms.
- Reduces risk of discharge to storm sewers or surrounding soils.
- Expedites disposal, as vac trucks are typically operated by licensed contractors who can directly haul the collected water to an approved off-site disposal facility.

Vac truck use is particularly effective in situations where:

- Groundwater accumulates quickly but in manageable volumes (hundreds to a few thousand gallons).
- There is insufficient space or time to stage frac tanks or portable totes.
- The source is limited in duration (e.g., one-time utility trench dewatering or excavation for a pool foundation).

Before arranging vac truck disposal, a sample of the extracted water should be collected and submitted for laboratory analysis to determine whether the water exceeds RCRA discharge criteria. **APEC** can coordinate this sampling and assist in securing disposal approval with the receiving facility upon request.

For larger-scale or longer-term dewatering operations, alternative containment (e.g., frac tanks or totes) may still be warranted. However, even in these scenarios, a vac truck can be used as an effective backup or overflow management solution.

Dewatering discharge to a Publicly Owned Treatment Works (POTW) will only be permitted if analytical results confirm compliance with the receiving facility's discharge standards.

All disposal volumes and manifests shall be retained in the Site's environmental file.

6.0 WORKER HEALTH AND SAFETY

Protection of on-site workers and contractors is a central component of this plan. While contaminant levels observed during the 2025 sampling event are generally low and localized, direct exposure to lead and arsenic-contaminated soil can pose acute and chronic health risks.

6.1 Personal Protective Equipment (PPE)

All workers operating within SMZs or in areas of known contamination shall, at minimum, wear:

- Disposable nitrile gloves
- Long-sleeved shirts and pants
- Steel-toed boots
- Eye protection
- Dust masks or respirators if dry soil is being excavated

6.2 Dust and Erosion Control

To prevent airborne exposure to metal-contaminated particulates:

- Use water sprays or misting systems during excavation and material handling
- Cover contaminated soil piles during non-working hours or periods of inactivity

- Cease excavation during high-wind events if dust cannot be controlled

6.3 Site Communication and Training

Prior to initiating earthwork, the general contractor shall hold a pre-construction safety meeting to review this SGMP, contamination areas, and required protective measures. The meeting should be documented and attended by all subcontractors working below grade.

All workers must be made aware of the presence of contaminated materials on-site and trained on how to recognize signs of potential exposure or unexpected contamination.

7.0 SITE-SPECIFIC DEVELOPMENT CONSIDERATIONS

The proposed redevelopment of the Site includes infrastructure that may penetrate below the soil zone of known contamination and intersect with groundwater. Special attention must be given to these areas during design and construction to prevent environmental impacts and regulatory issues.

7.1 Diving Pool Installation

As part of the planned commercial redevelopment of the Site, the City is considering construction of a diving pool feature. Based on historical groundwater data collected during the 2009 Phase II ESA, the depth to groundwater at the Site is estimated to be between 7 and 12 feet below ground surface (bgs), varying seasonally and by location. A diving pool with a typical depth of 10–12 feet or more would likely intercept the saturated zone, triggering several design and construction concerns related to potential contamination and water management.

The primary concern is the potential interaction with lead-impacted groundwater, which could introduce environmental, health, and regulatory risks if not appropriately addressed. The following options are available for safely constructing the pool:

Option 1: Use of a Vac Truck for Direct Dewatering

This approach offer a practical and adaptable solution for removing limited volumes of groundwater that accumulate in the excavation during construction.

- A vac truck can be mobilized to the site on short notice to extract accumulated groundwater directly from the excavation bottom or from sump points dug at the base.
- Water is pumped into the truck's onboard tank and transported off-site to a permitted disposal facility.
- Benefits**:** Minimizes on-site handling and eliminates the need for storage tanks or treatment infrastructure. Best suited for intermittent or low-volume dewatering conditions.
- Limitations**:** May become cost-inefficient if high or continuous inflow requires frequent trips or extended mobilization.

This option is especially viable if dewatering is only needed temporarily (e.g., for forming and pouring the pool structure) and is compatible with contractors who want to minimize onsite setup complexity.

Option 2: Temporary Sump and Pump System with Holding Tank or Frac Tank

For more sustained groundwater inflow, a temporary dewatering setup may be required:

- One or more sumps are excavated at the base of the pool footprint.
- Submersible pumps transfer water into a poly tank or frac tank staged on-site.
- Water is sampled and analyzed for lead and other site-specific parameters prior to any off-site discharge or disposal.
- If results are non-hazardous, water may be contracted for off-site transport by a licensed hauler.
- If water exceeds applicable hazardous screening levels, it must be managed under RCRA guidelines.

This approach offers more capacity and flexibility for medium-duration dewatering but requires adequate site space and advance coordination for waste profiling and disposal approvals.

Option 3: Subsurface Drainage and Isolation Design

If long-term interaction with groundwater is anticipated (e.g., due to sustained high water table), design measures can be incorporated into the pool construction itself:

- Install underdrain systems around and beneath the pool to collect groundwater and direct it to a sealed sump.
- Apply geotextile liners and waterproof concrete to isolate the pool basin from ambient groundwater intrusion.
- If drainage water must be managed long-term, include a permanent pumping station with discharge controls and monitoring protocols.

This is a more capital-intensive but permanent solution best suited for a facility that will operate for decades. It requires collaboration between civil designers, geotechnical engineers, and environmental professionals to ensure that water movement and potential contaminant transport are fully controlled.

Option 4: Construct Above Water Table (if feasible)

If elevation and site grading allow, the City may consider shifting the pool location or slightly raising its base elevation to avoid intersecting groundwater altogether.

- This may involve modest site re-grading or changing the pool design.
- If successful, it avoids the need for dewatering infrastructure and regulatory water management.

- However, this may not meet functional design requirements, and feasibility depends on site layout and topography.

Given the known presence of shallow groundwater and historical lead detections, **APEC** recommends that groundwater be assumed to be present during construction of the diving pool, and that plans incorporate at least one temporary dewatering solution (i.e., vac truck or sump-and-tank system). If desired, prior to excavation, **APEC** can perform field screening or direct push groundwater sampling in the pool area to confirm depth and quality, enabling better cost control and planning.

Should groundwater be encountered, no discharge shall occur until analytical results are available and a disposal path is approved. All extracted water must be logged, sampled, and managed in accordance with this SGMP and any applicable state or local regulations.

8.0 DETENTION POND CONSTRUCTION

APEC understands that plans also may include the construction of a stormwater detention pond on the south end of the property. Although this area is not within a known Soil Management Zone, any excavation that extends deeper than 7 feet may intersect contaminated groundwater or influence groundwater gradients.

The construction of a detention basin typically requires excavation several feet below existing grade, which may bring the base of the basin into contact with the upper saturated zone. Depending on seasonal water levels and the basin's final depth, this activity could:

- Intersect contaminated groundwater, particularly if shallow perched zones or preferential flow paths are present;
- Create a hydraulic gradient toward the basin, effectively turning it into a low point that passively collects contaminated groundwater;
- Mobilize existing groundwater contamination, potentially drawing impacted water from upgradient portions of the Site into the newly excavated feature.

These risks are compounded by the basin's intended function—to collect and temporarily hold stormwater—which can result in infiltration, fluctuating saturation zones, and prolonged hydraulic loading.

Recommendations to Mitigate Groundwater Risk:

- **Pre-Excavation Groundwater Profiling:**

  Prior to basin excavation, consider conducting direct push groundwater sampling at the proposed basin footprint to confirm the current depth to water and assess lead concentrations. This will provide a basis for evaluating potential water quality and the need for engineering controls.

- **Limit Basin Depth if Feasible:**

  Where stormwater design requirements allow, limit excavation to avoid direct interaction with the saturated zone. Keeping the basin bottom at least 2 feet above the average seasonal high-water table reduces the risk of intercepting groundwater entirely.

- **Consider Subsurface Cutoff Barriers or Liners:**

  If design constraints require excavation into the saturated zone, consider installing a low-permeability clay liner, geomembrane, or engineered cutoff wall around the basin perimeter to prevent lateral migration of contaminated groundwater into the basin. These barriers can also minimize infiltration and reduce long-term maintenance requirements.

- **Avoid Discharge of Extracted Groundwater Without Testing:**

  If groundwater must be removed during construction (e.g., via dewatering wells or sumps), it shall be managed in accordance with Section 5.0 of this SGMP. Extracted water must be sampled for lead and handled per regulatory guidance before any off-site disposal or discharge occurs.

- **Monitor Post-Construction Conditions:**

  Once the basin is operational, consider periodic observation or sampling of retained stormwater or subsurface monitoring points to confirm that contaminated groundwater is not infiltrating into the system or discharging off-site.

Although the southern portion of the Site has not been historically identified as a zone of soil contamination, detention basin construction presents a unique risk of altering the local groundwater flow regime and unintentionally collecting contaminated groundwater. By designing the basin to minimize interaction with the water table, the City can avoid long-term maintenance liabilities and reduce the potential for regulatory complications.

9.0 REPORTING AND DOCUMENTATION REQUIREMENTS

Thorough documentation is critical to demonstrate compliance with this SGMP, protect the City of Sedalia's long-term interests, and support future regulatory inquiries or land transactions. All site activities involving the handling, removal, treatment, or disposal of potentially contaminated soil or groundwater must be tracked and recorded by the general contractor and/or environmental oversight personnel. This section outlines the minimum required documentation and recommended best practices.

9.1 Soil Excavation and Reuse Records

For any excavation activities involving soil from within the defined SMZs, the following records shall be maintained:

- Location of Excavation: A log of each excavation area, including GPS coordinates or field sketches showing the horizontal and vertical extent.
- Volume of Soil Disturbed: Estimated in cubic yards.
- Disposition: Whether soil was stockpiled, reused on-site, or transported off-site.
- Reuse Justification (if applicable): For soils reused as backfill, provide a brief rationale demonstrating they originated from outside of defined SMZs and are supported by laboratory data or site knowledge. If soil from within a SMZ is reused for subgrade fill (e.g., within utility trenches or structural fills), it must be capped with a minimum of 12 inches of clean fill or an engineered barrier (e.g., concrete, asphalt, or landscaping) in accordance with Section 4.4 of this SGMP. These records may be compiled by the contractor's superintendent with oversight or verification by **APEC** if needed.

9.2 Groundwater Management Logs

If groundwater is encountered and removed during excavation or utility installation, a log must be maintained documenting:

- Date and location of groundwater encounter
- Estimated volume extracted
- Method of extraction (e.g., sump pump, vac truck)
- Field observations (e.g., odor, color, turbidity)
- Sampling results, if applicable
- Disposal method (e.g., hauled off-site)
- Disposal facility name
- Waste manifests

9.3 Waste Characterization and Disposal Records

For any soil within the SMZs or water transported off-site for disposal, the following documents must be retained:

- Waste profile sheets (if any) submitted to the receiving facility
- Laboratory analytical results (if any) used to characterize the material
- Bill of lading or manifest documents
- Chain-of-custody forms
- Disposal facility acceptance documentation or certificates of disposal

APEC recommends maintaining these records digitally in a centralized environmental file retained by the City for a minimum of 10 years.

9.4 Field Deviations and Corrective Actions

Any deviation from the SGMP—such as alternative disposal routes, changes in excavation plans, or unexpected conditions—must be documented with the following:

- Description of deviation or condition encountered

- Date and personnel involved
- Photographic evidence (if applicable)
- Corrective actions implemented
- Final resolution and date closed

10.0 CLOSURE AND LIMITATIONS

This SGMP was prepared by **APEC** on behalf of the City of Sedalia to guide safe and compliant redevelopment of the Subject Property located on the north side of East Broadway Boulevard in Sedalia, Missouri. The information contained herein is based on environmental data collected during past investigations (2009 and 2025), regulatory correspondence with the Missouri Department of Natural Resources (MDNR), and planned development features known at the time of this document's preparation.

This SGMP is intended to provide a practical and enforceable framework for:

- Managing shallow soils impacted by lead and arsenic;
- Mitigating risks associated with potentially contaminated groundwater;
- Protecting the health and safety of construction workers and the surrounding community;
- Preventing the mobilization or spread of known contaminants during site grading, excavation, and infrastructure installation; and
- Ensuring regulatory compliance with existing deed restrictions, the MRBCA framework, and applicable MDNR Brownfields/Voluntary Cleanup Program guidance.

This SGMP reflects conditions and development plans as of May 2025. Should future construction activities deviate substantially from current plans—particularly regarding excavation depth, structural layout, or drainage configurations—**APEC** recommends re-evaluating the plan in coordination with a qualified environmental professional. Similarly, should future investigations identify new areas of contamination or previously undocumented risks, this SGMP should be updated accordingly.

The content of this SGMP is based on information believed to be accurate and reliable at the time of preparation. However, it is possible that subsurface conditions not previously identified may exist elsewhere on the Site. **APEC** assumes no responsibility for site conditions or environmental releases occurring outside the scope of activities specifically addressed in this document.

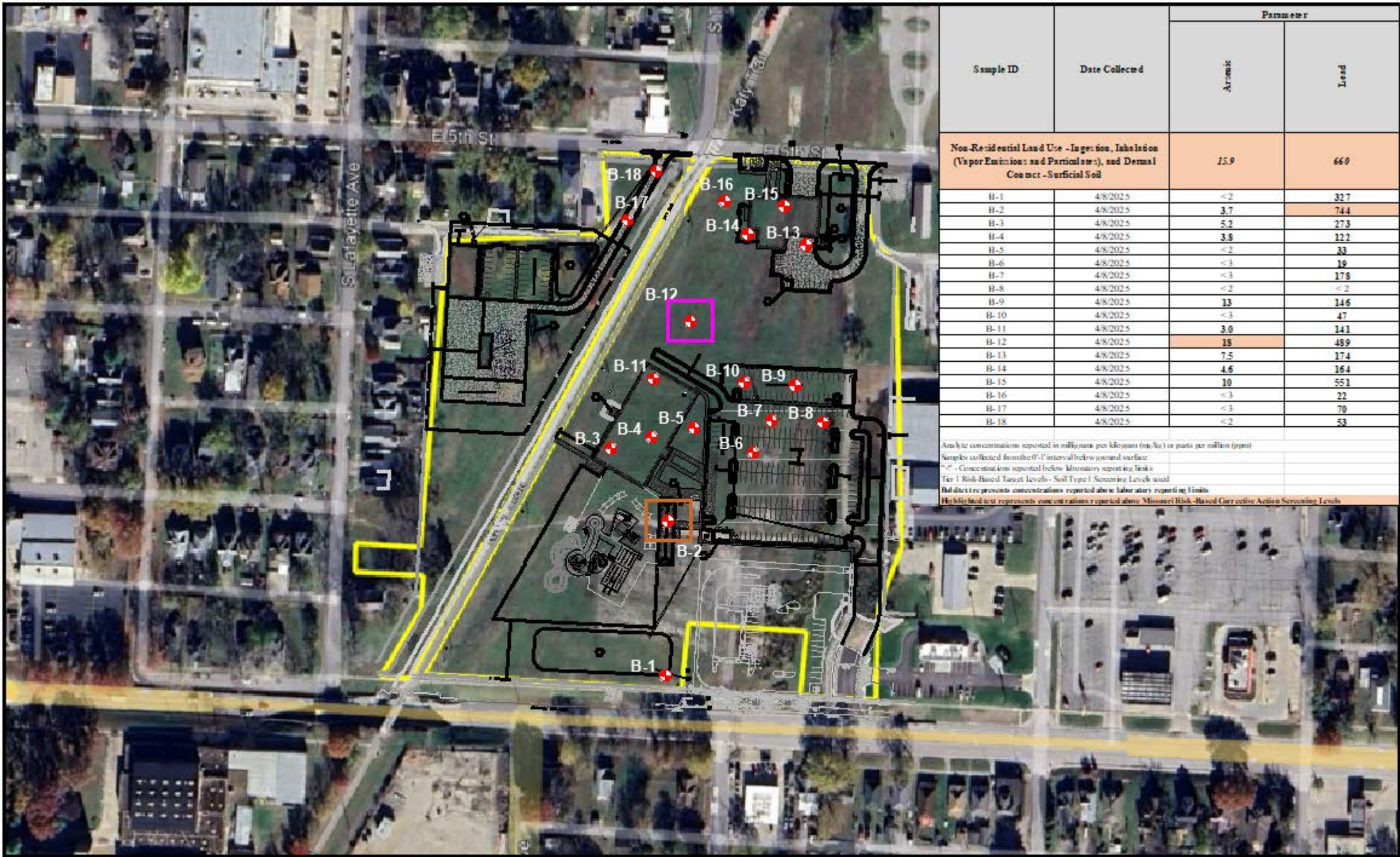
This SGMP is intended solely for use by the City of Sedalia, its contractors, design teams, and applicable regulators. Use or reproduction of this document by any other party is prohibited, without the express written consent of **APEC** and the City of Sedalia.

Sincerely,
AP Engineering & Consulting, Inc.

Cameron Abbott, CHMM
Director of Operations

ATTACHMENT A

SITE MAP WITH AFFECTED AREAS



Sample ID	Date Collected	Parameter	
		Arsenic	Lead
Non-Residential Land Use - Ingestion, Inhalation (Vapor Emissions and Particulates), and Dermal Contact - Surficial Soil		*15.9*	*660*
B-1	4/8/2025	<2	327
B-2	4/8/2025	3.7	744
B-3	4/8/2025	5.2	273
B-4	4/8/2025	3.8	122
B-5	4/8/2025	<2	33
B-6	4/8/2025	<3	19
B-7	4/8/2025	<3	178
B-8	4/8/2025	<2	<2
B-9	4/8/2025	13	146
B-10	4/8/2025	<3	47
B-11	4/8/2025	3.0	141
B-12	4/8/2025	18	489
B-13	4/8/2025	7.5	174
B-14	4/8/2025	4.6	164
B-15	4/8/2025	10	551
B-16	4/8/2025	<3	22
B-17	4/8/2025	<3	70
B-18	4/8/2025	<2	53

Analytic concentrations reported in milligrams per kilogram (mg/kg) or parts per million (ppm)
Samples collected from the 0'-1' interval below ground surface
"<" - Concentrations reported below laboratory reporting limits
Tier 1 Risk-Based Target Levels - Soil Type I Screening Levels used
Bold text represents concentrations reported above laboratory reporting limits
Highlighted text represents concentrations reported above Missouri Risk-Based Corrective Action Screening Levels

NOTES:

N

250'

Approximate Scale

LEGEND

APPROXIMATE SUBJECT PROPERTY BOUNDARY

B-1 APPROXIMATE LOCATION OF SOIL BORINGS

APPROXIMATE LOCATION OF SOIL ARSENIC CONTAMINATION - 2025

APPROXIMATE LOCATION OF SOIL LEAD CONTAMINATION - 2025

Proposed Development
East Broadway Boulevard
Sedalia, Missouri 65301

2025 Boring Location Plan with Soil Management Zones

PROJECT NO.:	DRAWN BY:	DATE:	FIGURE:
2025-157	CA	5/19/25	1

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