



U.S. Department of Homeland Security  
FEMA Region 5  
536 South Clark Street, 6th Floor  
Chicago, Illinois 60605-1521

**FEMA**

August 8, 2025

CJ Wallace, Cultural Resources Coordinator  
Illinois Department of Natural Resources  
State Historic Preservation Office  
One Natural Resources Way  
Springfield, IL 62702-1271

Re: LPDM-PJ-05-IL-2022-007 / SHPO Log #015071822 / City of Alton Flood Relief  
38.8901, -90.1878 to 38.8903, -90.1860 (floodwall)  
38.8909, -90.1879 (sewer system / pump station)  
38.8822, -90.1346 (Chessen Lane)

Dear CJ Wallace:

Pursuant to Section 106 of the National Historic Preservation Act, I am writing this letter to continue consultation regarding the captioned Pre-Disaster Mitigation (PDM) Congressional Directed Spending Program project. The Illinois Emergency Management Agency (IEMA) initiated consultation for this undertaking in July 2022 and the SHPO Log #015071822 was assigned. In accordance with 36 CFR §800.11, this continuing consultation documentation provides updated 75% Design Drawings for the floodwall and sewer system mitigation measures and a finding of **No Adverse Effect on Historic Properties (above-ground resources only)** for the proposed work. FEMA intends to continue consultation in the future for below ground resources after the results of archaeological investigations.

A copy of this continuing consultation has been provided to all consulting parties in the attached list. FEMA welcomes your input on this undertaking. Please direct correspondence to Rachel Barnhart (SOI Specialist, Architectural History) and Karen Poulson (SOI Specialist, Archaeology) of my staff at [fema-r5-environmental@fema.dhs.gov](mailto:fema-r5-environmental@fema.dhs.gov).

Sincerely,

Duane Castaldi  
Regional Environmental Officer  
FEMA Region 5

Enclosures:

- 1) S106 Consultation with Figures, Photo Log; 2) 75% Design Drawings; 3) Consulting Parties List



**FEMA**

August 8, 2025

***Documentation Continuing Section 106 Consultation  
for a FEMA-Funded Undertaking***

**Project Information:**

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**Project ID:** LPDM-PJ-05-IL-2022-007 Alton / SHPO Log #015071822  
**Title:** City of Alton Flood Relief and Recovery Project  
**Address:** Mississippi River vicinity (see coordinates), City of Alton  
**Location:** Madison County, IL  
**GPS:** 38.8907, -90.1878 to 38.8903, -90.1860 (floodwall)  
38.8909, -90.1879 (sewer system and pump station)  
38.8822, -90.1346 (Chessen Lane)  
**PLSS:** Floodwall: Sec. 14; T5N, R10W  
Sewer System and Pump Station: Sec. 10; T5N, R9W  
Chessen Lane: Sec. 18; T5N, R9W

**Description of Undertaking and APE:**

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The City of Alton in Madison County, Illinois, is planning a comprehensive three-part flood mitigation project aimed at reducing the risk of future flooding and minimizing its dependence on federal disaster assistance. This proposed project would be funded from the Federal Emergency Management Agency's (FEMA) Pre-Disaster Mitigation (PDM) Congressional Directed Spending program, which provides financial resources to state, local, tribal, and territorial governments for sustainable and cost-effective hazard mitigation efforts. The Illinois Emergency Management Agency initiated Section 106 consultation for this proposed undertaking in July 2022; the IL SHPO responded (Log #015071822) in September 2022 requesting the next set of design documents to determine the impact of the proposed undertaking. This continued consultation documentation provides updated 75% Design Drawings for the proposed floodwall as well as identification and evaluation, a determination of eligibility, and finding for above-ground resources. An archaeological survey is recommended for Chessen Lane and archaeological monitoring is recommended for the floodwall and sewer system and pump station. FEMA considers the archaeology to be part of future ongoing consultations.

**Proposed Scope of Work**

The City of Alton proposes the following three project components in two locations (**Figure 1**):

***Floodwall Project Component 1:*** The first component of the proposed project involves constructing a hybrid floodwall system, comprising both permanent and temporary elements. From east to west, the floodwall system includes the following segments:

- A permanent reinforced concrete floodwall will be constructed along the north side of West Broadway adjacent to a parking lot, then turning north along Piasa Street, for a total length of approximately 200 feet
- A temporary floodgate will be installed across Piasa Street during flood events, connecting the permanent floodwall segments on the east and west sides of the street
- A second permanent floodwall segment will be constructed on the east side of Piasa Street, extending west to State Street along the parking corridor between West Broadway and Sugar Alley, with a total length of approximately 540 feet.
- A temporary floodgate will be installed across State Street during flood events, connecting the permanent wall segment on the east side of State Street with a temporary floodwall segment to the west, adjacent to Morrison's Pub.
- A temporary floodwall segment will be deployed on the west side of State Street, beginning at Morrison's Pub and continuing along West Broadway to William Street
- A final permanent wall segment, measuring approximately 70 feet, will be constructed along the east side of William Street, extending north from the corner of West Broadway.

The proposed flood protection wall will be approximately 1,050 feet long and 3 feet tall for permanent sections and includes a grout curtain in the soil beneath the wall to limit under-seepage. The permanent wall will have openings between Williams Street and State Street along West Broadway, at the Visitor's Center parking area at Sugar Alley, and across Piasa Street, thus allowing traffic to flow unobstructed during normal river stages. These openings will require temporary closures constructed by the city during flood conditions (**Figure 2**).

**Sewer System and Pump Station Project Component 2:** The second project component is intended to prevent river water from backing up into the existing sewer pipes and causing the flood waters to free flow out of the various inlets, manholes, and catch basins located at the intersections of State/West Broadway, W. 3<sup>rd</sup> /Piasa, and W. 3<sup>rd</sup> /Belle Street.

The improvements will include the construction of valves in the combined sewer area along W. 3<sup>rd</sup> Street, sealing old, non-functioning connections to the Piasa Sewer, and isolating storm sewer inlets on the streets by installing shut-off valves that can be closed during high river stages (**Figure 3**). In tandem with the valve system, the project includes the construction of a permanent, predominantly sub-surface pump station in the parking lot between W. 3<sup>rd</sup> Street and Sugar Alley (**Figure 4**). This work will effectively isolate the gravity sewers from backup associated with rising flood waters and will allow the downtown sanitary facilities to function during flooding events. The pump station will be activated at the same time as the combined sewer valves are closed to provide uninterrupted sewer service in the project area. The permanent floodwall, sewer valve system, and pump station improvements are interdependent.

**Chessen Lane Improvements Project Component 3:** At a separate location, the third and final component would be the mitigation of flood impacts along a stretch of Chessen Lane, which provides an access route to industrial facilities as well as to the local

wastewater treatment facility. The City of Alton proposes to improve a 1,500-foot-long, 24-foot-wide section of Chesson Lane, which includes reestablishing culverts and ditches on both sides of the road from the railroad tracks at the bottom of the hill south of West Broadway to a point 600 feet south of the Alton Steel crossroad (**Figure 5**).

### **Area of Potential Effects**

Pursuant to 36 CFR 800.4(a)(1), the Area of Potential Effects (APE) is defined as the geographic area(s) within which the undertaking may directly or indirectly affect historic properties. Based on the proposed scope of work, a distinct APE has been delineated for each of the three project components. These APEs encompass the physical project footprints, areas of ground disturbance within the overall project area(s), equipment access routes, staging areas on adjacent parcels, and sightlines where visual impacts may occur to adjacent historic districts. The APEs are defined as follows:

#### ***Floodwall***

The APE for the proposed floodwall begins at the intersection of State Street and 3<sup>rd</sup> Street, extending east along 3<sup>rd</sup> Street to Piasa Street, turning north along Piasa Street to E. 4<sup>th</sup> Street, then down Piasa Street to West Broadway. From there, it continues west along West Broadway to William Street, and then north back to State Street (**Figure 6**). The visual APE follows this definition.

#### ***Sewer System & Pump Station***

The APE for the proposed work aligns with the defined APE established for the floodwall. Sewer improvements are proposed at multiple locations, including along West Broadway at the Visitor Center; through Sugar Alley directly behind the proposed floodwall; through the adjacent parking lot with a connection to the proposed pump station; along 3<sup>rd</sup> Street between State Street and Piasa Street; and at the intersection of 4<sup>th</sup> and Piasa Streets (**Figure 6**).

#### ***Chesson Lane Improvements***

The APE for the proposed work is a linear project area along Chesson Lane, starting approximately 400 feet south of East Broadway, ending approximately 700 feet south of Hull Lane, with a 75-foot extended perimeter on either side of Chesson Lane (**Figures 5, 7**).

### **Previous Section 106 Consultation Timeline:**

The following section discusses the previous analysis, surveys, reports, and consultations that have occurred to meet cultural resource compliance requirements, organized by date.

- 2020 September 17: The City of Alton submitted the Principal Engineer Report (PER) to SHPO for the entire project
- 2020 September 30: SHPO responded to PER submission with a No Historic Properties Affected for archaeology
- 2022 July 15: The Illinois Emergency Management Agency (IEMA) consulted with SHPO on the proposed project
- 2022 September 14: SHPO provided comments to IEMA on the three project components and requested that local stakeholders be invited to participate in the consultation process.

- Chesson Lane was determined to have no historic structures or archaeological properties within the project area.
  - The floodwall had no known archaeological properties, but there was a potential for an adverse effect on two historic districts.
  - The sewer system improvements and pump station had no known archaeological properties, but there was a potential for an adverse effect on two historic districts.
  - SHPO requested submission of detailed design documents for the floodwall and the sewer system improvements to make a determination of effect on these project components.
- 2022 September 22: FEMA extended an invitation to consult to six interested parties and four tribal nations.
  - The Alton Historic Commission and Alton Main Street responded, requesting to be included in consultation.
  - The Osage Nation responded and requested to be a consulting party on this project and that a survey be conducted.
  - The Miami Tribe expressed concern about the presence of mound sites and requested that a survey be conducted. They also expressed interest in being a consulting party.
- 2023 January 12: FEMA held a meeting with identified consulting parties to provide information on the project and to receive feedback from the participants. At the time of the meeting, a USACE survey report was being developed for the project area; the report was released to the City of Alton in June 2023.
- 2023 June: A USACE Survey Report of the project area, "Flood Risk Reduction Study," was completed and presented to the City of Alton. The City created a public-facing website, <https://cityofaltonil.gov/planning-and-development/flood-mitigation-project/>, to provide public access to the USACE report as well as project design updates.
- 2024 October 10: FEMA sent a second series of notifications to seven tribal nations due to the lapse in time since the original notification was sent. FEMA received three responses.
  - 2024 October 18: The Osage Nation requested to be a consulting party on the project.
  - 2024 November 19: The Shawnee Tribe concurred that there were no known historic properties and asked to be consulted only if sites were discovered.
  - 2024 December 16: The Miami Tribe of Oklahoma requested to be a consulting party on the project and expressed concern about the proximity of the project to several mound sites, with a request for an archaeological assessment to be conducted.

- 2025 February 10: FEMA initiated a meeting with the Miami Tribe. FEMA updated the Miami Tribe that consultation will be reinitiated following the previous time lapse. The tribe requested that they be provided with the most up-to-date drawings for the floodwall and Chessen Lane mitigation measures and requested that a monitoring plan be created. The Tribe also noted that having tribal monitors present may not be necessary.
- 2025 February 18: FEMA initiated a meeting with the Osage Nation. FEMA updated the Osage Nation that consultation will be reinitiated following the previous time lapse. The Osage Nation reiterated their request to be a consulting party and expressed continuing interest in below-ground resources and archaeological surveys.
- 2025 February 21: FEMA notified SHPO Chief Archaeologist of the undertaking including that Alton Penitentiary, 11MS2733, site was recorded in 2024 and therefore was not part of original conversations in 2022 and there is an interest.

### Steps Taken to Identify Historic Properties and the Description of Historic Properties:

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#### ***Standing Structures***

A review of the Illinois (IL) State Historic Preservation Office database (Historic and Architectural Resources Geographic Information System, or HARGIS), the National Park Service's National Register of Historic Places (NRHP) database, and the National Archives database identified two previously recorded historic districts located within and adjacent to the APE for the floodwall and sewer system improvements. These are the Christian Hill Historic District, listed on the National Register of Historic Places (NRHP) on May 22, 1978, and the Middletown Historic District, NRHP listed July 11, 1978, with a boundary extension in 1982 and again in 2022 (**Figure 8**).

The proposed floodwall, which extends along West Broadway and Sugar Alley from William Street east to Piasa Street and includes designated openings for both pedestrian and vehicular access, traverses the southeast corner of the Christian Hill Historic District near the intersection of William Street and West Broadway. The remaining segments of the floodwall extending from State Street east to a parking lot just east of Piasa Street are situated immediately outside of the south boundary of the recently expanded Middletown Historic District (**Figures 2, 14**).

Proposed improvements to the sewer system are located along West Broadway and immediately north of the floodwall alignment, specifically along W. 3<sup>rd</sup> Street and Piasa Street. Additionally, a flood stage pump station is planned for construction within a non-contributing parking lot situated between W. 3<sup>rd</sup> Street and Sugar Alley (**Figures 3, 4**). The proposed improvements are within the southwest corner of the recently expanded Middletown Historic District.

#### **Christian Hill Historic District**

The Christian Hill Historic District (NRHP #78001165), encompassing approximately 106 acres, is situated west of Alton's central business district on a bluff overlooking the Mississippi River. The district comprises 274 predominantly residential buildings, with 266 contributing to its historic character. The area was developed in the 1830s and continued through the early twentieth century. Perched on bluffs, Christian Hill offers

panoramic views of the Mississippi River and features steep inclines and winding streets with historic stone retaining walls and staircases connecting different elevations. The district acquired its name from the hill above the river where a significant Catholic church was built in the 1850s. The district was added to the NRHP on May 22, 1978, under Criteria A, B, and C with the following Areas of Significance: Politics/Government, Architecture, Industry, Religion, and Social History.

#### **Middletown Historic District**

The Middletown Historic District (Original Boundary, 1978 – NRHP #78001166; First Boundary Increase, 1982 – NRHP #82002583, Second Boundary Increase, 2022 – NRHP #100007272), encompassing approximately 232 acres, includes portions of Alton's historic Middletown and Hunterstown neighborhoods. The district contains 653 buildings, of which 613 contribute to its historic character. Located on rolling terrain, the district features a traditional grid layout with brick-paved sidewalks, mature street trees, and historic street lighting, offering a visually cohesive blend of residential and commercial development that reflects Alton's historical growth.

Originally listed in the NRHP on July 11, 1978, under Criterion C for its architectural significance, the district underwent a boundary expansion in 1982, which incorporated the Hunterstown neighborhood to the east. A second boundary increase was approved in 2022, extending the district to include Alton's historic commercial area north of West Broadway.

The 1978 designation primarily focused on the residential neighborhoods situated uphill, capturing only a small portion of the downtown commercial core, limited to a few blocks near the river and segments of Front Street. The 2022 boundary expansion addressed this gap by encompassing an additional eleven-block historic commercial corridor on the south side of the original district, extending the boundary to the outer edges of Alton's historic central business district. This area historically developed between the residential neighborhoods to the north and the railroad corridor paralleling the Mississippi River to the south.

The commercial streetscape within the expanded area is defined by one- to three-story brick storefronts, interspersed with several four- to six-story buildings located near major intersections and along Front Street facing the river. Building materials include various shades of brick, as well as some examples of stucco and limestone facades.

With this expansion, the district also achieved eligibility under Criterion A for its association with the development of commerce in Alton as a nineteenth-century river town and trading hub. The district's significance is rooted in its role as a center of commerce and distribution tied to Mississippi River shipping. Between 1830 and 1935, the commercial district supported economic growth in the region through warehousing, trade, retail, and industry. As such, the district's eligibility under Criterion A reflects its function as a historic commercial corridor, not solely its visual integrity or aesthetic character.

The following buildings and structures are within the APE for the proposed floodwall and sewer system improvements:

Owner/Address/Parcel Number	Historic District/NRHP Status
Vacant Grass Lot: Comprised of 3 Privately Owned Parcels 300 West Broadway Parcel No. 23-2-07-14-06-101-020 Parcel No. 23-2-07-14-06-101-021 Parcel No. 23-2-07-14-06-101-022	Christian Hill Historic District Non-contributing
Building: West Third Properties, LLC 215-219 West 3 <sup>rd</sup> Street Parcel No. 23-2-07-14-06-103-017	Middletown Historic District Contributing
Building: Hiram Lewis 205 State Street Parcel No. 23-2-07-14-06-103-017.001	Middletown Historic District Contributing
Parking Lot: City of Alton 200 West 3 <sup>rd</sup> Street Parcel No. 23-2-07-14-06-103-016	Middletown Historic District Non-contributing
Building: Catdaddys Inc 203 West 3 <sup>rd</sup> Street Parcel No. 23-2-07-14-06-103-015	Middletown Historic District Non-contributing
Vacant Grass Lot: Comprised of 3 Privately Owned Parcels 201 West 3 <sup>rd</sup> Street Parcel No. 23-2-07-14-06-1-3-014 Parcel No. 23-2-07-14-06-103-013 Parcel No. 23-2-07-14-06-103-013.001	Middletown Historic District Non-contributing
Building and Patio: Mary Carroll Revocable Trust 121 West 3 <sup>rd</sup> Street Parcel No. 23-2-07-14-06-103-012.001	Middletown Historic District Non-contributing
Building: Mary Carroll Revocable Trust	Middletown Historic District



123 West 3 <sup>rd</sup> Street Parcel No. 23-2-07-14-06-103-012	Contributing
Building: Lauschke Company 119-117 West 3 <sup>rd</sup> Street Parcel No. 23-2-07-14-06-103-011	Middletown Historic District Contributing
Parking Lot: City of Alton 101 West 3 <sup>rd</sup> Street Parcel No. 23-2-07-14-06-103-010	Middletown Historic District Non-contributing
Building: Edward Benz 101 West 3 <sup>rd</sup> Street Parcel No. 23-2-07-14-06-103-007	Middletown Historic District Contributing
Paved Linear Parking Lot along Sugar Alley's south edge: IDOT Parcel No. 23-2-07-14-06-103-018 Parcel No. 23-2-07-14-06-103-019 Parcel No. 23-2-07-14-06-103-020	Not within a historic district Not a historic property
Paved and Landscaped Plaza with Meeting of the Great Rivers Signboard: State of Illinois 100 West Broadway Parcel No. 23-2-07-14-06-103-021 Parcel No. 23-2-07-14-06-103-022	Not within a historic district Not a historic property
Alton Visitors Center Building (1981) and Paved Parking Lot: State of Illinois 100 West Broadway / 200 Piasa Parcel No. 23-2-07-14-06-103-023	Not within a historic district Not a historic property
Paved Parking Lot: Waterfront Properties XXVIII LLC 10-34 West Broadway Parcel No. 23-2-07-14-06-103-005 Parcel No. 23-2-07-14-06-103-004	Not within a historic district Not a historic property

Identification and evaluation efforts of the buildings and structures within the APE for the floodwall and the sewer system improvements find no new resources that are eligible for NRHP listing.

There are no NRHP listed properties within the Chessen Lane project's APE. The APE viewshed includes two mid-to-late twentieth century utilitarian buildings at 121 Chessen Lane, part of the Azcon Metals property. These buildings do not meet NRHP Criteria for Eligibility.

### ***Archaeological Resources***

To assess the potential for intact archaeological resources to be present in the APE, FEMA SOI qualified archaeologists conducted background research using the Illinois Historic and Architectural Resources Geographic Information System (HARGIS) and the Illinois Inventory of Archaeological Sites (IIAS) websites to identify the locations of previously recorded archaeological sites within or near the APE. FEMA also notified Tribes with an interest in the project area about the proposed undertaking and is concurrently providing the Tribes with this consultation.

The west end of the proposed permanent flood wall is opposite the former location of the Alton Penitentiary, 11MS2733 (outside the direct APE, **Figure 14**), a historic property that operated as a state prison from 1833–1857 and as a military prison 1862–1865 and is listed in the National Register of Historic Places (NRHP) as a contributing resource to the Christian Hill Historic District (listed in 1978; period of significance 1830–1910; Wagner 1977). Portions of the planned flood wall, the sewer system improvements, and the new pump station also lie within the NRHP-listed Middletown Historic District (also listed in 1978; boundaries expanded in 1982 and 2022; period of significance 1835–1962). Precontact Period Native American mound sites 11MS14 and 11MS140 are within 0.30 mile of the project components. The project area lies within the American Bottom, a portion of the Mississippi River flood plain extending from Alton, Illinois south to the Kaskaskia River known to have served as the center for the Mississippian civilization, Cahokia. The project area is approximately 30 miles north of the Cahokia Mounds State Historic Site, and several mound sites are within 1 mile of the three project components.

The permanent flood wall proposed for downtown Alton is planned north of West Broadway along Sugar Alley, on the north side of West Broadway, from William Street to Piasa Street. This section of West Broadway parallels the Mississippi River with the Christian Hill and Middletown Historic Districts to the north and the approximately 10-story Ardent Mills Alton Mill to the south. The entirety of the flood wall including the planned sewer system improvements and the new pump station APEs for direct effects lie within the 533:Urban Land soil type. The United States Department of Agriculture-Natural Resources Conservation Service (USDA-NRCS) records no data for a subsurface soil profile of this area (USDA-NRCS 2025).

Chessen Lane is located approximately 2.8 miles east of downtown Alton. It is a major thoroughfare in the City's industrial area east of Alton Steel and west of Mighty River Recycling. The area appears heavily disturbed from previous grading and construction with chain link fence and power line poles paralleling both sides of Chessen Lane. Chessen Lane is a two-lane paved road within no center line or shoulder running north-south between East Broadway in the north and dead ends at an electrical substation approximately 1.5 miles to the south. The entirety of the footprint of the Chessen Lane

APE for direct effects lies within the 802B: Orthents, loamy, undulating soil type. Orthents consists of silt loam to 60 inches (1.5 meters) below surface. It is considered well-drained with depth of restrictive features and water table recorded at greater than 80 inches (2.0 meters; USDA-NRCS 2025).

No archaeological resources have been identified within the APE. However, the Miami Tribe of Oklahoma and the Osage Nation raised concerns about nearby mound sites and the possibility of unrecorded mounds within the APE particularly near Chessen Lane. In addition, the SHPO expressed interest about possible historic-period archaeological resources associated with the former Alton Penitentiary, 11MS2733, near the west end of the proposed floodwall. These concerns suggest the project warrants further archaeological investigation.

As a result, FEMA developed an archaeological testing plan that details a subsurface testing strategy across all three project components within the APEs. The archaeology testing strategy and reporting requirements were developed to fulfill FEMA's compliance requirements in accordance with Section 106 of the NHPA. The archaeological testing strategy was designed to consist of a combination of machine aided (project components 1 and 2) and hand testing (project component 3).

Subsequent to the development of the archaeology machine aided strategy for project components 1 and 2, the recommended SHPO Chief Archaeologist backhoe operator familiar with buried cultural resources, indicated significant Illinois Department of Transportation (IDOT) requirements for road closures and safety.

Given the IDOT requirements for road closures and safety within project components 1 and 2, FEMA recommends monitoring during construction of both the floodwall and the sewer system and pump station. The applicant also conducted soil bores within these components which are in process of being provided to FEMA. These soil bores will help inform the probability of deeply buried archaeological sites and to confirm urban soil designation deeper than machine aided testing. FEMA considers the archaeological consultation to be ongoing for the project components 1 and 2.

Within project component 3, Chessen Lane, shovel test pits (STPs) will be spaced at regular intervals, hand excavated within the direct impact APE and archaeologists may utilize judgmentally placed STPs. STPs will measure not less than 40 centimeters (cm) (15.7 inches) across and will be excavated in arbitrary 10-cm (3.9-inch) levels within stratigraphic deposits to sterile subsoil or 100 cm (39.3 inches) below surface, which is the physical limit of shovel excavations, whichever comes first. All excavated soils will be screened through 0.25-inch wire mesh. Representative photographs of STP locations will be taken, excavated STPs will be plotted on project maps. The stratigraphy, artifacts collected, and any cultural features identified will be described in detail using standard archaeological practices. If cultural materials or features are identified, radial STPs may be excavated. Radial placement of STPs will be at less than 5-m intervals from any STP positive for cultural material; these radial STPs will be excavated to define the limits of any identified sites within the APE (**Figure 15**)<sup>1</sup>. Given the overgrowth of vegetation (**Photo 6**), the applicant will mow the right-of-way of Chessen Lane to facilitate ease of STPs. All

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<sup>1</sup> CDM Smith and Richard Grubb & Associates, Draft Archaeological Testing Plan, FEMA Region 5, LPDM-PJ-05-IL-2002-007, Flood Relief and Recovery Project, City of Alton, Madison County, Illinois, July 14, 2025.

testing methodology will follow the Illinois SHPO Interim Phase I Field Methodology and Reporting Guidelines dated March 1, 2025.

A technical report will be developed outlining the results of the archaeological testing for project component 3 that will include management recommendations regarding the need for a further survey (i.e., Phase II evaluation-level survey), if necessary, or no further survey. The technical report will be developed per the Illinois SHPO Interim Phase I Field Methodology and Reporting Guidelines dated March 1, 2025. FEMA will coordinate with the Tribes and the SHPO regarding review and comment on the draft report. The work will be carried out under Section 106 of the National Historic Preservation Act (NHPA), as amended, and Illinois' Human Remains Protection Act (HRPA; 20 Illinois Compiled Statutes 3440) and its implementing regulations (17 Illinois Administrative Code 4170), Illinois SHPO Interim Phase I Field Methodology and Reporting Guidelines dated March 1, 2025 and procedures as outlined in the Programmatic Agreement Among the Federal Emergency Management Agency, the Illinois State Historic Preservation Officer, the Illinois Emergency Management Agency, and Participating Tribes (IL PA).

#### **Determination of Eligibility:**

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##### ***Standing Structures***

The APEs (including the viewshed) for the proposed floodwall and storm sewer improvements are within and adjacent to the Christian Hill Historic District and the Middletown Historic District. The NRHP-contributing structures within the APEs have not lost integrity since their original listing dates and remain historic properties. No newly identified historic structures exist within the APEs for the floodwall / sewer improvements and Chessen Lane.

##### ***Archaeology***

No known archaeological resources or historic properties have been identified within the APEs for the floodwall/sewer improvements and Chessen Lane. Archaeological testing will be conducted along Chessen Lane. FEMA will submit the results of this testing to the SHPO and Tribes as part of continuing consultation in accordance with Section 106 of the NHPA.

Archaeological monitoring is recommended within project components 1 and 2 (floodwall and sewer system components). The applicant also conducted soil bores within these components which are in process of being provided to FEMA. These soil bores will help inform the probability of deeply buried archaeological sites and to confirm urban soil designation deeper than machine aided testing. Dependent upon the results of the soil bores, FEMA may revise the recommendation. FEMA considers this as part of continuing consultation in accordance with Section 106 of the NHPA.

#### **The Undertaking's Effects on Historic Properties:**

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##### ***Standing Structures***

A visual analysis was conducted in conjunction with the renderings of the proposed floodwall design provided by the City of Alton in April 2025 (**Photo Log and Enclosed Drawings**). The assessment of potential effects includes viewsheds from sidewalks, commercial buildings, and streetscapes toward the proposed floodwall and pump

station, as well as historic context, materials, skyline, and spatial relationships within the historic districts.

The APE for the floodwall and sewer system improvements encompasses the southeastern portion of the Christian Hill Historic District as well as segments of the Middletown Historic District boundary expansion. While the proposed floodwall is situated just south of the Middletown Historic District boundary, the visual analysis considers those viewsheds and streetscapes immediately surrounding the floodwall that could be impacted (**Figure 14**).

### **Context and Visual Relationships**

- South of the floodwall, the landscape is dominated by large-scale industrial structures including grain silos, mill buildings, and active railroad lines that run parallel to the Mississippi River and create a sightline barrier between the historic districts and the river.
- The four-lane West Broadway corridor forms a major vehicular and visual divide between the industrial riverfront and the historic downtown.
- North of the corridor, the topography gradually rises, with sidewalks, parking lots, and rows of one- to three-story historic commercial buildings forming the urban core. The view within the districts from the sidewalk and street level is generally open due to the existing setbacks and surface lots. The 2-3ft height of the proposed floodwall's permanent base, as seen with a hybrid design (**Figure 13**), will preserve the sightlines within and into the districts. The 2–3-foot height of the floodwall ensures that pedestrian-level views from sidewalks and first-floor windows in the historic buildings will remain largely unobstructed. The gradual topographic rise to the north also supports elevated viewing angles toward the riverfront, further diminishing any potential visual barrier the wall might pose.
- The use of sympathetic wall finishes or textures applied to the permanent floodwall segments, such as stone veneer or scored concrete, will visually echo the existing historic materials in the district, allowing the new infrastructure to cohesively integrate with the historic streetscape (**Figure 12**).

### **Potential Impacts Analysis – Christian Hill Historic District**

#### **Floodwall Proposal**

The section of the proposed floodwall located within the Christian Hill Historic District boundaries will be installed along West Broadway between William Street and State Street, directly across from Ardent Mills which features concrete grain silos and railroad infrastructure that block viewsheds of the Mississippi River from the district.

- A permanent floodwall segment would begin at ground level on William Street, at the edge of an undeveloped lot (Parcel 23-2-07-14-06-101-020/021/022), and extend down the sloped elevation to West Broadway. This permanent wall segment would have a maximum height of 2 to 3 feet and would be designed to support a temporary aluminum floodwall extension, increasing the total barrier height to approximately 5 feet during flood events. This is known as a hybrid design (**Figure 13**).

- The permanent floodwall section at William Street/West Broadway would connect to a 5-ft-tall temporary and removable floodwall, positioned adjacent to the sidewalk curb along West Broadway from William Street to State Street (**Figure 9**). This flood protection segment would be erected adjacent to Morrison's Pub at 200 State Street, a contributing building to the district. The temporary wall would be freestanding, non-invasive, and would not attach to any historic buildings or structures. It would be erected only during flood conditions.
- A temporary floodgate, similar to those previously used by the City of Alton during past flood events, would be connected to the temporary wall and extended across State Street at West Broadway, linking to a section of permanent floodwall at the exit of Sugar Alley.

Character-defining features of the Christian Hill Historic District include brick street pavers as seen along William Street and historic two-part commercial block buildings, such as Morrison's Pub at 200 State Street. The proposed floodwall has been designed in a manner that would not negatively impact these character-defining features. Specifically, the portion of the floodwall adjacent to Morrison's Pub will be a temporary and removable structure, so that the viewshed of and from that building is not permanently obstructed. Temporary floodgate closures will allow normal pedestrian and vehicular traffic during non-flood conditions, and thus will not change or diminish the commercial function of the district. The permanent portion of the wall abuts a non-contributing grass lot. Furthermore, the permanent base of the wall will use masonry materials, echoing the building materials seen in the district, and will be no taller than 3' in height, maintaining sightlines throughout the district. The presence of a floodwall in a historic district adjacent to a major river will not alter the feeling of the district, as flooding and man-made methods of flood mitigation are an important facet of the development and evolution of river towns. Overall, the integrity of the Christian Hill Historic District will not be diminished by the floodwall.

#### **Potential Impacts Analysis – Middletown Historic District**

##### **Floodwall Proposal**

The permanent floodwall being proposed along West Broadway between State Street and the paved parking lot immediately east of Piasa Street abuts the Middletown Historic District expansion's southern boundary.

- A permanent floodwall segment with regularly spaced columns and stone veneer or scored concrete finishing is proposed along the edge of an existing municipal parking lot on the south side of Sugar Alley, extending eastward from State Street to Piasa Street (**Figure 10**). A temporary floodgate would be incorporated into the wall to allow continued access to the parking area west of the Alton Visitor Center (built in 1981, Parcel 23-2-07-14-06-103-023) (**Figure 12**). This permanent wall segment would have a maximum height of 2 to 3 feet and would be designed to support a temporary aluminum floodwall extension, increasing the total barrier height to approximately 5 feet during flood events. This is known as a hybrid design (**Figure 13**).
- The design incorporates a temporary floodgate that will be installed across Piasa Street during flood conditions. Pedestrian and vehicular traffic will be able to flow freely during normal conditions.

- On the east side of Piasa Street, a permanent floodwall segment would continue along the edge of a non-historic parking lot on Parcels 23-2-07-14-06-103-005 and 23-2-07-14-06-103-004 (**Figure 11**).

#### Sewer System and Pump Station Proposal

- The subsurface sewer system improvements propose to isolate the downtown sewers from the Piasa Tunnel and the West Broadway storm system. A stormwater pump station, predominantly sub-surface, will be constructed on the non-contributing paved parking lot at 200 W. 3<sup>rd</sup> Street (Parcel 23-2-07-14-06-103-016) to prevent water backup in the system from rising floodwaters (**Figure 4**). The sewer system improvement work is for sewer lines located beneath West Broadway, West 3<sup>rd</sup> Street, and Piasa Street. The proposed work is within and adjacent to the Middletown Historic District boundary expansion (**Figure 3**).

Character-defining features of the Middletown Historic District's commercial corridor include historic two-part commercial block buildings and public sidewalks to facilitate pedestrian access to commerce. The proposed floodwall and sewer system improvements will not adversely impact the district's character-defining features. The permanent floodwall segment would be located approximately 50 feet south of contributing commercial buildings in the Middletown Historic District and remain lower in height than parked vehicles in the lot. Its construction would not involve direct physical or visual intrusion on any contributing structures. Temporary floodgates will preserve traditional pedestrian and vehicular access within and into the district during normal (non-flood) conditions. The floodwall's hybrid design will preserve existing viewsheds throughout the district during normal conditions. The floodwall base will use masonry materials that are visually compatible with existing building materials seen throughout the district. The historic feeling of the district will be maintained. The pump station will be mainly sub-surface and will be placed within a non-contributing parking lot that is adjacent to a non-contributing building. The sewer system repairs are not expected to impact historic brick pavers. Overall, the integrity of the Middletown Historic District will not be diminished by the floodwall and sewer system improvements.

#### **Viewshed Impact Assessment**

The visual APE for the proposed floodwall and sewer system improvements is defined by an urban-industrial landscape located along the Mississippi River in downtown Alton, Illinois. This area includes multiple layers of built and natural features that contribute to the overall viewshed, including the riverfront, large grain silos and mill buildings, a major roadway corridor (West Broadway/IL-100), and a series of historic commercial structures.

Given its modest height and placement at the edge of a major roadway, the floodwall will have minimal intrusion on key sightlines between the historic commercial buildings and the Mississippi River. The floodwall is situated in an area already visually dominated by modern infrastructure, including a four-lane highway, traffic signals, parking lots, and extensive industrial development along the riverfront. These existing elements significantly reduce the sensitivity of the setting to additional low-profile infrastructure.

Importantly, the proposed floodwall does not disrupt the historic spatial relationships or architectural rhythm of the district, as it is set apart from the buildings by existing sidewalks and parking lots. It does not intersect or physically alter any contributing historic structure. The existing empty lots and open views between buildings allows visual

permeability across the block, further reducing the visual prominence of the proposed flood barrier.

### **Conclusion**

The proposed floodwall is a protective infrastructure measure intended to reduce flood risk along West Broadway and the riverfront. It is designed to safeguard historic commercial buildings from recurring flood damage, support the long-term usability of ground-floor storefronts and commercial spaces, and promote continued economic activity within the district by enhancing resilience. With a permanent low profile of 2 to 3 feet and a combined height of up to 5 feet only during flood events, the design ensures minimal visual impact while delivering effective and functional flood protection.

The indirect and cumulative effects identify that the floodwall preserves the overall integrity of the districts by protecting vulnerable historic buildings from increased flood events. It is not anticipated that the permanent floodwall would introduce high-contrast visual elements or obscure contributing features. Additionally, it would not contrast with the commercial or industrial nature of the immediate surroundings.

### **Archaeology**

The proposed undertaking was previously reviewed for cultural resource impacts by the Illinois Department of Natural Resources in 2024 (Permit No. NE2024055), which concluded that impacts to cultural resources were unlikely. No known archaeological resources or historic properties have been identified within the APEs for the floodwall/sewer improvements and Chessen Lane.

However, further consultation with the SHPO and Tribal representatives revealed concerns about the potential presence of unrecorded mound features, particularly in the Chessen Lane area, as well as possible historic-period archaeological resources associated with the former Alton Penitentiary, 11MS2733, near the west end of the proposed floodwall.

FEMA requires an archaeological survey along Chessen Lane by a Secretary of the Interior-qualified archaeologist to identify any human remains, cultural material, or mound remnants. The results of this survey will be submitted to the SHPO and Tribes as part of ongoing consultation under Section 106 of the NHPA.

Archaeological monitoring by a Secretary of the Interior-qualified archaeologist is recommended within project components 1 and 2 (floodwall and sewer system components). The results of this survey will be submitted to the SHPO and Tribes as part of ongoing consultation under Section 106 of the NHPA.

In the case of inadvertent discoveries, FEMA will follow the procedures set forth in Stipulation III.B. Procedures for Unexpected Discoveries, Previously Unidentified Properties, or Unexpected Effects of the *Programmatic Agreement Among the Federal Emergency Management Agency, the Illinois State Historic Preservation Officer, the Illinois Emergency Management Agency, and Participating Tribes* (IL PA).



## Finding:

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FEMA finds that this undertaking, when conducted in accordance will result in ***no adverse effects on historic properties for above ground resources.***

FEMA considers consultation **continuing for below ground cultural resources.**

## Summary of Views of Consulting Parties and the Public:

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FEMA initiated consultation for the undertaking by notifying six tribal nations and several local stakeholders on September 22, 2022. In response, the Osage Nation and the Miami Tribe of Oklahoma requested to be consulting parties. The Miami Tribe expressed concern regarding the proximity of the project to mound sites and requested that an archaeological survey be conducted. These concerns were reiterated in October 2024 and again in a February 2025 consultation meeting, during which the Tribe requested updated design drawings and a monitoring plan but noted that on-site tribal monitors may not be necessary. The Osage Nation also reaffirmed its status as a consulting party and maintained interest in subsurface resources and archaeological integrity. On November 19, 2024, the Shawnee Tribe concurred that there were no known historic properties in the APE and requested future consultation only in the event of unanticipated discoveries. Consultation with tribal nations remains ongoing.

In response to SHPO's September 14, 2022, request that local stakeholders be included in consultation, FEMA and the City of Alton engaged with the Alton Historic Commission and Alton Main Street, both of which requested to participate. Public outreach has included two public meetings hosted by the City of Alton: the first on June 25, 2024, and the second on February 27, 2025. At both meetings, project materials were made available, and attendees were invited to submit written comments. Over 30 unique comment cards were collected between the two events.

Public comments have not, on the whole, focused on the potential for adverse effects to historic properties, but rather on broader concerns regarding the design, implementation, and long-term impacts of the proposed flood protection system.

### Summary of Public Input (06/25/2024 Meeting)

The first public meeting generated comments primarily centered on:

- Skepticism regarding the floodwall's effectiveness, especially concerning basement flooding from groundwater seepage;
- Frustration with the format of the event—numerous attendees expected a formal presentation and structured Q&A rather than an open house format;
- Calls for alternative strategies, including rerouting the floodwall closer to the river or focusing funding solely on sewer and pump station upgrades;
- Concerns about cost-efficiency, with several commenters questioning whether partial implementation or property-level floodproofing would be more appropriate;
- Initial visual concerns, particularly about the wall's potential to obscure downtown visibility and its effect on the character of the historic district;

- Support for Chessen Lane and sewer system improvements, which were broadly viewed as practical and necessary.

### **Summary of Public Input (02/27/2025 Meeting)**

The second public meeting reflected many of the same concerns but with added specificity and urgency:

- Increased opposition to the floodwall, with some downtown business owners explicitly stating they do not support its construction;
- More detailed questions about design, materials, wall height, and visual impact, including suggestions for sympathetic finishes, public art, and mural integration;
- Wider concern about business disruption, including questions about construction duration, traffic detours, noise, and parking availability;
- More developed design feedback, including requests for integration of pedestrian and bicycle amenities, landscaping, and compatibility with existing streetscape elements;
- Sustained interest in cost transparency, maintenance responsibilities, and questions about FEMA funding gaps;
- Stronger emphasis on public process transparency, including calls for online surveys, regular updates to the City's Riverfront Commission, and improved communication with residents and businesses.

The evolving nature of the feedback indicates a shift from general concern and information-seeking in mid-2024 toward more pointed skepticism and requests for design and process accountability in early 2025. While the sewer and Chessen Lane components continue to receive public support, the proposed floodwall—particularly its alignment and aesthetic—remains a source of controversy. Nonetheless, very few public comments have directly addressed the potential effects to historic structures within the Christian Hill or Middletown Historic Districts.

To support ongoing public access and transparency, the City of Alton maintains a dedicated public website where project documents, renderings, and updates are posted. FEMA continues to coordinate with SHPO, tribal consulting parties, and local stakeholders to ensure that potential effects to historic properties are appropriately considered as planning advances.

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## Appendix A: Figures

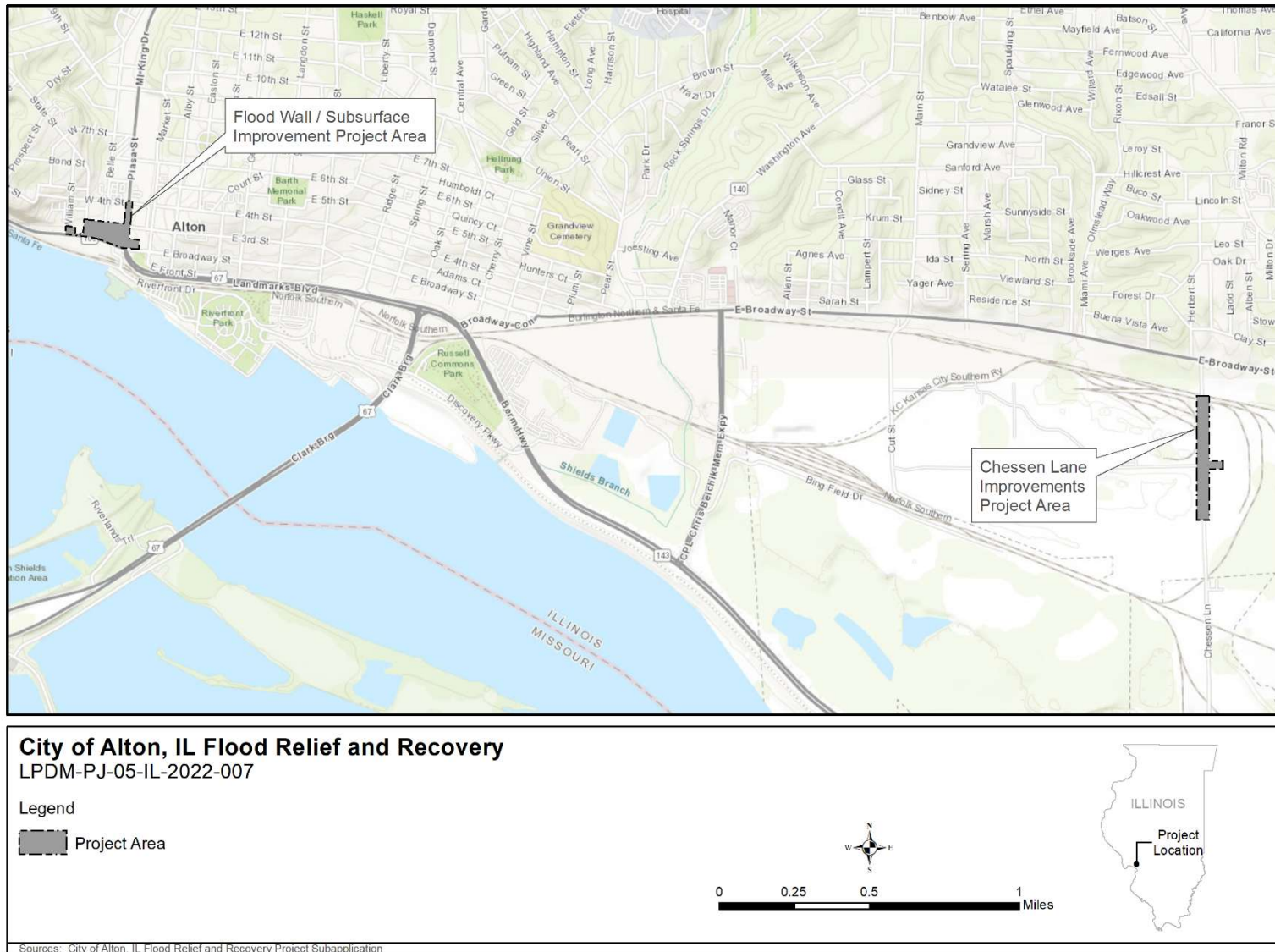


Figure 1: Project Vicinity Map

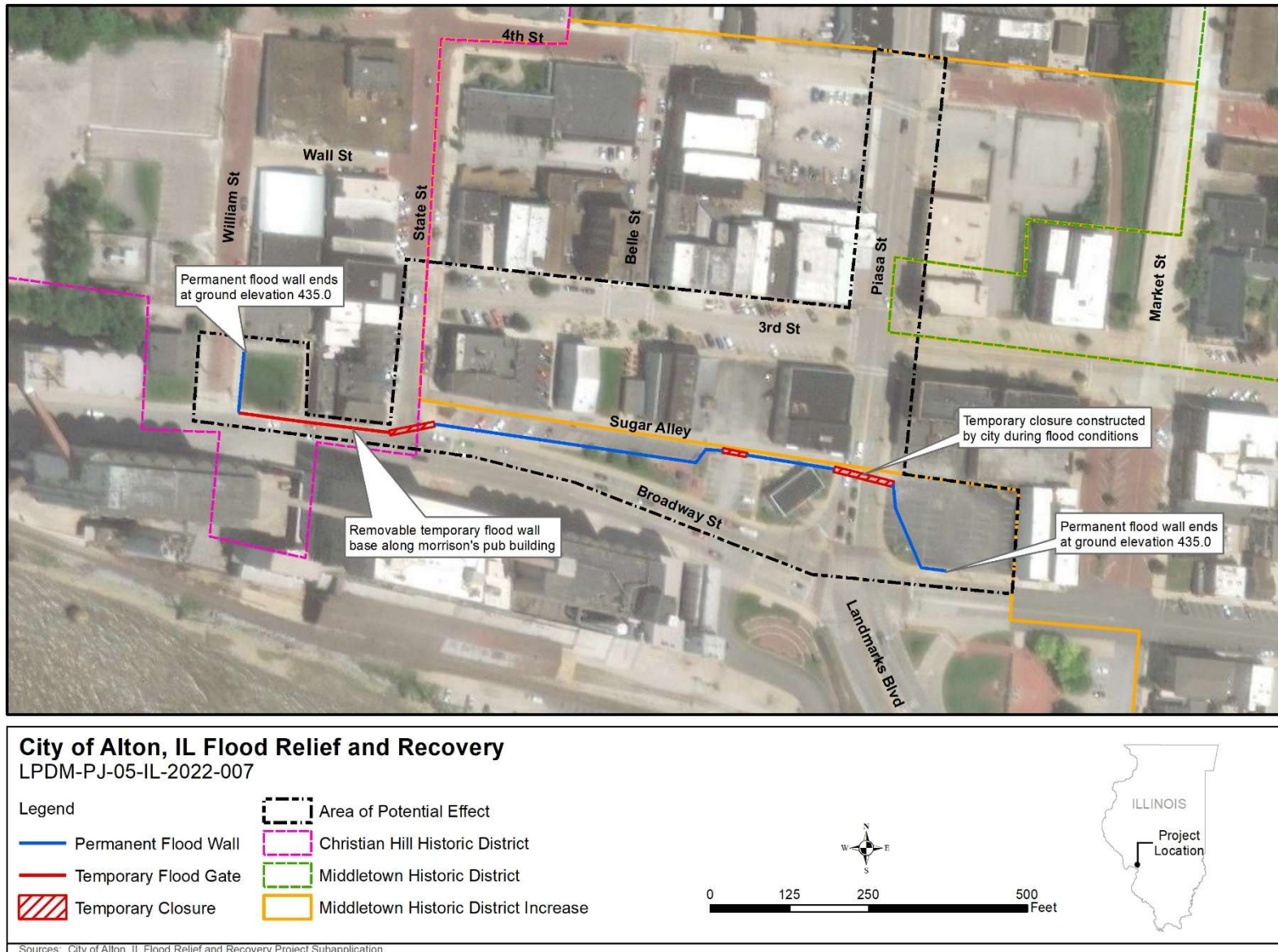
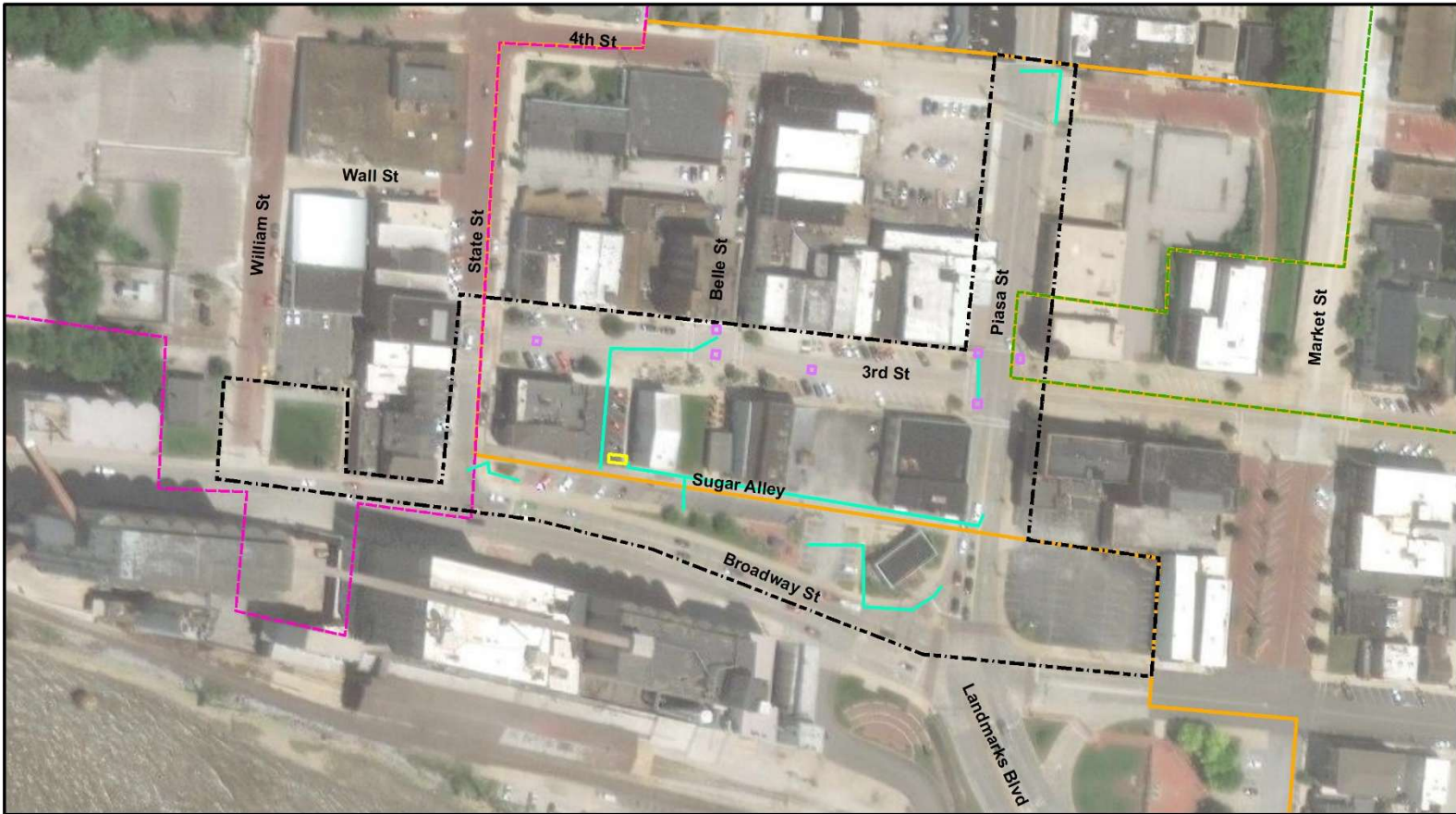









Figure 2: Proposed floodwall and temporary closure structures

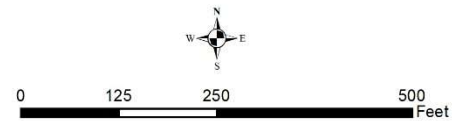




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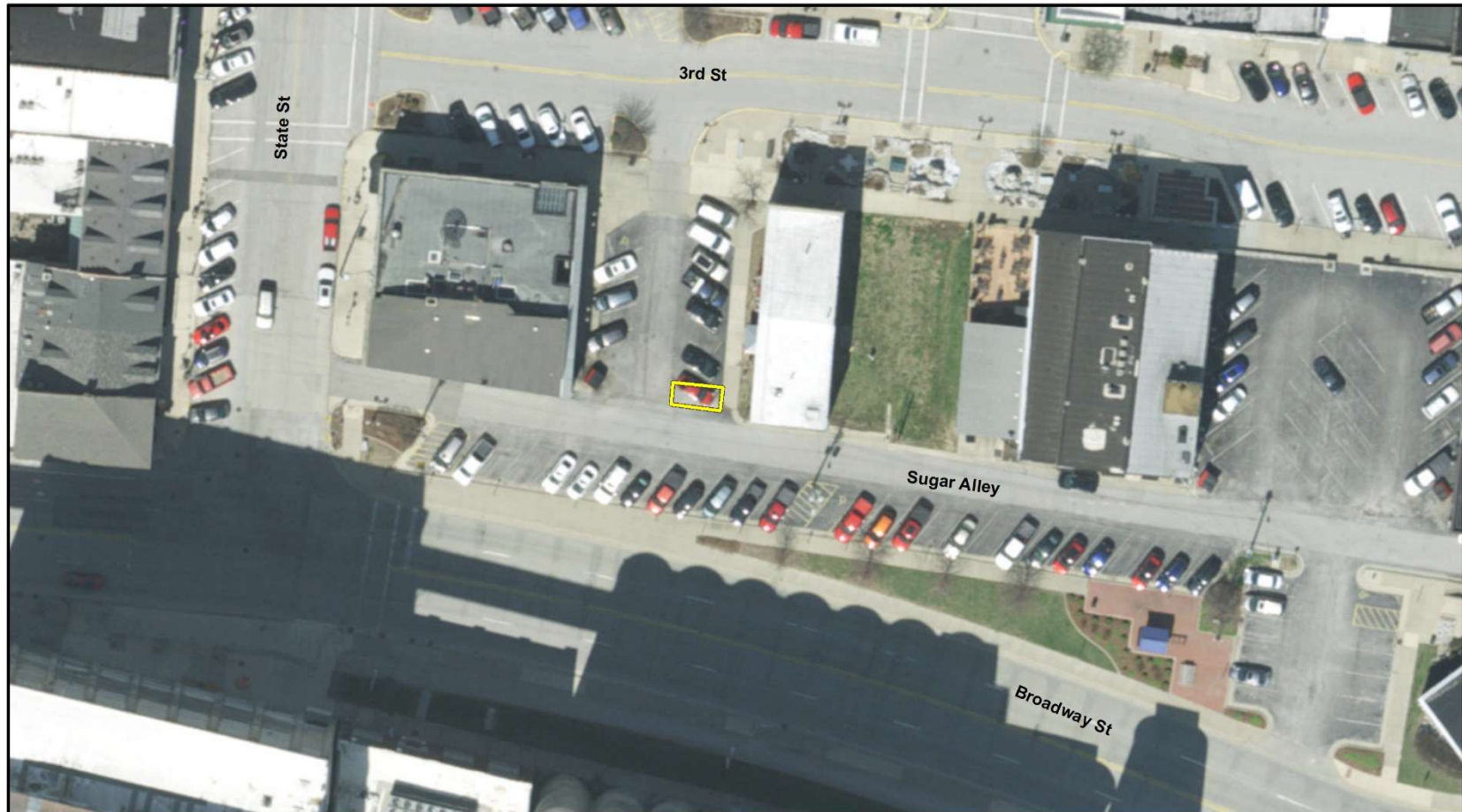
**Legend**

- |  |   |
|--|---|
|  Proposed Storm Sewer     |  Area of Potential Effect              |
|  Flood Stage Pump Station |  Christian Hill Historic District      |
|  Shut-off Valve           |  Middletown Historic District          |
|  |  Middletown Historic District Increase |



Sources: City of Alton, IL Flood Relief and Recovery Project Subapplication

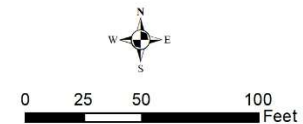
**Figure 3: Sewer System Improvement and Pump Station**



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**Legend**

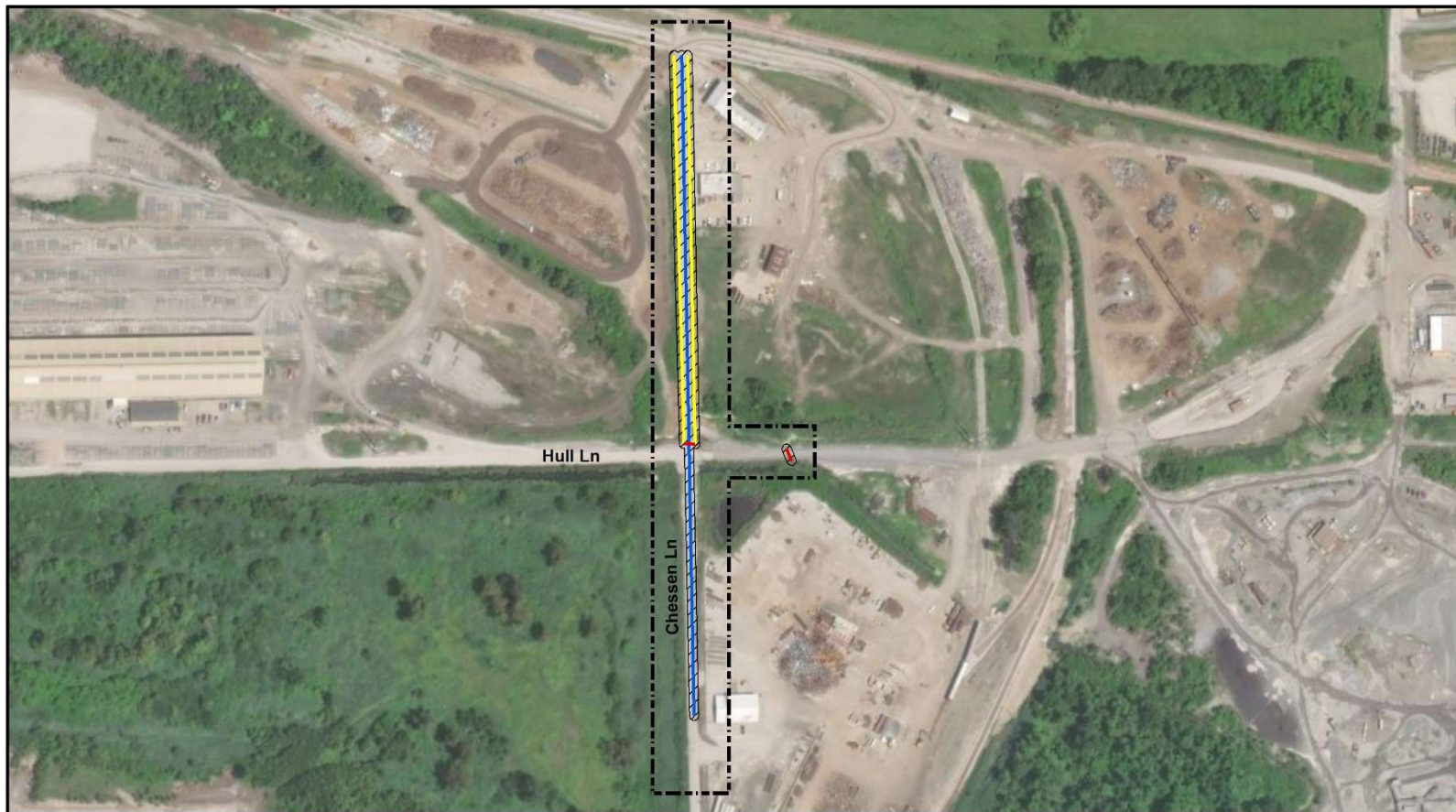
— Flood Stage Pump Station



Sources: City of Alton, IL Flood Relief and Recovery Project Subapplication






**Figure 4: Pump Station between Sugar Alley and West 3<sup>rd</sup> Street**

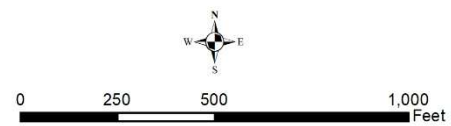




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**Legend**

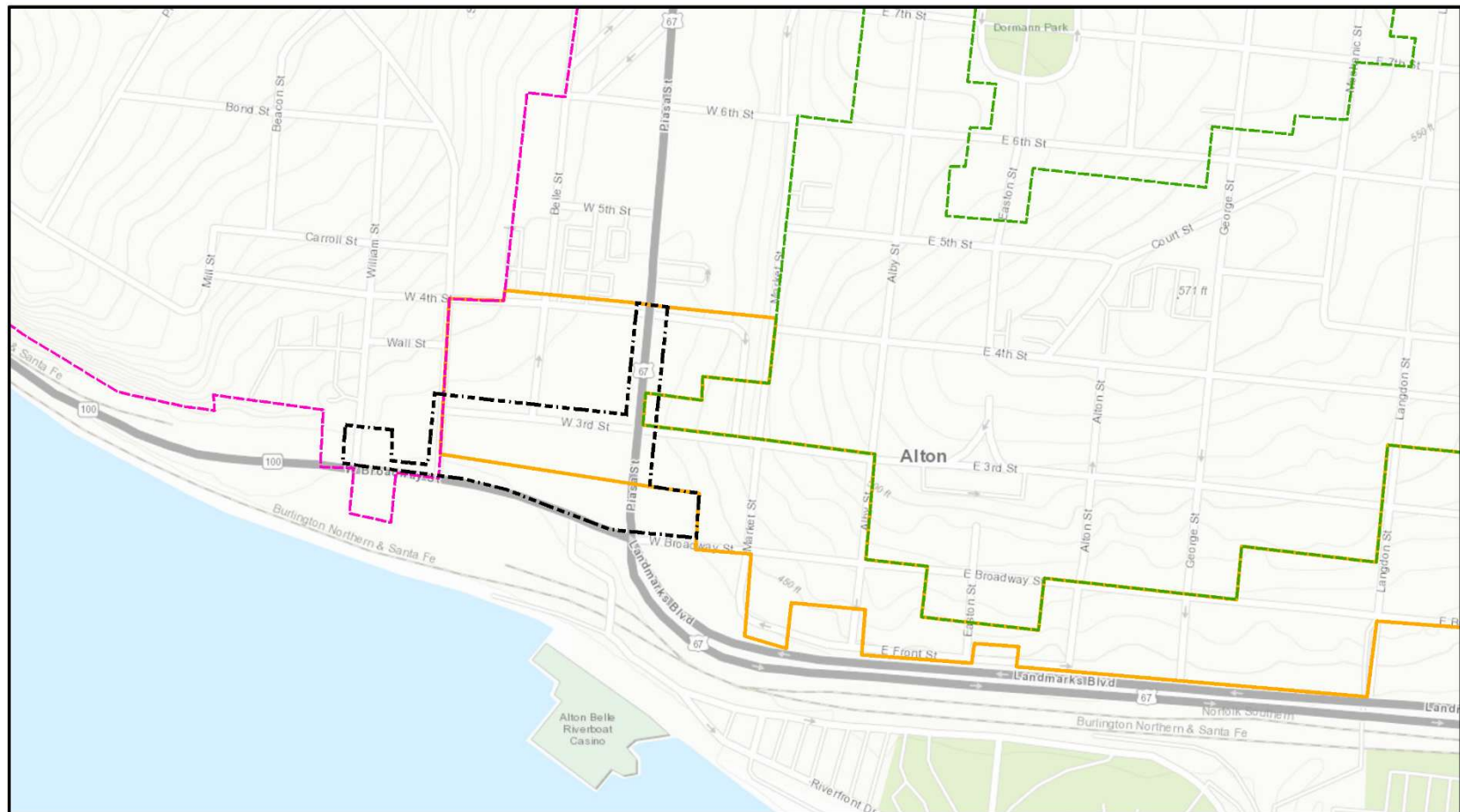
- |   |  |
|---|--|
|  Visual APE        |  Ditching               |
|  APE Direct Impact |  Culvert replacement    |
|   |  Roadway reconstruction |



Sources: National Park Service, National Register of Historic Places

**Figure 5: Chessen Lane Proposed Project**





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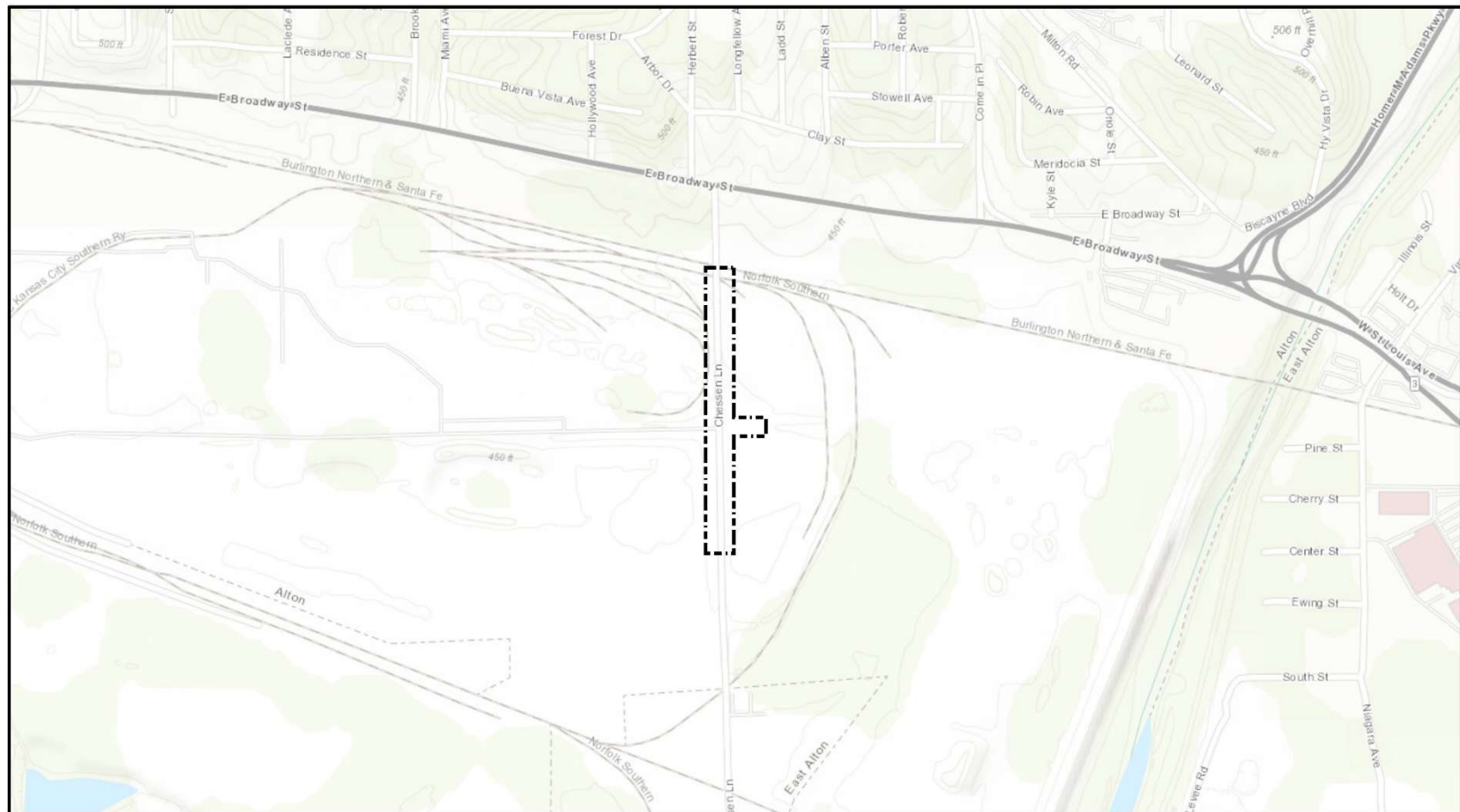
### Legend

- Area of Potential Effect
- Christian Hill Historic District
- Middletown Historic District
- Middletown Historic District Increase



Sources: National Park Service, National Register of Historic Places


Figure 6: Floodwall and Sewer System Improvement APE



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### Legend

 Area of Potential Effect

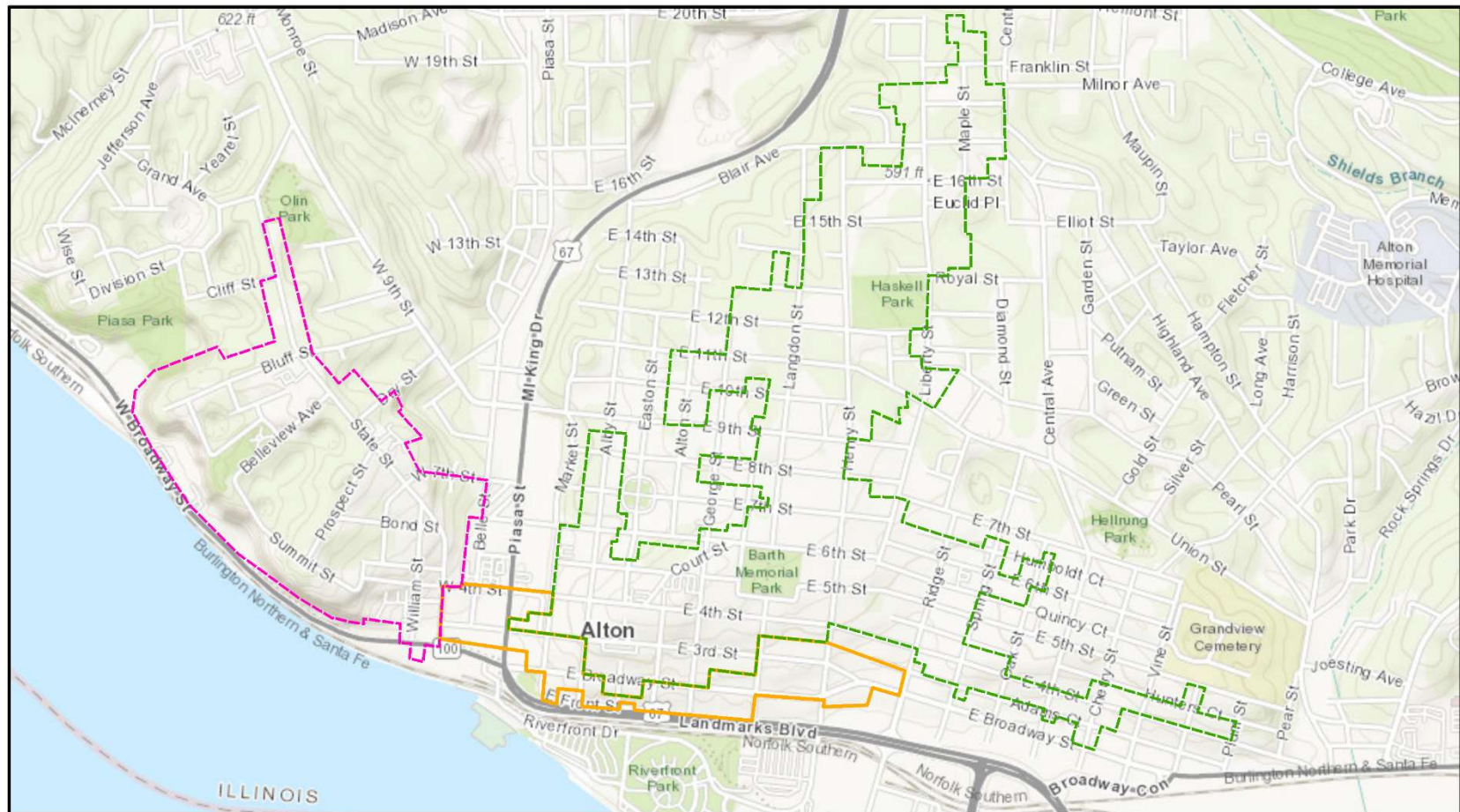


0 0.125 0.25 0.5  
Miles



Sources: National Park Service, National Register of Historic Places

Figure 7: Chessen Lane APE



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### Legend

- Christian Hill Historic District
- Middletown Historic District
- Middletown Historic District Increase

Sources: National Park Service, National Register of Historic Places

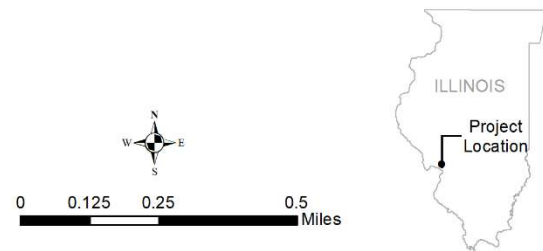
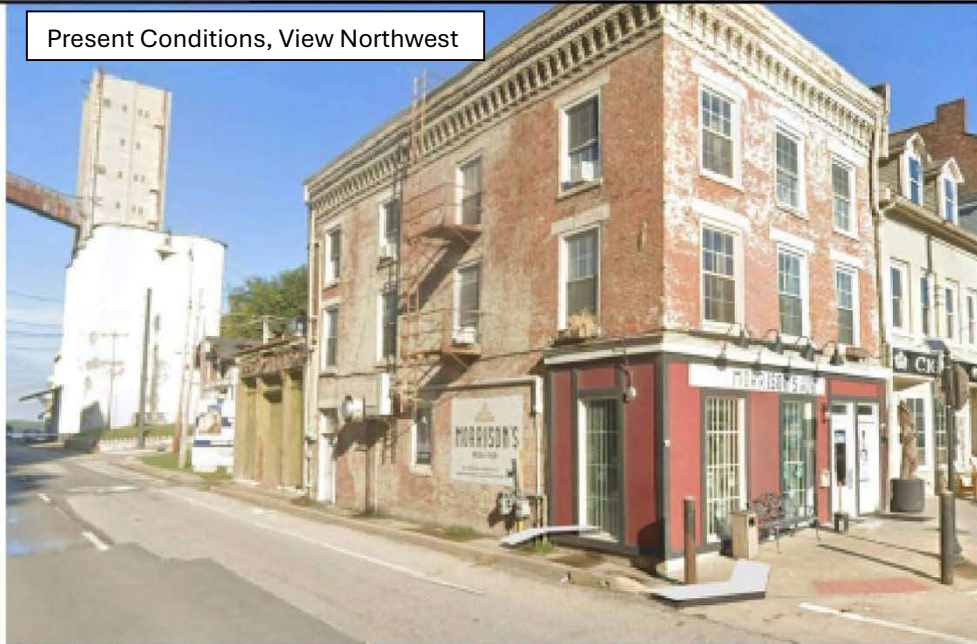


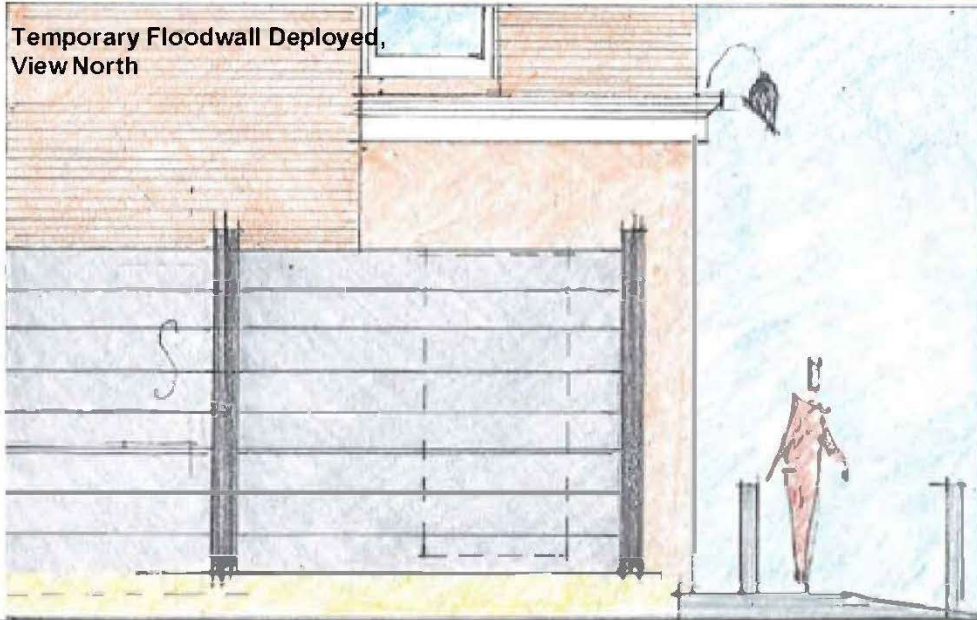
Figure 8: National Register of Historic Places, Historic Districts in Project Area Vicinity



Present Conditions, View Northwest



Temporary Floodwall Deployed,  
View North



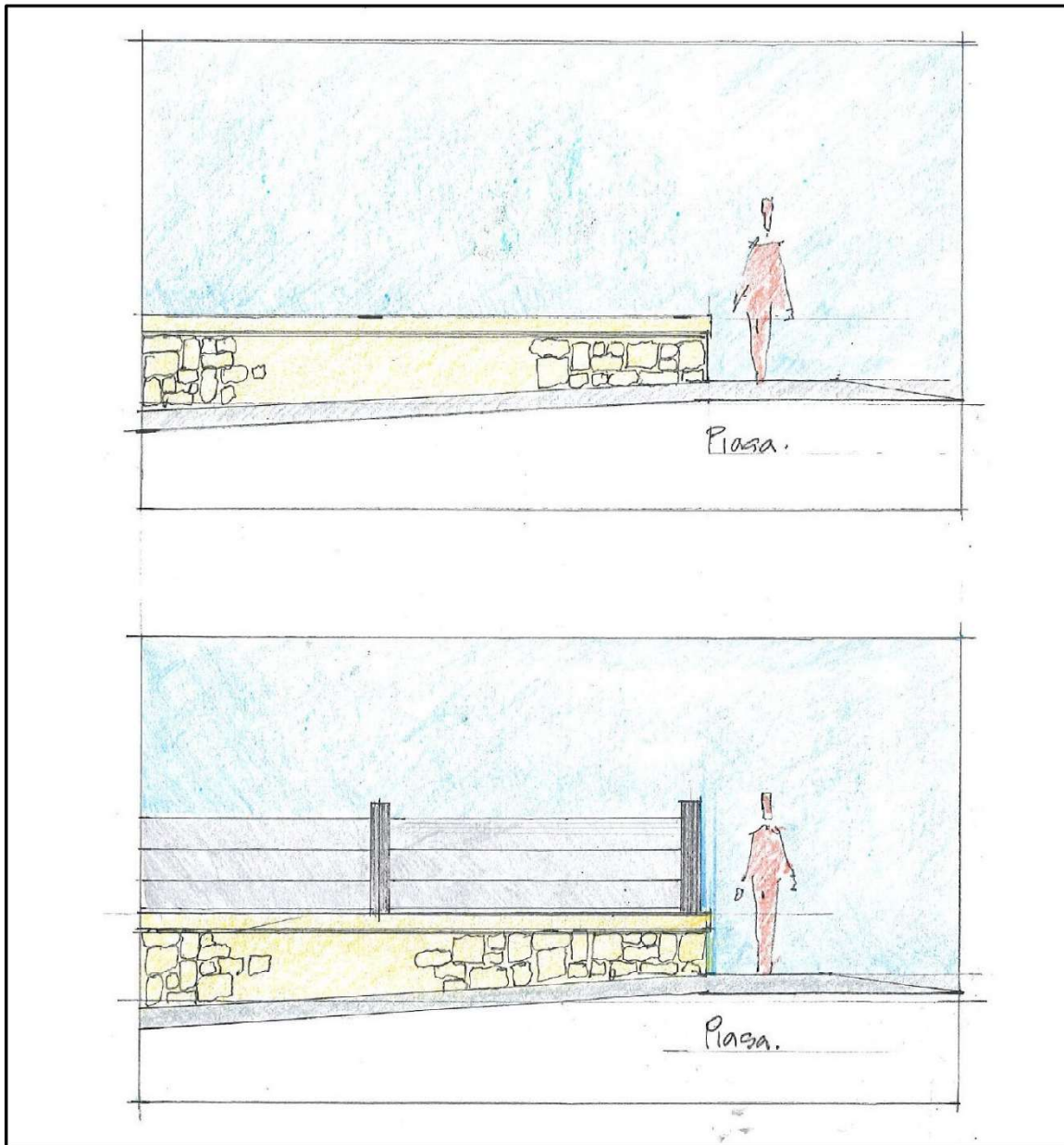
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Note: 200 State Street at the intersection of W. Broadway



Sources: Henderson Associates Architects, 2024

**Figure 9: Rendering of Temporary Floodwall along W. Broadway at State Street**



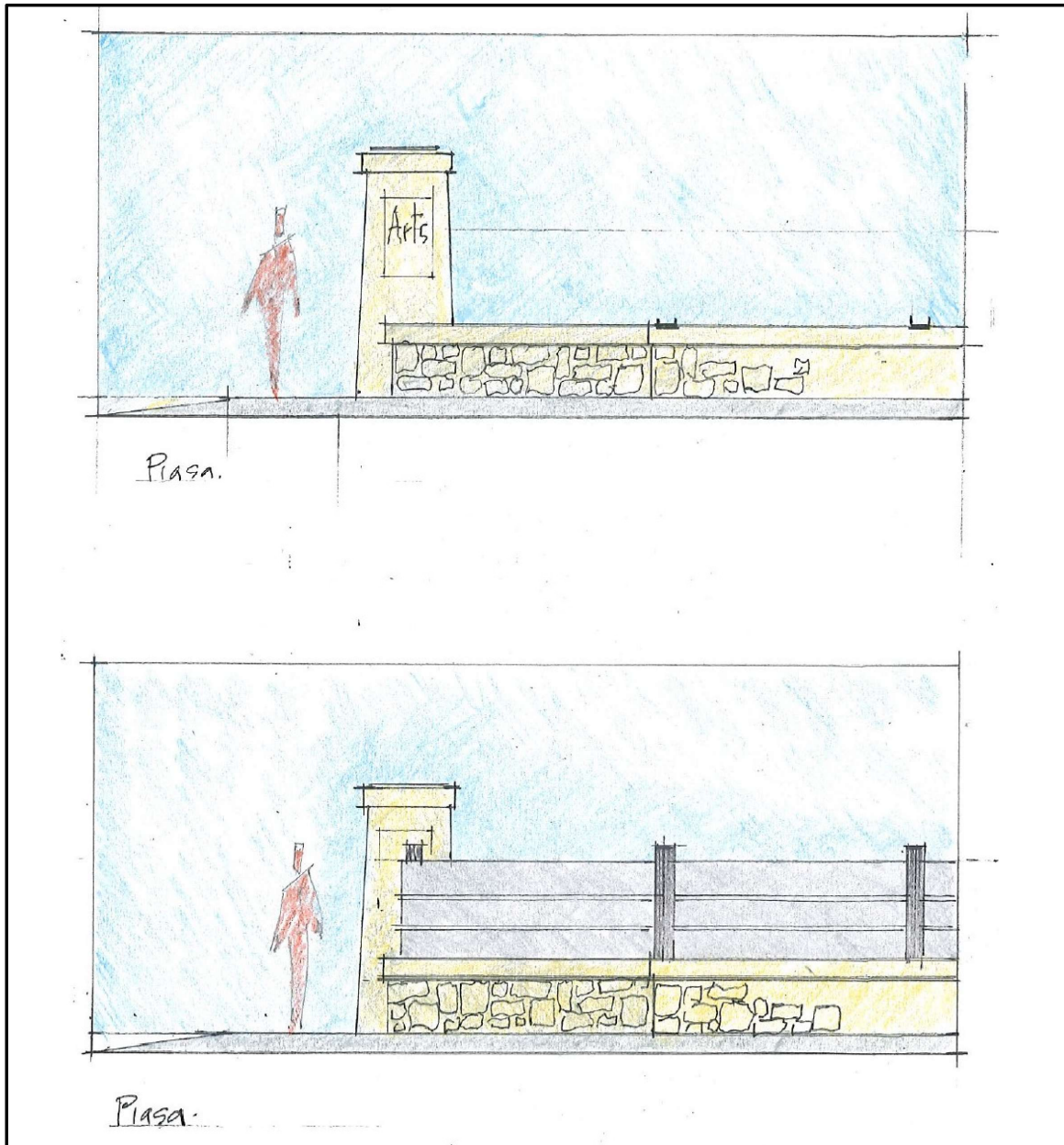
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Sources: Henderson Associates Architects, 2024

**Figure 10: Proposed Floodwall along West Broadway at Piasa Street  
 immediately north of the Alton Visitor Center**





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Sources: Henderson Associates Architects, 2024

**Figure 11: Proposed floodwall along West Broadway at Piasa Street  
 in front of a non-contributing parking lot**



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Sources: National Park Service, National Register of Historic Places

**Figure 12: Example of wall finish options for a concrete flood wall**



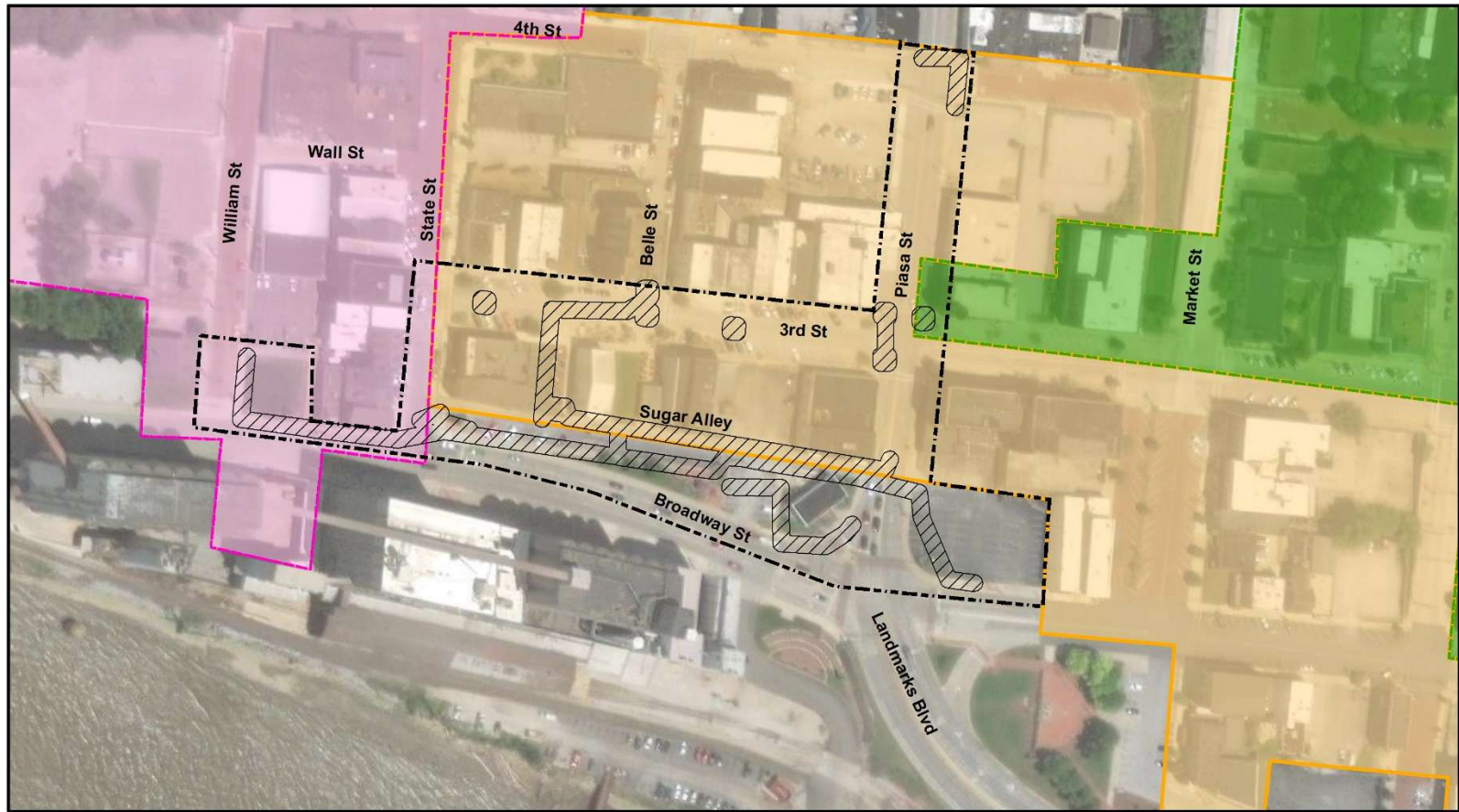
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Sources: City of Alton, IL Flood Relief and Recovery Project Subapplication

**Figure 13: Example of hybrid flood wall designs that combine a permanent concrete floodwall and a temporary plank system used during a flood event**

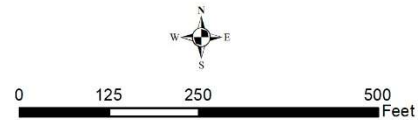




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**Legend**

- |   |   |
|---|---|
|  Visual APE        |  Christian Hill Historic District      |
|  APE Direct Impact |  Middletown Historic District          |
|   |  Middletown Historic District Increase |



Sources: City of Alton, IL Flood Relief and Recovery Project Subapplication

**Figure 14: Visual APE and Direct Impact APE**

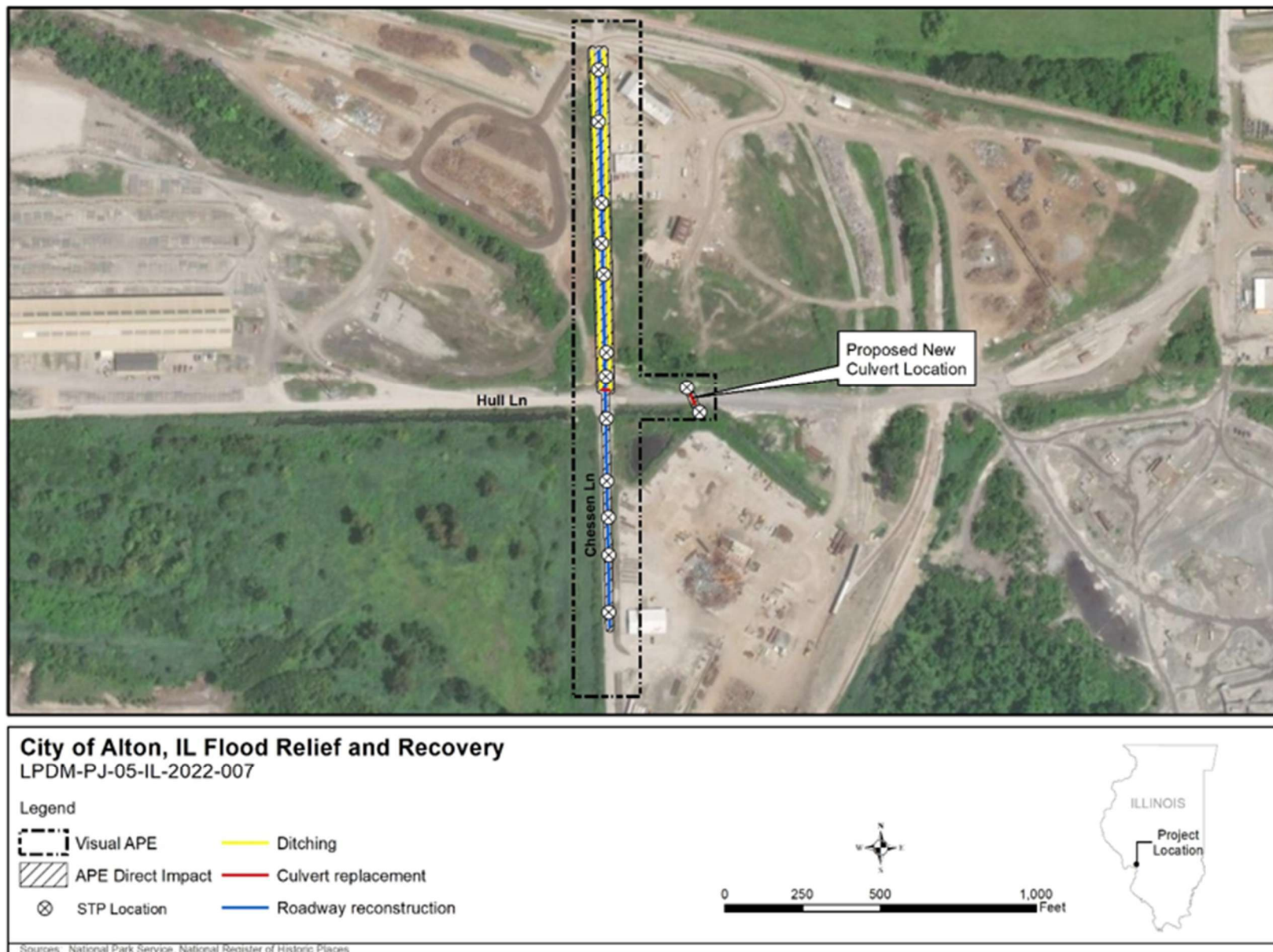


Figure 15: Visual APE and Direct Impact APE Chessen Lane. Proposed STP locations. CDMSmith and Richard Grubb & Associates July 2025

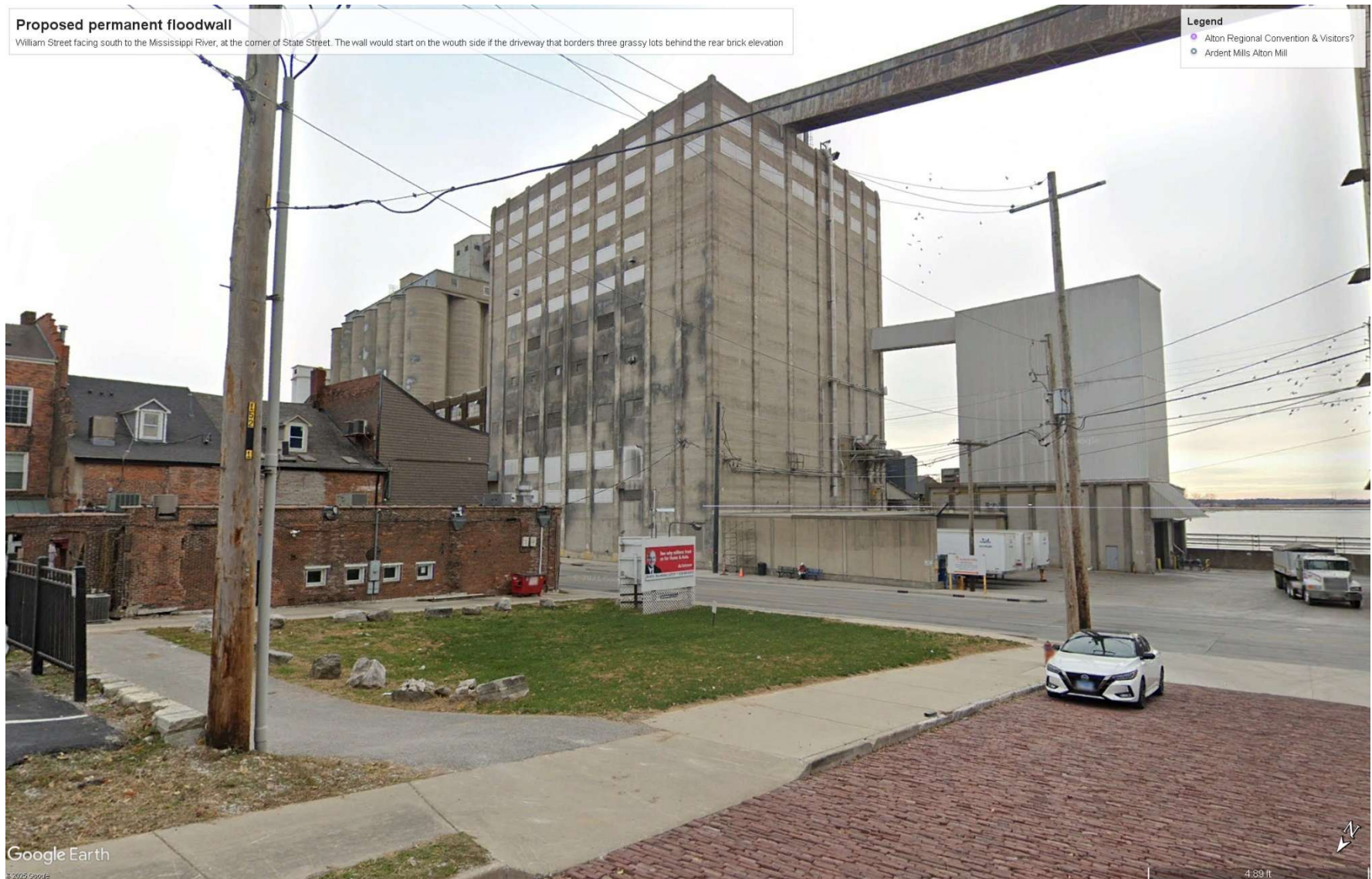
## Appendix B: Photo Log





Aerial Map with Photograph Locations and Directions





**Photo 1: Location of Proposed Permanent Floodwall,  
corner of William Street and West Broadway; facing southeast**

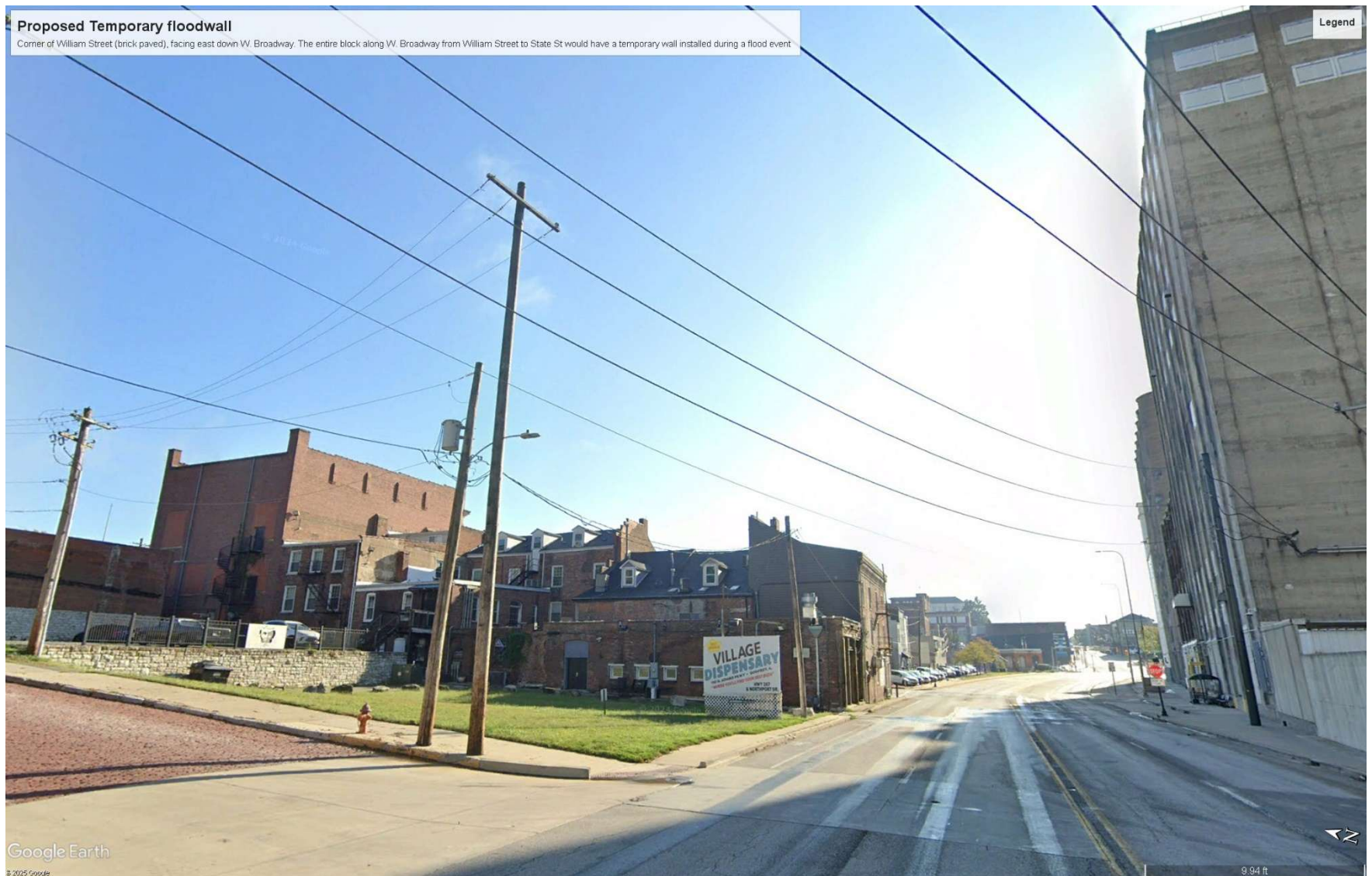


Photo 2: Proposed Temporary Floodwall along West Broadway from the corner of William Street to State Street; facing east



**Proposed Permanent floodwall**  
Corner of State Street, facing east towards Plaza Street and E. Broadway

Legend



**Photo 3: Permanent Floodwall along West Broadway,  
starting at the corner of State Street and Sugar Alley; facing east**

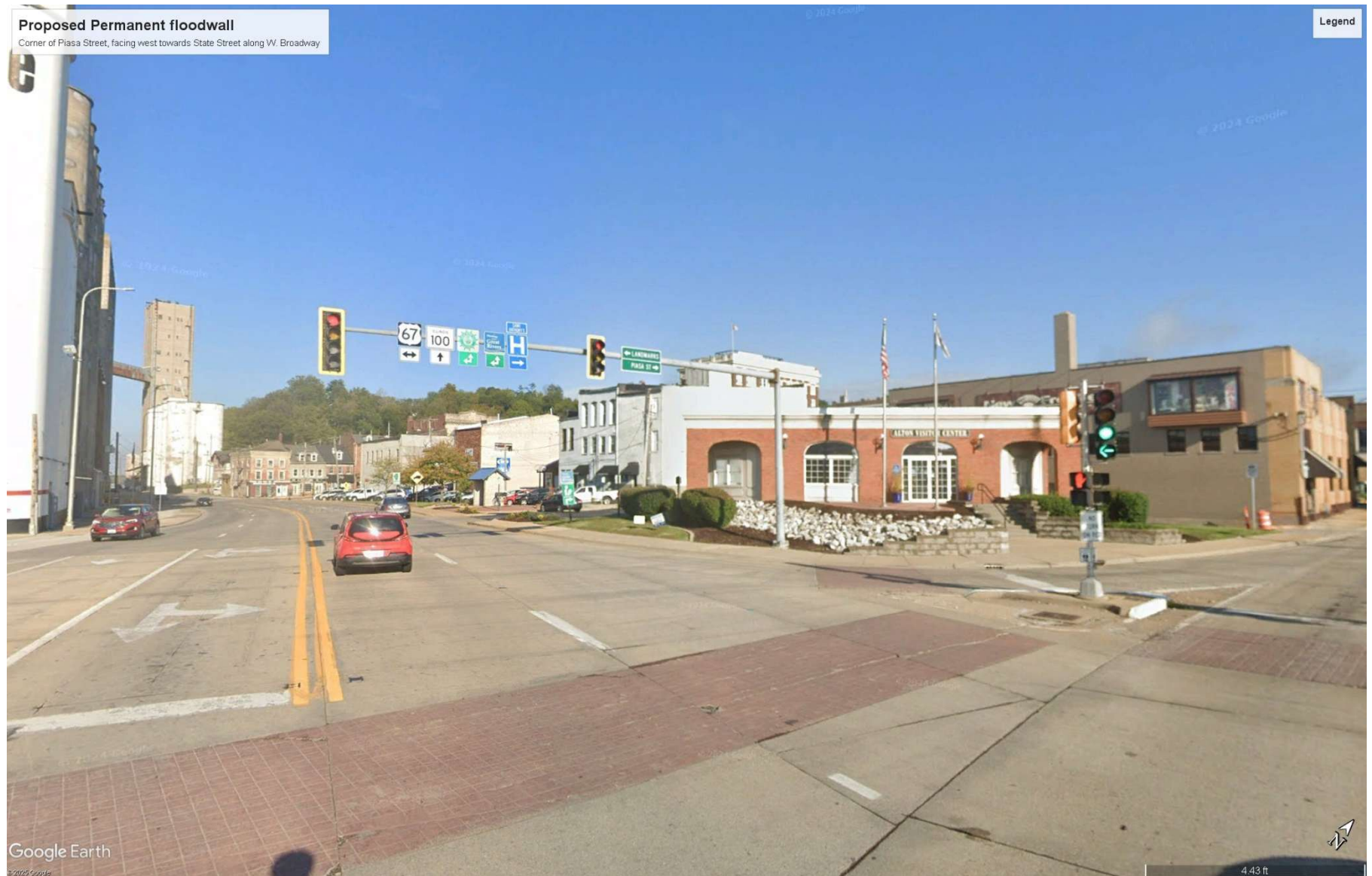


Photo 4: Permanent Floodwall along West Broadway ending at Piasa Street and Sugar Alley; facing west



**Proposed Permanent floodwall**  
Corner of Piasa Street, facing NE. Permanent floodwall to line corner parking lot

Legend



**Photo 5: Permanent Floodwall along Piasa Street and West Broadway  
along the perimeter of the corner parking lots; facing northeast**



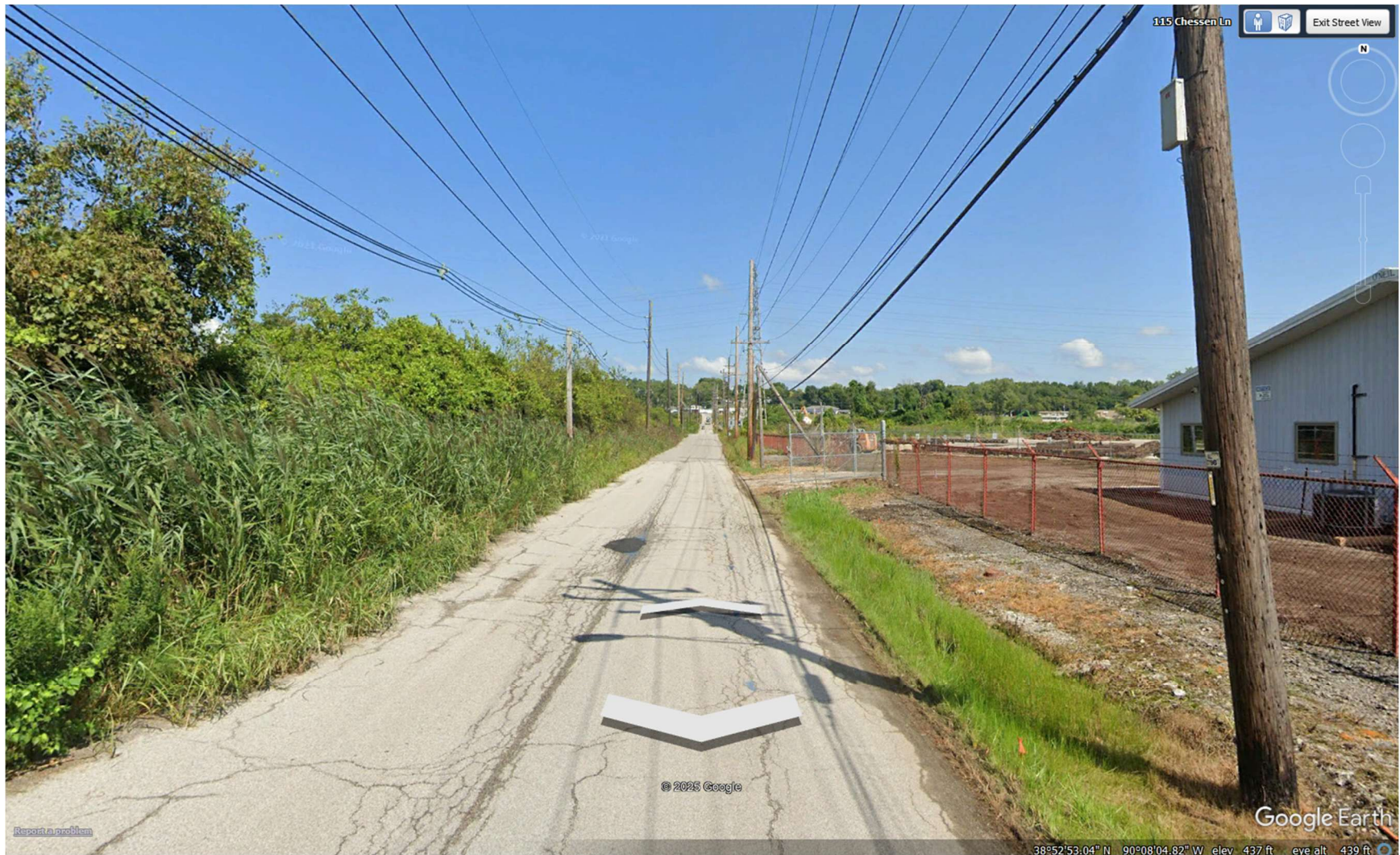


Photo 6: Chessen Lane View to North from southern terminus.