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**ARCHAEOLOGICAL MONITORING REPORT FOR THE  
OLD ST.PATRICK'S CATHEDRAL CEMETERY WALL  
RESTORATION PROJECT,  
MANHATTAN, NEW YORK COUNTY, NEW YORK**



*Prepared For:*

**Archdiocesan Building Commission  
And  
Acheson Doyle Partners Architects, P.C.**

*For Submission to:*

**New York City Landmarks Preservation Commission  
Municipal Building, 9th Fl  
1 Centre St  
New York, NY 10007**

*Prepared By:*

**Michael Audin, RPA  
Archaeology Resource Services, LLC  
Cultural Resource Services**

**November 2010**

ARCHAEOLOGICAL MONITORING REPORT FOR THE  
OLD ST.PATRICK'S CATHERDRAL CEMETERY WALL RESTORATION PROJECT,  
MANHATTAN, NEW YORK COUNTY, NEW YORK

DOCKET # 094614

CNE #09-4838

PREPARED FOR:

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FOR SUBMISSION TO:

New York City Land Marks Preservation Commission  
Municipal Building, 9th Fl  
1 Centre St  
New York, NY 10007

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November 2010

## **Abstract**

In August and September 2010 archaeologists monitored excavation work related to the Old St. Patrick's Cathedral Cemetery Brick Wall Restoration Project in the City of Manhattan, New York County, New York. The objective of the monitoring was to determine if human burials in the Cathedral cemetery would be affected by the excavations needed for reinforced concrete pile caps and buttresses and mitigate their impact. The archaeologists were responsible for recording (at least minimally) all human burials, artifacts and structures encountered. A total of one feature, 21 intact burials, evidence of approximately 14 reburials or previously disturbed burials, multiple headstones, evidence of several possible refuse pits and a builder's trench for the brick wall were recorded. Several of the headstones might indicate *in situ* locations of burials. However, most of the headstones encountered were fragments of headstones that were removed from their original locations and placed in and around the builder's trench. It is believed that this was done to protect the reburials or previously disturbed burials associated with the construction of the brick wall in the 1830s.

Key personnel of the Archaeological Monitoring Team included Michael Audin, RPA, Principal Investigator; Jeannette Fridie, MA, Forensic Anthropologist; Scott Warnasch, Archaeologist; Elaine Pfeiffer, Archaeology Assistant; and Joy Sosniski Archaeology Assistant.

## **Acknowledgments**

Several individuals participated in the completion of this report. Michael Audin served as the project's Principal Investigator and is the author of the report; Jeanette Fridie, Elaine Pfeiffer and Joy Sosniski participated in field monitoring. Jeanette Fridie conducted the limited physical anthropological review. Michael Audin produced the final version of the report.

The ARS would like to thank the James Garity who provided valuable information about the history of the cathedral and its development.

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## **1.0 INTRODUCTION**

This report describes the archaeological monitoring conducted by Archaeology Resource Services, LLC (ARS) for the proposed Old St. Patrick's Cathedral Cemetery Wall Restoration Project located at 263 Mulberry Street, Manhattan, New York. The proposed project includes the excavation for the construction of reinforced concrete pile caps and buttresses to assist with the restoration of the existing brick wall around the churchyard and cemetery. The excavation into soils within the cemetery is the reason for the archaeological monitoring. Old St. Patrick's Cathedral is listed as an Individual Landmark with the New York City Landmarks Preservation Commission (LPC) and as such a permit is needed from the LPC to conduct the excavations. A permit was issued for the project by the LPC on 27 October 2008 (Appendix F). A site location map and 2008 aerial photograph are included as figure 1 and 2.

This report contains a short description of the site history, scope of work, field methodology, the results of monitoring and a brief physical anthropological summary. All work for this project was carried out in performed in accordance with the Secretary of the Interior Standards and Guidelines for Archaeology and Historic Preservation 1983; Section 106 of the *National Historic Preservation Act*; 23 CFR 771, as amended October 30, 1980; the amended Procedures for the Protection of Historic and Cultural Properties, as set forth in 36 CFR 800; Landmarks Preservation Commission Guidelines for Archaeological Work in New York City (April 12, 2002), New York State Historic Preservation Act of 1980, Section 14.09 and New York State Historic Preservation Office (SHPO) guidelines and requirements

This report was prepared in accordance with the Landmarks Preservation Commission Guidelines for Archaeological Work in New York City (April 12, 2002). The Archaeologists and Physical Anthropologist that performed the investigations and prepared the report meet or exceed the criteria outlined in 36 CFR 66.3(b) (2) and 36 CFR 61. Résumés of the key personnel are presented in Appendix A.

### **1.1 Project Site Description**

The project site is located at Old St. Patrick's Cathedral at 263 Mulberry Street (Block 509, Lot 1), Manhattan, New York. The proposed project area is bounded by Mulberry Street to the west, Mott Street to the east, Prince Street to the south and Old St. Patrick's Cathedral to the north (figure 1). The project area for the archaeological monitoring is within the boundaries of the brick wall in the southern portion of the cemetery (Photograph 1).

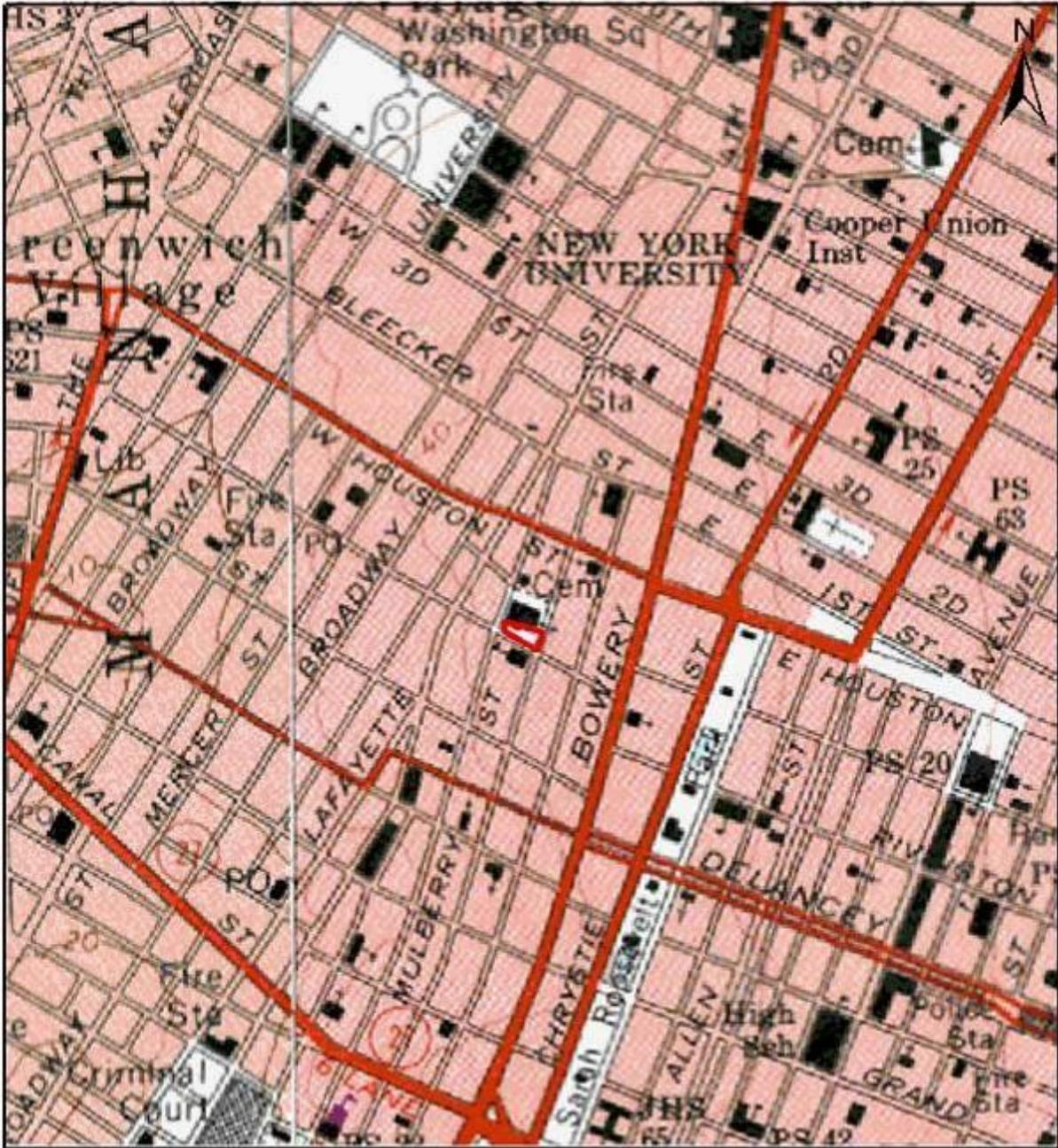
### **1.2 Project Description**

The project consists of exterior work on the brick wall surrounding the churchyard and cemetery at Mulberry, Prince and Mott Streets. The work includes the installation of reinforced concrete buttresses and associated piles approximately every 12 feet along the interior perimeter of the

wall, the buttresses will be stained to match the brick wall. Additional work included the repointing of the entire wall; installation of carbon fiber reinforced polymer rods set in epoxy in select joints at the upper portion of the wall; selective crack repair and limited brick replacement; selective repair of brownstone quoins and brownstone coping stones; replacement of existing cast stone coping stones with new brownstone coping stones; cleaning of the wall; and the restoration of two sets of double wood doors on Mulberry Street. Archaeological monitoring is only required for the excavation portion of the project to install the pile caps and the buttresses.



**Photograph 1 – Inside of Old St. Patrick’s Cathedral Brick Wall. Photograph parallel to Prince Street facing east toward Mott Street.**



Map Reference: USGS Topographic Map, Brooklyn and Central Park Quadrangles

**Legend**

— Approximate Project Site



Archaeology Resource Services, LLC



**SITE LOCATION MAP**

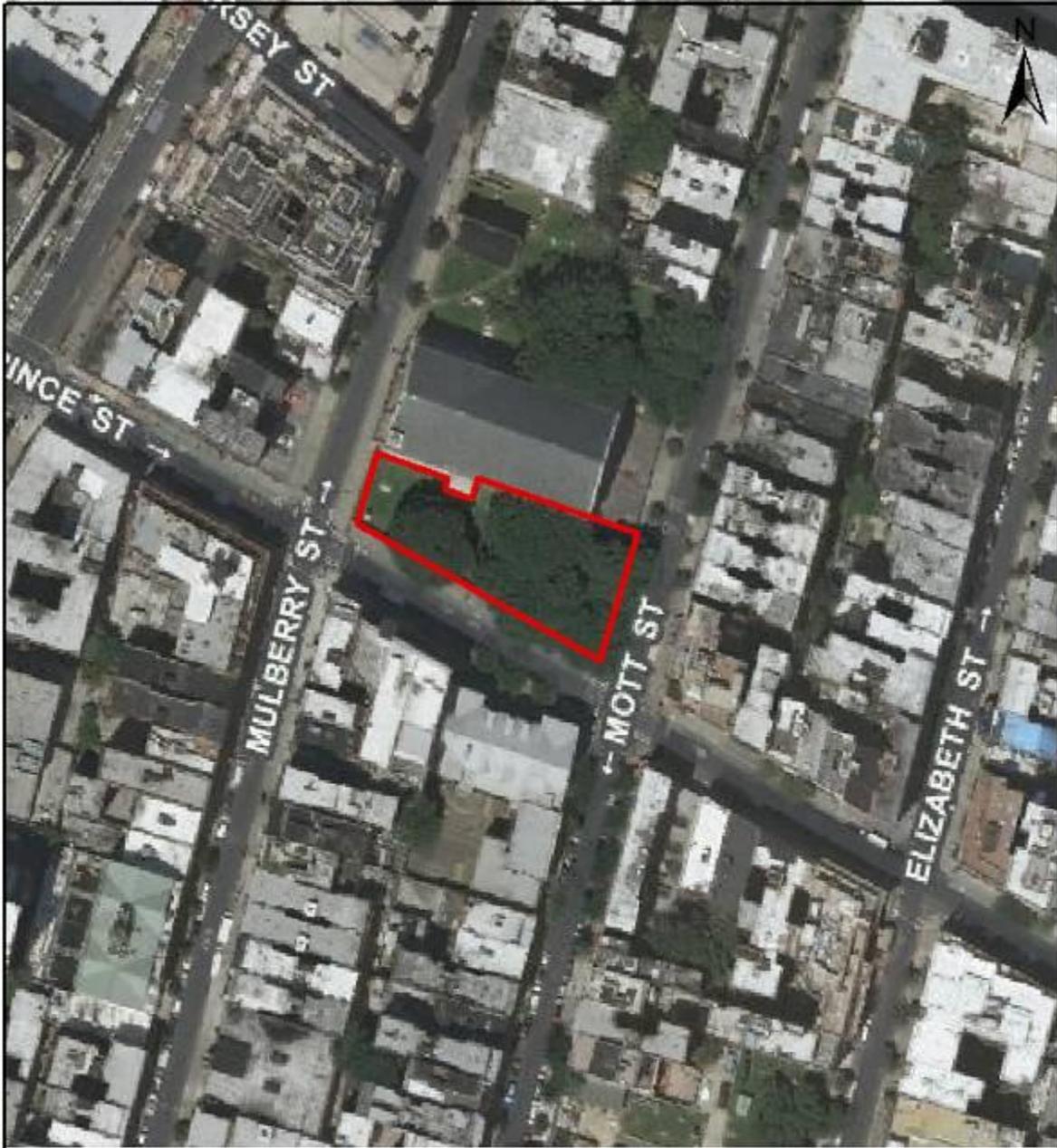
OLD ST. PATRICK'S CATHEDRAL WALL RESTORATION  
MANHATTAN

NEW YORK COUNTY

NEW YORK

Project No. 20100018	Date 10/25/2010	Scale See Above	Figure No. 1
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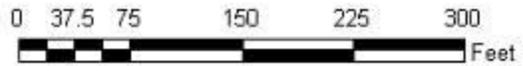
C:\Maudin Data\ARS\Old St Pat's\Figures\Figure 1 Site Location Map Old St. Pat's.mxd



Map Reference: NYC Portal, 2006 Aerial Photograph

**Legend**

— Approximate Project Site



Archaeology Resource Services, LLC



ARCHAEOLOGY RESOURCE SERVICES

**2008 AERIAL PHOTOGRAPH**

OLD ST. PATRICK'S CATHEDRAL WALL RESTORATION  
MANHATTAN

NEW YORK COUNTY

NEW YORK

Project No. 20100018	Date 10/25/2010	Scale See Above	Figure No. 2
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C:\Maudin\_Data\VAR\Old St Pat's\Old St Pat's 8.5x11.mxd

## 2.0 Project Site History

This chapter presents an overview of the history of Old St. Patrick's Cathedral and cemetery. The cathedral history was taken from the Old St. Patrick's website and "History of Calvary Cemetery - Catholic News, Oct. 26, 1973, Thursday".

The first Catholic Cemetery in New York State was established in the year 1785. The site of George Washington's inauguration in 1789 in New York as our first president was a short distance from the first Catholic Cemetery. The cemetery was located on the corner of Barclay and Church Streets, the present location of St. Peter's Church.

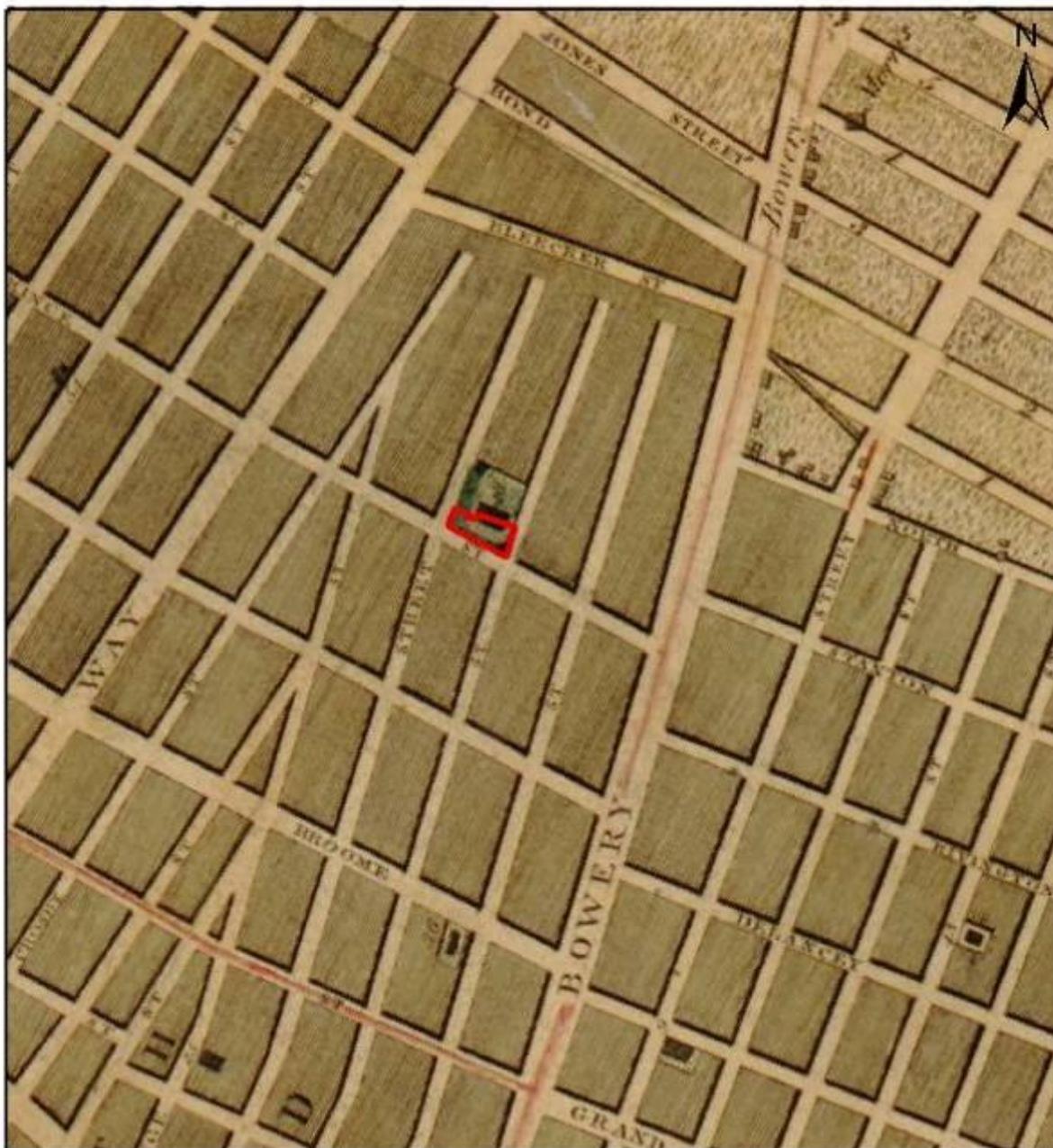
Ecumenism, a rare occurrence in those days, played a major role in the establishment of the first Catholic Cemetery in New York. This tract of land which measured 100 x 125 feet was first leased and then sold to the Catholic Congregation in New York by Trinity Episcopal Church. Prior to 1785 a portion of the Trinity Church graveyard was reserved for the burial of Catholics.

In 1796, a portion of the new cemetery was set aside for the erection of the first Catholic Church in New York, St. Peter's, and when the first Church building was replaced in 1836 with a new structure, most of the remains in the cemetery were moved to the cemetery at St. Patrick's Old Cathedral on Mott Street.

Originally the sites of the first two churches in New York, St. Peter's and Old St. Patrick's and also the locations of both the old and new St. Patrick's Cathedral were purchased for use as cemetery land. In 1801, a parcel of land was purchased on the corner of Prince and Mott Streets for the burial of Catholics.

Soon after, New York became a diocese in 1808; plans were made to erect a Cathedral church on a portion of the property which had been set aside for the cemetery. At this time the Catholic population began its steady and rapid growth. The corner stone of Old St. Patrick's - the city's first Cathedral Church - was laid on June 8, 1809. The 1811 Bridges Map of the City of New York (Figure 4) shows the original church on it. It was dedicated on May 14, 1815, and on that day the New York Gazette described the cathedral as "a grand and beautiful church, which may justly be considered one of the greatest ornaments of our city"

Designed by architect Joseph Francois Mangin, St. Patrick's has great dignity and character in its restrained simplicity. Her sidewalls rise to a height of 75 feet, and the inner vault is 85 feet high. The church is over 120 feet long and 80 feet wide. The 1853 Perris Map (Figure 5) shows the church closer to Mulberry Street than the current church which was rebuilt after the fire in the 1860's. Near the west wall stands the huge marble altar surrounded by an ornately carved, gold leaf reredos.



Map Reference: 1811 Wm. Bridges, This Map of the City of New York and the Island of Manhattan, New York City Public Library

**Legend**

— Approximate Project Site



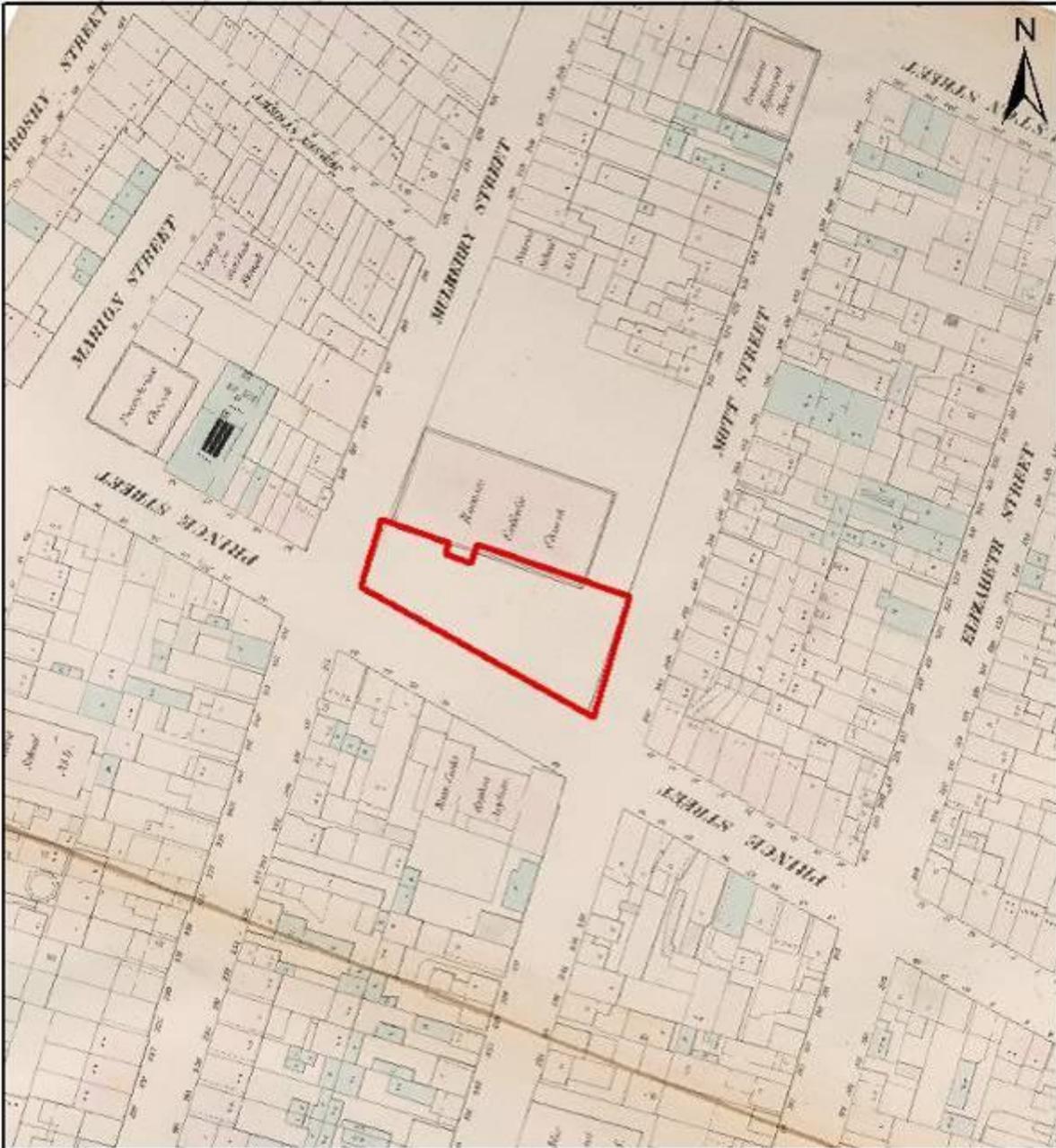
Archaeology Resource Services, LLC



**1811 WML BRIDGES MAP**  
**OLD ST. PATRICK'S CATHEDRAL WALL RESTORATION**  
**MANHATTAN**

NEW YORK COUNTY		NEW YORK	
Project No.	Date	Scale	Figure No.
20100018	10/25/2010	See Above	3

C:\Maudin Data\ARS\016 St Pat's\Figures\Figure 3 1811 Bridges Map Old St. Pat's.mxd



Map Reference: 1863 William Ferris, Maps of the City of New York, Plate 27, New York City Public Library

**Legend**

 Approximate Project Site



Archaeology Resource Services, LLC



**1853 WM PERRIS MAP**  
**OLD ST. PATRICK'S CATHEDRAL WALL RESTORATION**  
**MANHATTAN**

NEW YORK COUNTY		NEW YORK	
Project No.	Date	Scale	Figure No.
20100018	10/25/2010	See Above	4

C:\Maudin Data\ARS\Old St Pat's\Figures\Figure 4 1853 Ferris Map Old St. Pat's.mxd

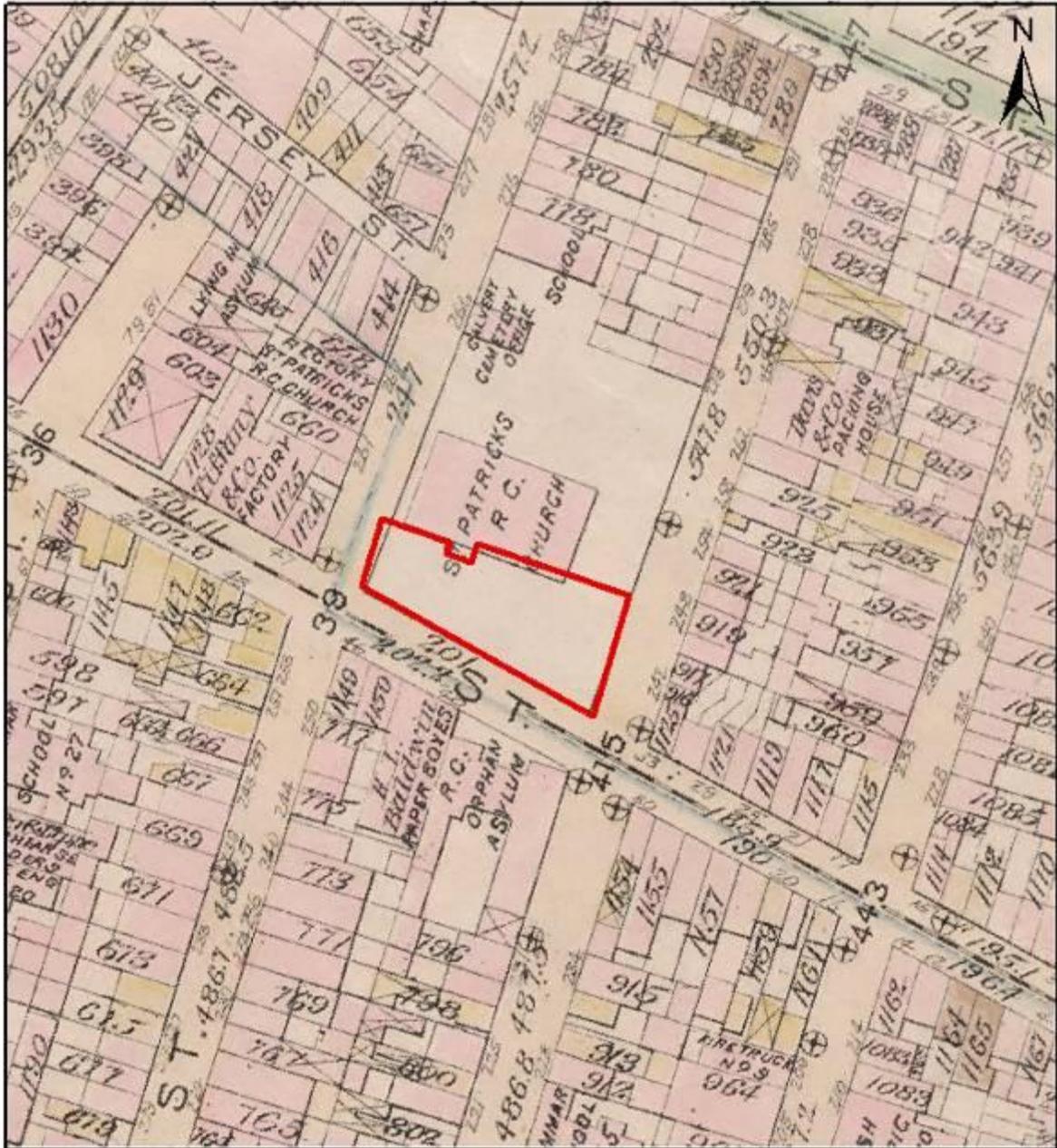
At the opposite end of the church in the choir loft is a historic organ, an Erben 3-41, in its original condition. The organ was built by Henry Erben in 1852, and is one of less than a dozen such great instruments surviving in New York City. The organ is still used in liturgies today.

Beneath the church lies a labyrinth of well-kept mortuary vaults and outside, is a cemetery containing many old graves and tombstones. Most famous of all was the original resting place of Pierre Toussaint, a Black New Yorker, born a slave in Haiti, whose cause for canonization (sainthood) is being considered in Rome. Also of note are the burial sites of New York's first Bishops and many other prominent people.

St. Patrick's Old Cathedral is a church that cradled the Irish, Germans, French and Italian communities as they made their foothold in this country. The 1885 E. Robinson Atlas (Figure 7) depicts the church as it was rebuilt after the 1860's fire. Today's parish is comprised of primarily Italian-Americans, Dominican-Americans and the surrounding area's younger artists and professionals.

The Old Cathedral ceased to be the seat of the Archdiocese of New York and became a parish church on May 25, 1879. The change in status was the result of the completion of the present Cathedral of St. Patrick located at 50th Street and Fifth Avenue.

St. Patrick's Old Cathedral is located in "The Heart of Old New York" in the rapidly changing neighborhoods of Little Italy, Chinatown, and SOHO. In 1966, Old St. Patrick's Cathedral was one of the first sites to be named a New York City landmark by the New York City Landmarks Commission. St. Patrick's, St. Patrick's Old Cathedral School and St. Michael's are also listed on the National Registry of Historic Landmarks. The 1924 aerial photograph (Figure 6) shows the church before the trees in the cemetery began the giants they are today.



Map Reference: 1885 E. Robinson's Atlas of the City of New York, Plate 4, New York City Public Library

**Legend**

— Approximate Project Site



Archaeology Resource Services, LLC



**1885 E. ROBINSON ATLAS**

OLD ST. PATRICK'S CATHEDRAL WALL RESTORATION  
MANHATTAN

NEWYORK COUNTY

NEWYORK

Project No.	Date	Scale	Figure No.
20100018	10/25/2010	See Above	5

C:\Maudin Data\ARS\Old St Pat's\Old St Pat's 8.5x11.mxd



Map Reference: NYC Portal 1924 Aerial Photograph

**Legend**

— Approximate Project Site



Archaeology Resource Services, LLC



**1924 AERIAL PHOTOGRAPH**  
**OLD ST. PATRICK'S CATHEDRAL WALL RESTORATION**  
**MANHATTAN**

NEW YORK COUNTY		NEW YORK	
Project No. 20100018	Date 10/25/2010	Scale See Above	Figure No. 6

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### **3.0 Project Methodology**

Archaeological monitoring is frequently recommended to mitigate adverse effects to a known archaeological site. Archaeological monitors observe ground-disturbing activities during excavation to identify and evaluate potentially significant finds. A program of archaeological monitoring was included as a condition to the LPC permit for the proposed restoration work for the Old St. Patrick's Cathedral in the Borough of Manhattan, New York. The scope addresses project planning, monitoring program design, responsibilities, and methodology for monitoring, treatment of artifacts, reporting and curation.

The objectives of archaeological monitoring are to:

- Provide a oversight during excavations in the cemetery to identify any human remains/burials,
- Recommend ways to avoid intact burials or if needed, remove burials using archaeological excavation techniques for storage until reinternment, and
- Report the discovery and extent of identified archaeological remains.

The area that requires monitoring is the southern portion of the Old St. Patrick's Churchyard and cemetery. The archaeological monitoring of Old St. Patrick's brick wall restoration included the following phases:

- Project planning,
- Archaeological monitoring,
- Reporting,
- Treatment of human remains/artifacts, and
- Curation of artifacts.

#### **3.1 Project Planning**

Archaeological monitoring of large-scale earthwork operations requires careful and considered project planning. This planning included the following steps:

##### ***Project familiarization***

In preparation for the project the principal archaeologist familiarized himself with the project and any existing plans or reports relating to the project area and its vicinity, inspected the project area and assessed its archaeological potential. The principal archaeologist was provided with copies of the relevant maps, various development drawings, and the permit conditions and requirements, all of which was made available to the archaeological staff selected for monitoring.

## ***Project Design***

All elements of the assessment were conducted in accordance with a written project design. The purpose of the project design was to identify within a single document the entire archaeological scope and requirements of the works. The project design was submitted to the client and the client's representative. The project design detailed the following:

- The objectives of the proposed archaeological monitoring, as summarized in the LPC Permit, DOCKET #094614, CNE #09-4834 and dated 27 October, 2008, are focused on monitoring the proposed excavation associated with the proposed Old St. Patrick's brick wall restoration.
- The project site is located at 263 Mulberry Street (Block 509, Lot 1), Borough of Manhattan, City of New York, New York County, New York.
- Contingencies should be provided for the possibility exists to locate subsurface historic archaeological deposits such as shaft features.
- A contractor to perform excavation at the project site has been retained by the architect.
- Michael Audin, RPA, an archaeologist that meets the NPS professional criteria, will be conducting all archaeological monitoring on this site with the assistance of Jeanette Fridie, Elaine Pfeiffer or Joy Sosniski.
- Jeannette Fridie, MA, Physical Anthropologist, will conduct the brief physical anthropological review.

## ***Chain of Command***

The ARS archaeological team will meet with the Architect (Acheson Doyle Partners Architects, P.C.) the client (Archdiocesan Building Commission), the site manager (Michael Fitzgerald Contracting Co) and representatives of Old St. Patrick's Cathedral to schedule the excavation work and monitoring. While on site the Site Manager and contractor forman will be verbally informed of the monitoring work on a daily basis. Following is the list of Parties/Agencies involved and their contact information.

### **CLIENT**

Archdiocesan Building Commission  
Bishop Ferns Building  
201 Seminary Avenue, 2nd Floor  
Yonkers, NY 10704-1852

Bram Hillegers, Project Manager  
(914) 476-1058  
Bram.hillegers@archny.org

**OWNER**

Old St. Patrick's Cathedral  
263 Mulberry Street  
New York, NY 10012

Monsignor Donald Sakano  
Chris Flatz, Parrish Manager  
(212) 226-8075

**ARCHITECT**

Acheson Doyle Partners Architects, P.C.  
W. 18th Street 8th Floor  
New York, NY 10011-4640

Lou Martino, AIA  
(212) 414-4500  
lmartino@adparchitects.com

**SITE MANAGEMENT**

Michael Fitzgerald Contracting Co  
955A McLean Avenue  
Yonkers, NY 10704

Christian Fitzgerald, Civil Engineer  
(914) 237-7713  
MJF955@optonline.net

**PRINCIPAL ARCHAEOLOGIST;**

Archaeology Resource Services, LLC  
605 Twin Arch Rd  
Rock Tavern, NY 12575

Michael Audin, RPA  
845-725-7694  
Michael.Audin@harservices.com

**LANDMARKS PRESERVATION COMMISSION**

Director of Archaeology  
1 Centre Street, 9N  
New York, NY 10007

Amanda Sutphin  
(212) 669-7823

**Methodology and Resources**

- Monitoring strategy - the procedure for archaeological monitoring of the excavation includes close observations of the excavation procedures by experienced archaeologists. The plan calls for the use of one backhoe to conduct the excavation. One archaeologist will monitor the backhoe work. A second on call archaeologist will be called in as needed to excavate burials or rake/screen the stockpile.
- Work schedule – the excavation is scheduled for two separate stages consisting of every other excavation and after the first set is completed and the buttresses built and backfilled (plus possible reinternments) the second stage of excavations will begin. Each stage of excavation is expected to last for approximately 7 to 10 business days.
- Resources - The principal archaeologist has prior experience in archaeological monitoring for human remains. ARS will supply all hand equipment necessary for the archaeologists to conduct their monitoring. Archaeologists will photograph the project area prior to and during the excavation burials.

## **Health & Safety Issues**

ARS has not been informed of any hazardous conditions that might exist within the project area. Therefore, normal monitoring procedures are anticipated. All ARS archaeological monitoring personnel will follow the OSHA requirements for fieldwork.

## **Treatment of finds**

All remains and artifacts will be cleaned and stored in the crypts at Old St. Patrick's Cathedral. Remains will be reinterred during the back filling of the excavation holes.

### **3.2 Archaeological Monitoring**

The archaeological monitoring of all soil removal in the cemetery area shall be carried-out in accordance with the project design, and in particular the methodology described therein. Any changes to the methodology shall be reported under the agreed liaison framework.

Should the monitoring archaeologist note features of archaeological potential, he/she may, as per the agreed monitoring methodology, request the driver to:

- Stop excavation as need be,
- Avoid working in the area of potential remains, or
- Alter the way in which the machine is operated.

Where a machine driver is requested to stop, the monitoring archaeologist should log the time and action taken. Such a log will minimize any confusion over the impact of monitoring procedures and practices on the excavation.

Given the risk to buried remains during excavation, and by the subsequent movements of heavy site traffic, it is imperative that once an area of remains has been confirmed it should be:

- Appropriately fenced off and clearly marked with warning signs,
- Photographed as such, recording time and date,
- Logged, numbered sequentially (i.e. in order of their discovery) and their extent and location surveyed.

To minimize delays to the excavation work, it is important to determine (by way of small scale, exploratory hand-excavation) the nature and extent of any newly identified area of potential remains as soon as possible. Should an exploratory examination reveal the site to not contain human remains this should be documented and the area returned for excavation. If intact burials are found, then additional hand excavation may be needed to determine the extent of or remove the human remains.

During the course of monitoring, the monitoring archaeologist shall also:

- Oversee the conduct of the monitoring and ensure a professional standard of recording,
- Pay due regard to stray finds in the soil,
- Recover any notable archaeological objects and record their location,
- Recover all finds associated with archaeological deposits which have been disturbed during monitoring,
- Maintain daily logs,
- Daily verbal updates, and
- Adhere to the agreed liaison framework.

### **3.3 Treatment of Artifacts**

All archaeological objects shall be cared for in accordance with the *Secretary of the Interior's Standards and Guidelines for Archaeology and Historic Preservation* (Federal Register, vol. 48, no. 190) and Landmarks Preservation Commission Guidelines for Archaeological Work in New York City (April 12, 2002).

Human remains are anticipated during the excavation. When human remains are found during the excavation, all work in the immediate area will stop and, the monitor will advise the site manager to determine if the remains can be avoided. If the remains cannot be avoided the excavation will move to the next site and the human remains will be removed for temporary storage by the archaeological assistant. Once the excavations and buttress construction is completed the remains will be reinterred as close as possible to their original location. A reburial plan is located in Appendix D.

### **3.4 Reporting**

The following types of reporting will be conducted:

- Daily logs,
- Discovery reports, and
- Monitoring report.

A final monitoring report will be prepared in accordance with the Landmarks Preservation Commission Guidelines for Archaeological Work in New York City (April 12, 2002). The report will address the following:

- An overview of the landscape in which the project took place,
- A description of the development plan,
- A description of the areas of soil removal,

- The dates and duration of monitoring,
- Details of the soil removal, methods and machinery used, including any variations,
- The monitoring methodology, including the project team and the hours worked,
- An overview of the ground, weather and overall monitoring conditions, particularly with respect to any problems encountered,
- A description of all archaeological artifacts and features uncovered, including provenance information.
- A discussion on the overall archaeological findings,
- A critical evaluation of the soil removal methods and the monitoring methodology,
- Conclusion,
- Bibliography and references,
- Supporting maps, plans, photographs and illustrations,

The final report will be submitted within 60 days of the completion of field work. Copies of the final report will be sent to the client and all the relevant state and local authorities.

### **3.5 Curation of artifacts and project archive**

Artifacts will be turned over to Old St. Patrick's Cathedral for curation and possible display. The project archive will contain the following:

- A copy of the project design,
- All the daily logs,
- All relevant mapping and photography,
- All correspondence relating to the archaeological monitoring,
- Final monitoring report,

## **4.0 MONITORING RESULTS**

### **Archaeological Monitoring at Old St. Patrick's Cathedral**

The monitoring was conducted from August 2 to August 13 and August 25 to September 3, 2010. During this time an ARS archaeologist was always present on the site overseeing the work in progress and making records of any encountered burials and artifacts. The work was conducted in accordance to the detailed monitoring design.

#### **Field methods**

Archeologists were present all times during the excavation work. All anomalies including changes in stratigraphic sequences, soil discoloration, and indications of intact burials, reburials or other possible features were noted. Artifacts, animal and human bones were recovered.

All excavations began by machining with a small track hoe with a one-foot trenching bucket on it. The archaeological monitor oversaw both the excavation and the placement of the soil excavated for signs of human remains or artifacts. In some cases hand excavations were applied to examine burial shafts and other features. The soil matrix from features and around features was screened through ¼ inch hardware mesh. All artifacts were collected, bagged and labeled accordingly. Certain artifacts were left in the field but they were counted and described.

All human remains were collected and labeled. All human remains, animal remains and artifacts were turned over to the Old St. Patrick's Cathedral staff for storage in the crypts. The remains were brush cleaned and later reburied as close as possible to their original location. Daily monitoring logs were kept throughout the duration of the project.

#### **The Monitoring**

Excavations were proposed to be conducted approximately every 12 feet for the buttresses. Currently temporary supports hold the wall in place. To ensure that none of the excavations destabilized the wall or worker safety the excavations were done in two separate stages. The first stage began on August 2, 2010 and continued until August 16, 2010, the second stage began August 25, 2010 and continued until September 2, 2010. Each stage entailed the excavation of every other proposed excavation. Excavations were labeled in the order that they were conducted. Burial and reburials were numbered as they were encountered.

Excavations began with the use of a small track hoe machine outfitted with a one foot wide trenching bucket. The narrow bucket was needed so it could excavate between the temporary shoring for the brick wall and the driven piles in the center of the excavation. Excavations measured approximately four feet wide, six feet long (off the brick wall) and six feet deep. Two

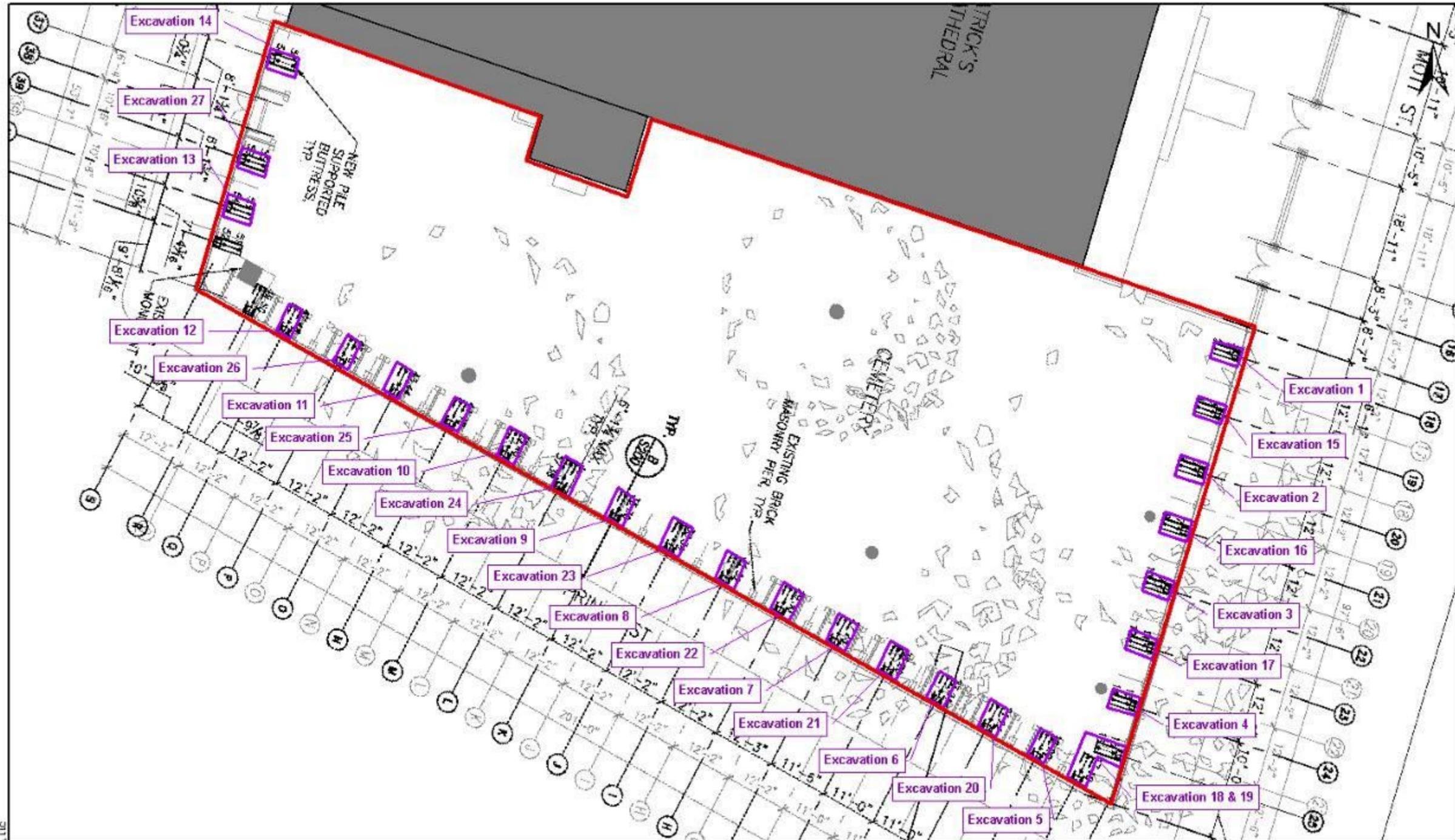
piles were driven into the location prior to the excavation and excavations centered on the piles (Figure 7 - Pile Cap Plan).

Excavations started in the north eastern portion of the project site by the Mott Street entrance into the cathedral and proceeded south and then west along the brick wall alignment. For safety reasons every other pile cap location was excavated in the first round of excavation and numbered 1 through 14. This allowed for the pile caps and buttresses to be poured and constructed ensuring stability of the brick wall. The second round of excavation consisted of the excavation of the remaining pile cap and buttress locations labeled 15 through 27. A burial plan was provided by the church. However, because it was hand draw and used different reference datum it was difficult to translate the information into our current coordinate system, making it fairly inaccurate for the monitoring. A total of 27 excavations were completed during the monitoring and are all briefly described below.

#### Excavation 1 (Piles 1 and 2)

Excavation 1 encountered a nearly intact headstone at approximately 10 inches below the surface. The headstone was face up and lying on its back. Laborers were able to remove the headstone by hand and move it to a temporary storage area. The headstone is red sandstone and engraved on the stone is “IHS” on the top with “Here lieth the body of Elce Currin wife of John Currin who departed this life march th (sic) 6<sup>th</sup> 1805 Aged 33 years” (Photograph 2). Below the headstone animal bone was encountered and along the builders trench some human bone was also found.

The excavation further revealed three two inch thick pieces of blue stone approximately four feet below surface on their side in a rectangular pattern (going east to west) possibly a burial vault (Photograph 3). A metal rod going north-south on the eastern side of the vault was drilled and screwed into the northern and southern pieces. The eastern side is approximately 1.5 feet off of the brick wall. The remains of a brick wall or other structure are on the north side of the excavation; its purpose is not known.



Map Reference: Plan provided by Archon Doyle Partners Architects, P.C.

**Legend**

- Approximate Project Site
- Approximate Excavation Locations



PILE LOCATION PLAN			
OLD ST. PATRICK'S CATHEDRAL WALL RESTORATION MANHATTAN			
NEW YORK COUNTY		NEW YORK	
Project No. 20100018	Date 10/25/2010	Scale see above	Figure No. 7

C:\Media\Drawings\OLD ST PATRICKS\Fig 1 Pile Location Plan.dwg



**Photograph 2- Fairly intact headstone of Elce Currin found in excavation 1.**



**Photograph 3 – Possible vault found in excavation 1.**

In the southeast corner of the excavation, in the builder's trench outside of the possible vault, reburial 1 (RB-1) was found. This reburial was a mix of two individual's one adult and one sub

adult approximately 3 to 9 months old. No artifacts were directly associated with the reburial. Artifacts found in the excavation include fragments of ceramics, pieces of rusted metal, glass bottle fragments, clay pipe stems, a marble, a button and an 1833 one cent piece.

Excavation 2 (Piles 5 and 6)

Excavation 2 encountered two headstone markers (or grave holders) with the initials “J. F.” and “M. N.” inscribed on them (Photographs 4 and 5) at approximately 20 inches below surface. The excavation did not encounter any human remains in it. Artifacts from the excavation include clear bottle glass fragments, headstone fragments and butchered animal bone were found in the builder’s trench.



**Photograph 4 – Headstone or grave holder with J.F. inscribed, found in Excavation 2.**



**Photograph 5 – Headstone or grave holder with M.N. inscribed, found in Excavation 2.**

Excavation 3 (Piles 9 and 10)

Excavation 3 encountered a headstone marker with the initials “B. L.” inscribed on it (Photograph 6) at approximately 4 inches below surface. The excavation did not encounter any human remains or animal bone. Artifacts from the excavation include bottle glass fragments, ceramic fragments and headstone fragments were found in the builder’s trench.



**Photograph 6 – Headstone or grave holder with B. L. inscribed on it found in excavation 3.**

Excavation 4 (Piles 13 and 14)

Excavation 4 encountered headstone fragments in the upper layers. At approximately 3.5 feet below surface 5 feet away from the brick wall a human burial is encountered in the south wall of the excavation. The burial has not been impacted by the excavation and plywood was placed over the burial while the excavation was completed. When the excavation was completed, 6 mil plastic was placed over the burial to ensure that no concrete bonds with the burial. A few butchered animal bones were found in the builder’s trench

Excavation 5 (Piles 19 and 20)

Excavation 5 encountered headstone fragments at approximately 1 foot below surface. No human, animal bones or artifacts were encountered during the excavation.

Excavation 6 (Piles 23 and 24)

Excavation 6 encountered headstone fragments at approximately 1 foot below surface and RB-2 located along the foundation of the brick wall at approximately 5 feet below surface. The human remains consisted of an adult and included of a portion of a right foot, portions of a right femur and some vertebral fragments. Animal bones were also encountered along the brick wall in the builder's trench at approximately three feet below surface. The only other artifact found was a fragment of a clay pipe stem and a small rusted horse shoe.

Excavation 7 (Piles 27 and 28)

Excavation 7 encountered headstone fragments and animal bones at approximately 2 feet below surface along the brick wall. The first intact burial (Burial-1) was encountered at approximately 4 feet below surface close to the brick wall (1.5 feet off the wall) in southeast corner of trench (Photograph 7). Under animal bones along the wall below Burial-1 are two concentrations of human remains RB-6 and RB-7 (Photograph 8). RB-6 is the remains of one adult and RB-7 is the comingled remains of two sub adults, approximately 2-3 years old and 5-7 years old. These are most likely reburials possibly from the construction of the brick wall. Not all of the remains were recovered since they continue into the trench wall to the east. Following the remains could possibly compromise safety and it is not the protocol set out by the church. Artifacts from the excavation include animal bones, glass fragments and metal rivets most were encountered along the brick wall in the builder's trench.



**Photograph 7 – Exposes skull from burial 1 in excavation 7.**



**Photograph 8 – Exposed remains from reburial 6 and 7 in excavation 7.**

*Excavation 8 (Piles 31 and 32)*

Excavation 8 encountered headstone fragments and animal bones at approximately 2 feet below surface along the brick wall. Intact burial (Burial-2) was uncovered at approximately four feet below surface in the northeast portion of the excavation (Photograph 9). The remains are comingled remains of one adult and one sub adult. One of the ribs of the adult has evidence of a healed fracture on it. Artifacts from the excavation include ceramic fragments, metal pieces and pipe stems were also encountered along the brick wall in the builder's trench.



**Photograph 9 – Exposed remains of burial 2 in excavation 8.**

#### Excavation 9 (Piles 35 and 36)

Excavation 9 encountered headstone fragments and animal bones at approximately 3 feet below surface along the brick wall. Reburial (RB-3) was uncovered at approximately five feet below surface close to the brick wall. The remains are of an adult and consist of multiple long bone fragments. Not all of the remains are recovered since they continue into the trench wall. Artifacts from the excavation include animal bones; most were encountered along the brick wall in the builder's trench.

#### Excavation 10 (Piles 39 and 40)

Excavation 10 encountered headstone fragments and animal bone at approximately 4 feet below surface along the brick wall. RB-4 was found at approximately 5 feet below surface approximately 4 feet from the brick wall. The reburial consisted of the comingled remains of an adult and subadult. A second reburial RB-5 was found just to the south and below RB-4. The reburial consisted of the comingled remains of an adult and subadult (approximately 2-3 years old). The remains consist of mostly bones and teeth. No discernable grave shaft can be identified in the trench walls. It is possible that these remains were comingled by the actions of the machine during the excavation. Artifacts from the excavation include animal bones, metal nails, including possible coffin nails, and a metal spike.

#### Excavation 11 (Piles 43 and 44)

Excavation 11 encountered headstone fragments at approximately 15 inches below surface along the brick wall. Intact burial (Burial-3) was uncovered at approximately 5 feet below surface and 1 foot from the brick wall on the eastern trench wall. A name plate was recovered and can only partially be read. The name "Francis E. Grim" with a date of "August 1827" (Photograph 10) are written on the plate. The burial consists of the comingled remains of one adult and two sub adults (approximately 1-3 years old and 3-7 years old). One of the subadult skulls was partially impacted by a pile and grout was fused to the skull (Photograph 11). This is most likely a family burial shaft and not a reburial as the remains are in anatomical position and not randomly placed. Not all of the remains are recovered since they continue into the trench wall.

A second intact burial (Burial-5) is found to the north of Burial-3 approximately 5.5 feet below surface and 2 feet north of the first burial. The burial consists of the comingled remains of an adult and a subadult. Artifacts from the excavation include animal bones, glass fragments, ceramic fragments, pipe stem fragments, coffin wood and metal nails (possibly coffin nails).



**Photograph 10 – Coffin name plate for Francis Edward Grim with a date of August 1827 on it.**



**Photograph 11 – Sub adult skull impacted by the driving of piles in excavation 11.**

Excavation 12 (Piles 47 and 48)

Excavation 12 encountered headstone fragments at approximately 1 foot below surface along the brick wall. Intact burial (Burial-6) was uncovered at approximately 4.5 feet below surface and 8 inches from the brick wall (Photograph 12). The remains consist of the comingled remains of two adults, with a mandible that is most likely male. Burial-7 is uncovered to the north of Burial-6 and is approximately 5 feet below surface and 51 inches from the brick wall. The remains consist of 1 adult and 1 subadult and a tin name plate is found with the remains. Unfortunately, the plate is too corroded to read. To the north of Burial-7 is Burial-8 in the northeast corner of the excavation. The burial is also 5 feet below surface and just to the north of Burial-7 and consists of the comingled remains of 2 adults and 1 subadult. Burial-9 (Photograph 13) was uncovered under Burial-6 and consists of an adult cranium the remainder of the remains continues into eastern trench wall. Below Burial-9 is yet another burial but it is over 6 feet below surface so 6 inches of soil are used to cover it up and leave it in place. Burial-10 is located between Burial-6 and Burial-7 at approximately 5.5 feet below surface. The remains consist of a nearly complete white female (Photograph 14). Reburial 9 (RB-9) is found in the west wall of the trench near the brick wall and consists of the comingled remains of 2 adults. This reburial might also be associated with some of the other burials previously uncovered.

Artifacts from the excavation include animal bones, glass fragments, ceramic fragments, a button, a plastic dart, a metal horseshoe, a possible coffin handle, a glass stopper, miscellaneous building materials and clay pipe stem fragments.



**Photograph 12 – Exposed remains of burial 6 in excavation 12, remains run parallel to the brick wall along Prince Street.**



**Photograph 13 – Skull of burial 9 found under burial 6 in excavation 12.**



**Photograph 14 – Exposed remains of burial 10 found between burials 6 and 7 in excavation 12.**

Excavation 13 (Piles 51 and 52)

Excavation 13 encountered headstone fragments and animal bones at approximately 1.5 feet below surface along the brick wall. Reburial 8 (RB-8) was uncovered at approximately 3.5 feet below surface. The comingled remains consisted of 1 adult and 1 subadult. An adult humerous was uncovered approximately 3 feet below surface in the builder's trench with a subadult cranium 4 inches below the humerous. Artifacts from the excavation include animal bones, ceramic fragments, metal nails, a button and a pipe stem fragment.

Excavation 14 (Piles 55 and 56)

Excavation 14 encountered headstone fragments and animal bones at approximately 1 foot below surface along the brick wall and a trash pit on the northern side of the trench. Intact burial (Burial-4) was uncovered at approximately 5.5 feet below surface and approximately 4 feet from the brick wall (Photograph 15). The comingled remains are of 1 adult and 1 subadult. The cranium was partially impacted by the machine, but the remainder of the remains are in fair condition. Artifacts from the excavation include animal bones, a metal spike, ceramic fragments and clay pipe stem fragments.



**Photograph 15 – Exposed remains of burial 4 in excavation 14.**

Excavation 15 (Piles 3 and 4)

Excavation 15 encountered headstone fragments at approximately 1 foot below surface along the brick wall. Reburial 10 (RB-10) was uncovered at approximately 2.5 feet below surface in the

west corner of the trench. The remains consisted of 1 adult right first metatarsal with a possible healed fracture. Artifacts from the excavation include butchered animal bones and ceramic fragments.

Excavation 16 (Piles 7 and 8)

Excavation 16 encountered headstone fragments and animal bones at approximately 1 foot below surface along the brick wall. An intact burial was encountered at approximately 6 feet below surface. To avoid disturbing the burial 6 inches of soil was returned to the excavation and hand packed down to protect the burial and leave it in place. Artifacts from the excavation include animal bones, ceramic fragments and a glass bottle neck and shards.

Excavation 17 (Piles 11 and 12)

Excavation 17 encountered headstone fragments and animal bones at approximately 1 foot below surface along the brick wall. A base of a headstone is uncovered in the southwest corner of the excavation (Photograph 16). The top is broken off but some of the writing is visible. Using the headstone as the approximate location of the top of a burial, Burial-11 was uncovered at approximately 5 feet below surface and 2.5 feet from the brick wall. The remains consist of an unfused innominate and vertebra of a subadult (2-3 years in age). Below Burial-11 is Burial-12 (Photograph 17) at 5.5 feet below surface. The comingled remains consist of a nearly complete adult male and 2 subadult ulnae. It is possible that one of the ulnae is from the previous burial and not a new individual. The writing on the headstone states that one of the individuals buried here was 9 months old. Artifacts from the excavation include ceramic fragments and metal nails.



**Photograph 16 – In situ headstone base in excavation 17.**



**Photograph 17 – Exposed remains of burial 12 found under burial 11 in excavation 17.**

*Excavation 18 (Piles 15 and 16)*

Excavation 18 encountered headstone fragments and animal bones at approximately 1 foot below surface along the brick wall. An intact burial was encountered at approximately 6 feet below surface in the northeast corner of the excavation. To avoid disturbing the burial 6 inches of soil was returned to the excavation and hand packed down to protect the burial and leave it in place. Artifacts from the excavation include animal bones, ceramic fragments, a rust metal pail (2.5 feet below surface) and clay pipe fragments.

*Excavation 19 (Piles 17 and 18)*

Excavation 19 encountered Reburial 11 (RB-11) at approximately 5.5 feet below surface in the south west corner of the trench. The remains consisted of 1 adult partial femur. Artifacts from the excavation include butchered animal bones and ceramic fragments.

*Excavation 20 (Piles 21 and 22)*

Excavation 20 encountered headstone fragments and animal bones at approximately 1 foot below surface along the brick wall. In the northeast corner of the excavation at approximately 2.5 feet below surface 2 relatively intact marble grave markers are uncovered with the initials “S. G.” and “J. M. F.” inscribed on them. Artifacts from the excavation include butchered animal bones, clay pipe bowl fragments and ceramic fragments

Excavation 21 (Piles 25 and 26)

Excavation 21 encountered headstone fragments at approximately 1 foot below surface along the brick wall. Burial-13 is uncovered in the southwest corner of the excavation approximately 5.5 feet below surface and partially under the brick wall foundation (Photograph 18). The burial is of an adult female and a pendant from a necklace and possible coffin handle are associated with the burial. Burial-14 was uncovered at approximately 5.5 feet below surface (Photograph 19) and next to Burial-13. The comingled remains consist of an adult male cranium and subadult remains. It is possible that subadult remains are associated with Burial-13 and not Burial-14. Artifacts from the excavation include metal diamond shape covers, a u-shaped metal handle, a plastic button, a corroded pendant and half oval metal caps.



**Photograph 18 – Exposed remains of burial 13 in excavation 21.**



**Photograph 19 – Partial skull of burial 14 in excavation 21.**

Excavation 22 (Piles 29 and 30)

Excavation 22 encountered headstone fragments at approximately 2 feet below surface in the builder's trench. No other artifacts or remains were found in this excavation

Excavation 23 (Piles 33 and 34)

Excavation 23 encountered Reburial 12 (RB-12) at approximately 3.5 feet below surface near the brick wall in the builder's trench. The comingled remains are of 1 adult and 1 subadult. Artifacts from the excavation include rubber fragments possibly from a shoe.

Excavation 24 (Piles 37 and 38)

Excavation 24 encountered 1 fairly intact and several fragments of headstones at approximately 1 foot below surface near the brick wall in the builder's trench. A headstone base in situ is found approximately 5 feet from the brick wall 2 feet below surface. The headstone base is approximately 2.5 feet wide and 4.75 feet tall and does not have any writing on the stone. P pile was driven first partially into the headstone then next to the headstone and the grout has adhered to the headstone. No other artifacts were found in this excavation.

Excavation 25 (Piles 41 and 42)

Excavation 25 was conducted next to a large maple tree approximately 3 feet in diameter. Headstone fragments were encountered at approximately 1 foot below surface along the brick wall. An intact burial was encountered at approximately 6 feet below surface in the northern part of the excavation. To avoid disturbing the burial 6 inches of soil was returned to the excavation and hand packed down to protect the burial and leave it in place. Artifacts from the excavation include animal bones, a glass marble, a glass bottle, ceramic fragments, ceramic bottle tops (1 written on “Rocco DiNubile 717 Fitzwater St. Phil.”), a partial coffin plate (illegible), metal nails and clay pipe fragments. The Rocco DiNubile 717 Fitzwater St. Phil bottle cap was found to be from a whisky (wholesale) at 717 Fitzwater Street in Philadelphia in the 1913 directory. Also there is the Rocco Di Nubile & Co Weiss Beer company beer bottle cap, which was not a Philadelphia brewery.

Excavation 26 (Piles 45 and 46)

Excavation 26 encountered headstone fragments at approximately 1.5 feet below surface along the brick wall. Burial-15 is uncovered in the southern part of the excavation at approximately 3.5 feet below surface (Photograph 20). The burial is of a nearly complete adult male. Burial-16 was uncovered at approximately 4.5 feet below surface north of the north side pile. The remains consist of an adult. Reburial-13 is uncovered to the south of both burials at approximately 5.5 feet below surface by the brick wall and partially under it. Artifacts from the excavation include nails, ceramic plate fragments, glass bottle fragments and 1 ceramic bottle top labeled “Loreisigacker 1357 Frankford Ave. Phil.”



**Photograph 20 – Exposed legs of burial 15 in excavation 26.**

### Excavation 27 (Piles 49 and 50)

Excavation 27 encountered Reburial 14 (RB-14) at approximately 3.5 feet below surface near the brick wall in the builder's trench. The remains were comingled with animal bone and are of 1 adult. The human remains consist of a single right scapula. Artifacts from the excavation include animal bones of a cow and pig and ceramic fragments.

### Surface Finds

The dirt back pile was walked on a daily basis to determine if any human remains were missed by the monitoring. For the entire project only one human bone was recovered from the back pile a patella. Other surface finds included artifacts such as ceramic fragments, glass fragments and modern coins. The patella was reburied with other remains.

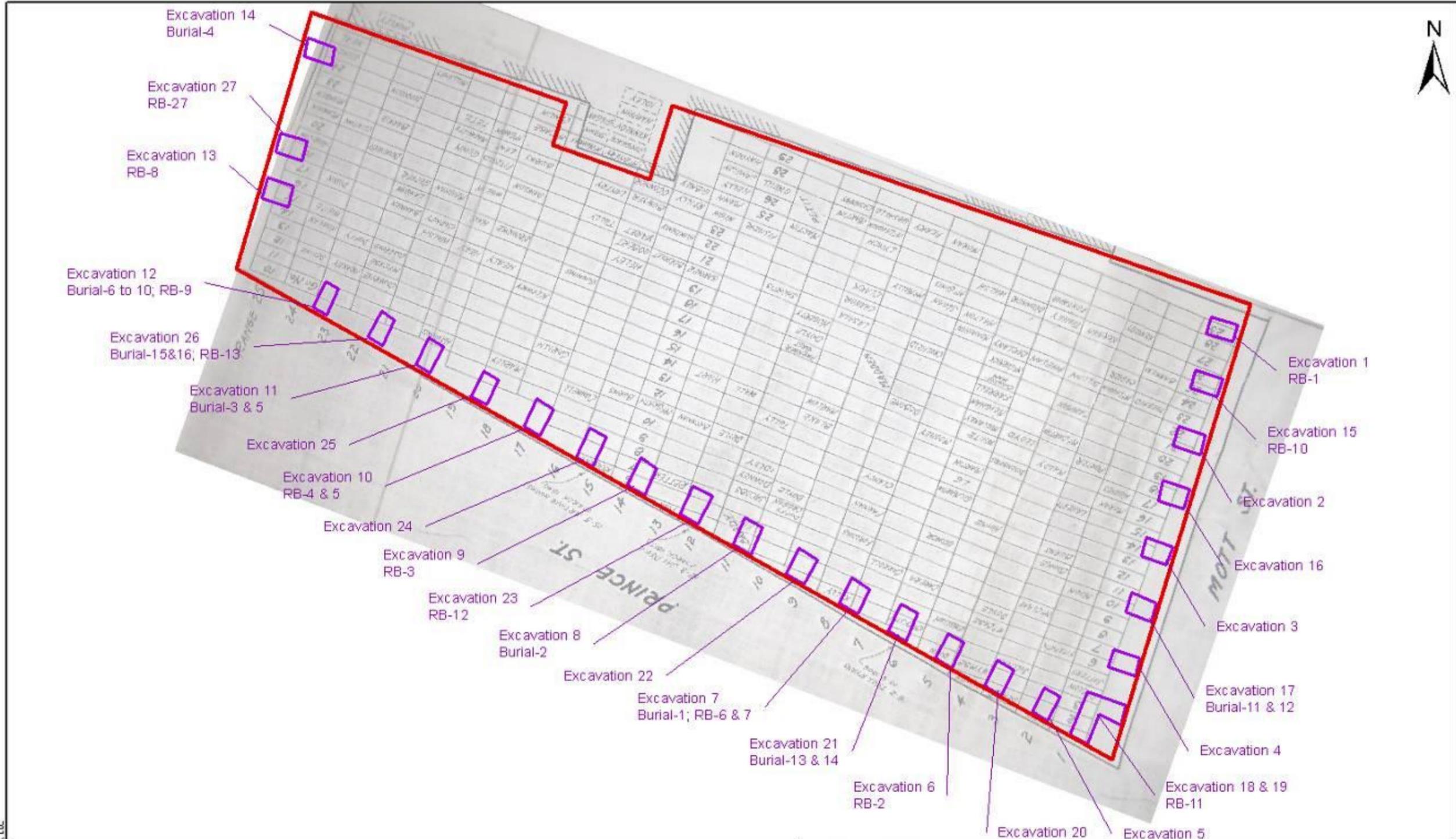
### Reburial

All remains were reburied as per the reburial plan in Appendix D. All artifacts were cleaned and turned over to the church. Prior to reburial a basic physical anthropological evaluation was conducted on the remains to separate out non human bone. No in-depth investigation was conducted as per the churches wishes and is described in the next section.

Reburial was conducted on three separate occasions August 30<sup>th</sup>, September 1<sup>st</sup> and September 15<sup>th</sup>. The reburial process began by placing one foot of backfill into each excavation that human remains would be reburied in, followed by recovering the remains from the cathedral crypt for reburial and then a prayer and blessing from Monsignor Sakano. The remains would then be reburied in the backfilled layer on the side that was as close to the original burial as possible. An additional foot and a half of back fill would then be added and compacted by a gas operated hand compactor. Additional layers of fill would be added and compacted as needed.

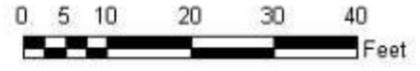
### General Findings

In general, the excavations revealed that the cemetery is covered by a layer of topsoil approximately 12 to 24 inches thick. Several areas contained evidence of trash deposits were located during the monitoring, including the builders trench for the brick wall and in excavations 1, 12, 13, 14, 18, 19, and 27. In these areas abundant cultural material existed, mainly brick fragments, marble and red sandstone headstone fragments, glass fragments, ceramic fragments, animal bones, metal pieces, and ash. Intact burials were generally oriented with the head to the west and the feet to the east. Several reburials and many of the reburials were encountered in the builder's trench usually under several stacked fragments of former headstones and in some cases under the foundation of the brick wall. A total of 14 reburials (most containing multiple sets of human remains), 16 intact burials and 5 burials that were encountered but, could be avoided we revealed during the monitoring (Figure 8 Excavation and Burial Plan).



Map Reference: Plan provided by Old St. Patrick's Cathedral and Calvary Cemetery

- Legend**
- Approximate Project Site
  - Approximate Excavation Locations



EXCAVATION & BURIAL PLAN			
OLD ST. PATRICK'S CATHEDRAL WALL RESTORATION MANHATTAN			
NEW YORK COUNTY		NEW YORK	
Project No. 20100018	Date 10/25/2010	Scale see above	Figure No. 8

C:\Users\David\Documents\St Pat's\Figures\Figure 8 Excavation Location Plan.mxd

During the excavations the human remains indicate that the brick wall was constructed after burials had been placed in the current alignment that the wall occupies. These artifacts indicate that the area now occupied by the brick wall was previously utilized as a part of the cemetery. Among the artifacts are headstones located *in situ*, burial posts, reburials often consisting of comingled human remains and intact human burials.

Monitoring archaeologists also recoded a variety of mammal bones collected from the depth of 1 - 5 feet below surface. Most zoological materials as well as other artifacts like clay pipe stems and bowl fragments, liquor bottle fragments and ceramics were found in the builder's trench for the brick wall or near the trash deposits.

## 5.0 Physical Anthropology

This chapter presents a brief Physical Anthropological assessment of the remains encountered was made by Jeannette S. Fridie, MA, Physical Anthropologist. Copies of her original notes can be found in Appendix C.

### Summary of Skeletal Analysis

To: Michael Audin, Archaeology Resource Services

Date: 21 September 2010

Re: Summary of Skeletal Analysis from 263 Mulberry Street, Old St. Patrick's Cathedral Cemetery (05 August 2010 -10 September 2010)

### BACKGROUND:

Skeletal remains were excavated from the cemetery of Old St. Patrick's Cathedral, located at 263 Mulberry Street in Manhattan, New York. The bodies were disinterred from the grave site in an effort to preserve the skeletal remains until the walls surrounding the cemetery could be restored. Assessment of the disinterred skeletal remains by the physical anthropologist took place between 05 August 2010 and 10 September 2010. The disinterred remains were reinterred by the lead archaeologist, Michael Audin.

### EXCAVATIONS:

Most of the skeletal remains were removed from trenches measuring approximately 4 x 6 x 6 feet. The soil was mostly damp, mixed with sand and stone, and interspersed with fibrous roots and other forms of vegetation. Most of the graves excavated were noted to be secondary burials (i.e., disturbed from the original burial position). Evidence for secondary burials include presence of butchered, non-human skeletal remains, randomly placed, disarticulated human skeletal remains (that is, not in anatomical position), and commingling (multiple skeletal elements from different individuals mixed together). The non-human items were separated from the human skeletal remains by the anthropologist.

### SKELETAL ANALYSIS:

The information is based on the gross, morphological assessment by the physical anthropologist.

#### *Condition of the Remains:*

The skeletal elements are in fair-to-poor condition. The bones show evidence of soil staining, cortical flaking, crushing, and warping. Approximately 85 to 90% of the skeletal remains show postmortem fragmentation. The taphonomic changes observed on the skeletal remains are consistent with bones that have been interred in damp, compact soil for a number of years.

### *Skeletal Inventory:*

Most of the bones recovered from the excavations include multiple fragmented long bones, ribs, vertebrae, bones of the hands and feet, and cranial fragments. Numerous teeth were also recovered. Most burials were incomplete. Both subadult (children) and adult human skeletal remains were recovered. The youngest individual was approximately six months old (+/-3 months). Age was determined by the development of the mandibular dentition (Excavation #1).

There were also multiple examples of older subadults ranging in age from one to seven years, based on long bone development and dentition. Adults ranged in age from middle to older adulthood (based on gross morphological changes observed on the skeletal elements, including pelvis and clavicles, degenerative changes observed on the articular surfaces of the long bones and vertebral bodies, and tooth development and wear. At least one ossified thyroid cartilage was present in the collection (Excavation 12, Burial 10). Ossified thyroid cartilage typically occurs in older individuals.

Males and females are represented in the collection. Sex was determined using gross morphological characteristics, including robust muscle markings, pronounced glabella, large mastoid processes, and square mandibles for males (Excavations #12, Burial 6, #17, Burial 12, #21, Burial 14, and #26, Burial 15) and gracile muscle attachment sites, flat glabella, small mastoid processes, and pointed mandibles for females (Excavation #12, Burial 10 and #21, Burial 13).

The cranium from Excavation #12, Burial 10 is nearly intact. The skull is the primary area used to determine race/ancestry. Based on the morphological characteristics, the individual was Caucasian (of European descent). Morphological characteristics in support of this assessment include receding zygomatics, dolicocephalic profile, sharp nasal sill, narrow nasal aperture, and narrow interorbital breadth.

### *Trauma Analysis:*

At least one instance of antemortem trauma was observed via a bony callus (healed fracture) on an adult right 2nd rib (Excavation #8). There is also a possible healed fracture of a 1st right metatarsal (Excavation #15).

### *Pathological Conditions:*

The dentition from Excavation #12 shows some evidence of dental hypoplasia, or arrested development of the dental enamel, resulting in bands of horizontal lines or grooves within the enamel. There was at least one example of os acromilae of the right scapula, a portion of the

acromion process of the scapula that failed to completely fuse. The tibiae for Excavation #26, Burial 15 show signs of tibial periostitis (inflammation of the periosteum) around the tibial shaft.

*General Observations:*

Two sets of dentition (Excavations #11 and #12, Burial 6) show evidence of moderate shoveling (pronounced ridge of enamel on the lingual surface of the central and lateral incisors). While some degree of shoveling can be found in all populations, the highest frequency of shoveling is found amongst Asians and Amerindians. Other maxillae and mandibles in the collection exhibit evidence of antemortem tooth loss (teeth lost during life) and alveolar resorption. No dental restoration (i.e., tooth fillings, etc.) was observed on any of the teeth present for analysis. The lingual and occlusal surfaces of the anterior dentition of Excavation #12, Burial 10 exhibit grooves that appear to be artifactual and may be the result of an occupational hazard. Additionally, Excavation #12, Burial 10 contains a mandible with torus mandibularis or extra bony growth on the posterior portion of the mandibular body.

Jeannette S. Fridle, MA  
Forensic Anthropologist

## 6.0 CONCLUSIONS

The archaeological monitoring resulted in the discovery of 21 intact burials, 5 of which were avoided and 16 that were partially excavated and removed for the project and then reburied during back filling. An additional 14 reburials were also recovered mostly within the builder's trench from the construction of the brick wall. These remains were also reburied during back filling of the pile cap excavations.

In general the churchyard is covered by a layer of topsoil approximately 1 to 2 feet deep followed by several different strata of natural soils. Several soil profiles were conducted during the hand excavation of the burials and can be found in Appendix B with the field forms.

Several trash deposits most likely associated with the church or the neighborhood were uncovered during the monitoring. Many headstones and fragments with writing on them were uncovered during the monitoring. A few coffin name plates were found during the monitoring, of these two were readable and from the Grim family. Neither of the names for these name plates was found on the burial plan provided. It is possible that the original burial plan was either lost or destroyed in the 1860's fire. It is possible that the current plan was written after the fire and that no documents showing burials outside the brick wall survived fire. The plan could have been written by simply going into the cemetery and writing down the names on the headstones and from memory. This would also account for burials that seem to be missing headstones; these headstones might have been buried prior to the fire and therefore, not included on the current burial plan. Regardless, the cemetery most likely extended beyond its current boundaries and there is a possibility that burials still exist under the side walk on the public side of the wall.

The headstones and some burials that continue under the wall demonstrate that the cemetery was in use since the early part of the 19<sup>th</sup>-century and that it most likely extended beyond the current stone wall at some point prior to the stone wall being constructed. The 1833 penny found near the beginning of the wall, by the Mott Street entrance to the cathedral, could have been intentionally placed to document the construction of the wall, as is sometimes done by the workers. This would make the wall no older than 1833, but not necessarily built in 1833. Some documentary sources place the construction of the brick wall c.1836 as a reaction to the anti-catholic feelings building in the area, but this has not yet been confirmed.

Since the vast majority of the artifacts were recovered without good provenience, an artifact analysis, beyond a statistical analysis, would most likely not provide much useful information to the overall patterns of history of the area. Artifact photographs can be seen in Appendix E.

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## **APPENDIX A**

### Resumes of Key People

**MICHAEL AUDIN, RPA**  
**Archaeologist / Cultural Resource Specialist**

**Field Crew Management**  
**Phase I, II and III Excavation**  
**Human Remains/Burial Excavation**  
**Site Preparation and Survey**  
**Historic Research**  
**Photographer**  
**Laboratory Analysis**  
**Field Illustration**  
**Report Writing and Editing**  
**Historic American Building Surveys**

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**EDUCATION**

Hunter College: M.A. Anthropology

William Paterson University: B.A. Anthropology  
Archaeological Field School: Lenape Meadows, Somerset  
County Parks Commission, New Jersey

**YEARS EXPERIENCE: 8**

**SUMMARY QUALIFICATIONS**

Mr. Audin is a Registered Professional Archaeologist (RPA) that has been reviewed by several State Historic Preservation Offices as a Principal Investigator and has over 8 years of professional experience in Cultural Resource Management. Responsibilities include coordination and implementation of archaeological and historical tasks associated with projects requiring cultural and historic assessments as part of permit and regulatory review. Office tasks include communication with State Historic Preservation Offices and other regulatory offices, budgeting, proposal writing, field testing strategy and planning, hiring of field technicians, report writing, GIS mapping, production and editing. Field tasks include all aspects of Phase I, II and III archaeological and historical investigations including field supervision, excavation, monitoring, site photographer, prehistoric and historic site assessments, site survey, field illustration, field documentation, planning, preliminary architectural evaluations and level III Historic American Building Surveys.

In addition Mr. Audin has 3 years of experience as a land surveyor and 10 years business management experience prior to coming to cultural resources.

**RELEVANT EXPERIENCE**

**NYS Route 440 Pole Relocation Project, Phase IB, Staten Island, New York**

Principal Investigator for prehistoric/historic site investigation for Department of Transportation NEPA documentation and Section 106 reviewed project. Conducted field testing, writing and preparation of report, edited and produced report for submission.

**EZ Automotive Services, Phase IA, Robbinsville, New Jersey**

Principal Investigator for prehistoric/historic site investigation for NJDEP. Conducted research, assessed prehistoric/historic archaeological potential, writing and preparation of report, edited and produced report for submission.

**Pennsauken Country Club Water Reuse Project, Phase I, Pennsauken, New Jersey**

Principal Investigator for prehistoric/historic site investigation for NJDEP Environmental Infrastructure Trust funding program. Conducted research, preparation of site, excavation of shovel test pits, laboratory analysis of artifacts, writing, preparation, editing and producing report for submission.

**NYS Route 440 Pole Relocation Project, Phase IA, Staten Island, New York**

Principal Investigator for prehistoric/historic site investigation for Department of Transportation NEPA documentation and Section 106 reviewed project. Conducted research, assessed prehistoric/historic archaeological potential, writing and preparation of report, edited and produced report for submission.

**World Trade Center, Phase III, Potential Human Remains Recovery, Staten Island, New York**

Field crew for recovery of potential human remains for the New York City Office of the Chief Medical Examiner. Conducted materials screening for human remains and artifacts relating to the 2001 attacks on the World Trade Center.

**SCCC, Phase IB Cultural Resource Investigation, Kearny, New Jersey**

Principal Investigator for historic investigations for NJDEP and USEPA Superfund site. Conducted additional research to prove the Jersey City Water Works was located outside of the project area and conducted backhoe trenching for historic drainage features related to the Hackensack Meadowlands, writing and preparation of report, edited and produced report for submission.

**Lanning Square Elementary School, Level III HABS, Camden, New Jersey**

Complier/Photographer for EO215 compliance for NJ Schools Development Authority. Conducted level III Historic American Building Survey (HABS) including photographic documentation of the Broadway Episcopal Methodist Church Parsonage to mitigate the proposed demolition of this building. The HABS was requested by the NJ HPO to satisfy the EO215 review.

**Access to Regional Core (ARC), 3-D Laser Scanning, New York, New York**

Field crew for documentation of historic and non-historic buildings for Section 106. Conducted 3-D laser scanning of all buildings in the project area. Collected field data of varying resolutions for buildings in project area, historic buildings were recorded at higher resolution.

**Jersey City Walkway and DMAVA Park, Phase IA, Jersey City, New Jersey**

Principal Investigator for prehistoric/historic site investigation for NJDEP and Section 106. Conducted research, assessed prehistoric/historic archaeological potential, monitored

geotechnical sub surface investigation for archaeological remains, writing and preparation of report, edited and produced report for submission.

**Route 33 Interchange Improvements, Phase I, Palmer Township, Pennsylvania**

Principal Investigator for prehistoric/historic site investigation for Pennsylvania Department of Transportation and Section 106 reviewed project. Conducted research, site excavation of shovel test pits, laboratory analysis of artifacts, writing and preparation of report, and editing report for submission.

**USDA, Health-Based Plant Genomics Facility, Phase IB, Cornell University, Ithaca, New York**

Co-Principal Investigator for prehistoric/historic site investigation as part of a Section 106 Assessment for the addition to the Plant Genomics Laboratory Building site. Conducted research, excavation of shovel test pits, laboratory analysis of artifacts, writing and preparation of report, edited and produced report for submission.

**SCCC, Phase IA Cultural Resource Investigation, Kearny, New Jersey**

Principal Investigator for prehistoric/historic site investigation for NJDEP and USEPA Superfund site. Conducted research, assessed prehistoric/historic archaeological potential, writing and preparation of report, edited and produced report for submission.

**GAC Adsorption Plant, Phase I, Pennsauken, New Jersey**

Principal Investigator for prehistoric/historic site investigation for NJDEP Environmental Infrastructure Trust funding program. Conducted research, preparation of site, excavation of shovel test pits, laboratory analysis of artifacts, writing and preparation of report, edited and produced report for submission.

**Penn Regional Business Center III, Phase I, Smithfield, Pennsylvania**

Principal Investigator for prehistoric/historic site investigation for Pennsylvania Funding Grant Application. Conducted research, preparation of site, excavation of shovel test pits, laboratory analysis of artifacts, writing and preparation of report, edited and produced report for submission.

**Montauk Theater, Level III HABS and Architectural Salvage Plan, Passaic, New Jersey**

Principal Investigator for EO215 compliance for NJ Schools Development Authority. Conducted level III Historic American Building Survey (HABS) including photographic documentation and an architectural Salvage Plan of the Montauk Theater to mitigate the proposed demolition of this building. The HABS and Salvage Plan were requested by the NJ HPO to satisfy the EO215 review.

**Former Koppers Superfund Site, Additional Phase IB, Newport, Delaware**

Crew chief and OSHA Site Safety Officer for prehistoric/historic site investigation for EPA compliance for superfund site during three month phase IB auger testing conducted by 13 archaeologists. Teamed with John Milner and Associates. Work included over 1,700 phase IB augers in a tidal marsh. Additional work included field tech training, and safety oversight.

### **Dredge Stockpile Site, Phase I, Harmony, New Jersey**

Field director, research coordinator, lab director and photographer for prehistoric/historic site investigation for Section 106 review of stockpile site for dredge materials from FEMA. Field duties include preparation of site, excavation of 32 shovel test pits and site survey. Post field work included laboratory analysis of artifacts, writing of sections of report and prepared, edited and produced report for submission.

### **Lowes, Phase I, Mansfield, Pennsylvania**

Field director, research coordinator, lab director and photographer for prehistoric site investigation for review for big box retail store. Field duties include site preparation, excavation 60 shovel test pits of site and survey. Post field work included laboratory analysis of artifacts, writing of sections of report and prepared, edited and produced report for submission.

### **Former Jacobs Aircraft Engine Factory, HABS, Lower Pottsgrove, Pennsylvania**

Principal Investigator/photographer for NPDES permit compliance. Conducted low level Historic American Building Survey (HABS) including photographic documenting of the former Jacobs Aircraft Engine Factory and Administrative Building to mitigate the proposed demolition of these buildings. The photographic documentation was requested by PHMC to satisfy the NPDES permit review.

### **Queensboro Plaza, Phase I, Long Island City, New York**

Field director, research coordinator, lab director and photographer for historic site investigation for cultural resources section 106 for a NEPA assessment and LPC review for bike path in the Queensboro Plaza. Includes an archaeological assessment, field testing and architectural evaluation of the current property. Field work included site preparation, the excavation of a two meter by two meter test pit and site survey. Post field work included laboratory analysis of artifacts, writing of sections of report and prepared, edited and produced report for submission.

### **Lowes, Phase IB, Montgomery, New York**

Field director, research coordinator, lab director and photographer for prehistoric/historic site investigation for SEQRA review for retail store. Field work included the preparation of site, excavation of 60 shovel test pits and site survey. Post field work included laboratory analysis of artifacts, writing of sections of report, prepared, edited and produced report for submission.

### **Green Brook Trail, Application for Project Authorization/Preliminary Assessment, Plainfield, Green Brook, and North Plainfield, New Jersey**

Principal Investigator for New Jersey Historic Preservation Act and Freshwater Wetland Permit compliance. Completed and submitted an Application for Project Authorization for Green Brook Park and Washington Park Historic District for a multi-use recreational trail. Additionally, completed a preliminary archaeological assessment for the proposed seven-mile trail, including research, analysis, and report writing.

### **Public School #3, Archaeological Monitoring, West New York, New Jersey**

Archaeological Monitor/researcher for NJ Executive Order 215 Compliance for 1 day of archaeological monitoring for human remains and research on school site that found headstone during excavation. Post field activities included report writing for submission to state.

**Former Koppers Superfund Site, Phase IB and II, Newport, Delaware**

Crew chief and OSHA Site Safety Officer for EPA compliance for superfund site during six month phase IB and II field excavations conducted by 20 archaeologists, teamed with John Milner and Associates. Work included setting of testing grid and field testing of over 3000 phase IB auguring and STP units and over 180 phase II units. Additional work included lab work, field tech training, and safety oversight.

**Bronx River Park, Phase IA, Bronx, New York**

Research coordinator, researcher and report production for New York City Landmarks Preservation Commission Compliance. Assessed park land for prehistoric and historic archaeological potential.

**USDA, Health-Based Plant Genomics Facility, Cornell University, Ithaca, NY.**

Research coordinator, researcher and report production for archaeological resources Section 106 Assessment as part of a NEPA Screening on the Plant Genomics Laboratory Building site.

**Weeksville Village, Phase IB testing, Brooklyn, New York**

Archaeological Monitor for SEQRA review for village cultural center. Performed 1 day of field duties, with Joan Geismar. Work included monitoring of back hoe trenching for foundations and artifact deposits associated with the Huntely Houses.

**Edgewater Colony, Phase II, Edgewater, New Jersey**

Field director and lab director for or EIT storm water improvements loan consisting of the preparation of a Phase II prehistoric/historic site investigation. Included the direction of two field technicians excavating a total of 8 standard test units, photographer and the coordination of lab work. Other post-field responsibilities include writing sections, preparation and production of the final report for submittal to New Jersey DEP Municipal Finance and Technical Services.

**Portion of the Northeast Business Park, Phase IA, Washington Township, New Jersey**

Research coordinator, researcher, and report production for New Jersey Wetlands Permit. Assessed site for prehistoric and historic archaeological sensitivity.

**Creighton Farm Bridge Crossing, Phase I, Willistown, Pennsylvania**

Field director, research coordinator, lab director, photographer and report preparation for Army Corps of Engineers Permit. Post field work included laboratory analysis of artifacts, assisting with the writing, prepared, edited and produced report.

**Camp Laughing Water, Phase I, New Hanover and Upper Fredrick, Pennsylvania**

Field director, research coordinator, lab director, photographer and report preparation for Army Corps of Engineers Permit. Post field work included laboratory analysis of artifacts, assisting with the writing, prepared, edited and produced report.

**Camp Hidden Falls, Phase I, Delaware and Lehman Townships, Pennsylvania**

Field director, research coordinator, lab director, photographer and report preparation for Army Corps of Engineers Permit. Post field work included laboratory analysis of artifacts, assisting with the writing, prepared, edited and produced report.

**Select Sires, Phase I, Eaton, Pennsylvania**

Field director, research coordinator, lab director, photographer and report preparation for Pennsylvania section 105 Permit. Post field work included laboratory analysis of artifacts, assisting with the writing, prepared, edited and produced report.

**Tournament World, Phase IB, Montgomery, New York**

Field director, research coordinator, lab director, and photographer for SEQRA review. Field assessment for prehistoric and historic archaeological sites. Post-field work included laboratory analysis of artifacts, assisting with the writing, prepared, edited and produced report.

**Former Old First Presbyterian Church Cemetery, Phase III Data Recovery, Newark, New Jersey**

Project Manager/Field Director

Responsibilities included:

- Over sight of all field activities for 2.2 acre cemetery excavation
- Preparation and implementation of a comprehensive field plan for the locating human remains and associated artifacts
- Hiring and managing a field staff of 35
- Directing and coordinating sub contractor with field staff of 30
- Directing and coordinating 4 backhoes on site to move overburden and back fill site
- Over sight of cataloging all burials and artifacts
- Laboratory analysis of artifacts
- Writing, coordinating and editing of final report

**Circulations Improvement Project, Phase IA and IB, Newark, New Jersey**

Field director, research coordinator, photographer and lab director for NJ Executive Order 215 Compliance. Phase I background investigation and Phase IB field testing. Work included coordinating conducting research, conducting photographic pedestrian survey site, and conducting field testing. Post field work included laboratory analysis of artifacts and preparation of the final reports. Report preparation included writing sections of the report, preparation and production of final report for submittal.

**Edgewater Colony, Phase IB, Edgewater, New Jersey**

Field director, research coordinator, and photographer for Environmental Infrastructure Trust Financing Program (EIT). Preparation of a Phase IB prehistoric/historic site investigation. Included the direction of three field technicians digging a total of 139 standard test pits, project coordination with the principal investigator, photographer and the coordination of lab work. Other post-field responsibilities include assisting with the writing, preparation and production of the final report.

**Former Central Railroad Terminal, Archaeological Monitoring, Newark, New Jersey**

Crew Chief/Project Coordinator Application for project authorization compliance of 6 week archaeological monitoring during demolition of former railroad terminal for SHPO resolution on application for project authorization. Monitor for human remains associated with the Old First Presbyterian Church cemetery, identifying, excavating, cataloging and turn over to mortician for reburial. Post field work included lab analysis of artifacts.

**Regional Biocontainment Laboratory – Newark Center, University of Medicine and Dentistry of New Jersey, Newark, New Jersey** – Researcher and report writer for cultural resources section of Environmental Assessment in accordance with the requirements of NEPA for the construction of a new Regional Biocontainment Laboratory under a grant from the National Institutes of Health.

**USDA, Health-Based Plant Genomics Facility, Phase IA, Cornell University, Ithaca, New York**

Researcher and site inspector for cultural resources section of a Section 106 Assessment as part of a NEPA Screening on the Plant Genomics Laboratory Building site. Includes an archaeological assessment and architectural evaluation of the current facility and property.

**Newark Downtown Core Redevelopment and Circulations Improvement Plan, Newark, New Jersey**

Responsibilities included:

- Preparing a multi-phased strategy for investigating, testing and mitigating the project area
- Conducting preliminary research regarding various aspects of the project area, including possible intact remains within the former First Presbyterian Church cemetery
- Supervising research
- Conducting field photo reconnaissance and preliminary visual assessment of all properties potentially eligible for listing on the State and National Register of Historic Places that may be impacted by the proposed project
- Contributing to the Application for Project Authorization regarding the proposed demolition of five historic structures located within the Four Corners Historic District

**NJSCC School Development Program, New Jersey**

Crew Chief, researcher, photographer and report writing and production for NJ Executive Order 215 Compliance and NJSCC Guidelines. Participated in the development and redevelopment of 20 new and existing school sites located throughout New Jersey. Responsibilities included:

- Conducting and overseeing background research at the New Jersey Historic Preservation Office, the New Jersey State Museum and local archives
- Conducting field photo reconnaissance and preliminary visual assessment of all properties potentially eligible for listing on the State and National Register of Historic Places that may be impacted by the proposed project
- Preparation and assistance in writing of the Cultural and Historical Resource Assessment section of Environmental Assessment and Environmental Impact Statement Reports and Phase IA background investigations
- Overseeing report production and preparing maps and figures

- Producing for internal departments/clients memos, letters and other documentation outlining potential issues and possible recommendations.

#### **Pen Del Development, Phase IB and II, Pemberton, New Jersey**

Field/Laboratory Technician of a Phase I & II prehistoric site investigation/excavation. Field responsibilities also included photographer and mapping excavation locations using GPS equipment. Laboratory Technician responsibilities included; cleaning, cataloging and photographing all artifacts. Other post-field responsibilities included assisting with the preparation and production of the final cultural resource report for submittal to New Jersey HPO.

#### **Field School, Lenape Meadows, Phase II, Basking Ridge, New Jersey**

Field and Laboratory Technician for phase II prehistoric excavation. Field work included daily preparation of site, field excavations, documentation of artifact finds, field crew management and the closing up the site for the winter. Laboratory work included cleaning, identifying, cataloging and photographic documentation of all artifacts.

#### **Lithics Identification Project, William Paterson University, New Jersey**

Volunteer. Conducted laboratory analysis, identification and cataloging, of over 5,000 stone fragments from the Wallkill River basin in Northern New Jersey, submitted to Dr. Janet Pollak. Research included identifying and cataloging human produced stone flakes and tools vs. naturally altered stone.

#### **SELECTED PUBLICATIONS**

*Phase IA Cultural Resource Survey, Standard Chlorine Chemical Company Site, Interim Response Action Workplan, Town of Kearny, Hudson County, New Jersey.* Michael Audin, RPA, Principal Investigator, 2009. MS on file at NJSHPO, Trenton, NJ.

*Phase I Cultural Resource Investigation GAC Adsorption Plant, Pennsauken, Camden County, New Jersey.* Michael Audin, RPA, Principal Investigator, 2009. MS on file at NJSHPO, Trenton, NJ.

*Historic American Building Survey for the Montauk Theater, Passaic, Passaic County, New Jersey.* Michael Audin, RPA, Principal Investigator, 2009. Submitted to the NJ HPO, Trenton, NJ.

*Phase I Archaeological Investigation Montgomery Towne Square, Montgomery, Orange County, New York.* Ludomir Lozny Principal Investigator, Michael Audin, and Sarah Hlubik, 2007. MS on file at OPRHP, Pebbles Island, NY.

*Phase II Archaeological Investigation of the Edgewater Colony, Edgewater, Bergen County, New Jersey.* Ludomir Lozny PI, Michael Audin, and Sarah Hlubik, 2007. MS on file at NJSHPO, Trenton, NJ.

*Phase IA Archaeological Investigation Bronx River Park, Bronx, Bronx County, New York.* Ludomir Lozny PI, Michael Audin, and Sarah Hlubik, 2007. MS on file NYC LPC, New York, NY.

*Phase I Archaeological Survey Camp Hidden Falls, Lehman Township, Pike County, Pennsylvania.* Ludomir Lozny PI, Michael Audin, and Erol Kavountzis, 2006. Ms on file at PHMC, Harrisburg, Pa.

*Phase I Archaeological Investigation Eaton, Wyoming County, Pennsylvania.* Ludomir Lozny PI, Michael Audin, and Erol Kavountzis, 2006. Ms on file at PHMC, Harrisburg, Pa.

*Phase III Cemetery Excavation, Old First Presbyterian Church, Newark Downtown Core Redevelopment, Newark, Essex County, New Jersey.* Michael Audin, Erol Kavountzis, and Sarah Hlubik, 2005. Manuscript on file at NJSHPO, Trenton NJ.

## **SUMMARY OF PROFESSIONAL ACTIVITIES**

Mr. Audin is the author or co-author of over forty (40) cultural resource reports in New Jersey, New York and Pennsylvania.

## **PROFESSIONAL DEVELOPMENT**

Historic Preservation Research Course, Drew University, February 2005  
OSHA 40 Hour Certified HAZWOPER Training (December, 2005) and refreshers  
OSHA Site Supervisor Certified (June, 2007) and refreshers  
NJSHPO Cultural Resources Best Practices Workshop, October 2006  
Introduction to ArcGIS I, November 2006  
Preservation Planning in the Highlands, Drew University, March 2007  
Section 106 Essentials Class with ACHP, July 2007  
Pennsylvania Department of Transportation, Cultural Resource Handbook Class, April 2010

## **PROFESSIONAL AFFILIATIONS**

Archaeological Society of New Jersey  
Council for Northeast Historical Archaeology  
Lambda Alpha National Collegiate Honors Society for Anthropology  
Middle Atlantic Archaeological Conference  
National Trust for Historic Preservation  
New York State Archaeological Association (Lifetime Member)  
Register of Professional Archaeologists  
Society of American Archaeology  
Society for Historical Archaeology  
Society for Industrial Archaeology  
The Society for Pennsylvania Archaeology

***Jeannette S. Fridie***

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E-mail: [jfridie@ocme.nyc.gov](mailto:jfridie@ocme.nyc.gov)

**EDUCATION**

- 2007        **New York University**, New York, NY  
M.A. in Physical Anthropology, Human Skeletal Biology Track  
Thesis: *A Retrospective Study in Human Dismemberment in New York City from 1990-2006*
- 2004        **Hunter College, City University of New York**, New York, NY  
B.A. in Anthropology, Minor in Archaeology

**AWARDS AND GRANTS**

- 2009        *Microscopic Analysis of Sharp Force Trauma in Bone and Cartilage* (Award #2009-DN-BX-K238) –National Institute of Justice (\$45,078 US) (Recipients also include Dr. Christian Crowder and Christopher Rainwater, Office of Chief Medical Examiner). *Study currently in progress.*
- 2005-2006    *Departmental Fellowship*-New York University (\$8,000 US)

**PROFESSIONAL EXPERIENCE**

2007- Present Office of Chief Medical Examiner (OCME) - New York, NY  
*Forensic Anthropologist / Criminalist II*

*Forensic Anthropologist:* Morgue and scene coverage for all five boroughs of New York City. Responsibilities include anthropological analysis on skeletal remains to assess trauma and pathology, to determine the biological profile of unidentified decedents (including age, sex, race, stature, etc.), to determine human vs. non-human. Participate in training exercises for disaster response as a member of the OCME Special Operations Team. Other major duties include:

- Maintain quality control of all anthropology reports and case records.
- Respond to crime scenes and participate in forensic excavations of skeletal remains.

*Jeannette S. Fridie – Curriculum Vitae*

- Give presentations to medical examiners, residents, medicolegal investigators, and NYPD detectives.
- Certified as a Hazardous Materials (HAZMAT) Technician.

Lead Forensic Anthropologist for World Trade Center Operations, Phase III (March 2010-Present). Supervise over 30 anthropologists and archaeologists for Phase III of the World Trade Center sifting operations, located at the Fresh Kills Landfill on Staten Island. Responsibilities include collecting and analyzing all bone fragments and personal effects recovered during the sifting operations, and supervising all Criminalists hired to work on the Phase III sifting project.

Lead Forensic Anthropologist for World Trade Center Operations, Phase II (January 2007-November 2007). Supervised nearly 100 anthropologists and archaeologists for Phase II of World Trade Center sifting operations, located in the DUMBO area of Brooklyn. Responsibilities include collecting and analyzing all bone fragments and personal effects recovered during the sifting operations, and supervising contract forensic technicians hired to work on the Phase II sifting project.

2005-2007 *Anthropologist / Criminalist I (OCME)*

*Forensic Anthropologist:* Performed gross and metric anthropological analyses on skeletal remains within the Forensic Anthropology Unit.

- Conducted forensic analyses on human skeletal remains.
- Responded to crime scenes and assisted with forensic excavations of human skeletal remains.

*Forensic Biologist:* As a member of the Missing Persons Identification Unit, performed forensic testing on exemplars submitted for DNA analysis for the OCME Forensic Biology Department.

- Examined and performed forensic tests on exemplars, including but not limited to human tissues, of Missing and Unidentified individuals for DNA analysis.

2003-2005 *Laboratory Associate II / Mortuary Assistant (OCME)*

Assisted with the analysis and preservation of human remains from the World Trade Center (WTC) Disaster. Assisted the OCME DNA Identification Unit on data entry using M-FIsys and Genotyper databases. Assisted with quality control management of WTC case files.

2010 *Archaeology Resource Services, LLC - New York, NY*

*Physical Anthropologist*

Examined skeletal remains from St. Patrick's Old Cathedral cemetery that were briefly disinterred during the conservation of a historic wall that crossed grave shafts

*Jeannette S. Fridie – Curriculum Vitae*

- 2008 Landmark Archaeology, Inc. - Newburgh, NY  
*Physical Anthropologist/Archaeologist*  
Excavated a 19<sup>th</sup> century, African-American cemetery located in Orange County. Located individual burials and exhumed human skeletal remains as part of a salvage project prompted by the construction of a Newburgh Courthouse within the boundaries of the burial ground
- 2006 Kenyon International Worldwide Disaster Management Specialists - Phuket Island, Thailand  
*Mortuary Technician*  
Assisted with the preservation human remains from the Asian Tsunami of 2005. Assisted with packaging of tissue samples taken from the decedents of the tsunami for DNA analysis. Assisted with providing multiple forensic teams with mortuary and laboratory supplies.
- 2002-2003 Kenyon International Worldwide Management Specialists - New York, NY  
*Anthropology Scribe / Mortuary Assistant*  
Assisted forensic anthropologists with the analysis of human remains from the World Trade Center (WTC). Assisted forensic biologists with the collection of human tissue samples for DNA analysis. Managed approximately 20,000 human remains from WTC. Released identified remains to funeral directors.
- 2001-2002 Brooklyn College, City University of New York - New York, NY  
*Archaeology Field Technician / Laboratory Assistant*  
Excavated the perimeter of an 18<sup>th</sup> century Dutch-American cemetery in Gravesend, Brooklyn. Responsible for cataloguing hundreds of artifacts, including bone fragments, from multiple excavations.

**ADDITIONAL EXPERIENCE**

- 2004 Skirball Institute of Biomolecular Medicine-Transgenic Mouse Laboratory at New York University School of Medicine - New York, NY  
*Laboratory Assistant*  
Administered injections containing *pregnant mare's serum (PMS)* and *Human Chorionic Gonadotropin (HCG)* to *Specific Pathogen-Free (SPF)* female mice for cellular genetics research.

## **WORKSHOPS AND LECTURES**

2009-2010 *Forensic Sciences Training Program for Medicolegal Death Investigators* (Forensic anthropology component). Develop and teach exercises in anthropological laboratory analysis and archaeological field recovery techniques. Grant funded by the National Institute of Justice. Office of Chief Medical Examiner - New York, NY (8 hours of a 40-hour course). November 2009, June 2010, and August 2010.

July 2010 *Introduction to Forensic Anthropology for NYPD Crime Scene Unit*. Introduction to basic forensic anthropological techniques. Office of Chief Medical Examiner - New York, NY (8 hours).

June 2010 *Introduction to Forensic Anthropology for FDNY Fire Marshals*. Introduction to basic forensic anthropological techniques. Office of Chief Medical Examiner -New York, NY (1.5 hours).

## **TEACHING EXPERIENCE**

2010 Instructor, Summer Scholars Institute, Forensic Sciences section. *Introduction to Forensic Anthropology* (advanced high school seniors, paid position). Summer course. Pace University - New York, NY (40 hours)

2006 Teaching Assistant, *Human Osteology* (graduate course, unpaid position). Spring semester. Hunter College, City University of New York - New York, NY.

2005 Teaching Assistant, *Human Osteology* (graduate course, unpaid position). Fall semester. Hunter College, City University of New York - New York, NY.

## **ADDITIONAL TRAINING**

2009 *Hazardous Materials Refresher*, New York, NY. New York City Office of Chief Medical Examiner.

2009 *The Department of Homeland Security Weapons of Mass Destruction (WMD) Radiological/Nuclear Awareness Course to Train-The-Trainer*, New York, NY. Course provided by National Security Technologies<sup>LLC</sup> (8 hrs).

2008 *Advanced Mold Making, Hands-On Mold Making Workshop*, New York, NY. Course provided by the Compleat Sculptor, Inc.

2008 *Introduction to Mold Making, Resin Rubber Overview*, New York, NY. Course provided by the Compleat Sculptor, Inc.

*Jeannette S. Fridie – Curriculum Vitae*

- 2008      *Introduction to Bloodstain Pattern Analysis*, New York, NY. Course provided by the Office of Chief Medical Examiner, the City of New York.
- 2008      *Advanced Forensic Investigations for Hazardous Environments*, New York, NY. Course provided by the National Center for Biomedical Research and Training, Academy of Counter-Terrorist Education (40 hrs).
- 2008      *The Department of Homeland Security Weapons of Mass Destruction WMD Radiological/Nuclear Responder Operations*. Course provided by the National Security Technologies <sup>LLC</sup> (2.6 hrs).
- 2008      *WMD Radiological/Nuclear Awareness*, New York, NY. Course provided by the New Mexico Institute of Mining and Technology (4 hrs).
- 2007      *International Field School for Mortuary Archaeology*, Giecz, Poland. Excavation of a multiple human skeletons from a medieval cemetery. Course provided by the Slavia Foundation for Polish History and Culture.
- 2007      *Hazardous Materials Refresher Training*, New York, NY. Course provided by the Office of Chief Medical Examiner, the City of New York.
- 2007      *Asbestos Awareness*, Brooklyn, NY. Course provided by the Environmental Protection Agency.
- 2005      *Hazardous Materials Technician (Certification)*, Brooklyn, NY. Course provided by the New York City Police Emergency Service Unit (40 hrs).
- 2006      *Emergency Response to Hazardous Material Incidents*, Brooklyn, NY. Course provided by the New York City Police Emergency Service Unit (3.6 hours).
- 2005      *Bone Trauma and Pseudo-Trauma in Suspected Violent Deaths*, Erie, PA. Course provided by Mercyhurst College, Department of Applied Forensic Sciences.
- 2002      Historic Archaeology Field School, Brooklyn, NY. Excavation of the historic, 18<sup>th</sup> century, Hendrick I. Lott Homestead. Course provided by the Department of Archaeology and Anthropology at Brooklyn College, City University of New York.

**SELECTED INVITED PRESENTATIONS AND POSTERS**

- 2010      Rainwater, CW and CM Crowder, and JS Fridie. *Microscopic analysis of sharp force trauma from knives: Preliminary results of a validation study*. Poster presented at the National Institute of Justice Impression and Pattern Evidence Symposium. Clearwater Beach, FL. (August 02-05)

*Jeannette S. Fridie – Curriculum Vitae*

- 2010        *Introduction to Forensic Anthropology*, Guest lecturer for the Department of Anthropology at Hunter College, City University of New York. New York, NY. (May 03)
- 2009        *What is a Forensic Anthropologist?* Guest presenter during career day at Public School 1. New York, NY. (April 08)
- 2008        *A Retrospective Study on Dismemberment in New York City, 1990-2006.* Guest presenter for the Department of Anthropology at New York University. New York, NY. (February 26)
- 2006        *Emergency Response: The Role of Forensic Science in the Aftermath of the Asian Tsunami.* Guest presenter at the Young Forensic Scientists Forum at the American Academy of Forensic Sciences. Seattle, WA. (February 21)

**PROFESSIONAL ORGANIZATIONS**

- 2002-Present American Academy of Forensic Sciences, Physical Anthropology Section,  
Membership Level: Associate Member 2008-  
2010 Society of American Archaeologists 2008-Present  
Society of Forensic Anthropologists (SOFA)

## **APPENDIX B**

### Field Monitoring Forms



# Monitoring: Daily Log

Forms: Old St. Patrick's Cath. Cem. over 7

Date: 8/2/10

Name (Filling out log): Michael Audin

Weather Conditions: Partly cloudy warm 85° humid

Personnel in Field: M.A.

Description:

8: Review w/ soil sub (Scottie Forman) → excavation prog.

8:30 Start excavation #1 pile #1+2

9:00 Find head stone 10" deep remove + continue to excavate (INS. Elce Lucina 1806)

9:20 Find more H/S fragments possible human bone and det. animal bone by old

9:30 Move to 2nd excavation site pile #5+6

10:00 Find 2 H/S markers (M.N. + C.F.) 20" below surface + fragments

10:30 Break - I check out excavation 1 find other cut animal bone (no human)

10:50 Finish Break

11:10 Finish excavation 2 to size of depth (generally 2+ ft of fill) over natural strata

11:15 Go back to excavation 1 to finish

11:30 Find more animal bone + PHR stop Exca #1 and go to Exca #3 pile 9-10

11:35 Find marker (B.L.) at 4" below surface w/ fragments above.

11:00pm Finish excavation #3 at pile #9+10

1:11pm Take lunch - I recover possible human remains in Exca. #1

1:43 Finish lunch - start excavation #4 pile #13+14 Find H/S frag.

2:30 Find 1 piece of PHR in south side wall (just exposed not taken out of wall) 5' from S. wall 3.5' B/L on south side of trench. go back to exca. #1

2:50 Ex 1 Additional animal bones? Found next to the B. wall at 2' deep. in center of excavation, on wall. move to Exca. 4 place plywood along south trench wall to protect remains in place and finish Exca. #4 south side

Photos?: Yes  No

306 Start Excav. 5 pits # 19+20. Find h/s fragments

315 Find animal bone at 3' b/s against wall

418 Finish excavation # 5 (no more remains) for day. ~~done~~

418 Clean up for day & turn over remains to church.



# Monitoring: Daily Log

Forms:

Date: 8/3

Name (Filling out log): Michael Audin

Weather Conditions: 88 cloudy humid

Personnel in Field: MA

**Description:**

- 7:30 ~~Arrive~~ Arrive on site, get equipment.
- 7:40 Excavate last set of bones in EXCV. #1 pile #1+2
- 8:00 Excavators ~~start~~ Finish clearing out EXCV. #5 after, I Finish w/ animal bone in EXCV. #1 (pile 19)
- 8:12 GO Back to EXCV. #1 w/machine to try + finish.
- 8:40 Find stone perp. to brick wall at approx. 4' B/S 1.5 ft. B. Wall
- 9:11-13 ~~Former~~ Stops Excav. to build ramp on stock pile.
- 9:35 Find ~~possible~~ PHR at approx. 4' B/S in side stones perp. to wall stop excav. 1 and move to excav 6
- 9:45 make ramp deal w/ stalled machine
- 10:18 - ~~Break~~ Break + Fill machine w/fuel so back to
- 10:48 - Finish excav. #4 north side
- 11:20 - start excavation #6 pile #23 + 24 Find H/S Fragments
- 11:58 - Find some animal bone in fill layer, clay pipe fragment + smaller horse shoe (rusty)
- 12:50 - Finish excav. #6 + take lunch (see possible PHR in E. end wall) (check out PHR during lunch, not bone)
- 1:40 - Return from lunch. Start Excav. #7 pile # 27 + 28
- 2:00 - Find H/S Frog + animal bone against B. wall in excav. #7 @ 2'
- 2:20 - Find PHR in SE corner + <sup>try to</sup> remove but breaks upon touch. (Burial #1)
- 2:30 - call excavation for now + move on to #8 piles 31 + 32 Find H/S Frog.

Photos?: Yes \_\_\_ No \_\_\_

cover w/tarp

Find H/S Frog.

4:00 ... for car + turn over ...



## Monitoring: Daily Log

<b>Forms:</b>	
<b>Date:</b>	8/4/10
<b>Name (Filling out log):</b>	Michael Audin
<b>Weather Conditions:</b>	90° overcast humid
<b>Personnel in Field:</b>	MA
<b>Description:</b>	
7:30 arrive on site call Chris Platz to get equipment.	
8:00 get equip + move to work area. Cont. Excav. #8	
8:30 Find Human bone in NE corner of Excav. #8. (Burial #2)	
(will screen back piles), find skull, teeth + some animal bone. (Bag #6), stop excav. #8 until Arch. Ass. can hand excavate cover w/ tarp.	
9:00 move to Excav. #9 pile 35/36 start excavating with machine. Find #15 fragments	
10:00 meeting (stop excavation)	
10:20 finished meeting + return to site	
11:46 Go to Excav. #9 Find animal bone + (possible human bone) remains by B. wall at bot. of excav. possible Reburial (RB?)	
11:48 Start Excav. #10 pile 39/40 Find #14 fragments bone 4' b/s (most likely animal bone Bag #8, but could be human bone) close to the wall	
1:00 Break for lunch to 1:00	
1:54 Return from lunch continue excav. #10 pile 39/40	
2:05 Find det. human bone (Femur?) screen wheel barrow and remove more bone Bag #8 5' down 4' from wall. (stop excavation cover w/ tarp for later investigation) RB 3+4	
2:30 Move to Excav. #11 pile 43/44 Find #15 fragments	
3:20 Find Bone in Excav. #11 Bag #9 PHR also find name plate at 45" b/s + 3-4"	
Photos?: Yes <input checked="" type="checkbox"/> No <input type="checkbox"/> From wall. Francis E. Grim? (Burial #3)	

3:45 cover remains w/ tarp + soil call work for the day.

4:00 leave site + turn over remains to church.



# Monitoring: Daily Log

Forms:
Date: 8/5
Name (Filling out log): Michael Audin
Weather Conditions: 92° humid
Personnel in Field: MA, Jeanette, Chris, Scottie, Jose, Pablo, Hector, Tony
Description: <p>7:45 meet Jeanette + go over site + procedures w/ her</p> <p>8:180 start Excav. #12 take to 1" B/S and find 1/5 Frag          &amp; large pieces of conc. that machine cannot move.</p> <p>8:45 Call Excav. for now + move on to Excav. #13. pile 53/54          1st move rebar out of way</p> <p>9:05 Start Excavating #13 Find large # of headstone frags.</p> <p>9:30 Find cut animal bone, pipe bowl (clay) + RL spike.          also find 2 tibia (animal). Bag # 10. A refuse pit in NW corner          (contains ash, coal, slag)</p> <p>10:20-10:45 Take Break</p> <p>10:45 go back to Excavation #13. Jeanette is almost finished w/          Excavation #7<sup>(burial?)</sup> and will then move to #6. Jeanette find          co-angled human remains under the animal bones. RB-6+7</p> <p>11:20 Find adult Humerous at wall found approx 3' b/s w/a          subadult skull 3-4" below the Humerous, in Excav. #13 RB-8</p> <p>11:35 <del>stop</del> excavation #13 and move to Excav. #14 pile 57/58          I assist Jeanette w/ her work while laborers clear area for          Excav. #14 to begin.</p> <p>12:15 Start Excav. #14 Find an animal bone Bag #11 in a          refuse pot in Eastern side of Excavation, also note brick          structure in north trench wall (brick          see profile)</p> <p>1:05-1:45 Break for lunch</p> <p>Photos?: Yes ___ No ___</p>

1:45 Continue w/ Excavation #14

2:00 Amanda S. Fran LPC visits site. (Cor. of Excav. collapses and I. Fall on hole. sprain left ankle & scrape right shin)

2:50 Find PWR on Excav. #14 screen back dirt & confirm it is human w/ Seacette. Possible incisions found (Burial #4)

3:45 Screen dirt for Seacette, cover w/ tarp for later investigation

3:50 Seacette & I look for human remains in all bags collected, so far.

4:20 Clean up & Leave site & turn over remains to church



## Monitoring: Daily Log

Forms:

Date: 8/6/10

Name (Filling out log): Michael Austin

Weather Conditions: 86 mostly clear less humid

Personnel in Field: MJ, Jeanette, Scottie, Pablo, Jose, Hector

### Description:

- 7:20 Arrive on site unboxed new ladder + meet Jeanette on site. I set equipment. Jeanette starts on Excav. #6 and I go to Excav. #7.
- 8:20 Find more human bone in Excav. #7 and screen wheel barrow.
- 8:40 Back to Excavation. Found some random human bone.
- 9:40-10:10 Break
- 10:15 - Excav. #7 Find human skull (hit by machine) remove fragments from wheel barrow. additional frag. in SE corner of trench going into trench wall 64" down 2' from wall.
- 11:30 Jeanette finishes Excav. #6 and moves to #8. Chris asks us to hold off on #8 and Jeanette moves to #10.
- 11:45 I follow the skull in the SE corner of Excav. #7 and remove rest of skull + mandible as well as other bones. Find possible 2nd mandible. I go in 8' and then stop + cover w/ dirt. 18" from wall 60" down. (remainder of Reburial 2)

Photos?: Yes  No

2:00 Finish recovering RB-7 and start to hand excav.  
trench down next 6" to determine if any other  
PHR are present.

2:30 Screen all material loosened by hand excavation.

3:00 Finish screening.

3:30 Scottie + crew leave

4:10 We clean up + leave + turn over remains to church

8  
8



2:50 Find additional <sup>human remains</sup> @ approx 5' D/S in  
Excav #11. <sup>(Burial #5)</sup> Have Elaine recover bone + 1 more to  
Excav #13 to machine.

3:00 Start #13 again with machine.

3:45 Finish #13 Excavators clean up + leave. Scott goes  
to Excavation #8 and exposes + disinters the burial. Elaine +  
1 screen material from ~~both~~ Excav #11 and #13. Elaine needs a little  
more time on #11.

4:45 Elaine + 1 screen material from Excav #8 then clean up.

5:00 Leave for day + turn over remains to church. (radio)



## Monitoring: Daily Log

Forms:	
Date:	8/10/10
Name (Filling out log):	Michael Audin
Weather Conditions:	95° hot humid <sup>VERY ICKY</sup> chance of Thund. Showers
Personnel in Field:	MA, EP
Description:	
7:10	Arrive on site and drop off additional screen + buckets. then park car.
7:30	Elaine will start in Excav. #11 <sup>(Burial #5)</sup> and I will start in Excavation #14, both using only hand shovels to excavate
9:30	Elaine finishes Excav. #11 and I find outline + orientation of <sup>Burial</sup> (#4) in Excav. #14 5' from wall and 5'6" deep. Bucket of machine just catches part of skull, some vert. and ribs. screen wheel barrow. soil for remains
9:45-10	Break
10:00	Elaine takes over Excav. #14 and I continue to machine Excav. #11, Find additional SKULL in Excav. #11 a 5'5" deep 24" from brick <sup>(Burial #5)</sup>
12:50-	Lunch
1:00-	Follow bone in E + W walls, <sup>West</sup> <del>East</del> wall has a <sup>top of femur</sup> <del>humerus</del> and in East 2 ribs + fibulas <sup>(Burial #5)</sup>
3:00	Finish Excav. #14 and then machine to depth in Excav. #11
3:45	other crew
	Elaine does profile in Excav. #14, #11 + #8
4:00	Clean up + finish for day Turn over remains to Church.
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:

Date: 8/16/10

Name (Filling out log): Michael Aedin

Weather Conditions: 90° humid

Personnel in Field: MA JEP

### Description:

- 7:00 Arrive on site + get Equipment. Elaine arrives at 7:20
- 7:30 Elaine screens rest of soil from Excavation #11 and I go to Excavation #12 w/machine to take down after ~~6000~~ 6000.15 broken up + removed.
- 9:00 Elaine goes to Excavation #1 and starts to scrap down to depth by hand w/ tector. Find more large blue stone sides in trench.
- 10:00-10:5 Break
- 11:40 I find 2 burials in Excavation #12 (#6 by wall 18" out and 4" 6" down; Burial #7 51" from wall <sup>2 femurs</sup> 5' b/s) start clearing burial #6 by hand and expose remains.
- 1:00-1:30 lunch
- 1:30 Elaine takes Excavation #1 down to depth on south side and I start burial #6 by wall. Burial is in fair state of preservation, but fragile.
- 3:45 Elaine has taken Excav. #1 to depth on north side + I have exposed burial #6
- 4:00 photograph + remove B#6. Explore under area of burial #6 and find possible additional burial #9.
- 4:30 Clean up + leave for day.  
Turn over remains to church

Photos?: Yes  No



## Monitoring: Daily Log

Forms:

Date: 8/12/10

Name (Filling out log): Michael Aulin

Weather Conditions: 82° overcast

Personnel in Field: MA, EP

**Description:**

- 7:00 Arrive at site drop off lights + park car. Screen wheel borrow
- 7:20 Elaine starts on burial #7, in Excav. #12 Finds Pelvis and vert. I go to Excav. #1 to finish digging out and monitor while they cut stone + metal bar. Armando slows up at ~~at~~
- 9:00 - Break  
10:05
- 10:05 Have Pablo open Excav. #12 move to north for safety. Find another skull (burial #8 in N. East wall of trench.) Elaine ~~resumes~~ <sup>exposes (causes)</sup> burial #8 and I screen back dirt. Elaine then resumes excavating burial #7
- 12:45 - Lunch  
1:15
- 11:30 Elaine has removed burial #7, with name plate
- 1:45 Shovel out loose dirt around burial #9 found yesterday under burial #6. Then starts to expose remains.
- 3:30 Find some additional burials (#10) + partial burials (RB-9) under and around burial #9. The new burial #10 is in center of trench. The new burial under Burial #9 is below required depth so cover w/ 6" of soil + leave undisturbed.
- 4:00 Rain starts clean up leave for day. (cover w/ tarp + plywood)  
Turn over remains to church.

Photos?: Yes \_\_\_ No \_\_\_



## Monitoring: Daily Log

Forms:

Date: 8/13/10

Name (Filling out log): Michael Ardin

Weather Conditions: 80° Breezy Clear

Personnel in Field: MA EP

### Description:

- 7:10 Arrive on site and Drop off extra bags. Elaine arrives and I have her go to Excav. #12 to disinter Burial #10 as I park truck.
- 7:25 I ~~start~~ screen material from yesterday for PAR.
- 7:50 Hector + I have finished screening so I go assist Elaine w/Burial #10. Pablo removes excess soil in trench prior to my entering hole, (will be screened)
- 9:30 Burial #10 is mostly exposed and I leave for team meeting at the rectory. See meeting notes.
- 10:30 Do walk through of site w/team and I check on Elaine. The entire burial is exposed and Elaine has removed the right side, and moving onto left side
- 11:30 Entire burial has been disintered and Elaine does profile of E + W walls. I start to collect equipment.
- 12:00 Todd tells me a headstone needs to be removed from Excavation #9 so I monitor while it is removed.
- 12:30 - Lunch
- 1:15 - Update notes and move equipment to storage area.
- 3:15 - Turn over remains to church + leave for day
- Photos?: Yes \_\_\_ No \_\_\_



## Monitoring: Daily Log

Forms:

Date: 8/25/10

Name (Filling out log): Michael Audin

Weather Conditions: 70° Slight Rain

Personnel in Field: MA

### Description:

7:00 Arrive on site & unload equip. then park car & walk to site

7:30 start excav. #15 on East wall bet. Excav. 1 + 2. Begin by clearing site <sup>(poles 3+4)</sup> of debris & const. materials. Then cut down poles & pipes. Start digging at 8:20.

8:26 - 9:22 Rain delay

9:30 Scotty calls - day due to Rain ~~7:30~~  
leave site

Photos?: Yes \_\_\_ No \_\_\_



## Monitoring: Daily Log

1/2

Forms:

Date: 8/26/10

Name (Filling out log): JF MA

Weather Conditions: 85° Clear

Personnel in Field: JF MA

### Description:

Arrived: 7:15 AM 26 Aug 2010

- Discussed plan of attack with Pablo (machine operator)

\* Misc, unassociated non-human, long bone fragment found on the ground near trench to be excavated (Excavation 15, File 3)

Digging began at 7:40 AM

- Top soil transferred from trench #2 into open trench #1. Deposited soil was monitored for bones/artifacts by Fridie.

8<sup>00</sup> AM: Non-human bone found as well as a small piece of ceramic near bottom right corner of trench (East wall used as top portion of trench for direction).

8<sup>23</sup> 2<sup>nd</sup> isolated non-human bone found near center of the trench. Jose continues to break up soil by hand (with shovels). Jose also continues to measure width, length & depth of trench.

Photos?: Yes \_\_\_ No \_\_\_

(over) →

8<sup>30</sup> AM Jose and Pablo tamp down backfilled soil in trench #1. Tamping process continues intermittently throughout the day.

8<sup>45</sup> Small pottery fragment found (partial flower pot?)

One piece of human bone (hand phalanx) found with probable fragment of coffin wood and embedded, corroded nail. (Found near bottom west corner of trench)  
(left)

RB-10

BREAK = 9<sup>30</sup> - 9<sup>50</sup> AM

Multiple Non-human bone fragments found dispersed, but isolated in trench. Bones mostly concentrated near builder's trench (along east wall).

~ 10<sup>45</sup> AM = Visit by Architects

~ 11<sup>00</sup> AM = M. Audin arrives.

~ 11<sup>30</sup> AM = Excavation #2, Pile 3/4 is complete.  
(Seanehe goes to lunch) 15'

11<sup>35</sup> am - Start excavation #16 pile 7/8 and back Fill into excavation #3. A lot of large roots in excavation from 3' dia maple tree. ~~Fill~~

11:55 - Find some animal bone near wall and a couple of artifacts (bottle <sup>mouth</sup>, ceramic 1/2 piece).

12:30 - 1:15 Take lunch



## Monitoring: Daily Log

2/2

Forms:

Date: 8/26/10

Name (Filling out log): M. Audin

Weather Conditions: 85° Clear

Personnel in Field: JF WA

### Description:

- 0:45 - Jeanette goes down to crypts to work on bones.
- 1:15 - Return from lunch + continue excavation till
- 3:25 Find PNR in NE corner of Excav. Hand  
Excav. from that point on. Recover visible damaged bone  
and leave rest for tomorrow morning.
- 3:40 Clean up
- 3:50 Leave site. Turn over remains to church.

Photos?: Yes \_\_\_ No \_\_\_



## Monitoring: Daily Log

Forms:

Date: 8/27

Name (Filling out log): Michael Audin

Weather Conditions: 80° Clear

Personnel in Field: MA

**Description:**

- 7:00 Arrive on site open equipment box and set up for day. Will cont. Excav. #16 looking for human remains and then screen back soil.
- 7:30 Rest of crew arrives + we start excavation #16 again. by hand. Clear out bottom + do not find any other bone. Bone found yesterday was all animal bone.
- 8:10 Scrap w/ machine + find PHR in north west corner of excavation. Move onto Excavation #17 piles 11/12 and will investigate later.
- 8:15 Start Excavation #17. Find bottom part of a head stone in SW corner of trench, top broken off.
- 9:00 Find animal bone along brick wall.
- 10:00 ~~At~~ 4' ± B/S Find Poss. Human Bone. ~~in~~ North half of trench excavated down further 6" and then stop.
- 10:15 Screen soil from Excav. 16 then from Excav. #17. No PHR found
- 11:00 Go into Excav. 16 to pursue human bone <sup>Found earlier</sup> Find mostly intact burial of head + arm, at 6' B/S. Scotty says he can stop at 5' 6" so I place all bones Found earlier from Excav. #16 back in hole and cover.
- Photos?: Yes \_\_\_ No \_\_\_

w/ 6" of soil, to protect burial from conc. pile caps which will partially cover burial. The remains found yesterday were recovered from the crypt and added to the burial.

12:15 Prepare for ~~Start~~ Excavation 18 piles 15/16 by moving temporary supports and clearing construction materials.

12:25-1:10 Break for lunch

1:40 Start Excavation #19 with machine. Need to do 19 next since the machine needs to rest on the area for Excav. #18 to do the work. Find H/S fragments + other trash in area.

2:30 Avoid old manhole well pipe by excavation #19

3:45 Clean up turn over remains to church.

4:10 Leave site



## Monitoring: Daily Log

Forms:

Date: 8/30

Name (Filling out log): Michael Audin

Weather Conditions: 90° hot

Personnel in Field: MA JS

**Description:**

- 7:15 Arrive on site and to walk over w/ Joy. Explain excav. procedure. then set her up to complete ~~excav.~~ #17 + Find PRR.
- 7:24 ~~Start~~ <sup>Finish</sup> Excavation #18 piles 17/18 with Pablo, while Jose cleans out Excavation #19 completed on Friday.
- 8:15 Start ~~Excavation~~ Excavation #18 piles 15/16.
- 8:30 Recover remains <sup>(in crypt)</sup> from Excav. 6, 7, 8, 9, 10, 13 + 14 and place on table for Mrs. Salcom to say prayer over and then have Joy rebury remains from Excav. 6-9 now and will do rest later, after lunch when they are ready <sup>to back fill</sup>
- 8:45 Continue excav. #18. Find old metal ash pail (crushed + rusted) at 2.5' B/S.
- 9:45 - Break  
10:00
- 10:10 Start Excav. #18 again + Joy continues to expose child found in Excav. #17 (Burial #11)
- 10:40 Find human mandible at 6' B/S SE part of trench. Check backpile for any other bones. Then rebury bones in same area and ~~back~~ back fill in 6" of soil to protect burial, just like what was done in Excavation #16
- Photos?: Yes \_\_\_ No \_\_\_

10:55 Start Excavation #20 pile 21/22. ~~and~~ clay  
Find a piece of ceramics + part of a pipe bowl at  
approx 2' B/S.

A head stone base is in the NE corner of trench  
and 2 marble head stones are @ approx 2.5' B/S  
(S.G. + J.M.F.)

12:20 - Take lunch

1:05 Joy + find skull of possible mother of child skeleton (Burial #11)  
in Excavation #17. Hector assists Joy w/clearing soil out of  
bottom of trench so Joy can remove Burial #12.  
Labb + Jose cut piles in Excav. #20.

1:30 Continue excavating #20.

2:09 Finish Excavation #20, assist Joy w/ Excav. #17 for a  
few minutes + partial backfill Excav. #18 to protect burial

2:30 Start Excavation #21 piles 25/26.  
Find some fragments of head stones.

3:30 visit by the miss. and 3 guests.

3:40 Go to reinter remains for Excav. 9, 10, 13, +14, but no soil in holes,  
so put back in church storage.

3:45 Clean up + pull Burial #12 + will screen bottom soil tomorrow.  
cover w/tarp

4:15 leave for day turn over remains to church



## Monitoring: Daily Log

Forms:

Date: Mon 8/31/12

Name (Filling out log): Michael Audin

Weather Conditions: 96 hot Clear

Personnel in Field: MA JS

### Description:

- 7:15 Arrive on site and have Joy get Field equip. She + Hector will screen both of Excav. #17 so we can clear it. I assist them with this.
- 7:42 Finished Excav. #17 Joy updates paper work + I monitor #17 to machine to depth
- 8:00 Finish Excav. #17 to depth + then continue Excav. #21
- 8:45 Find human bone on East side of trench (Burial #13) near south side. Clean out hole by hand as best as possible. Filling machine bucket by hand. Cut piles down. Burial is by brick wall + partially under wall.
- 9:10 I move to excavation #22 piles 29/30 + Begin machining down.
- 9:35-10:05 Break time
- 10:05 Resume Excavation #22. Find some headstone fragments at approx 2' @/s on west trench wall.
- 12:00 Finish Excavation #22 down to depth no PWR.
- 12:05 Move on to Excavation #23 piles 33/34.
- 12:30 - Lunch  
1:00
- 1:00-2:00 Concrete arrives for pile caps. Joy + I screen loose soil from her excavation
- Photos?: Yes  No

- 2:00 Go back to Excavation # 23
- 3:15 Find small scattering of human bone in Excav. # 23, mixed w/ butchered animal bone. Found near brick wall at approx. 3-4' Bls. Screened back soil + soil from excavation floor. Hand excavated remainder of trench. Found limited PWR.
- 3:40 Finish Excav. # 23 and clean up for day. Turn over remains to church. R.B-12
- 4:00 Leave Site



## Monitoring: Daily Log

Forms:

Date:

9/1/10

Name (Filling out log):

Michael Ardin

Weather Conditions:

92° Clear

Personnel in Field:

MA JS

### Description:

- 7:15 Arrive on site I have Joy screen material from Excav. #23 and I have Pablo move to Excav. #21 to bring up loose soil by filling machine bucket by hand. Joy finds burial #14 after loose soil is cleared
- 7:45 Finish taking excess soil in Excav. #21 and move to Excavation #24 3/38. Find 1 fairly intact + several fragments of head stones @ about 1' B/s.
- 9:30-10:00 Break LI get remains for Excav. #11 for Mnsr. to bless them for reburial
- 10:00 Set up table for Mnsr. Salkano and then proceed with Excavation #24. A head stone base at 5' from the brick wall and 2' B/s is found in-situ. The stone is 2.5' wide and 4.75' tall, no writing on the stone. The 2nd pile was run along side to the east and the grant adhered to it. Excavators were able to remove relatively intact.
- 10:45- Mnsr. + 2 visitors visit site + Bless remains for reburial. I have Joy rebury while I monitor Excav. #24
- 11:23 Finish reburial and Excav #24 and move to Excav. #25 next to large maple tree

Photos?: Yes  No

11:35 Start  
Excav. #25 pile 41/42 by maple tree. Joy is done w/  
Excav. #21 and will monitor the back pile. while I monitor  
the machine + trench.

12:25 - 1:10 Lunch

1:30 Excavators try to break up large rocks along Brick wall, possibly  
Under mine wall foundations.  
2:00 Move to Excavation #26 piles 45/46 while they continue  
to work on rocks at 3-5' BLS. Start excavating #  
26.

4:40 Clean up + leave site at 4:00pm  
Turn over remains to church



## Monitoring: Daily Log

Forms:	
Date:	9/2/10
Name (Filling out log):	Michael Audin
Weather Conditions:	94° hot humid
Personnel in Field:	MA JS
Description:	
7:05	Arrive on site + look for Joy's wallet. at 7:10 she calls to say she is running late & found her wallet.
7:20	Open Storage container + recover equipment. Will cont. with Excav. #25 and then go back to #26 and finish with Excav. #27.
8:00	Find Human Remains Excav #25 at 5'11" B/S between piles. Return remains to same location, screen back dirt and fill to 5'6" to protect burial.
8:30	Return to Excavation #26. Call Chris to schedule blessing of remains.
9:00	Joy finds burial in Excav. #26 (Burial #15) at 3.5' B/S. South of the piles. Msgr. Salano does blessing on remains.
9:15	Joy + I rebury remains from Excav. #12.
9:15-9:45	Break
10:00	Find 2nd possible burial (#16)? in Excav. #26. take out as much soil as possible then move to Excav. #27. Joy also finds a possible reburial (13) by brick wall.
10:30	Start Excav. #27
11:30	Joy has finished burials #15, #16 and the bone scatter in Excavation #26. (under the wall) RB-13
Photos?:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>

12:00 Finished Excavation #27 to depth ~~to~~<sup>one</sup> human bone  
but lots of animal bone, head stones and various  
trash (Brick, ash, cinder, ceramics, etc.) to depth.

12:25-  
1:10 Lunch

2:30 Finish Excavation #26 to depth. then screen back  
dirt for bone.

3:00 clean up then leave site. Turn over remains to church



# Monitoring: Daily Log

Forms:

Date:

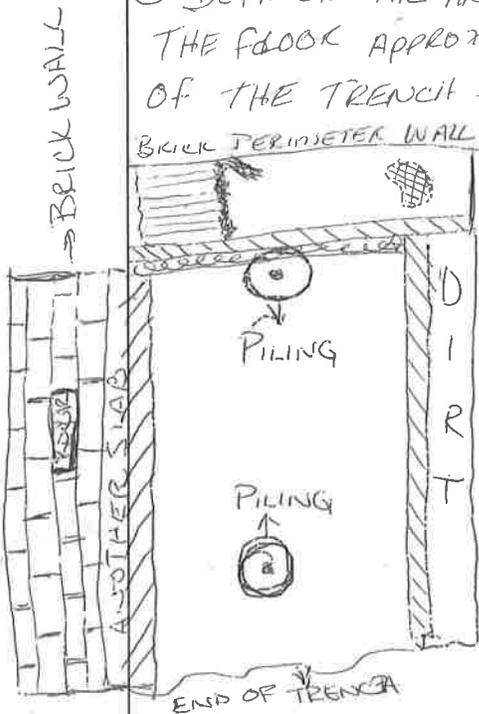
Name (Filling out log):

Weather Conditions:

Personnel in Field:

Description: EXCAV 1 PILES 18 & 19 8-11-10 EP.

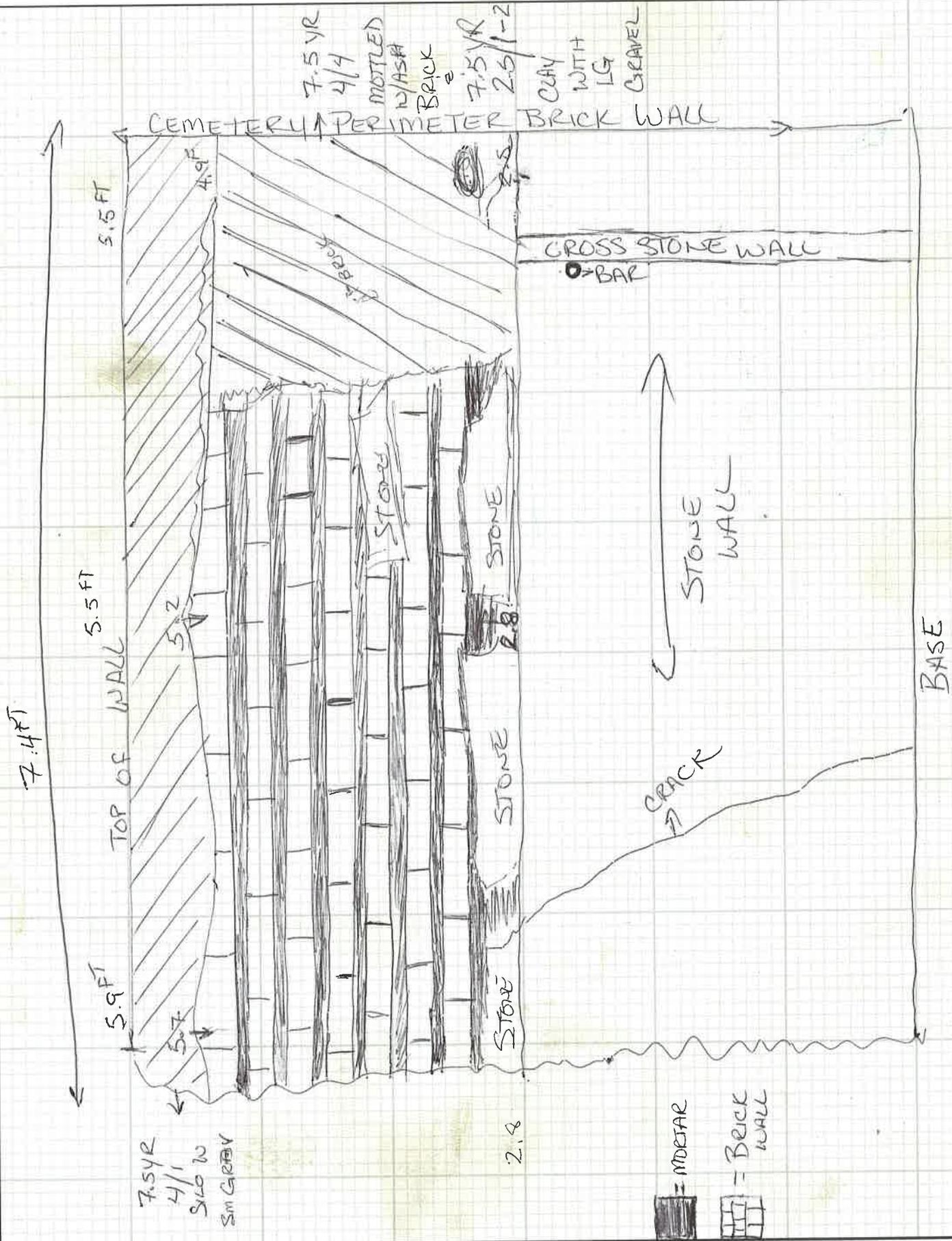
① DEFINED THE AREA INSIDE THE CUT STONE FORMATION & BROUGHT DOWN THE FLOOR APPROX 4-6 IN. HECTOR SHAVED THE NORTH WEST SIDE OF THE TRENCH TO FIND ANOTHER SIDE TO THE CUT STONE FORMATION.



- ① HANDS EXPLORATION BETWEEN THE CUT STONE & BRICK PERIMETER WALL FOUND PARTIAL SKULL FRAGMENTS FROM A SUB ADULT WITH A SMALL PORTION OF A LONG BONE. PHOTOS WERE TAKEN & THE MONUMENT WILL BE REMOVED TO SEE IF THERE IS A FULL BURIAL.
- ① INSIDE THE CUT STONE SLAB IS INDICATIVE OF AN OLD STONE BURIAL VAULT OR SISTERN.

Photos?: Yes  No

- ⊕ AFTER REMOVING THE BONE FROM SAID AREA IT WAS DETERMINED THE SKULL CAP WAS HUMAN HOWEVER THE OTHER BONE WAS ANIMAL.
- ⊕ THE DIRT WAS TAKEN DOWN APPROX 1 FT AROUND THE ATTAINABLE CUT STONE PERIMETER. ONLY 10+ BONE FRAGMENTS WERE FOUND & EVERY 5<sup>TH</sup> BUCKET OF SOIL SIFTED.
- ⊕ AFTER LUNCH HECTOR TOOK DOWN THE REST OF THE SOIL TO LEVEL INSIDE THE STONE FORMATIONS.
- ⊕ CREATED A PROFILE & TOOK MEASUREMENTS AS WELL AS A PHOTO.
- ⊕ THE DIRT NEAR THE NW CORNER OF THE STONE BASIN WAS REMOVED TEMPORARILY 18" BELOW ~~LEVEL~~ BASE LEVEL TO SEE IF THE BASIN WALLS WENT VERY DEEP FOR ARCHITECTURAL REMOVAL.





## Monitoring: Daily Log

Forms: Burial #7 Excav. #8 piles # 31 + 32

Date: 8/9/10

Name (Filling out log): Scott Warnogsch

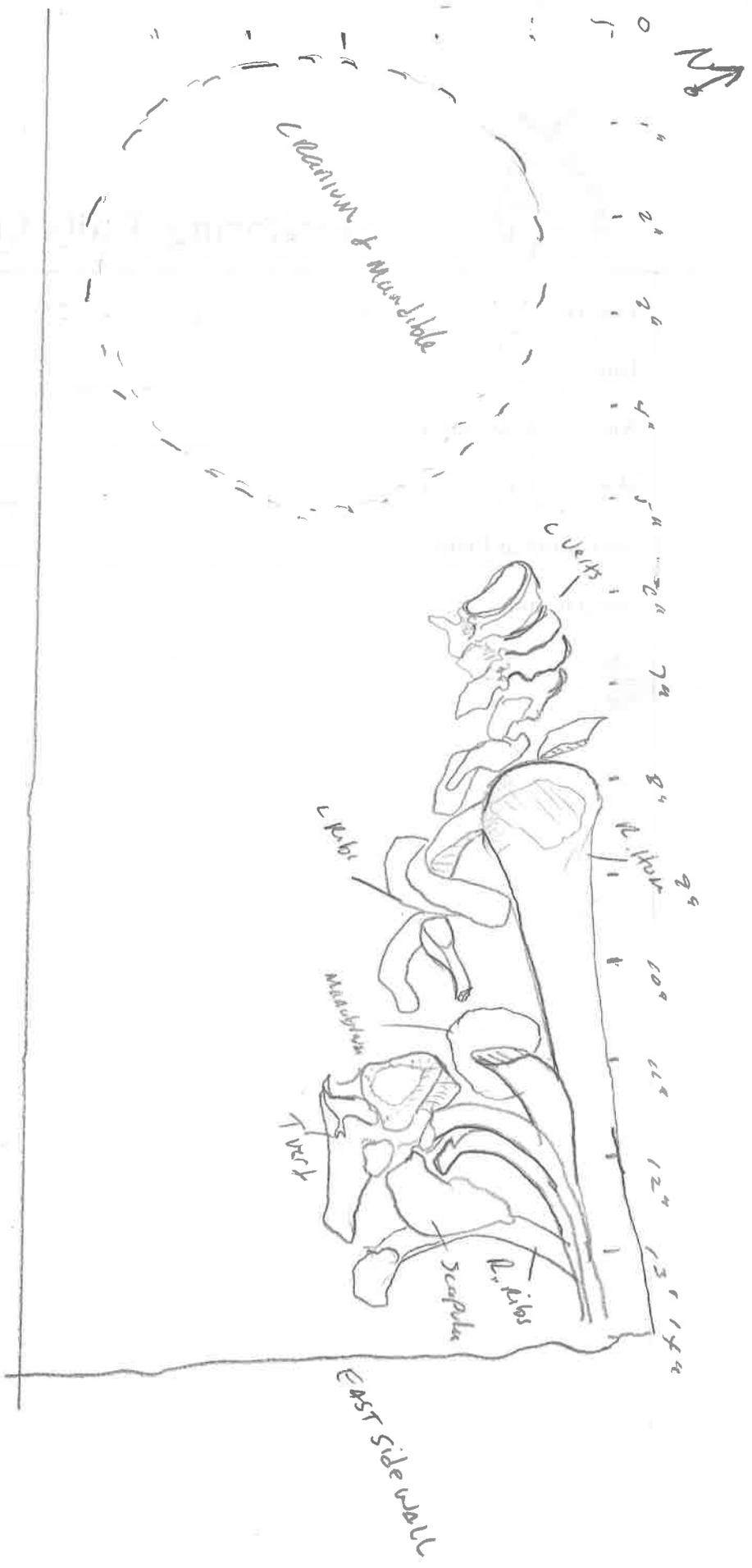
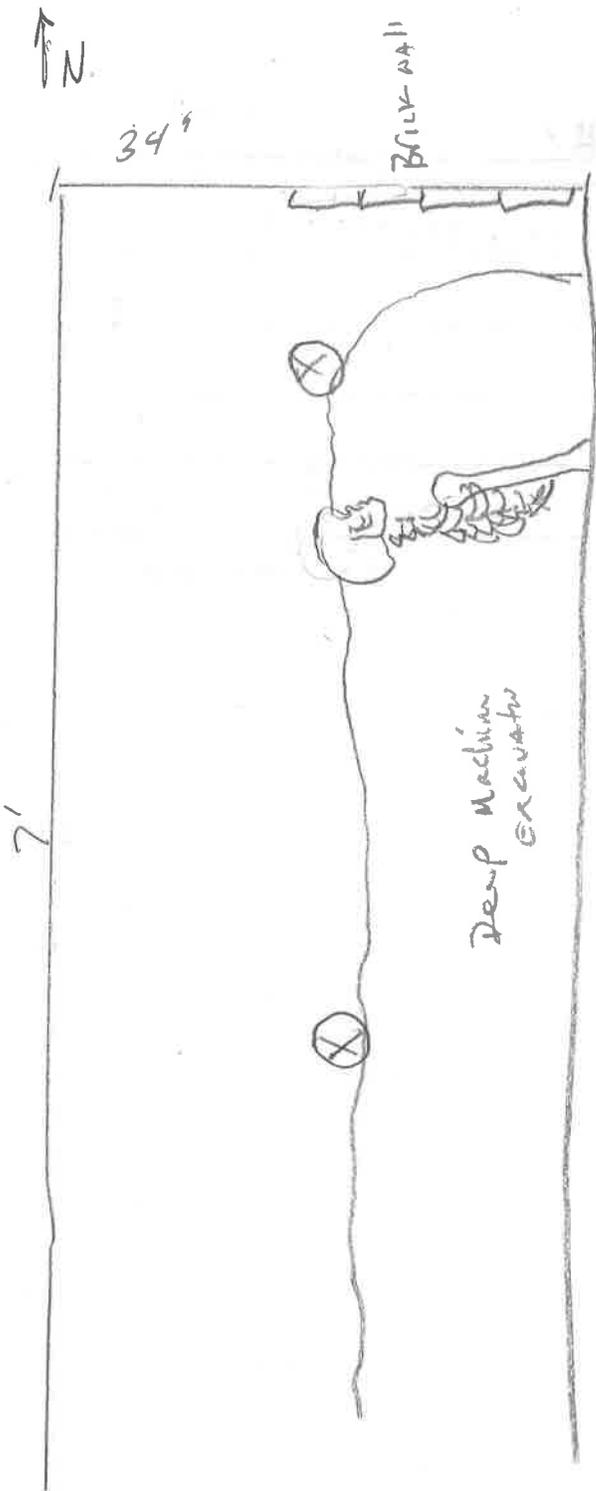
Weather Conditions: Hot & Sticky

Personnel in Field: SW MA, etc

Description: Articulated burial. Excavation #8

Human bone was removed from \_\_\_\_\_  
upon clearing up the loose soil from the backhoe, the remains of  
a cranium + mandible were removed from screening and excavation.  
The cranium was partially in situ but most of it was loose in the soil at  
the north end of the excavation in the NE corner. The cranium + mandible  
were at 6'8" B.S., the skull + first few C vertes were removed from the  
loose soil but the remaining C vertes remained in situ. Excavation extended  
to the east and exposed the right humerus, ribs, T verte and scapula  
fragments. The Burial extends into the east side wall at about the elbow.

Photos?: Yes \_\_\_ No \_\_\_







## Monitoring: Daily Log

Forms: Excavation #12

Date:

Name (Filling out log):

Weather Conditions:

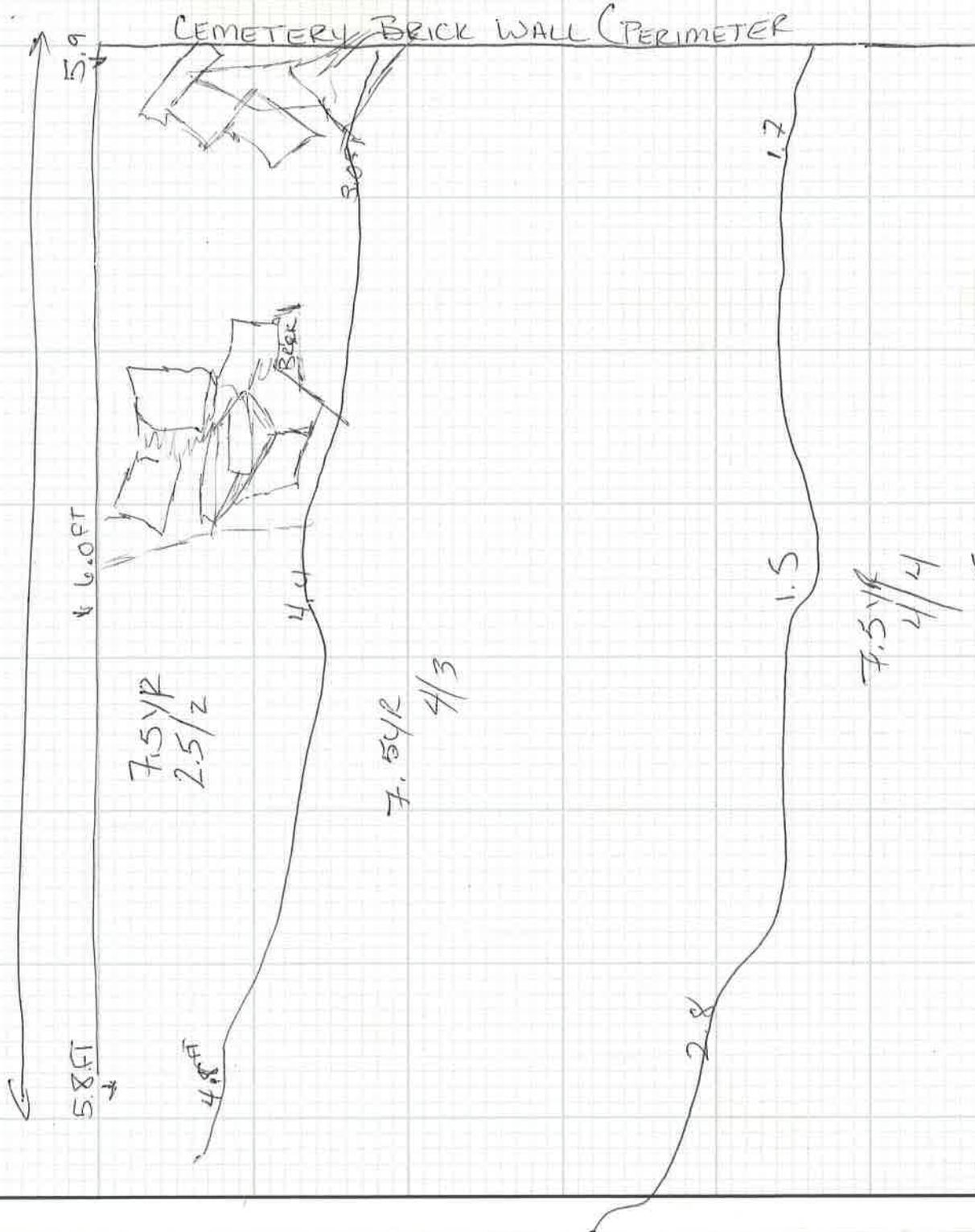
Personnel in Field:

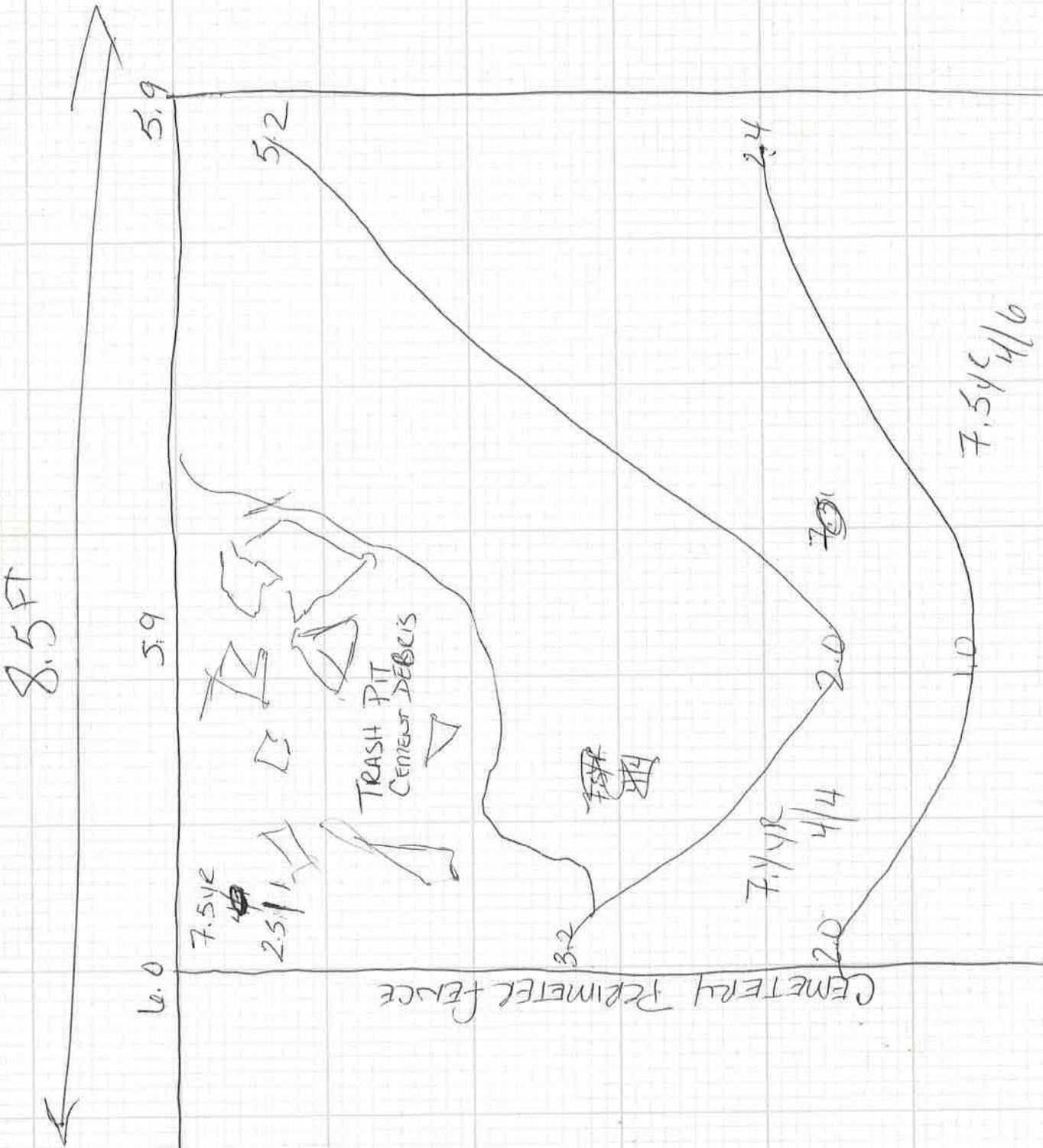
Description: EXCAVATION #12 ~~BURIAL 7~~ TILE 47. 8/12-13/10

- ⊕ STARTED OUT WITH A SKULL ALMOST AGAINST THE CEMETERY PERIMETER BRICK WALL AND IMMEDIATELY UNDER BURIAL 6. ~~AS~~
- ⊕ ON ~~THE~~ THE NORTH END THERE WAS ANOTHER BURIAL THAT NEEDED TO BE EXCAVATED. LABELED BURIAL 7. THIS WAS AN ADULT ~~FEMALE~~ MALE WITH A NAME PLATE WILLIAM GRIM 1845. THE PRESERVATION WAS PRETTY GOOD ALTHOUGH DUE TO WET SOIL THE BONE WERE VERY FRAGILE.
- ⊕ ABOVE BURIAL 7 (APPROX 18") ON THE NE CORNER OF THE TRENCH THERE WAS A SKULL THAT THE MACHINE CLIPPED. LABELED BURIAL 8 & EXCAVATED.
- ⊕ THE SKULL UNDER BURIAL 6 WAS LABELED BURIAL 9 & EXCAVATED. WHILE SCRAPING UNDER THE SKULL CAME ACROSS MORE BONE BUT IT WAS WELL PAST LEVEL SO RECOVERED & LEFT IT.
- ⊕ ON THE SOUTHWEST CORNER IN THE BUILDERS TRENCH FOUND A DIS ARTICULATED PELVIS & CRANIUM, ~~AS~~ AS WELL AS A PORTION OF BONE.
- ⊕ BETWEEN THE PILING AT THE END OF THE ~~THE~~ WORK DAY ON 8-12-10, A SKULL WAS FOUND IN THE SOIL. ON 8-13-10 THE CRANIUM WAS ATTACHED TO A VERY WELL PRESERVED SKELETON. LABELED BURIAL 10 & WAS EXCAVATED TO RIGHT BELOW THE PROXIMAL END OF THE HUMERUS. THE INDIVIDUAL IS APPROX 18-22 YRS OLD DUE TO FUSION & DENTITION ANALYSIS.

Photos?: Yes \_\_\_ No \_\_\_

BURIAL 10 CONT... THE NUCHAL CREST <sup>①</sup> & ORBITAL RIDGE & MANDIBLE POINT MORE  
TOWARDS FEMALE BUT IT WAS A FAST GLANCE.







# Monitoring: Daily Log

Forms: EXCA 13 PILE 53

Date:

Name (Filling out log):

Weather Conditions:

Personnel in Field:

Description: EXCAV #13 PILE 53 ET  
 + BONE FRAGMENTS FOUND NEAR WALL APPROX 3 FT / 97cm BELOW SURFACE ALSO FOUND MORE FRAGMENT APP 3.8 FT ON NORTH SIDE. ANOTHER BONE FRAG IS ON WEST APP 2.9 FT. SOUTH

+ AFTER EXCAVATING THE FRAGMENTS THE SOIL WAS THEN TAKEN DOWN APPROX 3-5 INCHES IN EACH DIRECTION & SIFTED

---

EXCAV #11 PILE 43 MA SW

NW 5'00"  
 NE 4'9"  
 SW 4'7"  
 SE 4'6"

I finished exposing a Distal femur shaft <sup>fragment</sup> @ 55" north of the wall @ 55" below surface. The bone was in a soft very friable silty sand. It was in situ ~~on an angle~~ <sup>on a pile</sup> demonstrating that the bone was likely deposited in a depression causing it not to lay flat. I excavated 6"-10" of remaining silt soil and exposed a more compacted silt (less red, more yellow tan). The top of the harder surface was irregular and showed no obvious signs of ~~any/previous~~ previous excavation. NO cuts were observed in the compacted strata. Hand excavation stopped between 4'6" and 5'0" BS. a few small bone fragments were recovered from the softer upper layer.

Small white stone in good shape removed from just north of the northeast corner P.D.

Femur shaft frag found along with many other leg bone frags. One ~~frag~~ <sup>fragment</sup> removed, angled, in situ in the NW corner. at 5' BS. Radius ~~radius~~ <sup>radius</sup>

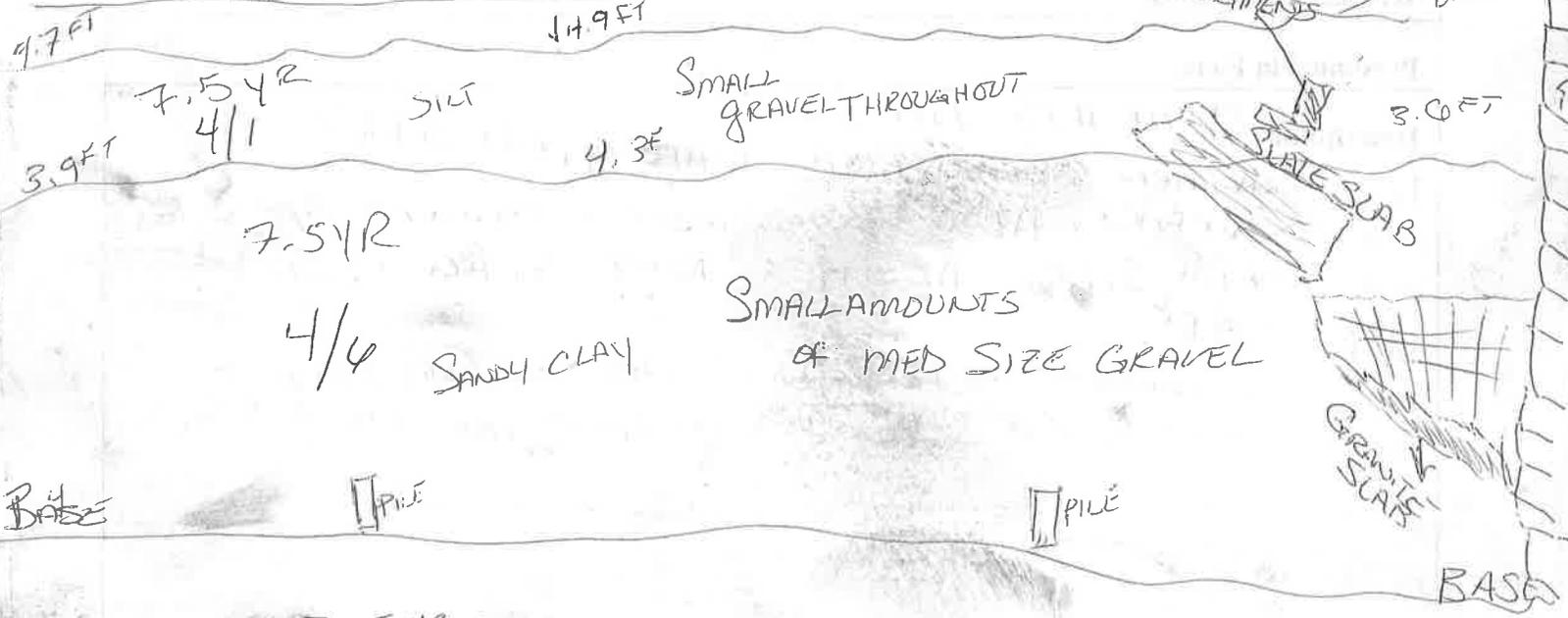
Photos?: Yes \_\_\_ No \_\_\_ all found during machine excavation except one in corner.

EXCAV 13 PILE 53 CONT...<sup>+</sup> THE MACHINE TOOK THE FLOOR DOWN ABOUT ANOTHER FOOT & HIT SOME BONE FRAGMENTS ON THE SOUTH EAST & SOUTH WEST OF THE TRENCH. THE SOIL WAS THEN MANUALLY TAKEN DOWN ANOTHER FOOT UNTIL IT WAS ~~OF~~ OF MATERIAL.

⊕ DID THE NORTH ~~EAST~~ ~~SIDE~~ SIDE OF THE TRENCH THE MACHINE FOUND MORE HEADSTONE TYPE MATERIAL.

EXCAV 11 PILE 43 CONT...<sup>+</sup> IN THE AFTERNOON, ANOTHER BATCH OF BONES WAS UNCOVERED BY THE MACHINE. SKULL PLUS OTHER FRAGMENTS WERE RECOVERED. THE SKULL WAS ORIGINALLY CRUSHED & DISHEVELLED BY A PILING. WENT DOWN 6 INCHES & FOUND A HARD COMPACT SILT SILTY CLAY.

8-10-10 EXCAV 11 PILE 43 CONT - PROFILE



EXCAV 11 PILE 43 CONT.

⊕ ~~THE~~ TOOK DOWN THE ELEVATED 1/2 OF THE TRENCH & FOUND A SUBADULT CRANIUM EMBEDDED IN THE PILING. AFTER DEFINING THE CRANIUM, IT WAS ~~REMOVED~~ PHOTOGRAPHED & CHISELED OUT. THE GROUT WAS LEFT IN THE SKULL TO KEEP IT STABLE. A PROFILE (ABOVE) WAS MADE & THE SOIL WAS TAKEN DOWN TO LEVEL THE BOTTOM OF THE SKULL WAS @ 5.2. BURIAL # ~~3~~ 3.

⊕ IN THE AFTERNOON THE PROXIMAL END TO A "LEFT" FEMUR AS WELL AS 2 TIBIAS & 2 FIBULAS WERE FOUND IN ALTERNATE SIDEWALLS. THEY WERE EXCAVATED AS BURIAL #5. NO PHOTOS WERE TAKEN



# Monitoring: Daily Log

Forms: Excav. #14 Piles # 57 + 58 Burial #4

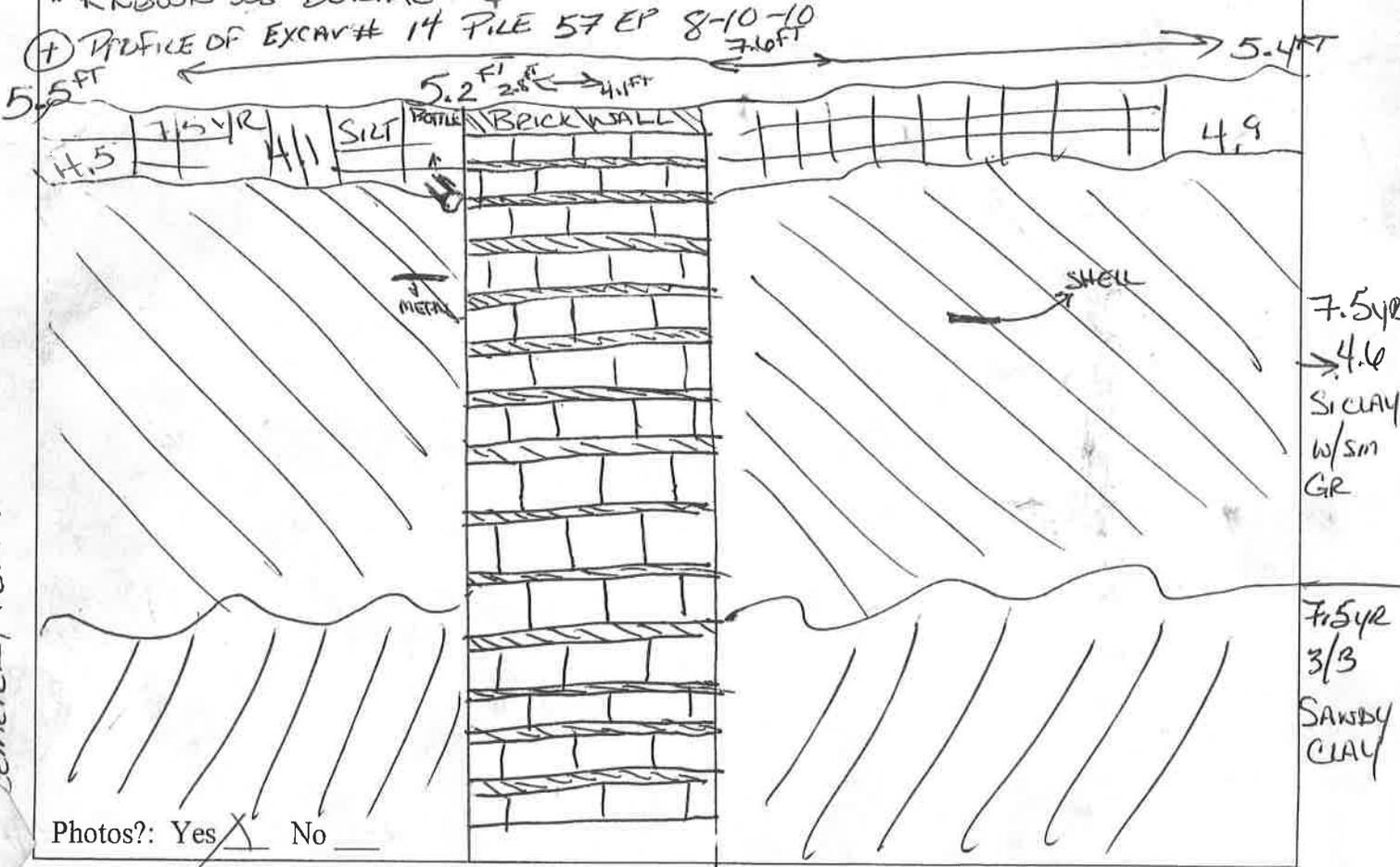
Date:

Name (Filling out log):

Weather Conditions:

Personnel in Field:

8-10-10  
 Description: EXCAV # ~~14~~ PILES 57 EP, MA  
 APPROX 5 FT DOWN THE MACHINE STUMBLER UPON A SUB ADULT <sup>Approx 2-4 yrs</sup>  
 BURIAL MOST OF THE SKULL, UPPER LONG BONES & VERTEBRAE  
 WERE DISTURBED BY THE "SCRAPING" PROCESS. THE LOWER LONG BONES  
 AND TARSALS, DIGITS & PARTIAL PELVIS WERE PRESERVED EN SITU. 3 PHOTOS  
 WERE TAKEN & PROMPTLY REMOVED. THE FLOOR IS BEING SCRAPED  
 DOWN BY M.A. & HECTOR. A PROFILE STILL NEEDS TO BE DRAWN.  
 \* KNOWN AS BURIAL #4





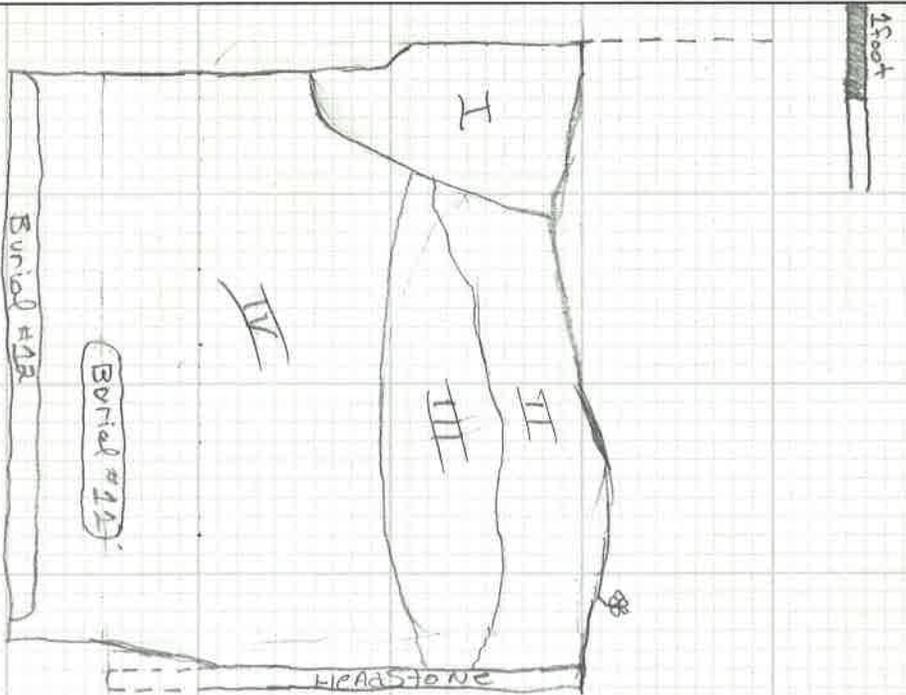
## Monitoring: Daily Log

Forms:	Burials 11 + 12	Excavation 17
Date:	Aug 30, 2010	
Name (Filling out log):	P. Jay Sosnowski	
Weather Conditions:	Hot & Humid	
Personnel in Field:	Me, Mike & Crew	
Description:	<p>Burial #11, Excavation #17, Burial of a child was disturbed during Track-Hoe Excavation, As it was uncovered it became evident that this child was disturbed previously. Very few intact bones were recovered and there was nothing articulated. After extraction a test was done to discover if there was any Burials under with. None were found. A Deeper test was done and another Burial was discovered. Burial was 62" below g/f and 2'8" to 4'8" from Wall. Broken Head Stone Reads "depar... this .... Aug 1 t... 1813; aged 9 months and 7 days."</p> <p>Profile of South Western Wall.</p> <p>Burial #12, Excavation #17. Burial of a woman was discovered intact, but in poor condition. Left arm was articulated @ the elbow crossing and resting on pelvis. Lower Body was articulated below the pelvis w/ Lower Shins &amp; feet below the Brick Wall. Burial was @ 6' below g/f and 0,0" to 5'9" from wall.</p>	
Photos?:	Yes <input checked="" type="checkbox"/> No <input type="checkbox"/>	

8/30/10 Excav #17 Burial #11 + #12  
PJS

South West Wall Profile + Plan View

- I Butters Trench  
Filled w/ Debris  
10yr 3/3
- II Top Soil A/P  
10yr 3/3
- III 10yr 4/2
- IV 10yr 5/3





## Monitoring: Daily Log

Forms: Burials 13 + 14 Excavation #21

Date: 8/31/10

Name (Filling out log): P. Joy Sosnowski

Weather Conditions: Hatter + Humider

Personnel in Field: Joy, Mike + Crew

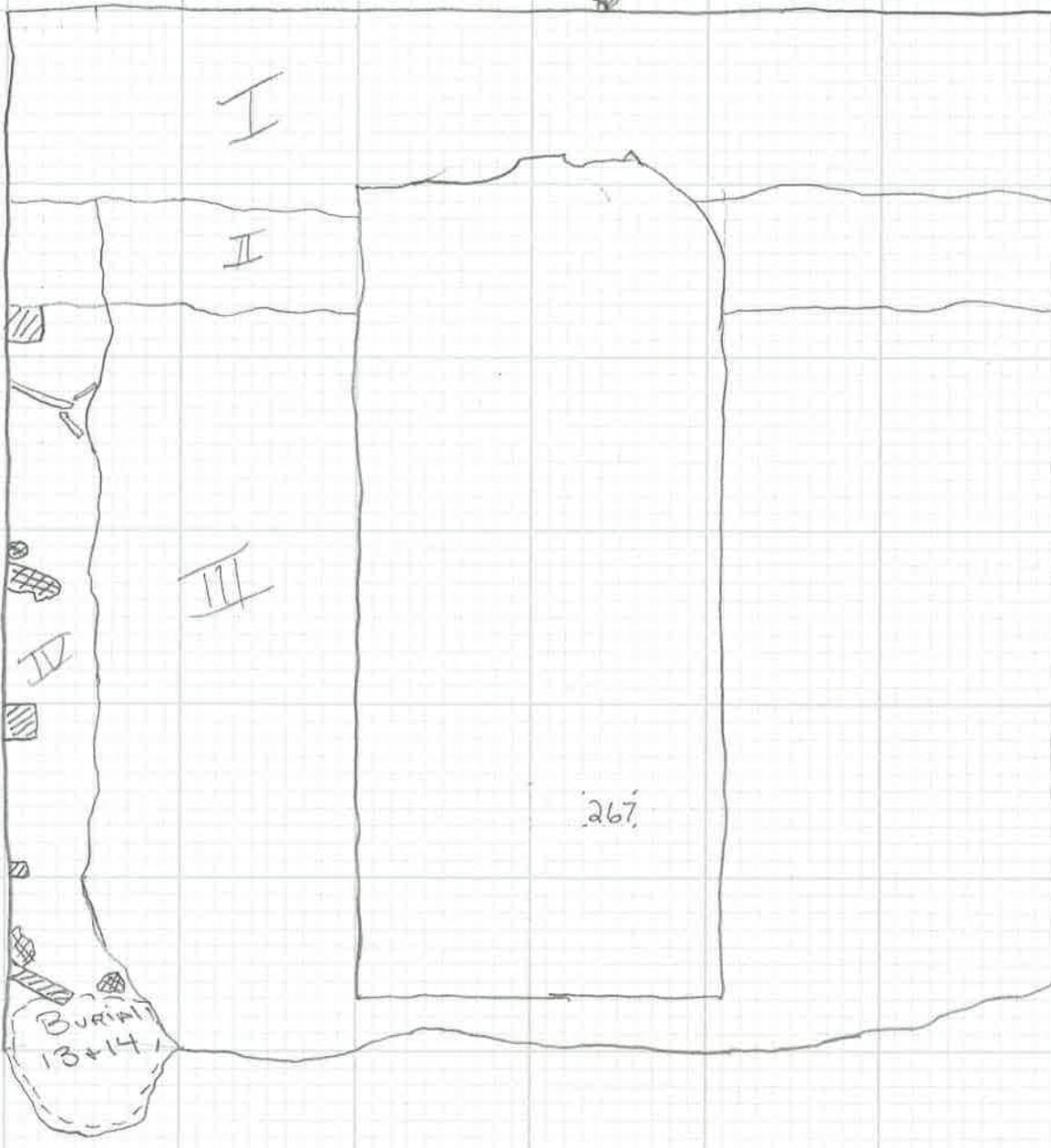
Description: Excavation #21 Burial #13. Burial was uncovered by the Trash Hole. The Majority of the Woman (based on Mandible) is missing from the original wall construction. Her Skull was crushed and several Bones were out of Place. Burial was located along the wall @ a depth of 5'5" below G/L

Burial #14. Only a skull was recovered. Excavated to a depth of 6' and found nothing more. Skull was crushed and some small Bone fragments were recovered nearby. The Skull was located laying next to #13 along the Brick Wall @ a depth of 5'6" below G/L. Gender was undetermined  
Profile of Western Wall.

Photos?: Yes  No

1 foot

-  Brick
-  GLASS
-  Rock



- I 10yr 3/2
- II 10yr 3/4
- III 10yr 1/4
- IV mottled Builders Trench

267

BURIAL  
13+14



## Monitoring: Daily Log

Forms: Excav. #26 Burials 15 + 16

Date: 9/2/10

Name (Filling out log): P. Joy Sosnowski

Weather Conditions: Hot + Humid

Personnel in Field: Joy, Mike + Crew

Description: Excavation 26 Burial 15. Located w/a shovel only the lower feet (toes) were disturbed. Running parallel to the wall the remains were w/ the feet to the East + Head to the West. The man - from what little remained of the Pelvis - was in good condition until I began to uncover the Pelvis, which began to powder as soon as it was exposed. The total depth of this Burial was 3 1/2'

Burial 16 was nothing more than a small scatter of remains @ a depth of 4 1/2'. This scatter looked to be the remains of a burial that had been removed previously for the construction of the the Piles.

Photos?: Yes  No

## **APPENDIX C**

### Physical Anthropology Notes



## Monitoring: Daily Log

Forms: Excavation 1 Piles 1 and 2 ↖

Date: 25 August 2010 Upper Providence

Name (Filling out log): Jeannette Frider

Weather Conditions:

Personnel in Field:

Page 1/2

Description: Examination of Skeletal Remains

Non-human remains noted and separated out.

Mixture of adult and subadult remains (commingled)

Subadult example: mandible (~ 6 month <sup>+/- 3 months</sup>) and cranial fragments.

Minimum Number of Individuals = 2 (1 subadult, 1 adult)

Page 1/2

Photos?: Yes \_\_\_ No \_\_\_



## Monitoring: Daily Log

Forms:	Excavation 1, Piles 1 and 2 lower provenience
Date:	25 August 2010
Name (Filling out log):	Jeanette Freder
Weather Conditions:	
Personnel in Field:	Page 2/2
Description:	<p>Examination of skeletal remains</p> <p>Non-human bones noted and separated out. Some human bone fragments (long bone fragments)</p> <p>Artifacts: pottery sherds, metal pieces, clay pipe stems, glass fragments, marble, button, and one 1833 coin</p>
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:	Excavation 4
Date:	05 August 2010
Name (Filling out log):	Jeanette Andie
Weather Conditions:	Page 1/1
Personnel in Field:	
Description:	All skeletal remains are non-human.
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:	Excavation 6, file 23
Date:	25 August 2010
Name (Filling out log):	Jeanette Indie
Weather Conditions:	Page 1/1
Personnel in Field:	
Description:	Examination of skeletal remains: Multiple cranial, vertebral, and long bone fragments. Bones of the feet are present. Artifacts: pipe stem. Non-human bones noted and separated out. Notes from 06 August 2010 for Ex. 6, File 23
	Trench = 3.7 ft wide x 8 ft long x 5 ft deep Soil: loose, dry, sandy with some stones and tree roots. Left wall of trench: Skeletal remains found (portion of right foot) and small long bone fragment. Right wall of trench: Portions of a right adult femur removed as well as some vertebral fragments.
Photos?:	Yes ___ No ___



## Monitoring: Daily Log

Forms: Excavation 7, File 27

Date: 05 and 25 August 2010

Name (Filling out log): Jeannette Fridie

Weather Conditions:

Personnel in Field:

Page 1/2

Description: Review of Skeletal Remains & Excavation

8 AM  
4:30 PM

05 August = removed coxa (non-human mammal) from trench wall. (bone 10cm out from wall and 35cm down from top ~~left~~ right corner).

Reviewed skeletal remains already collected by M. Audin. Separated human from non-human.

-Skeletal remains are commingled. (mixture of adult & subadult bones & teeth). Bones are in fair-to-poor condition (fragile, wet). Small trench excavated on right side wall (~6 additional inches wide) to remove human remains embedded within.

Total Skeletal Remains : Cranial fragments, bone fragments, vertebral fragments, rib fragments, scapulae, hyoid, bones of the hands and feet and teeth. At least two adults (two right tibiae) and two subadults (~2-3 yrs, and ~5-7 yrs).

Photos?: Yes  No

Minimum Number of Individuals = 4 Page 1/2



## Monitoring: Daily Log

Forms: Excavation 7, File 27

Date: 05 and 25 August 2010

Name (Filling out log): Jeanette Frider

Weather Conditions:

Personnel in Field:

page 2/2

Description:

25 August 2010  
Review of skeletal inventory  
continued.

Some non-human bones noted  
and separated out.

Artifacts: Glass fragments and  
metal rivets.

Photos?: Yes \_\_\_ No \_\_\_



## Monitoring: Daily Log

Forms:	Excavation 8, file 31
Date:	05 and 25 August 2010
Name (Filling out log):	Jeanette Fridie
Weather Conditions:	
Personnel in Field:	Page 1/2
Description:	<p>05 August 2010 = Trench started, but was postponed (per M. Audin). Soil from other trenches sifted and examined for skeletal remains</p> <p>25 August 2010. Skeletal remains consistent with a male. Multiple skeletal remains examined, includes scapulae, cranial fragments, ear ossicles, multiple long bone fragments, mandible, ribs, sternum, clavicle. Mixture of adult and subadult bones and teeth (commingled). Subadult <del>bones</del><sup>teeth</sup> include a deciduous 2<sup>nd</sup> molar and a permanent crown (forming) 1<sup>st</sup> or 2<sup>nd</sup> premolar, and a permanent crown (forming) canine.</p> <p>Minimum Number of Individuals: 2 (1 adult, 1 subadult)</p> <p>* One adult rib (Right 2<sup>nd</sup> rib) has evidence of a healed fracture with callus formation.</p> <p>Non-human bone separated out.</p> <p>Artifacts: Pottery sherds, metal pieces, pipe stems</p>
Photos?:	Yes <input type="checkbox"/> No <input type="checkbox"/>



## Monitoring: Daily Log

Forms:	Excavation 8, pile 31 (Upper Level)
Date:	25 August 2010
Name (Filling out log):	Jeanette Fidler
Weather Conditions:	
Personnel in Field:	Page 2/2
Description:	<p>Examination of skeletal remains (upper level)</p> <p>Cranial fragments, scapulae, long bone fragments, vertebrae and some adult (permanent) teeth.</p>
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:	Excavation 9, file 35
Date:	25 August 2010
Name (Filling out log):	Jeanette Lindo
Weather Conditions:	Page 1/1
Personnel in Field:	
Description:	Examination of skeletal remains Multiple long bone fragments Minimum Number of Individuals = 1 (adult)  Some non-human bones noted and separated out.
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms: Excavation 10, Piles # 39 and 40 (Page 1 of 2)

Date: ~~#~~ 25 August 2010

Name (Filling out log): Jeanette Friede

Weather Conditions:

Personnel in Field:

Page 1/2

Description: See 2nd burial, page 2 of 2. (A continuation of skeletal remains)

Skeletal remains include commingled remains (adult and subadult bones).

Adult: Fragments of cranium, ribs, vertebrae, and multiple long bones. Also include bones of the hands and feet. There are also adult teeth: left and right maxillary ~~1st~~ 3rd molars, 1st maxillary molar, and ~~2nd~~ 2nd maxillary molar (JF)

Subadult bones include fragmentary ribs and right femur.

~~Minimum~~

Minimum Number of Individuals = 2 (1 adult, 1 subadult)

Artifacts include large metal nails and possible metal coffin nails

Photos?: Yes  No



## Monitoring: Daily Log

Forms: Excavation 10, Piles 39+40 (2<sup>nd</sup> burial) (Page 2 of 2)

Date: 25 August 2010

Name (Filling out log): Jeannette Fridié

Weather Conditions:

Personnel in Field:

Page 2/2

### Description:

→ Sorting Skeletal remains in crypt (2pm) Contact: Eddie  
Excavation 10, Piles 39+40 (2<sup>nd</sup> burial)

Skeletal remains are a mixture of adults and subadult bones.

Skeletal remains include cranial fragments, and fragments of scapulae, patella ribs, hand bones, & mandible. There is also an adult tooth (1 lower (mandibular) premolar)

Subadult skeletal remains include os coxae, vertebral fragments, rib fragments, multiple long bone fragments, and two ear ossicles. (os coxa = child ~~was~~ 2-3 years of age)

→ Minimum Number of Individuals = 2 (1 adult, 1 subadult)

Artifacts include metal spikes and possible metal copper nails.

Photos?: Yes \_\_\_ No

Non-human bones noted and separated out.

END



## Monitoring: Daily Log

Forms:	Excavation 11, Pile 43 (Page 1 of 2)
Date:	25 August 2010
Name (Filling out log):	Jeanette Fridie
Weather Conditions:	
Personnel in Field:	page 1/2
Description:	(See Burial #5) Commingled Skeletal remains (adult and subadult).  Adult remains include fragments of vertebrae, mandible, unossified, ribs, cranium, and multiple long bone shafts. Some hand bones are present.  Subadult remains include cranial fragments, long bone fragment (distal humerus) hand bones, and scapula. There are also vertebral fragments from two different subadults (1-3 yrs and 3-7 years).  Teeth Present: deciduous mandibular 1 <sup>st</sup> molar, upper 1 <sup>st</sup> or 2 <sup>nd</sup> right molar, lower right canine, upper 1 <sup>st</sup> or 2 <sup>nd</sup> left premolar, upper left central incisor with shoveling, and upper left lateral incisor with shoveling.  Maximum Number of Individuals = 3 (1 adult, 2 subadults)  Artifacts: metal nails, pipe stem, glass shards, pottery shards
Photos? Yes <input type="checkbox"/> No <input checked="" type="checkbox"/>	



## Monitoring: Daily Log

Forms:	Excavation 11, Pile 43, Burial #5 (page 2 of 2)
Date:	25 August 2010
Name (Filling out log):	Jeannette Guide
Weather Conditions:	
Personnel in Field:	Page 2/2
Description:	<p>(Examination of skeletal remains)</p> <p>Skeletal remains are commingled (mixture of adult and subadult remains)</p> <p>Adult bones include multiple longbone fragments, cranial fragments, mandible, and hand bones</p> <p>Subadult bones include multiple cranial fragments, longbone fragments, clavicles, vertebrae, ribs, scapulae and <u>one</u> ear ossicle</p> <p>There are mixed dentition, indicative of a small child's <del>#</del> Teeth include a deciduous mandibular 2<sup>nd</sup> molar, a deciduous maxillary 2<sup>nd</sup> molar (right side), a permanent mandibular 1<sup>st</sup> molar (crown) and a permanent maxillary 1<sup>st</sup> molar (crown).</p> <p>Maximum Number of Individuals = 2 (-1 adult, 1 subadult)</p> <p>Artifacts: poss. coffin nails, pottery sherds, poss. coffin wood, Photos?: Yes ___ No ___ various metal pieces.</p> <p>① Nameplate found assoc. w/ burial END</p>



## Monitoring: Daily Log

Forms:	Excavation 13, Pile 33
Date:	25 August 2010
Name (Filling out log):	Jeanette Fridge
Weather Conditions:	
Personnel in Field:	Page 1/1
Description:	<p>Analysis of skeletal remains</p> <p>Mixture of adult and subadult bones and teeth (commingled).</p> <p>Adult (Multiple long bones)</p> <p>Subadult (cranial frags, long bone fragments, teeth)</p> <p>Minimum Number of Individuals <del>4</del> = 2 (1 adult, 1 subadult)</p> <p>Some non-human bones noted and separated out</p> <p>artifacts: pottery sherds, metal nails (coffin nails?) metal spike, buttons, and pipe stems.</p>
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:	Excavation 14, Piles 57 + 58
Date:	25 August 2010
Name (Filling out log):	Jeanette Judie
Weather Conditions:	
Personnel in Field:	Page 1/1
Description:	<p>Analysis of skeletal remains</p> <p>Some <del>are</del> non-human bones noted and separated out.</p> <p>Skeletal remains are commingled (adult and subadult)</p> <p>Adult: bones of the hand, feet, vertebral fragments, rib fragments, long bone fragments, and teeth</p> <p>Subadult: humerus, vertebrae, and ribs.</p> <p>Artifacts: metal spike, pottery sherds, and clay pipe stems.</p>
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:	Excavation 15, Pile 3
Date:	26 August 2010
Name (Filling out log):	Teannette Frider
Weather Conditions:	
Personnel in Field:	Page 1/1
Description:	<p>Examination of Skeletal Remains (Monitored Excavation in morning). Some non-human bones collected during excavation of trench. Multiple bones, some with evidence of butchering. Bones are unassociated with each other.</p> <p>(two) <del>some</del> human bone fragments found</p> <ul style="list-style-type: none"><li>- Right 1<sup>st</sup> metatarsal with a possible healed fracture</li><li>- Intermediate phalanx of the hand.</li></ul> <p>artifacts: pottery sherds (possibly from a of lower pot?) and various ceramic sherds,</p>
Photos?:	Yes ___ No ___



## Monitoring: Daily Log

Forms:	Excavation 16, Piles 7 and 8
Date:	26 August 2010
Name (Filling out log):	Jeanette Friedie
Weather Conditions:	
Personnel in Field:	Page <del>1</del> 1/1
Description:	<p>all skeletal remains are non-human.</p> <p>artifacts: glass fragments (bottle necks, glass shards), ceramic shards (plate fragments).</p>
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:	Excavation 17, Piles 11 and 12, Burial 11
Date:	26 August 2010
Name (Filling out log):	Jeanette Friche
Weather Conditions:	
Personnel in Field:	Page 1/2
Description:	Examination of skeletal remains Most skeletal elements represented. <u>Subadult</u> : ~ 2-3 years of age unfused innominate and vertebrae <del>Partial mandible and JSF</del> Teeth, mostly from the left side (both maxillary and mandibular teeth) <ul style="list-style-type: none"><li>- upper permanent incisor crown</li><li>- upper permanent 1st molar crown</li><li>- lower permanent 1st molar crown</li></ul> } still forming Minimum Number of Individuals = 1 (1 subadult) Artifacts = metal nails, pottery sherds, and ceramic sherds
Photos?: Yes ___ No ___	↑ Burials 11/12 Page 1/2 See Burial 12



## Monitoring: Daily Log

Forms:	Excavation 17, Piles 11 and 12, Burial 12
Date:	26 August 2010
Name (Filling out log):	Jeanette Judice
Weather Conditions:	
Personnel in Field:	Page 2/2
Description:	<p>Examination of skeletal remains (see diagram)</p> <p>Nearly complete adult, likely male also includes partial adult cranium mandible with slightly worn teeth. all upper teeth are present.</p> <p>Subadult mixed in (commingled) subadult tibia, frontal bone, mandible with teeth, ulnae (x2)</p> <p>Minimum Number of Individuals = 4 (2 adults, 2 subadults)</p> <p>Page 2/2</p> <p>See Burial 11</p>
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:	Excavation 18 and 20 Piles 15/16 and 21/22
Date:	26 August 2010
Name (Filling out log):	Jeanette Fridie
Weather Conditions:	
Personnel in Field:	Page 1/1
Description:	<p>All skeletal remains are non-human. Artifacts: pottery sherds, ceramic sherds, and clay pipe fragments.</p>
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:	Excavation 19, Piles 17 and 18
Date:	26 August 2010
Name (Filling out log):	Jeanette Irwin
Weather Conditions:	
Personnel in Field:	page 1/1
Description:	Examination of Skeletal Remains Partial adult femur. Minimum Number of Individuals = 1 (adult)
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:	Excavation 21, Burial 14
Date:	26 August 2010
Name (Filling out log):	Jeanette Jude
Weather Conditions:	Page 1/3
Personnel in Field:	
Description:	<p>Examination of skeletal remains (possible male) Fragments of cranium, vertebrae, mandible with antemortem tooth loss, multiple teeth (mixture of deciduous and permanent teeth)</p> <p>Subadult: 1 permanent crown from a molar, and 1 lower left molar.</p> <p>Minimum Number of Individuals = 2 (1 adult, 1 subadult) adult, possible male</p> <p>See burial 13, and burials 13/14.</p>
Photos?: Yes ___ No ___	Page 1/3



## Monitoring: Daily Log

Forms:	Excavation 21, Burial 13
Date:	26 August 2010
Name (Filling out log):	Jeanette Frider
Weather Conditions:	Page 2/3
Personnel in Field:	
Description:	<p>Examination of skeletal remains Fragments from an <u>adult female</u>.</p> <p>Mandible fragments with antemortem tooth loss, fragments of scapula, humerus, clavicle, femora, right radius, right ulna, vertebrae, cranium, manubrium, ribs, right innominate, bones of the hands (phalanges + carpals + metacarpals) and one fused hyoid bone.</p>
★ MNI = 1, adult female	
There are <u>two</u> left orbits of the skull, however, one clearly belongs to burial 14 → bone can be reassociated by fracture margin.	
Photos?: Yes <input type="checkbox"/> No <input type="checkbox"/>	See Burial 14 and Burial 13/14. Page 2/3



## Monitoring: Daily Log

Forms:	Excavation 21, Burials 13/14
Date:	26 August 2010
Name (Filling out log):	Jeannette Fudge
Weather Conditions:	
Personnel in Field:	Page 3/3
Description:	<p>examination of skeletal remains</p> <p>Artifacts from Burials 13 and 14 =</p> <p>metal, diamond-shaped covers,</p> <p><del>or</del> half-oval, metal caps, possible <del>nail</del></p> <p>(metal nail covers/caps?), L-shaped,</p> <p>metal handle, miscellaneous metal</p> <p>decorative pieces, plastic button, one</p> <p>metal ovoid-shaped pendant.</p> <p style="text-align: right;">Page 3/3</p> <p style="text-align: right;">See Burials 13 and 14</p>
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:	Excavation 23, Pile 33/34
Date:	26 August 2010
Name (Filling out log):	Jeanette Frida
Weather Conditions:	
Personnel in Field:	Page 1/1
Description:	<p>examination of skeletal remains</p> <p>Multiple long bone fragments and partial maxilla.</p> <p>Mixture of adult and subadult skeletal remains (commingled).</p> <p>Subadult: right femur and phalanx of the hand.</p> <p>Minimum Number of Individuals: 2 (1 adult, 1 subadult)</p> <p>Artifacts: Rubber fragments (possible remnants of a shoe).</p>
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:	Excavation 12, Pile 47
Date:	26 August 2010
Name (Filling out log):	Jeanette Frider
Weather Conditions:	
Personnel in Field:	Page 1/6
Description:	<p>Examination of skeletal remains</p> <p>Multiple long bone fragments, pelvis fragments, vertebrae, cranial fragments, rib fragments and carpals of the hand.</p> <p>There are <u>2</u> right radii of two different sizes.</p> <p>Minimum Number of Individuals = 2 (2 adults)</p> <p>Non human bones noted and separated out.</p> <p>Artifacts: metal nail, buttons (bone), ceramic sherds, pottery sherds, clay pipe stems, glass frags including bottle necks, misc. building material, plastic dart, metal horseshoe, metal coffin handle (possible)</p>
Photos?: Yes ___ No ___	Page 1/6



## Monitoring: Daily Log

Forms:	Excavation 12, Pit 47, Burial 6
Date:	26 August 2010
Name (Filling out log):	Jeannette Grider
Weather Conditions:	
Personnel in Field:	Page 2/6
Description:	<p>Examination of skeletal remains</p> <p>R/L humerii, r/l scapula, R clavicle, R 1<sup>st</sup> rib, Sternum, partial left femur, <sup>most</sup> R ribs, left ilium, manubrium, <del>some</del> vertebrae.</p> <p>Male mandible (square chin, robust) with teeth in situ.</p> <p>Two right humerii = Maximum Number of Individuals = 2 (2 adults)</p> <p>*Teeth present are very worn. Incisors show moderate shoveling and some hypoplasia</p> <p>Artifacts: nails (metal), possible coffin wood fragments, bone button.</p>
Photos?: Yes ___ No ___	Page 2/6



## Monitoring: Daily Log

Forms:	Excavation 1, Piles 47, Burial 7
Date:	26 August 2010
Name (Filling out log):	Jeanette Fride
Weather Conditions:	
Personnel in Field:	Page 3/6
Description:	Examination of skeletal remains (Adult) Proximal right femur, right temporal bone, right ulna, 2 proximal phalanges of the hand, right humerus, innominate, vertebrae, bones of the hands + feet, sacrum (Subadult) Left temporal bone  Minimum Number of Individuals = 3 Non-human bones separated out (left bones) Artifacts: glass stopper, pottery sherds, → coin from 1980, tin plate from coffin "18 45" nails, bone button, pipe stems
Photos?: Yes ___ No ___	Page 3/6



## Monitoring: Daily Log

Forms:	Excavation 12, pile 47, Burial 8
Date:	26 August 2010
Name (Filling out log):	Jeanette Triche
Weather Conditions:	
Personnel in Field:	Page 4/6
Description:	<p>Examination of skeletal remains</p> <p>Multiple long bone fragments, cranial fragments with teeth, 2 right humeri</p> <p>Commungled adult and subadult. Subadult = femoral fragment</p> <p>Minimum Number of Individuals = 3 (2 adults, 1 subadult)</p> <p>Artifacts: metal nails, coin from 1980</p>
Photos?: Yes ___ No ___	Page 4/6



## Monitoring: Daily Log

Forms:

Excavation 12, Pile 47, Burial 9

Date:

26 August 2010

Name (Filling out log):

Seanette Jude

Weather Conditions:

Personnel in Field:

Page 5/6

Description:

Fragmentary cranium and  
vertebral fragments.

Cranium consistent with an  
adult white male.

Page 5/6

Photos?: Yes \_\_\_ No \_\_\_



## Monitoring: Daily Log

Forms:	Excavation 12, file 47, Burial 10
Date:	26 August 2010
Name (Filling out log):	Jeannette Faudel
Weather Conditions:	
Personnel in Field:	Page 6/6
Description:	<p><del>Excavation</del> Examination of skeletal remains. Consistent with white female. Nearly complete skeleton with long bone fragments, scapulae, unossified sacrum, cranial fragments, coccyx, clavicles, manubrium, sternum, vertebrae, ribs, bones of the hand, 2 ear ossicles, ossified thyroid cartilage, mandible with moderate wear (slight torus). Some molars + premolars missing antemortem. Fractures noted on lingual surface of anterior teeth.</p> <p>White female = small mastoids, <del>star</del> gracile glabella, no mental crest, imbrication, receding zygomatics, sharp nasal sill, narrow nasal aperture and interorbital breadth. MNI = 1 (1 adult female)</p>
Photos?: Yes <input type="checkbox"/> No <input type="checkbox"/>	Artifacts = metal nails Page 6/6



## Monitoring: Daily Log

Forms:	Excavation 25, Piles 11 and 12
Date:	10 September, 2010
Name (Filling out log):	Jeanette Linder
Weather Conditions:	5 <sup>00</sup> pm
Personnel in Field:	Contact at site (John) page 1/1
Description:	Examination of skeletal remains. Non-human bone fragments. Artifacts: Glass bottle Ceramic pieces (tops?) x 2 "Rocco DiNobile 717 Fiftywater St, Phila" Metal Nails, glass marble, glass shards, metal screw caps?, clay pipe stems, pottery/ceramic sherds, partial metal copper plate.
Photos?:	Yes ___ No ___



## Monitoring: Daily Log

Forms:	<i>Surface Finds</i>
Date:	<i>10 September 2010</i>
Name (Filling out log):	<i>Jeanette Fudge</i>
Weather Conditions:	
Personnel in Field:	<i>Page 1/1</i>
Description:	<i>Human remains : Patella, Cranial fragments.</i>
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:

Excavation 27

Date:

10 September 2010

Name (Filling out log):

Jeanette Fiddle

Weather Conditions:

Personnel in Field:

Page 1/1

Description:

Examination of skeletal remains  
11) Human bone (right scapula)

Non-human bones separated out  
(collection of cow and pig)

Artifacts: Ceramic sherds  
(possible bowl or vase)

Photos?: Yes  No



## Monitoring: Daily Log

Forms:

Excavation 26 Files 45/46 Burials 15/16

Date:

10 September 2010

Name (Filling out log):

Jeanette Frullo

Weather Conditions:

Personnel in Field:

Page 1/4

Description:

Artifacts: Ceramic tops?

"Loreisigacker 1357 Frankford Ave,  
Phila"

- ceramic plate sherds
- glass bottle shards
- clay pipe stems
- metal nails

Photos?: Yes \_\_\_ No \_\_\_



## Monitoring: Daily Log

Forms:	Excavation 26, Piles 45/46 BURIAL <u>16</u>
Date:	10 September 2010
Name (Filling out log):	Jeanette Frider
Weather Conditions:	
Personnel in Field:	Page 2/4
Description:	Examination of skeletal remains <ul style="list-style-type: none"><li>- left temporal bone</li><li>- left radius</li><li>- right humerus</li><li>- Rib fragments</li><li>- hand phalanx</li><li>- partial innominate</li><li>- cranial fragments</li><li>- Additional long bone fragments</li></ul> Minimum Number of Individuals = 1
Photos?: Yes ___ No ___	



## Monitoring: Daily Log

Forms:	Excavation 26 Piles 45/46 Burial <u>15</u>
Date:	10 September 2010
Name (Filling out log):	Jeanette Judie
Weather Conditions:	
Personnel in Field:	Page 3/4
Description:	Examination of skeletal remains Nearly complete skeleton L/R femora L/R tibiae (signs of periostitis) L/R fibulae L/R innominate Sacrum and coccyx R patella clavicle mandible one rib fragment Scapula partial radius most bones of hands + feet Minimum Number of Individuals = 1
Photos?: Yes ___ No ___	robust bones ↓ likely an adult male



## Monitoring: Daily Log

Forms:	Excavation 26, Pile 45 (Scatter Under wall)
Date:	10 September 2016
Name (Filling out log):	Jeanette Jredce
Weather Conditions:	
Personnel in Field:	Page 4/4
Description:	Examinations of skeletal remains Distal phalanx of hand left MC4 (slender, gracile) left calcaneus light patella rib fragments cranial fragments thoracic vertebrae R MT3 radius or ulna short Right scapula Right femula (large robust)
	Maximum Number of Individuals = 2 (based on size differences in the bones)
Photos?:	Yes ___ No ___

**APPENDIX D**  
Reinternment Plan

August 26, 2010

Mr. Michael Audin, RPA  
Archaeology Resource Services, LLC  
605 Twin Arch Road  
Rock Tavern, NY 12575

**Re: *Saint Patrick's Old Cathedral Cemetery Wall Restoration*  
*263 Mulberry Street, New York, New York, 10012 (ADP- 70753.01A)*  
*Re-internment Plan for Recovered Remains***

Dear Michael,

Re: Reinternment of remains and discovered headstones

We have reviewed the situation regarding the disturbance of remains and discovered headstones with the client.

Their desire is to proceed as discussed in the meeting of August 13, 2010.

The procedure is as follows for remains:

1. Notify SPOC pastoral staff to coordinate schedule for re-internments. (SPOC will have priest present to preside over procedure).
2. Retrieve remains from temporary storage.
3. Excavate the location where the remains were discovered based on field log.
4. Excavation shall be as close as possible to the original discovery location.
5. The depth of the excavation shall match the depth of the original discovery depth.
6. Place remains in excavation and cover with screened soil for a depth of 12".
7. Complete back-fill with available soils from excavation.
8. Mark location with temporary tag/stake for documentation of location.
9. Record location on plot plan.
10. Submit plot plan to owner as record.

The procedure is as follows for headstones discovered below grade and disturbed by construction operations:

(Continued)

1. Retrieve headstone from temporary storage.
2. Excavate the location where the headstone was discovered based on field log.
3. Excavation shall be as close as possible to the original discovery location.
4. The depth of the excavation shall match the depth of the original discovery depth.
5. Place headstone in excavation and cover with screened soil for a depth of 12".
6. Replace headstones below grade in grouped or stacked positions as close as possible to discovered arrangement.
7. Complete back-fill with available soils from excavation.
8. Mark location with temporary tag/stake for documentation of location.
9. Record location on plot plan.
10. Submit plot plan to owner as record.

Regardless of the necessary disturbances resulting from the construction operations, it is the intent of the owner that all remains and headstones, as discovered, are replaced as closely as possible to their original locations.

Any small artifacts, such as coins, shards of glass, etc. which are unrelated to remains are to be retained by the owner for possible public display.

If you have any questions please do not hesitate to call and discuss at your convenience.

Very truly yours,

A handwritten signature in black ink, appearing to read "Lou Martino". The signature is fluid and cursive, with a long horizontal stroke extending to the right.

Lou Martino  
Principal

**APPENDIX E**  
Artifact Photographs

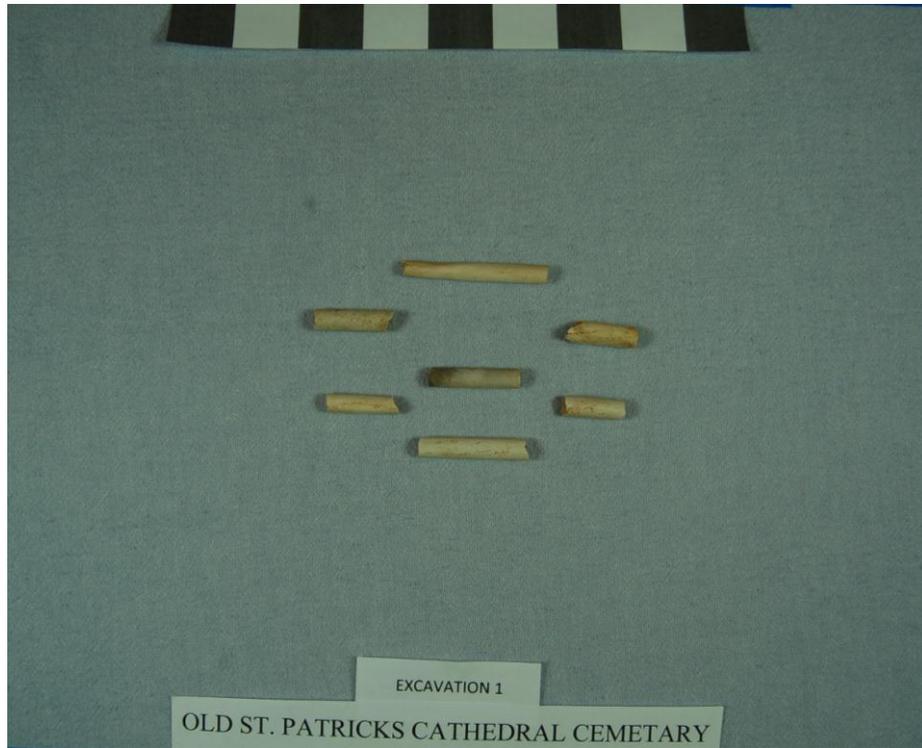


Photo AP-1: Clay pipe stem fragments found in excavation 1. Nine inch scale on top.



Photo AP-2: Glass found in excavation 1.



Photo Ap-3: Ceramics found in excavation 1.



Photo Ap-4: Metal found in excavation 1.



Photo AP-5: Metal found in excavation 6

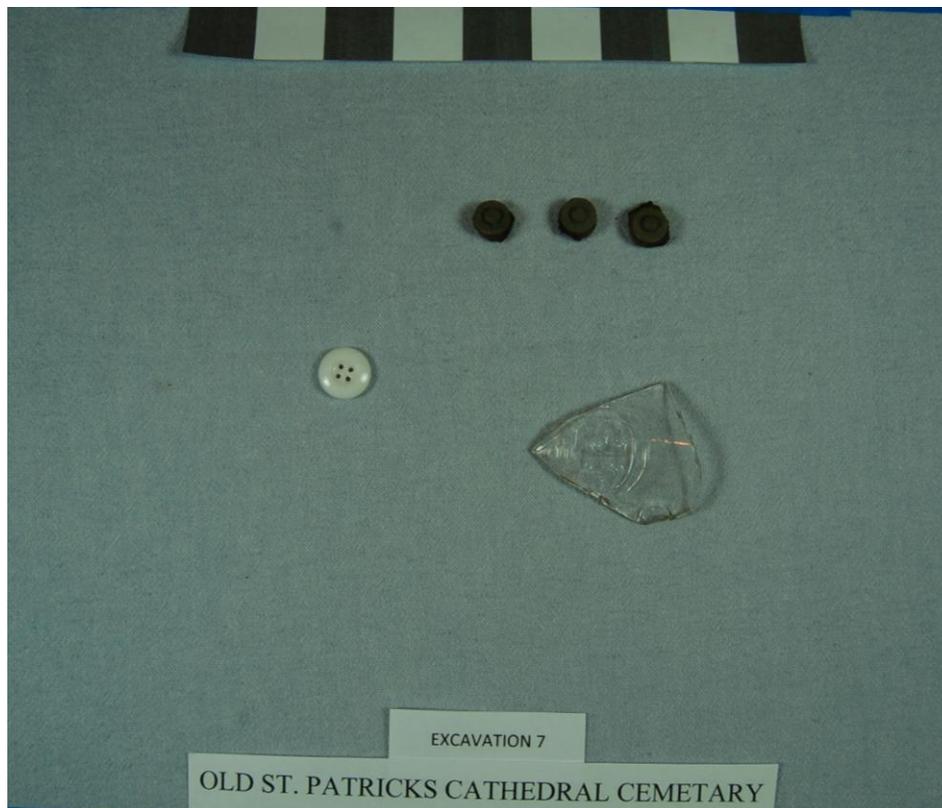


Photo AP-6: All artifacts found in excavation 7.



Photo AP-7: Clay pipe stem fragments and ceramics found in excavation 8.



Photo AP-8:



Photo AP-9: Metal from excavation 10.



Photo AP-10: Clay pipe bowl and stem fragments from excavation 11.



Photo AP-11: Glass from excavation 11.



Photo AP-12: Ceramics from excavation 11.



Photo AP-13: Metal from excavation 11.



Photo AP-14: Clay pipe stem fragments from excavation 12.





EXCAVATION 12  
OLD ST. PATRICKS CATHEDRAL CEMETARY

Photo AP-17: Metal from excavation 12.



EXCAVATION 12  
OLD ST. PATRICKS CATHEDRAL CEMETARY

Photo AP-18: More metal from excavation 12.



Photo AP-19: Metal from excavation 13.

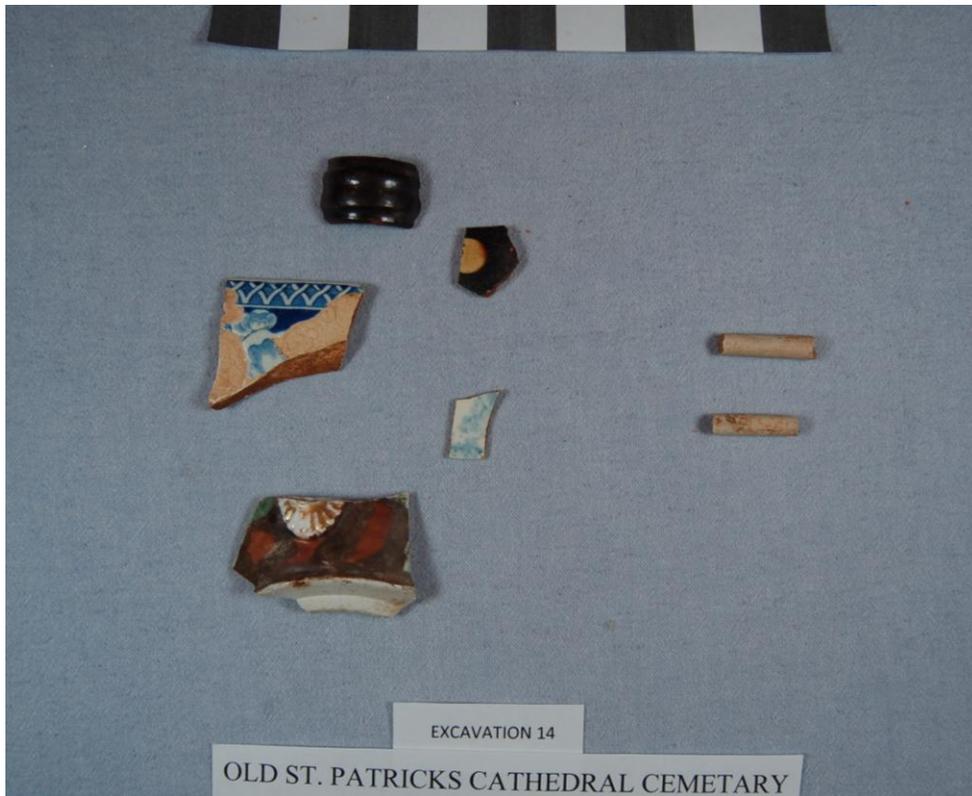


Photo AP-20: Pipe stem fragments and ceramics from excavation 14.



Photo AP-21: Metal from excavation 14.



Photo AP-22: Ceramics from excavation 15.





Photo AP-25: Metal from excavation 17.



Photo AP-26: Ceramics from excavations 18 and 20.



Photo AP-27: Glass, a clay pipe stem fragment, metal fork and ceramics from excavation 19.



Photo AP-28: Metal (mostly coffin hardware) from excavation 21 (miss marked excavation 17).

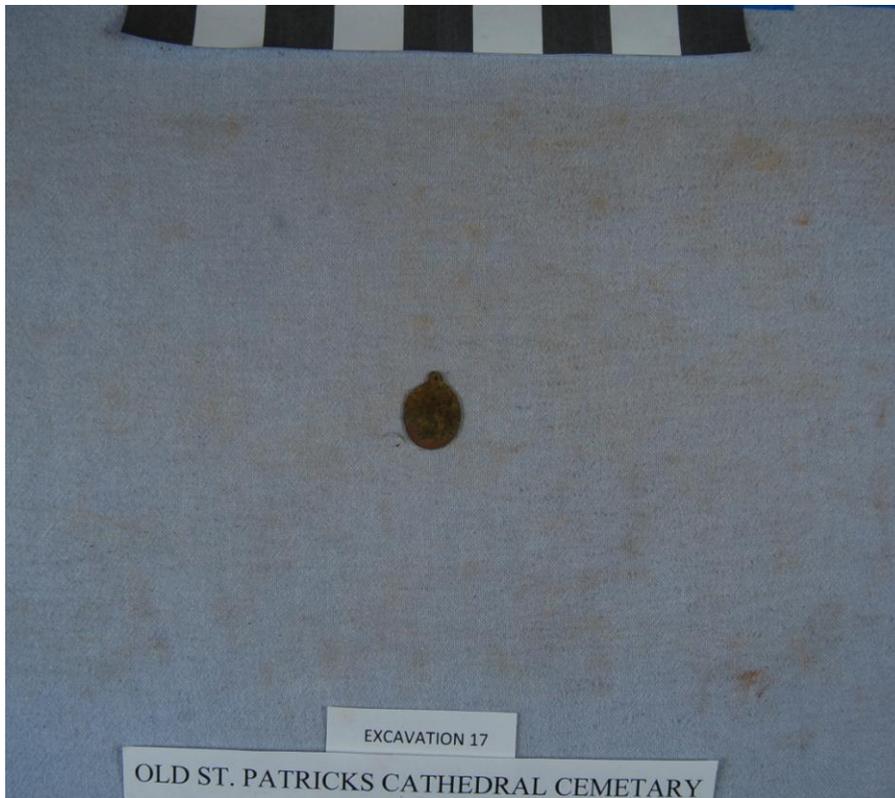


Photo AP-29: Small pendant from excavation 21 (miss marked excavation 17).

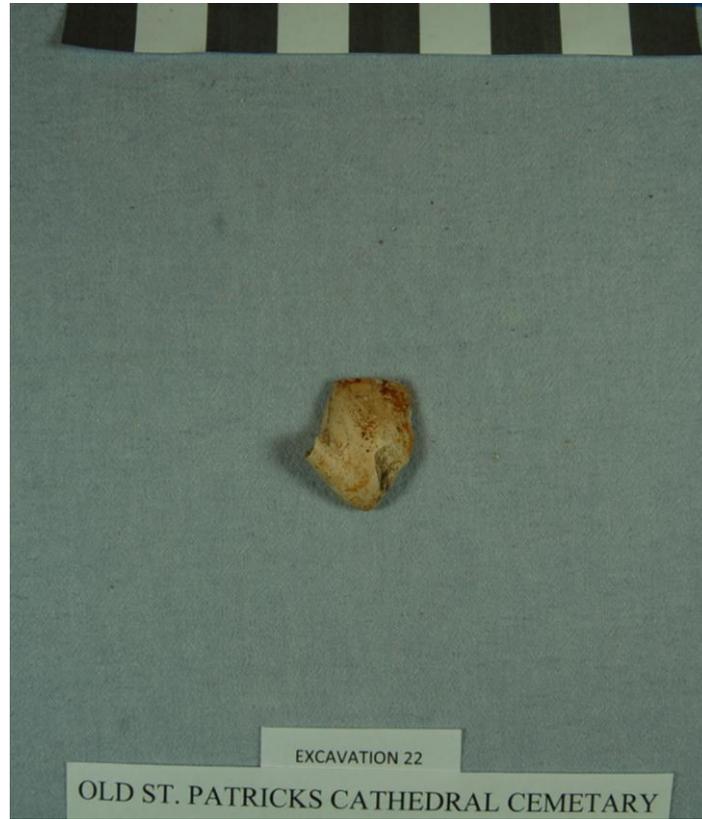


Photo AP-30: Part of a clay pipe bowl from excavation 22.



Photo AP-31: Metal from excavation 23.



Photo AP-32: Clay pipe stem fragments, glass and ceramics from excavation 25.



Photo AP-33: Metal (including part of a name plate) from excavation 25.



Photo AP-34: Clay pipe stem fragments and bottle glass from excavation 26.



Photo AP-35: Ceramics from excavation 26.



Photo AP-36: Metal from excavation 26.



Photo AP-37: Ceramics from excavation 27.

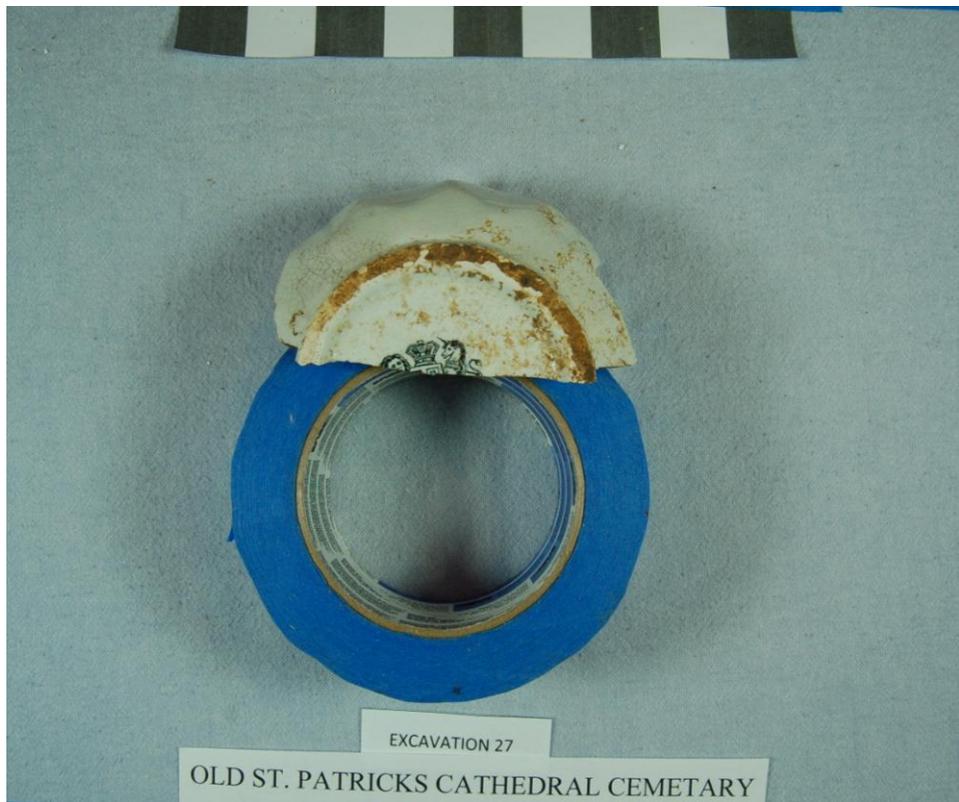


Photo AP-38: Possible makers mark on ceramics from excavation 27.



OLD ST. PATRICKS CATHEDRAL CEMETARY

Photo AP-39: Random surface find during excavation.

**APPENDIX F**

Relevant Communication with  
Landmarks Preservation Commission



THE NEW YORK CITY LANDMARKS PRESERVATION COMMISSION  
1 CENTRE STREET 9TH FLOOR NORTH NEW YORK, NY 10007

TEL: 212 669-7700 FAX: 212 669-7780



# PERMIT

## CERTIFICATE OF NO EFFECT

<b>ISSUE DATE:</b> 10/27/08	<b>EXPIRATION DATE:</b> 10/29/2012	<b>LOCKET #:</b> 094614	<b>CNE #:</b> CNE 09-4838
<b>ADDRESS</b> 260-264 MULBERRY STREET <u>Old St. Patrick's Cathedral</u> INDIVIDUAL LANDMARK		<b>BOROUGH:</b> MANHATTAN	<b>BLOCK/LOT:</b> 509 / 1

**Display This Permit While Work Is In Progress**

**ISSUED TO:**

**Monsignor Donald Sakano**  
**St. Patrick's Old Cathedral**  
**32 Prince Street**  
**New York, NY 10012**

Pursuant to Section 25-306 of the Administrative Code of the City of New York, the Landmarks Preservation Commission hereby approves certain alterations to the subject premises as proposed in your application completed on October 27, 2008.

The approved work consists of exterior work at the brick wall surrounding the churchyard and cemetery at Mulberry, Spring and Mott Streets; including, installation of reinforced concrete buttresses and associated piles approximately every 12' along the interior perimeter of the wall, with the buttresses to be stained to match the brick of the historic wall; repointing of the wall in its entirety; installation of carbon fiber reinforced polymer rods set in epoxy in selected joints at the upper portion of the wall, prior to the repointing of the joints; selective crack repair and limited brick replacement as necessary; selective repair of brownstone quoins and brownstone coping stones (Jahn repair mortar); replacement of existing cast stone coping stones with new brownstone coping stones to match the historic; cleaning of the wall using low pressure wash (maximum 500 p.s.i.) and a proprietary product; and restoration of two (2) sets of double wood doors on Mulberry Street, including scraping and painting to match the existing; as described in letters from Michael Doyle, dated October 23, 2008 and October 31, 2008; and drawings labeled A000, a100, A101, A102, A201, A202, dated 7/10/08, and prepared by Michael Doyle, R.A.; and S001, S001, S100, S200, S201, dated 7/11/08, prepared by Milan Vatovec, P.E.; all submitted as components of the application.

In reviewing this proposal, the Commission notes that the Old Saint Patrick's Cathedral Individual Landmark designation report describes 260-266 Mulberry Street as a Gothic Revival-style church building built in 1815, and designed by Joseph F. Mangin. The Commission also notes that the historic brick wall surrounding the churchyard and cemetery visibly undulates and leans inward at several locations, resulting in an unsafe condition that must be addressed. The Commission finally notes that the proposed excavation work has the potential to impact burials.

With regard to this proposal, the Commission finds that the installation of concrete buttresses at the interior of the brick wall will only be minimally visible from a public way, when looking through the gates of the entrance to the church on Mott Street; that the installation of the buttresses and carbon fiber reinforced rods will afford structural stability to the wall, while allowing it to maintain the distinctive leanings and undulations that characterize it; that the concrete buttresses will be stained to match the historic brick; that the repointing mortar will match the historic mortar with respect to color, texture, strength and tooling; that the replacement brick will match the historic with respect to size, color, texture and coursing; that the brownstone patching mortar will match the existing with respect to color, texture, detail and tooling; that the new brownstone coping stones will match the historic with respect to color, texture, thickness, detail and tooling; that the wall will be cleaned with a low-pressure water wash not to exceed 500 p.s.i. and a proprietary restoration product formulated for use on historic buildings; and that the wooden doors on Mulberry Street will be scraped and painted to match the existing.

PLEASE NOTE: Archaeological monitoring will be completed as part of the excavation, to identify burials so that the buttresses may be shifted to avoid impacting the burials if at all possible. If this is not possible, the Church has determined that the burials will be moved to a crypt in the church and then reburied once the work has been completed. The archaeologist, who must be eligible to be a Registered Professional Archaeologist, will submit a technical memo that documents what they have observed including the exact locations of any burials and provide plans, profiles, and photographs. This must be submitted to the Archaeology Department for review and approval.

PLEASE ALSO NOTE: This permit is issued contingent upon the Commission's review and approval of test samples of the brick, repointing mortar, brownstone patching mortar, and concrete stain prior to the commencement of the work; and the understanding that the work will take place when the exterior temperature remains a constant 45 degrees F or above for a 72-hour period from the commencement of the work. Please contact Andria Darby at the Landmarks Preservation Commission when samples are completed for a site inspection.

The Commission has reviewed the application and these drawings and finds that the work will have no effect on significant protected features of the building.

This permit is issued on the basis of the building and site conditions described in the application and disclosed during the review process. By accepting this permit, the applicant agrees to notify the Commission if the actual building or site conditions vary or if original or historic building fabric is discovered. The Commission reserves the right to amend or revoke this permit, upon written notice to the applicant, in the event that the actual building or site conditions are materially different from those described in the application or disclosed during the review process.

All approved drawings are marked approved by the Commission with a perforated seal indicating the date of approval. The work is limited to what is contained in the perforated documents. Other work or amendments to this filing must be reviewed and approved separately. The applicant is hereby put on notice that performing or

maintaining any work not explicitly authorized by this permit may make the applicant liable for criminal and/or civil penalties, including imprisonment and fines. This letter constitutes the permit; a copy must be prominently displayed at the site while work is in progress. Please direct inquiries to Andria Darby.

*Robert B. Tierney*  
Robert B. Tierney  
Chair

*AKD*

**PLEASE NOTE: PERFORATED DRAWINGS AND A COPY OF THIS PERMIT HAVE BEEN SENT TO:  
Michael Doyle, Vice President, Acheson Doyle Partners, Architects**

cc: Caroline Kane Levy, Deputy Director of Preservation; Amanda Sutphin,  
Director of Archaeology