

Archaeological and Forensic Research in Support of the 1921 Tulsa Race Massacre Investigation:

The 2022-2023 Field Seasons at Oaklawn Cemetery



Executive Summary

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Key Takeaways:

- The investigative team has recovered the remains of two individuals with gunshot wounds who are likely victims of the 1921 Tulsa Race Massacre—Burials 27 and 42.
- An additional individual—Burial 101—has evidence that is potentially consistent with a gunshot wound, but not definitive.
- Forensic analysis determined that the adult male in Burial 45 may have been exposed to burning after his death. He was interred in a casket that was too small for his stature.
- To date, fifteen additional individuals are considered of interest because they partially meet the profile criteria developed for this investigation and have not yet been ruled out as potential Massacre victims.
- Confirmation of the identities of these individuals requires the support of potential descendants from across the country to participate in the DNA and genetic genealogical investigation by Intermountain Forensics (IMF). The potential surnames and places of interest for five of these individuals have been previously announced by IMF.
- Additional archaeological excavations and forensic examinations are planned for mid-Summer 2024 to more thoroughly recover likely Massacre victims buried in Oaklawn Cemetery.

Introduction

This executive summary presents some of the most critical results of the archaeological and forensic research conducted in support of the 1921 Tulsa Race Massacre Investigation during the 2022 and 2023 field seasons in Oaklawn Cemetery. This research was conducted by an interdisciplinary team of specialists from the Oklahoma Archeological Survey (OAS), C. A. Pound Human Identification Laboratory (University of Florida), Stantec Consulting Services, Inc., Oklahoma Office of the Chief Medical Examiner, University of Oklahoma, University of Tulsa, San Diego State University, and Texas State University (among others) with support from—and on behalf of—the City of Tulsa and community members. This work is an extension of previous phases of the investigation as coordinated with the Public Oversight Committee in various public meetings between July 27, 2019 and June 21, 2022. A fuller discussion of that process is found in Stackelbeck, Stubblefield, and Ellsworth (2022:1-2) and on the City’s website dedicated to the investigation: <https://www.cityoftulsa.org/1921graves>.

From the outset of the re-opened investigation to locate Massacre victims, several locations were identified as potential targets within Oaklawn Cemetery based on the limited available historic records and oral historic accounts, including the: Sexton Area; Original 18 Area; and Clyde Eddy Area (Figure 1). Over the course of several previous mobilizations, the investigative team utilized remote sensing, the extraction of soil core and auger samples, test excavations, and/or block excavations to systematically examine subsurface deposits at each of these locations. The results of these prior efforts are presented in a comprehensive technical report (Stackelbeck and Stubblefield [compilers] 2022) and various meetings, presentations, and press conferences that are archived on the City’s 1921 Graves website:

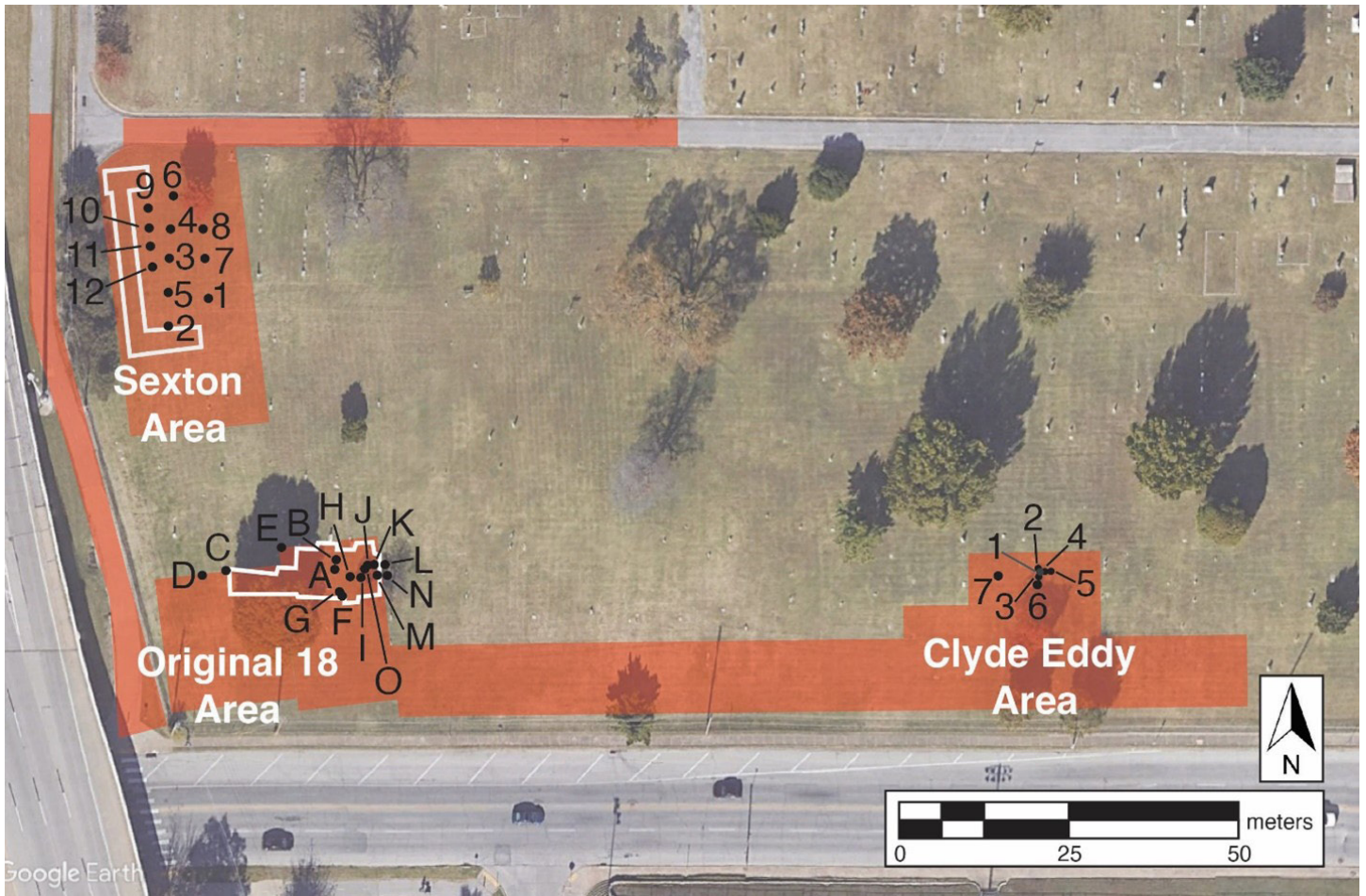


Figure 1. Aerial image displaying the three target areas in Oaklawn Cemetery where previous geophysical survey, soil coring, and test and block excavations have been completed (2019-2021).

<https://www.cityoftulsa.org/government/mayor-of-tulsa/1921-graves-investigation/committee-meetings-and-members/>.

Key findings from these earlier efforts include:

- 1) The Original 18 victims were likely interred in singular graves interspersed amongst non-massacre victims;
- 2) The location identified as the Clyde Eddy Area in Section 19 during the 1999 investigation does not contain evidence of disturbed soils that are otherwise consistent with a trench-style mass grave;
- 3) No burials or trench-style mass graves were identified in the Sexton Area; and
- 4) Section 20 of Oaklawn Cemetery has undergone tremendous changes in land use and episodes of fill deposits over the past century creating substantial challenges to remote sensing and other standard methods employed to locate clandestine graves, as well as impacting preservation of the skeletal remains.

Despite these challenges, our investigative team successfully located and documented a gunshot victim, Burial 27, who was carefully exhumed and examined in on-site forensic analysis, along with six other adult males buried in simple wooden caskets in unmarked graves (Burials 3, 9, 15, 17, 19, and 30) (Figure 2).

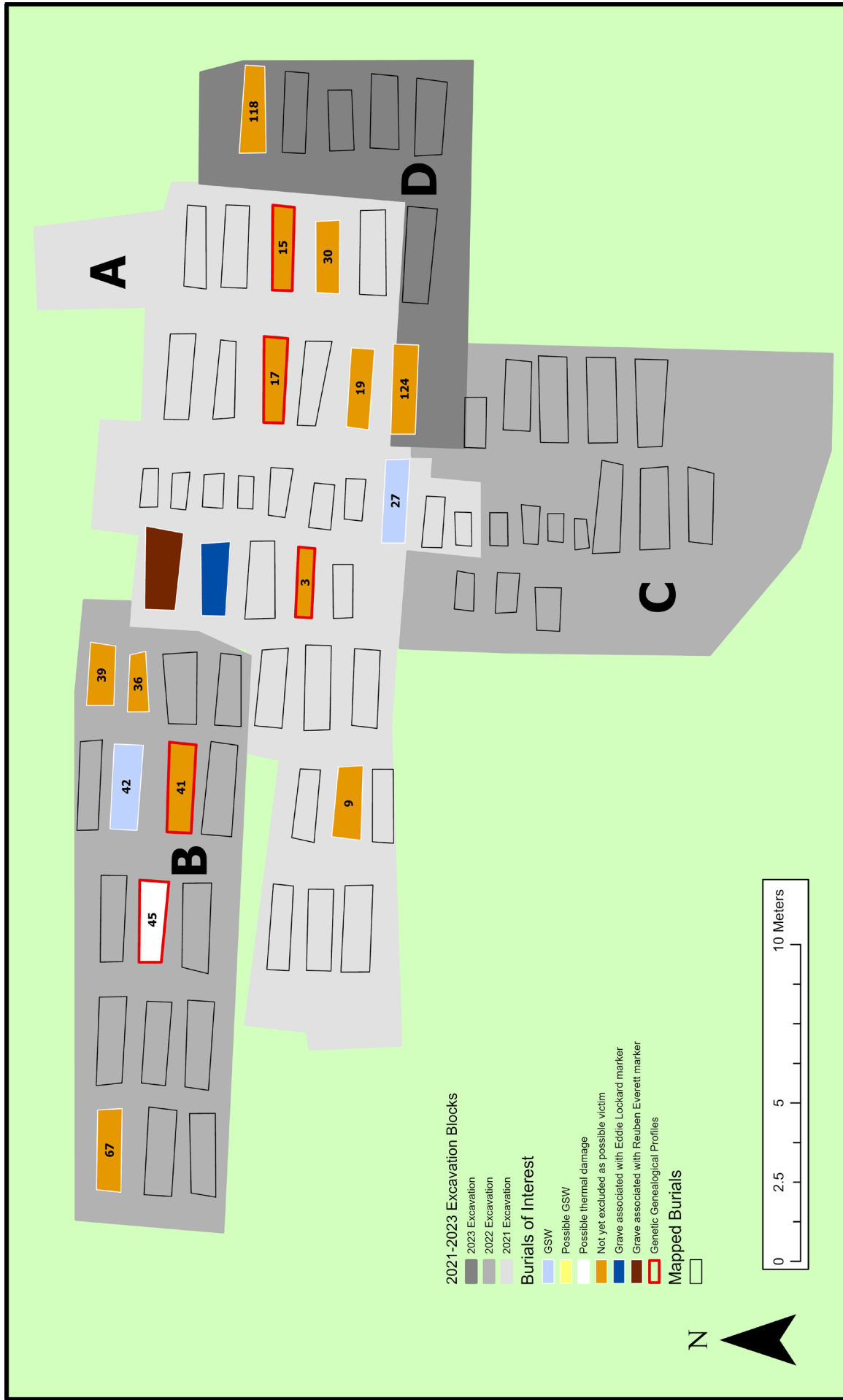


Figure 2. Map of Excavation Blocks A-D in the “Original 18” Area displaying the distribution of mapped burials and burials of particular interest as they pertain to the investigation.

2022-2023 Field Seasons

The 2022-2023 archaeological excavations were conducted under the direction of Kary Stackelbeck (OAS) and Ryan Peterson (Stantec). Remains recovered from Blocks B, D, and E were examined in the on-site forensic laboratory under the direction of Phoebe Stubblefield. The DNA analysis is under the direction of Daniel Hellwig (IMF) and Alison Wilde (IMF) is directing the genetic genealogical research.

Using the results of the earlier efforts—particularly the 2021 excavations and forensic evaluations—we proposed and completed expansions of the excavation area to increase the likelihood of encountering other individuals who fit our target profile—adult male trauma victims buried in simple wooden caskets. Excavation Blocks B and C were completed in October 2022; Block D was excavated in September 2023 (see Figure 2). Thirty-nine graves were recorded in Blocks B-D, all but one of which were unmarked. Eight individuals from unmarked graves in Block B and three individuals from unmarked graves in Block D were exhumed and analyzed in the on-site forensic laboratory.

Beyond these excavations in the Original 18 Area, the investigative team also pursued another lead associated with the Clyde Eddy Area as recounted by the eyewitness to Dr. Phoebe Stubblefield in 2005. The location is different than that which he apparently described to members of the previous investigative team in 1999 (Ellsworth 2001; 2022:13; Snow 2001:121) and was subjected to geophysical surveys (Brooks and Witten 2001; Witten et al. 2001; see Figure 1). Unlike this other location, Mr. Eddy took Dr. Stubblefield to a position in Section 20 (rather than Section 19) and related his observations of crates that contained multiple decedents being prepared for burial in Oaklawn Cemetery two days after the Massacre (Snow 2001:121) (Figure 3). Mr. Eddy stood in this same location when he was interviewed by reporters—including Kavin Ross—in the 1990's (Figure 4). He indicated a general area where he observed the crates, not a specific pinpointed location. With assistance from Ms. Brenda Alford, OAS conducted a new geophysical survey between May 9 and June 7, 2023 (Figures 5-6) that broadly covered the overall area, resulting in the detection of a suspicious anomaly (Figures 6-7).



Figure 3. View to the north as taken from the Clyde Eddy Area as conveyed to Phoebe Stubblefield in 2005 (left; image courtesy of Phoebe Stubblefield) and as taken from the location of the geophysical anomaly and test excavations in 2023 (right; image courtesy of Angela Berg). Note the distinctive diamond-shaped headstone outlined to the right of the tree in each image and the park bench outlined in the image on the right.



Figure 4. Clyde Eddy being interviewed (late 1990's?) as he describes his eyewitness account while standing near the location (video footage courtesy of Kevin Ross). Note the park bench visible upslope over Mr. Eddy's right shoulder.



Figure 5. Brenda Alford (descendant) and Scott Hammerstedt (OAS) collecting Ground Penetrating Radar (GPR) data on June 7, 2023.



Figure 6. Additional grids where OAS conducted geophysical survey in May and June 2023. A large anomaly is depicted at the intersection of the yellow crosshairs. This anomaly was the subject of test excavations on July 13, 2023.

**Large anomaly at Oaklawn Cemetery
26 cm below surface**

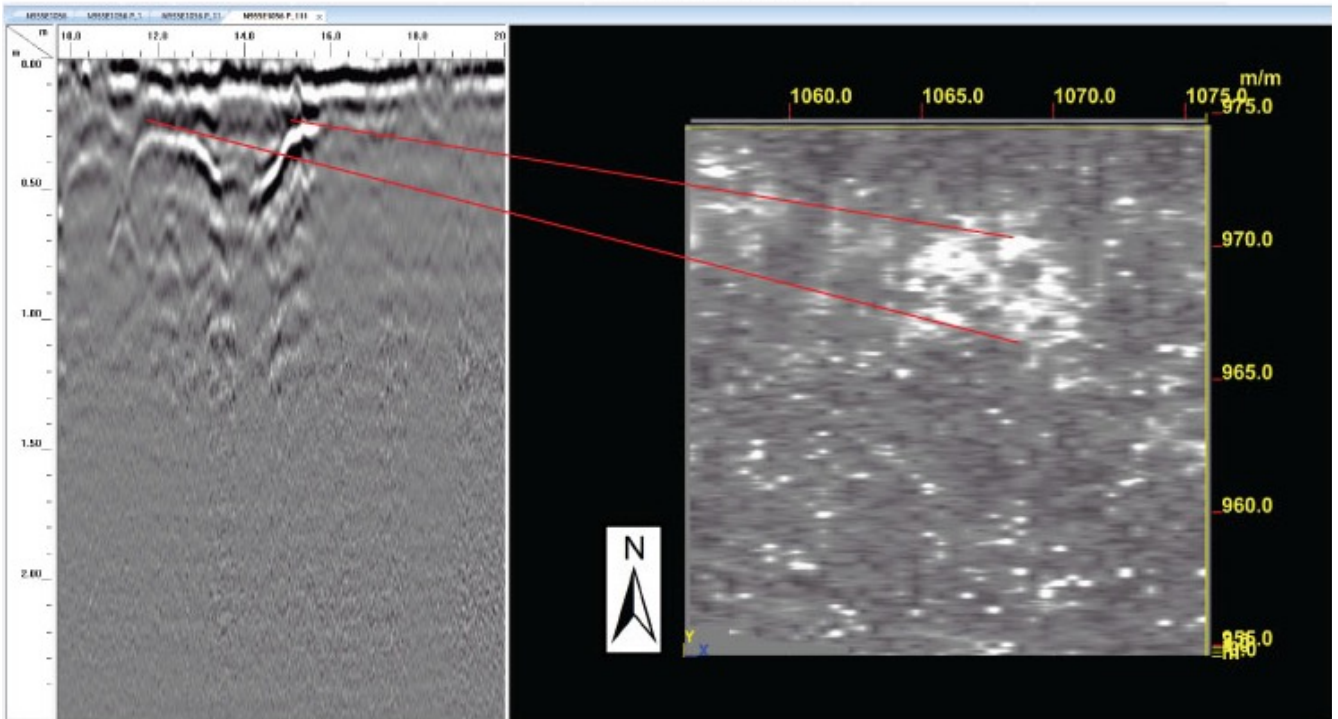


Figure 7. Large anomaly detected by GPR in the new Clyde Eddy area.

On July 13, 2023, the archaeological team conducted limited test excavations to determine the nature of the anomaly. In the process, we uncovered two rows of makeshift burial markers (mostly singular upright bricks) and underlying graves that appeared to be intact, though the exact source of the geophysical anomaly remained a mystery (Figure 8). The team returned in September of 2023 to expand on the test excavations, ultimately encompassing Block E (Figure 9). Fifty graves were documented in this block, only three of which had associated markers visible on the ground surface at the time of excavation. Expedient make-shift markers consisting of individual upright bricks (N = 20), one stone, and two milk glass slab fragments were discovered beneath about 30-50 cm of fill in association with 23 of the graves in Block E. Five of these individuals were exhumed for forensic examination (Figure 9).

This document presents an executive summary of the most critical findings and recommendations of the 2022 and 2023 field seasons— together with data from the 2020-2021 phases of the investigation— in support of expanded excavations in the summer of 2024. An exhaustive account of the collective results of the 2022-2023 excavations and specialized analyses are detailed in a forthcoming technical report.



Figure 8. Careful test excavations on July 13, 2023 in the area of the GPR anomaly monitored by representatives from OAS, Stantec, OCME, and the Public Oversight Committee. Note the two rows of makeshift markers, which are tagged with orange tape on either side of the backhoe trench.

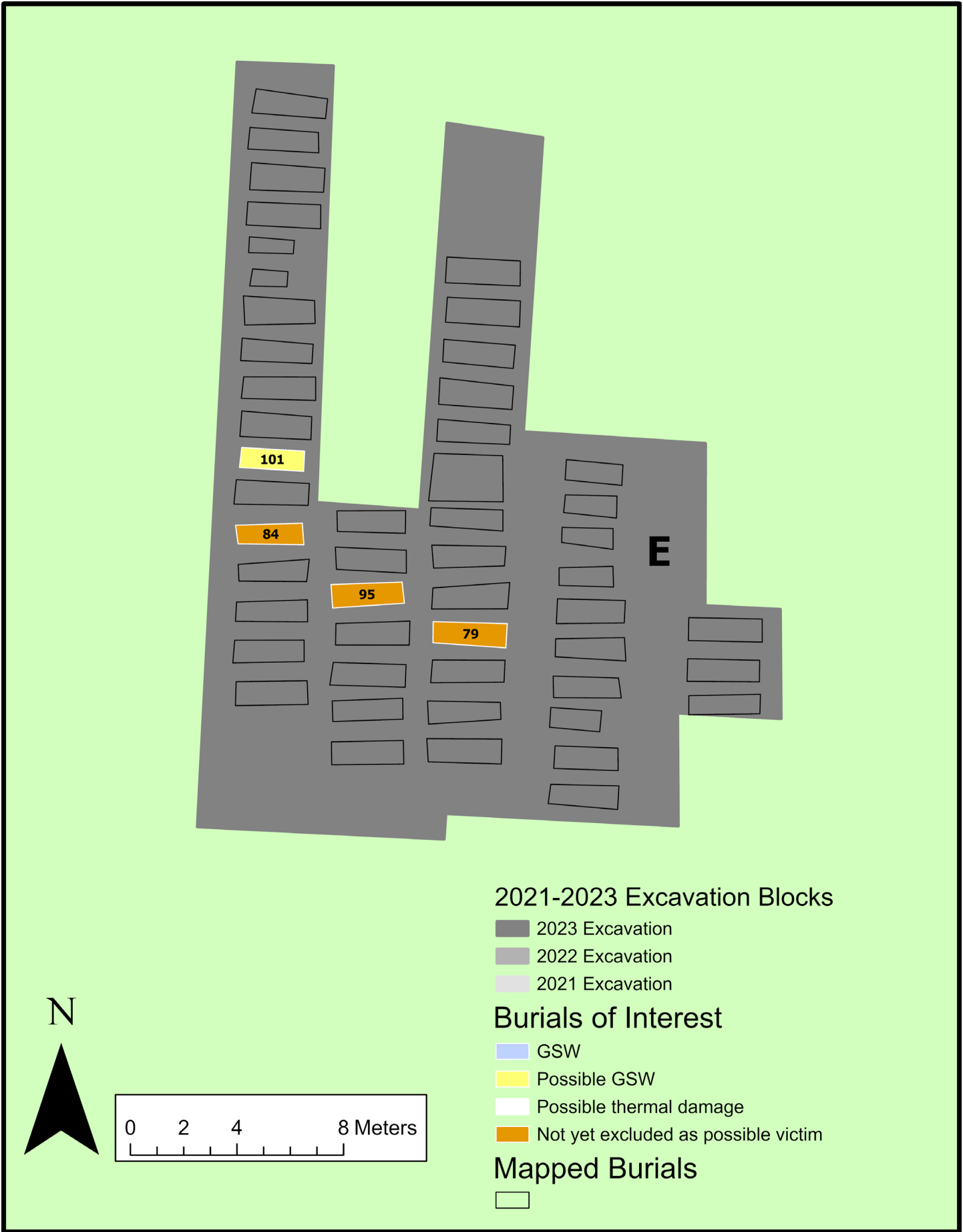


Figure 9. Map of Excavation Block E in the new “Clyde Eddy” Area displaying the distribution of mapped burials and burials of particular interest as they pertain to the investigation.

Summary Observations of Burials of Interest

To-date, excavations in Blocks A-E have resulted in the documentation of at least 126 graves (124 numbered graves plus those that are associated with the headstones for Reuben Everett and Eddie Lockard) in Section 20 of Oaklawn Cemetery (see Figures 2 and 9). The graves for Mr. Everett and Mr. Lockard were not excavated. Fully 120 graves had no associated markers visible on the ground surface in these excavation blocks.

Nineteen individuals in the burial population are of interest because they fit at least two of the characteristics from our target profile: 1) evidence of trauma; 2) male; and 3) interred in a simple wooden burial casket. This target profile does not preclude consideration of other individuals as potential victims, but it provides our team with a historical framework to discriminate those burials that are most likely to be potential Massacre victims and warrant exhumation and forensic analyses.

Observations Among the 19 Burials of Interest:

- Two individuals were victims of gunshot wounds: Burials 27 and 42 (further details below)
- Two individuals display evidence of possible trauma:
 - Burial 101 has radiopaque particles in the soil near his right arm and mandible that *could* be derived from a gunshot wound.
 - Burial 45 displays possible evidence of postmortem thermal damage (exposure to fire) to his left hand.
- All 19 individuals of interest are males.
- Fifteen of these individuals are buried in Excavation Blocks A, B, and D (see Figure 2); the other four are in Excavation Block E (see Figure 9). No burials in Block C fit our criteria for exhumation.
- All are buried in simple wooden caskets.
 - Observations of the construction style and variability in dimensions of these simple caskets suggest non-commercial, local production. Most of these appear to have been built to suit the size of the decedent, with the exception of Burials 3, 17, 19, 45, and 95 (and perhaps Burials 84 and 124) whose caskets were too small—or nearly so—for the individuals they contained. In these cases, the individuals appear to have been forced to fit in the too-small containers rather than adjusting the size of the casket or placing them in one that was better-fitted.
 - Another exception is Burial 42, who was interred in a shipping crate that was repurposed as a casket. This adult male was buried in the bloat phase of decomposition. The crate may have been used as an expedient burial container to accommodate his girth and facilitate hasty interment.
 - Two additional examples of expediency are demonstrated by the containers for Burials 65 and 95. These caskets were manufactured from uncured “green” pine wood that had not properly dried, suggesting hasty, local construction with substandard materials. Burial 95 is among the 19 individuals of interest. Burial 65 contained an adult female and is discussed further below.
- Five of these individuals have genetic genealogical profiles for which potential surnames and areas of interest have been previously announced by the Inter-Mountain Forensic

(IMF) team, including Burials 3, 15, 17, 41, and 45 (see Figures 2 and 9). DNA analysis is on-going for the remaining individuals and additional profiles may yet be forthcoming.

- At least eight of the burials (Burials 17, 19, 27, 41, 42, 67, 79, and 84) display evidence of probable postdepositional dislocation of remains at a stage of decomposition when soft tissue was likely still present.
 - Several of these burials also contained evidence of alluvial deposition of sediments inside the container.
 - These comparable taphonomic characteristics might be suggestive of being buried at the same time or at least a similar time of year or during a period(s) of similar weather conditions (e.g., shortly after the rainy season).
- Among the burials of interest, all but Burial 15 is buried with his head to the west. Burial 15 is oriented with his head to the east.
- All are interred in the relict stream channel that was filled in along the cemetery's south side, presumably as part of the cemetery expansion prior to 1917.

Burials of Particular Interest

Burial 27

- The individual in Burial 27 was a younger adult male and the victim of multiple gunshot wounds to his left shoulder, left scapula, and head. He was shot with .38-caliber lead bullets that were probably fired from a revolver—likely a Colt, but a Hopkins and Allen or a Forehand and Wadsworth firearm cannot be definitively ruled out.
- He stood about 5'7" in height.
- Observations of his teeth indicate that he likely suffered stress from illness (or other causes) during infancy.
- He was buried in a simple wooden casket in a row of mostly infants/subadults and at a depth similar to the adjacent infant (Burial 26) and adjacent adult male (Burial 124) but notably deeper compared to all other burials in Blocks A and C.

Burial 42

- Burial 42 is that of a young adult male, perhaps in his 30's, who suffered a gunshot wound to the head.
- He was in the bloat phase of decomposition at the time he was buried.
- He was interred in a crate—perhaps to accommodate his bloated girth.
- He was about 5'6" tall.
- He was buried with his clothes on, likely including a pair of overalls, as evidenced in part by a rivet (Figure 10) and button with fabric still adhering (Figure 11).



Figure 10. White metal clothing rivet (likely from a pair of overalls) from Burial 42.



Figure 11. Probable cuprous overall fastener recovered from Burial 42.



Figure 12. In situ detail of shoe or boot remnant found on the left foot in Burial 42 (Brooke np).

- He appears to have had only his left foot intact at the time of burial as no evidence of his right foot was observed or recovered. His left foot was inside a leather boot or shoe that was well preserved (Figure 12).
- He had personal items in his pockets at the time of his burial (Figures 13-17) including several keys (Figure 17), a possible money clip, a possible pocketknife, and a possible lighter.

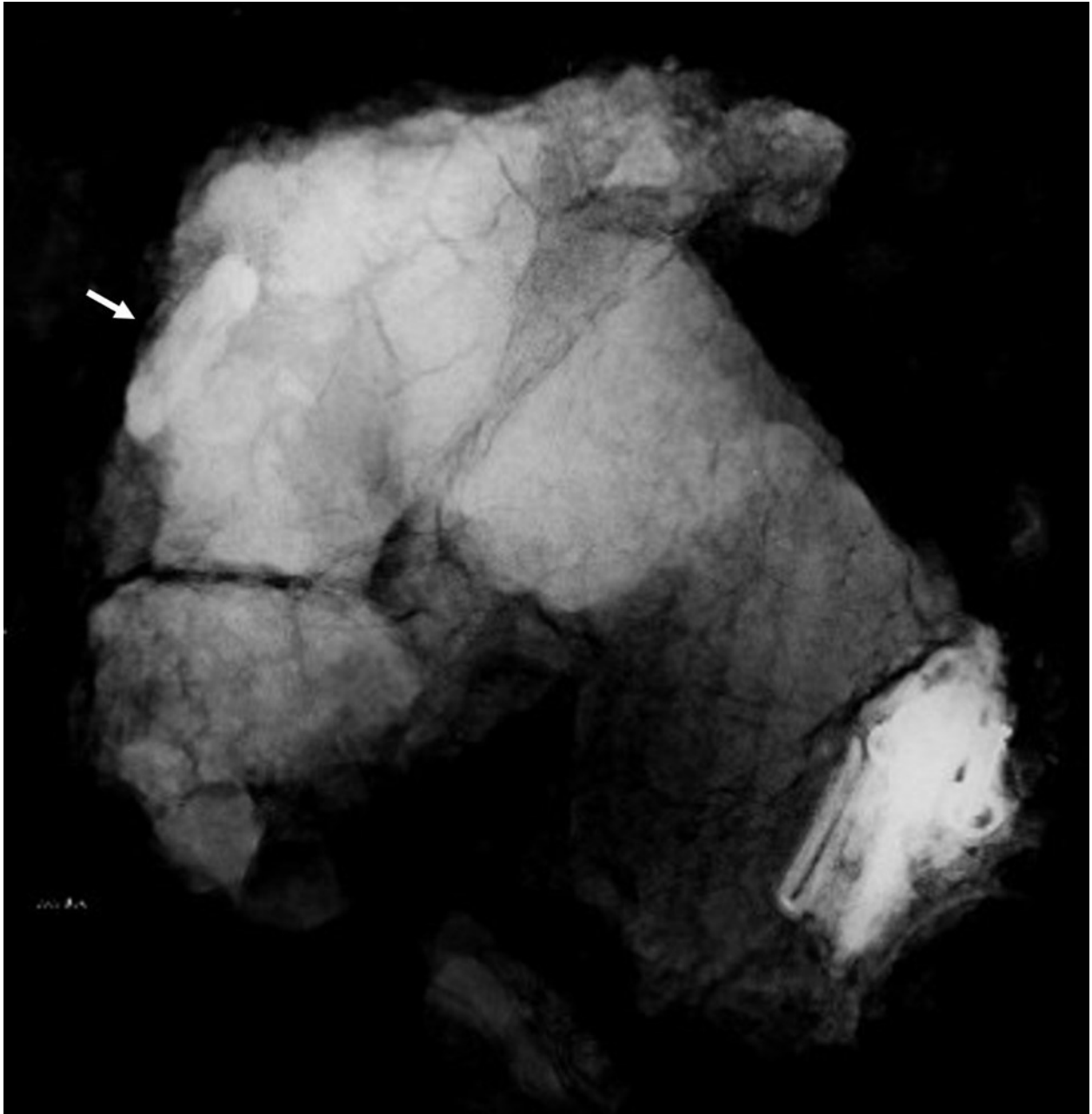


Figure 13. Radiograph of the Burial 42 pelvic area, showing a rusted object—possibly a pocketknife (arrow) on the left, and a clump of keys and possible money clip on the right.



Figure 14. Radiograph of the Burial 42 keys, showing at least two keys.



Figure 15. Ferrous concretion found under pelvis from Burial 42 prior to preliminary lab cleaning and electrolysis cleaning; several keys and a possible pocket knife were identified encased.



Figure 16. Detail of several keys from the ferrous concretion in the pocket of Burial 42.



Figure 17. Three of the keys from the pocket of Burial 42 after electrolysis treatment (LeBlanc np; Pace np.).

- The keys are of a type and function likely associated with a business location. “The primary keys likely operated both the main entrance of a commercial building and outswing steel security doors for after business closing. The secondary keys likely operated an associated cash box and a cabinet or drawer within the business” (Pace np).
- His skeletal remains showed signs of periostitis. The specific cause of this condition is not known, but it is possible that he suffered from hypertrophic osteoarthropathy, derived from hypertension, lung cancer and/or other bronchial-pulmonary ailments such as asthma or tuberculosis (Stubblefield et al. np).

Burial 124

- Burial 124 includes two individuals: an older adult male (124A) and a fetus of approximately 28 weeks (124B).
- Both individuals were buried in the same casket—as opposed to one being intrusively interred into the other. The fetal remains were placed between the legs of the adult.
- The adult’s stature was about 5’7”

- The casket may not have been too small for the adult male (124A), but the excavators noted that the fit was “snug” and the casket size appeared small.
- The grave for Burial 124 was excavated to a similar depth as Burials 27 and 26, which is below the level of other burials documented in Blocks A and C. One—and perhaps two additional graves were partially exposed near Burial 124 in Block D at a similar elevation and warrant further investigation.

Additional Noteworthy Burials

- During the 2021 excavations, grave shafts were documented in direct association with the headstones for Reuben Everett and Eddie Lockard (see Figure 2). These graves were not excavated so we have no specific knowledge of their contents or the individuals buried therein. Nonetheless, association with headstones of two known Massacre victims continues to make these graves of interest.
- Burial 65 is that of an adult female blunt force trauma victim who was buried in a simple wooden casket. The proposed expansion of excavations includes an area (Block F) adjacent to Burial 65 and should reveal if other similar burials are nearby. Samples from her remains are included in the DNA analysis.
- Burial 119 is that of an adult female who was buried with her head oriented to the east in a simple wooden casket. Within the burial population, only two other individuals were buried with their heads oriented to the east: Burials 15 and 110. Burial 15 is immediately adjacent and west of Burial 119. The similarities between these two burials and their proximity to one another is suggestive of some degree of relatedness or perhaps coterminous interment. Samples from Burial 119 are included in the DNA analysis. As noted above, Burial 15 is among the individuals whose genetic profile has yielded potential surnames and places of interest.

Proposed Next Steps

Taking all the above evidence into consideration, along with other details from the archaeological and forensic investigations, we propose to expand excavations at Oaklawn Cemetery in two blocks. We have not yet recovered the number of gunshot victims and burn victims that are expected to be buried in Oaklawn based on limited death records. Block F will target areas in the vicinity of burials of interest in Blocks A and B (Figure 18). Excavations in Block G will focus on covering the gap between Blocks D and E and will complete documentation of at least two graves in Block D that were only partially exposed in the 2023 field work (Figure 18). The process of excavation, *in situ* documentation, exhumation, on-site forensic analysis, and extraction of samples for DNA and genetic genealogical analyses will be consistent with previous phases of the investigation.

This proposed work will coordinate with the recommendations of the memorialization committee led by Ms. Brenda Alford, to conduct reburials of exhumed individuals and marking of exposed burials. This effort should include replacement of existing markers removed for protection during the excavations, as well as enactment of the memorialization committee recommendations.

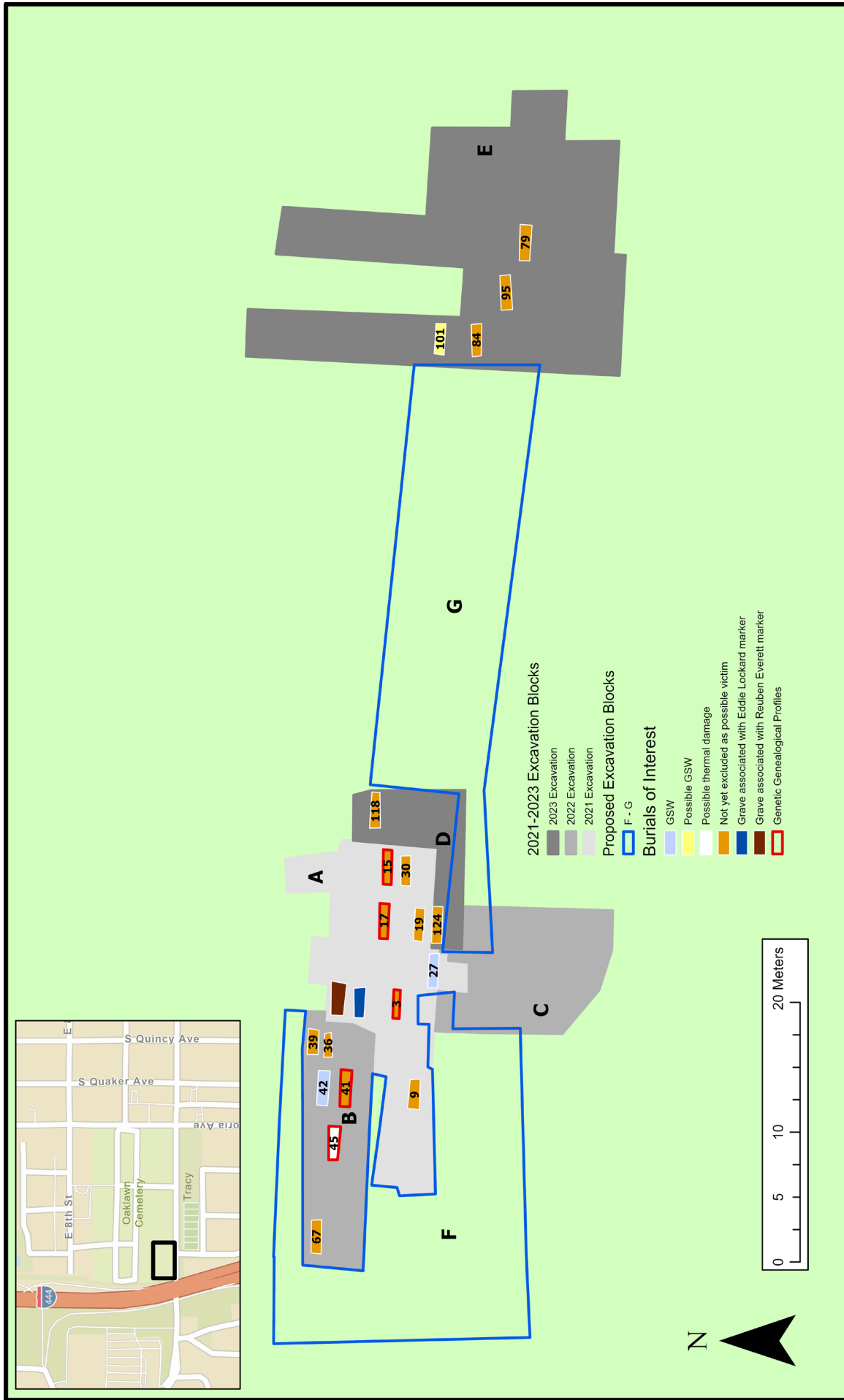


Figure 18. Proposed new excavation blocks F and G in relation to the previous excavation areas from 2021-2023 and burials of interest.

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