

ANALYSIS OF BROWNFIELD CLEANUP ALTERNATIVES

**U.S. EPA 128(a) Infrastructure Investment Jobs Act Grant
Cooperative Agreement (CA) # 4W-00E03306-2
Indiana Brownfields Program Site No. 4240712
ACRES ID No. 265127
Agency Interest No. 134394**

**St. Mary's Elementary School
206 & 218 South East Street
Greensburg, Decatur County, Indiana
May 2025**

This Analysis of Brownfield Cleanup Alternatives (ABCA) was prepared by Industrial Waste Management Consulting Group, LLC (IWM Consulting) as a requirement for utilizing United States Environmental Protection Agency (U.S. EPA) grant monies to remediate a brownfield. St. Mary's Elementary School (Indiana Brownfield Site ID: 4240712), located at 206 & 218 South East Street in Greensburg, Decatur County, Indiana (site), is currently occupied by Heritage Hills Events, Wedding Venue & Event Center. The site is improved with a former church (constructed circa 1884, utilized as a wedding venue), a vacant former school building (circa 1916) with a 1950s addition, a Rectory (circa 1940, utilized as the event center office), a catering building (circa 1993) used as support services for the event, and a parking lot. Sidewalks border the site's western, southern, and northeastern edges, with residential properties bordering the site to the south.

Sampling and analysis confirmed that asbestos was utilized in the construction of the school building. This ABCA presents remedial alternatives considered to mitigate potential exposure to asbestos fibers. Site redevelopment plans include converting classrooms in the former school building into one-bedroom rentals, creating indoor play space in the former school's gymnasium, building a garden or green space, and creating bridal suites or rentable accommodations within the former Rectory.

Gen Five Indiana, LLC acquired the site on January 20, 2022, and will be the property owner when implementing the work activities discussed in this ABCA.

Site Details

Site Name: St. Mary's Elementary School
206 & 218 South East Street
Greensburg, Decatur County, Indiana 47240

Property Owner: Gen Five Indiana, LLC
1718 Capitol Avenue
Cheyenne, Wyoming 82001

Site Representative: Ms. Emily Oesterling Manship
2001 E. 52nd Street
Indianapolis, Indiana 46205

Summary of Previous Site Activities

Site History

According to standard historical sources, a previous Phase I Environmental Site Assessment (ESA) revealed that the site was used as a Catholic Church starting in 1885. Although available property records indicate the St. Mary's Elementary School was reportedly constructed in 1940, historical Sanborn® Maps and aerial photography indicate the western portion of the building was built before 1927 (referred to as the 1916 addition), and the eastern addition was constructed after 1947 and before 1952 (herein referred to as the 1959 addition). The Rectory was reportedly built circa 1930; however, it was depicted in the 1927 Sanborn® Map. Additional structures utilized in the Church's operations (e.g., priest house, sister's house, St. Mary's Hall) and residential dwellings were historically located on the site.

Previous Environmental Assessments/Environmental Investigations

Micro Air, Inc. prepared a *NESHAP Demolition Asbestos Survey Report* for the *Old West School Building (Former Saint Mary's Catholic School)* on September 28, 2024. The report identified the following asbestos-containing materials (ACMs) observed in the western addition (1916) of the school:

- Approximately 45 linear feet of low-pressure steam preformed block pipe insulation and thermal cement fittings on low-pressure steam lines within the basement reception room, hallway, southeast room, and east restroom.
- Approximately 350 linear feet of domestic water air-cell and wrapped paper pipe insulation and thermal cement fittings within the basement reception room, east restroom, ground and second floor's east hallway, and east restroom.
- Approximately 9,000 square feet of three patterns of 12-square-inch floor tile throughout the basement, ground, and second floors.
- Approximately 3,100 square feet of rolled asphalt roofing on the roof of the 1959 addition.
- Approximately 1,300 linear feet of window glazing observed on original wood windows (approximately 67 windows) throughout the 1916 addition.
- Approximately 100 linear feet of caulk surrounding the metal entry door frames within the 1916 addition.

IWM Consulting conducted a *Phase I ESA* in April 2025. Although recognized environmental conditions (RECs) were not identified, the Phase I ESA noted that the confirmed presence of ACMs, along with the potential presence of lead-based paint and polychlorinated biphenyl (PCB)-bearing ballasts within observed fluorescent light fixtures, were considered to be business environmental risks (BERs).

IWM Consulting conducted an *Asbestos Survey* within the eastern 1959 addition of the school building in April 2025. The analytical results of the survey identified the following, previously unsampled, ACMs:

- Approximately 9,300 square feet of tan, marble-patterned 9-square-inch floor tile is located within the gym and on the second-floor hallways and classrooms. The mastic underlying the floor tile was analytically determined not to contain asbestos.

- Debris adhered to the black, 6-inch cove base was found to contain 10% chrysotile asbestos; however, after discussions with the laboratory, it was determined that the debris was from overhead pipe insulation and not the cove base or mastic.
- Approximately 450 linear feet of thermal system insulation (TSI) paper pipe insulation on 3-inch water lines, including elbows and fittings, observed above the stage and throughout the building.
- It should also be noted that this same type of TSI insulation was observed in the basement of the Rectory, and although not sampled, should be assumed to be ACM. Additionally, it should be assumed that TSI ACM is located on pipes above plaster and acoustical tile ceilings, and within wall pipe chases not accessed during the two asbestos surveys.

Summary of Site Characterization

Historical and recent site investigations support the following summary of site conditions.

1. The site is located in the northeast ¼ of Section 11, Township 10 North, Range 9 East of Decatur County, Indiana, as shown on **Figure 1**. The site consists of two parcels totaling 2.06 acres. Site features include one 8,020 ft² former Rectory and fence courtyard on the north parcel, one 6,316 ft² former church, one 33,884 ft² former school building, and one 3,294 ft² catering building on the south parcel. Paved parking is on most of the site surface, with grass in the northwest corner and along the southern property boundary. Properties in the immediate site vicinity include residential dwellings, active railroad tracks, a commercial glass company, Dollar General, and The Ark of Decatur County (a halfway house).
2. According to standard historical sources, the site has been developed since at least 1887. Occupants of the site included St. Mary’s Catholic Church and supporting structures (e.g., school, Rectory, former priest’s house, and sister’s houses). According to historical city directory listings, school operations ceased in 2000. The school has since remained vacant. The site was acquired by the current owner (Gen Five Indiana LLC) in 2022 from the Roman Catholic Archdiocese of Indianapolis. A site map has been included as **Figure 2**.
3. The nearest surface water feature to the site is Sand Creek, located approximately 550 feet east and southeast (downgradient) from the site. No surface water features are located on or adjacent to the site. The site is not located within the 100- or 500-year floodplain.
4. Previous environmental investigations conducted at the site indicate asbestos was utilized in the construction of the school, specifically:
 - Approximately 45 linear feet of mag-style steam pipe insulation, including fittings and elbows, observed in the 1916 addition’s basement,
 - Approximately 200 linear feet of mag-style steam pipe insulation, including fittings and elbows, observed in the ceiling over the 1959 addition’s gym/stage,
 - Approximately 390 linear feet of mag-style steam pipe insulation and paper-style water pipe insulation, including fittings and elbows, observed in the Rectory,
 - Approximately 350 linear feet of paper-style water pipe insulation, including fittings and elbows, observed on all floors of the school’s 1916 addition,

- Approximately 450 linear feet of paper-style water pipe insulation, including fittings and elbows, observed on all floors of the school's 1959 addition, including under the stage,
- Approximately 9,000 square feet of 12-inch square floor tiles, not including the underlying mastic, observed on all floors of the school's 1916 addition, and
- Approximately 13,250 square feet (square footage modified after the Asbestos Survey Report was issued) of 9-inch and 12-inch floor tiles, not including the underlying mastic, were observed within the school's 1959 addition, specifically within the gym/stage, and second-floor classrooms and hallways.
- It should also be noted that this same type of TSI insulation was observed in the basement of the Rectory, and although not sampled, should be assumed to be ACM. Additionally, it should be assumed that TSI ACM is located on pipes above plaster and acoustical tile ceilings, and within wall pipe chases not accessed during the two asbestos surveys.

Remedial Action Objectives

Asbestos is a naturally occurring mineral fiber. Due to its tensile strength and heat resistance, asbestos has been utilized in various building construction materials for insulation, roofing, floor tiles, and fire retardants. The friable nature of the ACM and proposed redevelopment suggest the following human exposure routes represent possible risks for potentially exposed populations:

1. Inhalation of asbestos fibers is the primary exposure route of concern. The effects on the lungs resulting from the inhalation of asbestos fibers are the leading cause of asbestos-related health issues. Since the contamination is contained inside St. Mary's Elementary School, the primary risk of inhalation is limited to those who enter areas of the school that have not undergone abatement.

Based on the results of previous site investigations, two aspects of the site require corrective action: TSI, including both mag-style and paper-style pipe insulation, adjoined by cementitious elbows and fittings, and Category I Non-friable floor tiles, both 9-square-inch and 12-square-inch.

Analysis of Remedial Alternatives

The remedial action alternatives considered were evaluated using the following criteria:

(1) Effectiveness

- a. The degree to which the contamination's toxicity, mobility, and volume are expected to be reduced.
- b. The degree to which a remedial action option, if implemented, will protect public health, safety, welfare, and the environment over time.
- c. Considering any adverse impacts on public health, safety, welfare, and the environment that may be posed during the construction and implementation period until case closure.

(2) Implementability

- a. The technical feasibility of constructing and implementing the remedial action option at the Site or facility.
- b. The availability of materials, equipment, technologies, and services needed to conduct the remedial action option.

- c. The administrative feasibility of the remedial action option, including activities and time needed to obtain any necessary licenses, permits or approvals; the presence of any federal or state, threatened or endangered species; and the technical feasibility of recycling, treatment, engineering controls, disposal or naturally occurring biodegradation; and the expected time frame needed to achieve the necessary restoration.

(3) Cost

- a. The following types of costs are generally associated with the remedial alternatives:
 - Capital costs, including direct and indirect costs; initial costs, including design and testing costs.
 - Annual operation and maintenance costs.

Summary of Remedial Alternatives

1. Alternative 1 – No Action.
2. Alternative 2 – Abatement of the accessible ACMs
3. Alternative 3 – Abatement of all the ACMs

Remedial Alternatives

1. ***Alternative 1 – No Action:*** The No Action alternative was assessed to provide a baseline against which the other alternatives can be evaluated. The No Action alternative requires no abatement to be performed to minimize or eliminate the potential inhalation exposure/hazards, and would leave St. Mary’s Elementary School in its current condition. In accordance with State and Federal laws and regulations, redevelopment of the school, which is proposed to undergo a partial demolition, could not be performed.

Graffiti and general destruction of the school’s interior were observed during the site walk. Actions from trespassers, such as removing copper piping or starting fires, could expose ACM and release asbestos fibers, potentially exposing welcome and unwelcome visitors and contaminating the school. Further deterioration of the school under natural circumstances and weather would increase the potential for exposure. Under the No Action alternative, there would be no mitigation of contaminant migration or exposure pathways, and neither monitoring nor maintenance would be performed.

- a. **Effectiveness** – None: This option does not reduce the potential exposure pathway, mobility, or volume of contamination, and does not protect human health, safety, welfare, or the environment.
- b. **Implementability** – Easy: There are no required actions or technology to implement this option. Regulatory agencies have not mandated asbestos abatement, and the No Action alternative could be found acceptable, provided no renovation or demolition occurs within the school. However, future redevelopment of the school, through renovation and demolition, could not occur due to the unaltered exposure pathway and the potential for increased exposure as the building continues to deteriorate and/or be vandalized.

- c. **Cost** – None: This option does not require ongoing operation, maintenance, or management costs. Any costs incurred would be in the form of loss of potential income from redevelopment.
- 2. **Alternative 2 (partial alternative) – Abatement of accessible ACMs:** Alternative 2 involves the complete abatement of only accessible ACMs and the isolation of inaccessible interior areas. An Asbestos Supervisor, licensed in the State of Indiana, would be required on-site during all work hours to identify and abate all accessible ACMs. During abatement activities, personal and perimeter air monitoring would be required to determine whether airborne asbestos fibers potentially threaten workers onsite or areas outside of negatively pressured containment.
 - a. **Effectiveness** – High: The physical removal and off-site disposal of accessible ACM and the isolation of inaccessible ACM within the school’s interior would achieve protection of human health and the environment by eliminating potential exposure pathways. By adequately wetting and bagging the ACM before off-site disposal, human health and the environment will be protected during transportation to a disposal facility that accepts regulated asbestos-containing wastes. An Operation, Maintenance, and Monitoring (OM&M) Plan would be implemented to ensure the long-term effectiveness of the inaccessible interior ACM undergoing isolation. The OM&M Plan would include procedures in the event that future renovations expose isolated ACMs. Protection against worker exposure and potential off-site exposure during abatement actions would be ensured through air monitoring, the use of appropriate, negatively pressured containment for asbestos mitigation, the provision of suitable personal protective equipment (PPE) for workers in areas undergoing mitigation, and proper off-site disposal. Dust suppression through wetting, physical removal, wrapping, and bagging ACM waste, as well as off-site disposal, reduces the contaminant's volume and mobility. Encapsulation of the remaining ACM would also limit mobility.
 - b. **Implementability** – Moderate: Asbestos removal must be conducted in accordance with all local, state, and federal laws and regulations. Industry standard abatement practices, performed by Licensed Abatement Workers under the direct supervision of a Licensed Asbestos Supervisor, would be performed. The equipment required to implement Alternative 2 (e.g., high-efficiency particulate air (HEPA) vacuum, plastic sheeting for containment, personal protective equipment (PPE), asbestos disposal bags, gloves, and hand tools) is readily available and easily acquired from local contractors. Both USEPA National Emission Standards for Hazardous Air Pollutants (NESHAP) and the Indiana Department of Environmental Management (IDEM) require a Notification of Demolition and Renovation Operations to be submitted to the IDEM Office of Air Quality at least ten working days before commencing abatement activities. Off-site disposal of regulated ACM waste must be transported to an approved landfill.
 - c. **Cost—High:** This option involves overseeing subcontracted asbestos abatement activities and is anticipated to cost \$109,010.
- 3. **Alternative 3 – Abatement of all interior ACM:** Alternative 3 consists of complete abatement of all interior ACM. An Asbestos Supervisor, licensed in the State of Indiana, would be required onsite during all work hours to identify and segregate all potential ACM at the point of abatement. Personal monitoring and perimeter air monitoring would

be required during abatement activities to determine whether airborne asbestos fibers are a potential threat to workers onsite or to areas outside of negatively pressured containment. Only a portion of the 2nd floor of the original school building is planned for potential demolition. Since the remainder of the structure is in good condition, it is planned for re-use, and only accessible ACM removal would be necessary.

- a. **Effectiveness** – High: The physical removal and off-site disposal of all ACM within the school’s interior would achieve protection of human health and the environment by eliminating potential exposure pathways. By adequately wetting and bagging the ACM before off-site disposal, human health and the environment will be protected during transportation to a disposal facility that accepts regulated asbestos-containing wastes. Protection against worker exposure and potential off-site exposure during abatement actions would be ensured through air monitoring, the use of appropriate, negatively pressured containment for asbestos mitigation, the provision of appropriate personal protective equipment (PPE) for workers within the areas undergoing mitigation, and proper off-site disposal. Dust suppression through wetting, physical removal, wrapping, and bagging ACM waste, as well as off-site disposal, reduces the contaminant's volume and mobility.
- b. **Implementability** – Moderate to Difficult: Asbestos removal must be conducted in accordance with all local, state, and federal laws and regulations. Industry standard abatement practices, performed by Licensed Abatement Workers under the direct supervision of a Licensed Asbestos Supervisor, would be performed. The equipment required to implement Alternative 2 (e.g., HEPA vacuum, plastic sheeting for containment, PPE, asbestos disposal bags, gloves, and hand tools) is readily available and easily accessible from local contractors. Both USEPA NESHAP and IDEM require a Notification of Demolition and Renovation Operations to be submitted to the IDEM Office of Air Quality at least ten working days before commencing abatement activities. Off-site disposal of regulated ACM waste must be transported to an approved landfill. Alternative 3 would include the abatement of all interior ACM, which may not be accessible or visible under current building conditions. This Alternative is contingent on inaccessible areas being exposed by separate contractors, as the demolition of walls or ceilings is not within the Licensed Asbestos Supervisor’s purview.
- c. **Cost** – High: This option involves oversight of subcontracted asbestos abatement activities and is estimated to cost \$109,010. If additional friable TSI is encountered during demolition activities, that would increase the costs by approximately \$39 per linear foot.

Remedial Alternatives with Respect to Climate Fluctuation Conditions

An evaluation of several consequences of climate fluctuation (e.g., sea level changes, increased frequency and intensity of flooding and/or extreme weather events, etc.) indicates that the site is not likely to be materially affected by such conditions.

Recommendation for Site Remedy

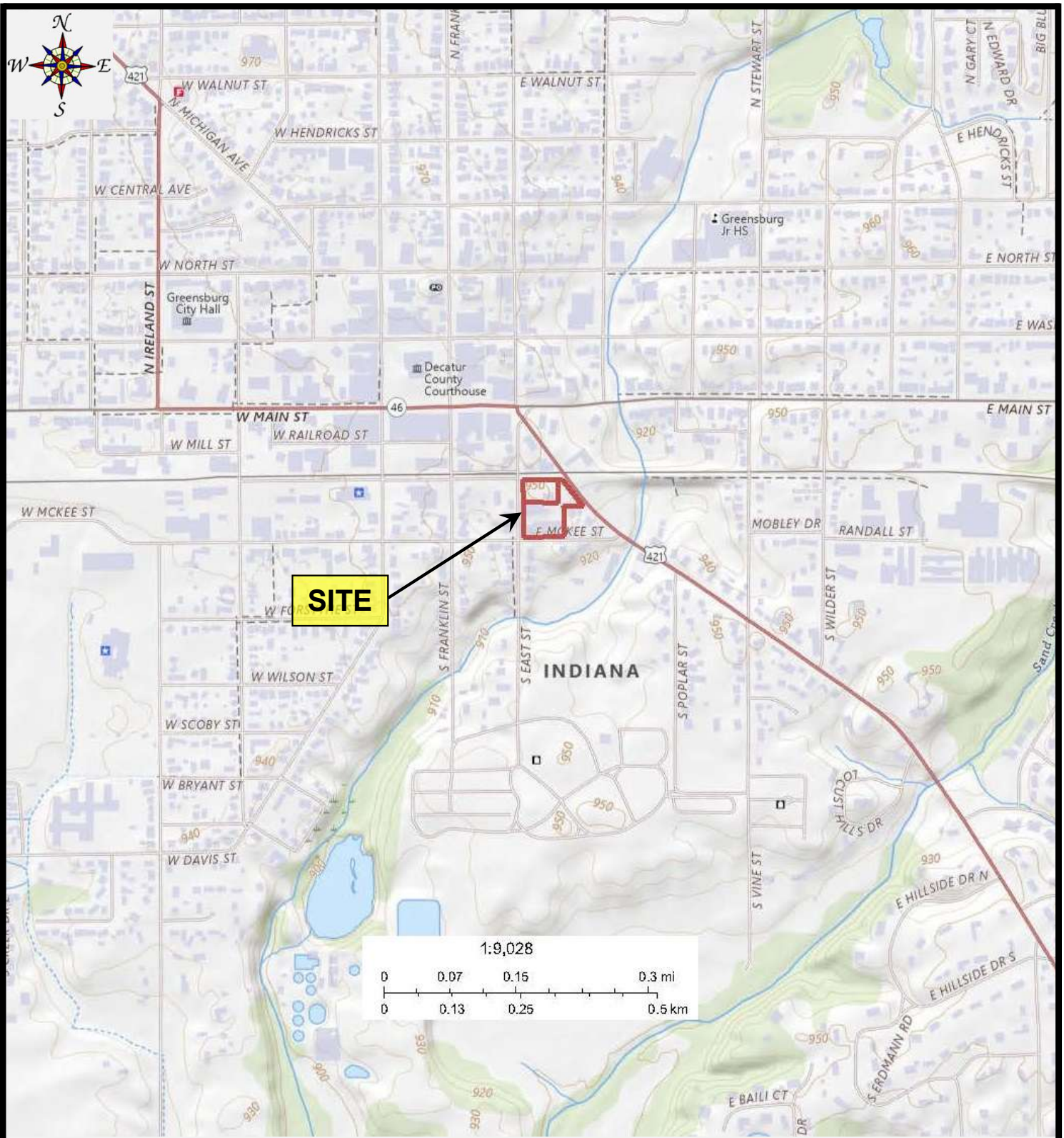
The most feasible and appropriate cleanup alternative is Alternative 2, which involves the abatement of all accessible interior asbestos-containing materials (ACM) and the control of inaccessible ACMs through an Operations and Maintenance (OM&M) Plan. This alternative selects the remediation option that is best suited to the property owner’s plans for the site and

provides a more definitive cost estimate for the remedial activities. The estimated cost to implement Alternative 2 is approximately **\$109,010**, plus supplemental administrative reporting requirements, which amount to an additional **\$9,750**.

Decision Document

A decision document with additional details on the selected alternative for the site remedy will be issued at the close of the public comment period. The decision document will serve as a notice to proceed with federally funded remediation activities and will be available in the local information repository for public review, along with the site ABCA and other site-related documents.

FIGURES



SOURCE: GREENSBURG, INDIANA, USGS TOPOGRAPHIC QUADRANGLE MAP, 1996



7428 Rockville Road Indianapolis Indiana 46214
 (317) 347-1111 Fax: (317) 347-9326

FIGURE 1

Site Area Map
St. Mary's Elementary School
206 & 218 South East Street
Greensburg, Decatur County, Indiana

CLIENT

Indiana Brownfields Program
Indianapolis, IN

Project	Task	Size	Date
IN25001	03	A	01/28/2025



Area Surveyed
by Micro Air in
September 2024

St. Mary's School

7248 Rockville Road Indianapolis Indiana 46214
(317) 347-1111 Fax: (317) 347-9326

Project	Task	Size	Date
IN25001	03	A	01/28/2025

FIGURE 2

Subject Property Map
St. Mary's Elementary School
206 & 218 South East Street
Greensburg, Decatur County, Indiana

CLIENT

Indiana Brownfields Program
Indianapolis, IN