

OAK HILL CEMETERY TEMPORARY RECEIVING VAULT

HISTORY OF OAK HILL CEMETERY

Early in 1865, the city purchased land for a new cemetery. Instead of a simple cemetery like the existing Pioneer Cemetery, Lawrence's city commissioners wanted a rural cemetery, which was a growing trend in cemetery development in the mid-late 1800's. The concept of rural cemeteries included trees, graceful paths, and open space for the public to gather. These types of cemeteries romanticized death, as was typical in the Victorian Era, and were a precursor to the public parks we know now. Monuments that were once simple crosses or slabs of stone now became detailed and intricate. Oak Hill's original entrance on the south had an elegant and decorative cast iron gate and fence, and parts of it remain in today's entrance. Lawrencians were very proud of their cemetery. They were utilizing ideals from the East that were deemed progressive for their time and town boosters were able to use it as a marketing tool to entice people to settle in Kansas.

Oak Hill Cemetery served as a place for citizens to remember those lost in Quantrill's Raid, who were re-interred here from the original Pioneer Cemetery in 1872. It is the final resting place of many prominent individuals that played key roles in the history of Lawrence, including James Lane, senator, and John Usher, Secretary of State under President Lincoln.



Holding Vault and John P. Usher Vault

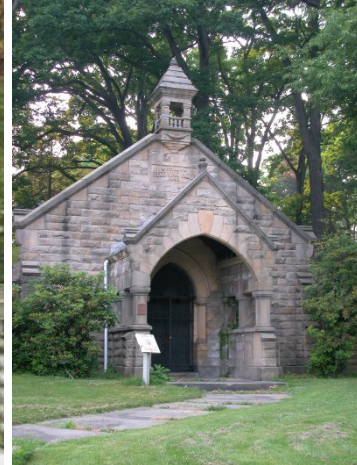
TEMPORARY/HOLDING VAULT

Most temporary receiving vaults were constructed between 1850 and 1900. The function of a holding vault was to temporarily intern people when it was not possible to place them in their chosen plot. There are several reasons why this could be necessary. The first and most common are because the ground would be too hard in winter months to dig graves by hand. The caskets would be placed in the vault to wait spring time when

the ground began to thaw. Another reason was to wait for the completion of a monument or personalized vault. This was usually the case with important, wealthy citizens. Adjacent to the holding vault in Oak Hill is the John P. Usher vault. Members of the Usher family were held in the vault awaiting permanent interment in their family vault.



Oak Ridge Vault 1860



West Lawn Vault 1893

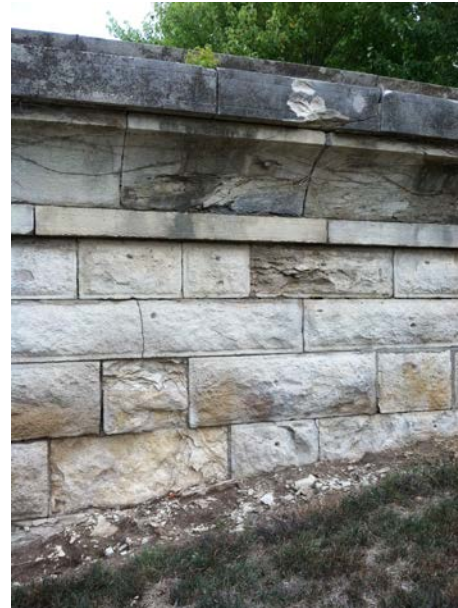
This was also the case with the vault at Oak Ridge Cemetery in Springfield, Illinois which held the casket of Abraham Lincoln, and his son, while the President's monument was finished. Another example is the vault at West Lawn Cemetery in Canton, Ohio that held the casket of President McKinley during the construction period of his monument.

The exact construction date has yet to be determined but it is estimated that the vault at Oak Hill was constructed between 1865, when the cemetery was established, and 1884. The exterior is constructed of limestone on all sides and the roof, with stone sizes varying from 46" x 15 ½" to 54" x 16". On the east side there is a small brick inset with a ventilation pipe. The door is made of steel. The overall size of the structure is approximately 500 square feet, or 19 x 26. The design is a simple revival style with little ornamentation. Rusticated stone walls join the stone architrave, which supports a concave frieze and the slightly pyramidal stone roof. The interior of the structure is constructed of brick covered with plaster and is undecorated. The walls come up to form a pointed arch over the open interior space. Both the interior and exterior walls are tuck-pointed with lime putty mortar, which is typical of the period of construction. This is a mixture of water, sand and lime (calcium oxide).

The structure is significant because it demonstrates a process in history that is mostly irrelevant today. Thanks to modern machinery, graves can be dug any time of the year and monuments don't have to be built using trains, carts, wagons and hand labor to carve stone. This immediacy has eliminated the need for a holding vault. The way that the structure is tucked into a small hill is typical of the rural cemetery movement. It was important to keep the natural lay of the land and incorporate hills and valleys. This placement also helped maintain a consistent, cool ground temperature to slow decay.

CONDITION

The overall condition of this structure is fair. Evidence suggests that there was at one time vegetation growing on the surface of the stone. This has proven to be detrimental to the condition of the stone and is one of the causes for the spalling (pieces breaking off the façade of the stone), especially near the base. When vegetation grows on the surface of stone, small roots penetrate the stone, creating many ways for water to get behind the surface. The water is then subject to regular freeze/thaw cycles, which compromises the integrity of the stone. Also the minerals in the water try to push out through the face of the stone.



The other probable cause is mortar damage that was either left unchecked or was fixed with an incompatible replacement mortar. When mortar is damaged and the seal between the stone and mortar is compromised, water is able to get into the wall, just as with the vegetation. It is important when repairing historic masonry buildings that the correct materials are used. In this case, a Portland cement mortar was used to re-point joints on the roof. Portland cement is too firm for use on most historic masonry buildings that are constructed out of natural stone or brick. The result is further damage to the joints and the stone. Since the repaired joints are on the roof, the damage can typically be traced from the joint down to the ground level.



The re-pointing issues on the roof have also led to minor problems on the interior. Overall the plaster is in good condition for its age, with no indications that it has been replaced from the original. As water has gotten behind the stones on the roof, it seeps into the walls, compromising the mortar joints of the interior bricks, which then seeps to the plaster, creating the cracks that are visible today.

The current growth of lichens, a type of fungus, on the face of the stone is not harmful to the stone. Unlike the vegetation that was previously growing on the walls, lichens do not have root systems and do not penetrate the surface of the stone. There are several environmentally friendly cleaning solutions available to remove lichens from the face of stones.







Restoration Services

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PROPOSAL

DATE: 12-9-13

PREPARED FOR: Lynne Zollner – Historic Resources Administrator, City of Lawrence KS, Douglas County

PROJECT: Oak Hill Cemetery Vault – Exterior Masonry Restoration

Pishny Restoration Services proposes to furnish and install all materials and labor to complete the above referenced project as outlined below.

Base Bid: \$42,960.00

Base Bid Includes:

- Cleaning of exterior stone masonry with most gentle method possible to remove the biological grown and staining.
- Removal of highly deteriorated stone faces back to sound material in preparation for new natural stone veneer installation.
- Fabricate and install new natural stone veneer to match existing in stone color and profile as closely as possible.
 - Installation will require drilling and installing stainless steel pins in epoxy anchoring adhesive and back bedding stone with natural hydraulic lime mortar.
- Stones that have open cracks and can be salvaged will receive the following treatment:
 - Cracks will be injected with dispersed hydrated lime (DHL) or lime based injection grout to fill voids that can collect and hold water.
- Repointing as necessary with natural hydraulic lime mortar with sand matched to original.
- Clean up of any construction related debris.

Exclusions:

- Additional items not listed in the base bid above.
- Replacement or repair of stones that have chips, but are otherwise in sound condition.

Thank you for the opportunity to present a proposal for this project. We appreciate your business.

Sincerely,

Corey Thomas
VP - Business Development

Pishny Restoration Services

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