MASONRY

The Depot is constructed with a wide variety of masonry materials: granite and limestone rubble was used for the foundation walls of the steam tunnels; soft common brick was used for all of the backup masonry and interior walls of the utilitarian rooms; buff pressed brick was employed for the interior waiting room walls; red face brick was used for the exterior; brown sandstone was utilized for the mudsills, watertable, a belt-course and exterior window sills; arched buff (interior) and brown (exterior) terra cotta lintels are found over the waiting room windows; hard brick pavers for the train platform and walks; and marble curbs and troughs in the hardscape. All of these masonry materials were visually indentified for the HSR; further testing should be completed when selecting proper mortar composition and replacement materials. Masonry conditions are detailed on the drawings in **Appendix D**.

All of these masonry materials were originally set in lime mortar, often pigmented to harmonize with the adjacent masonry. The condition, restoration and availability of replacement masonry materials vary so they are covered in further detail individually. Articles from the grand opening describe and even call out some of these masonry materials by name, but only the hardscape pavers bear maker's marks and these generally appear to be replacement materials. Nevertheless, local lore suggests at least some of these materials were sourced in Keokuk.

Granite & Limestone Rubble:

Access to perform a complete survey of the steam tunnels was limited due to numerous pipes and friable asbestos **[Fig 29.]**. Much of the Depot is reportedly built on bedrock but granite and limestone rubble footings and foundation walls are found throughout the steam tunnels. This material is generally undressed rubble laid-up with mortar in a random bond. The perimeter foundation walls are predominately granite, while limestone was employed for the interior tunnel wall. The builders used reliable granite to support the Depot walls, but were more frugal and resourceful where possible using marginal quality limestone where strength was less essential. Out of sight, the tunnel walls did not need to match. The source for the granite is unknown, but presumably came from one of the granite quarries in Iowa or the upper Midwest served by the rail lines that also served Keokuk. Keokuk had several limestone quarries and this material is presumably local if it was not simply excavated from the adjacent bluff. There is no evidence that the tunnels have ever been worked on since construction. Although the tunnels are generally sound for their purpose, a thorough survey and remedial repairs should be completed once the old piping and asbestos is removed. Given the moderate temperatures below grade, this work could be completed during late fall, early spring or even winter when masons are motivated to provide their most competitive pricing. Only limited material should be required to repair the walls; the brick vaults should be stabilized at the same time but should not require any significant reconstruction, which is fortunate given the tight confines.

Fig 29. Granite & Limestone rubble foundation walls in the steam tunnels.

Common Brick:

Common brick was employed throughout the Depot as vaulting material in the steam tunnels, the backup masonry for the exterior face brick, the chimney flue, and for the interior walls of the boiler room, freight rooms, mail room, train conductor's room and baggage room. It's reasonable to assume that the common brick, which represents the bulk of the brickwork, was acquired locally if the price was competitive. Moreover, since common brick was used only for back-up masonry and utilitarian rooms and generally not visible to the public, Root's reputation for closely scrutinizing materials for their quality and color was not pertinent. Keokuk had a local common brick industry from the late 19th century through the early 20th century but a reliable, comprehensive source for this industry remains elusive with several contradictory sources.

The Hubinger Brick Works were reportedly "utilizing the Warsaw shale" by 1890 and may have been the source of the common brick used for the Depot.[39] J.C. Hubinger was a leading industrialist in Keokuk during the late 19th century with multiple businesses, including the cornstarch processing plant that remains downriver from the Depot today. The Gate City Brick Works (GCBW) also appears to be in business in the early 1890s. One newspaper reports a GCBW worker was injured in a building collapse in 1893 but it is unclear whether they were in business when the Depot was built. Keokuk Brick & Tile built a new plant at the city limits by 1911 which was served by a CB&Q branch line, but again, it is unclear how early the company was actually producing bricks. The common bricks from this later plant were relatively high quality and stamped "keOKuk" on one face; they are popular collector's items but were not used in the construction of the Depot. Further research and testing may provide more definitive proof that the common brick was sourced in Keokuk. Regardless of the source, the quality and uniformity of the common brick is less than desirable. Where it is allowed to dry and is not subject to freeze-thaw cycles, such as in upper walls and the chimney flue, it has performed well and remains in very good condition **[Fig 30.]**.

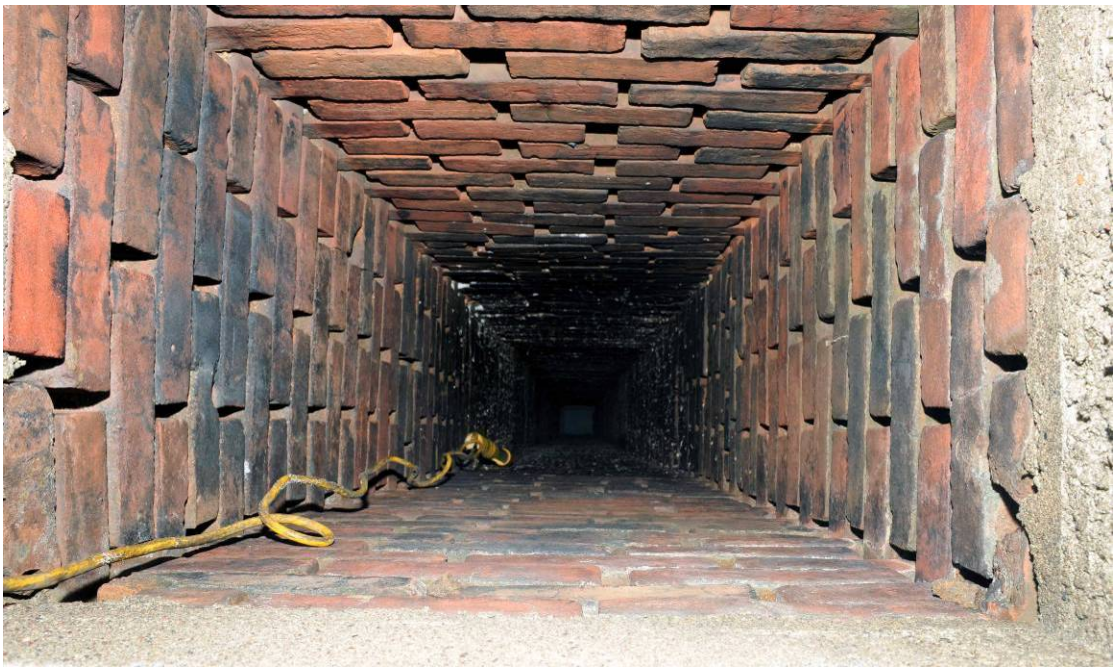

Fig 30. Common brick in the flue remains in good condition despite missing mortar.

[39] Story of Lee County, Iowa

However, wherever the brick is saturated by rising damp, steam leaks (historically in the tunnel vaults) or roof leaks, and is not allowed to dry out, the fire skin is susceptible to spalling and the porous clay body is prone to accelerated deterioration. This is exacerbated when the bricks—which have a high porosity—are subject to wetting/drying and freeze-thaw cycles in intermittently heated or unheated rooms. These conditions are primarily attributed to rising damp since they are found in the lower third of the interior walls in all of the utilitarian rooms with common brick. However, poor roof and site drainage, and nonexistent flashing at the deteriorated mudsills are primary sources of the rising damp and are all contributing to the brick deterioration. The worse conditions are found at the base of the walls and are especially serious in the conductor's equipment room, mail room and boiler room leaving piles of brick dust on the floor **[Figs 31., 32. & 33.]**.

There are no other apparent patterns to the common brick deterioration. It is found on interior walls and the interior face of exterior walls, near radiator locations (which tend to draw moisture towards them) and along unheated walls, and in all compass directions. The multiple paint layers (which tend to seal moisture in masonry and aggravate freeze-thaw conditions and spalling) seem to have no particular bearing. The very same common brick that's failing miserably below the approximate four foot level tends to be fine above.

Fig 31. Spalling brick in the lower walls of the conductor's equipment room.

There are currently no plans to restore any of these areas for historic interpretation. Repairing the walls with salvaged brick and lime mortar, to include a thru-wall flashing at the base of the wall, will significantly reduce rising damp and future deterioration. All load bearing walls must be repaired, even if they will ultimately be furred out and covered with plaster or drywall.

Fig 32. Spalling brick in the lower walls of the U.S. mail room.

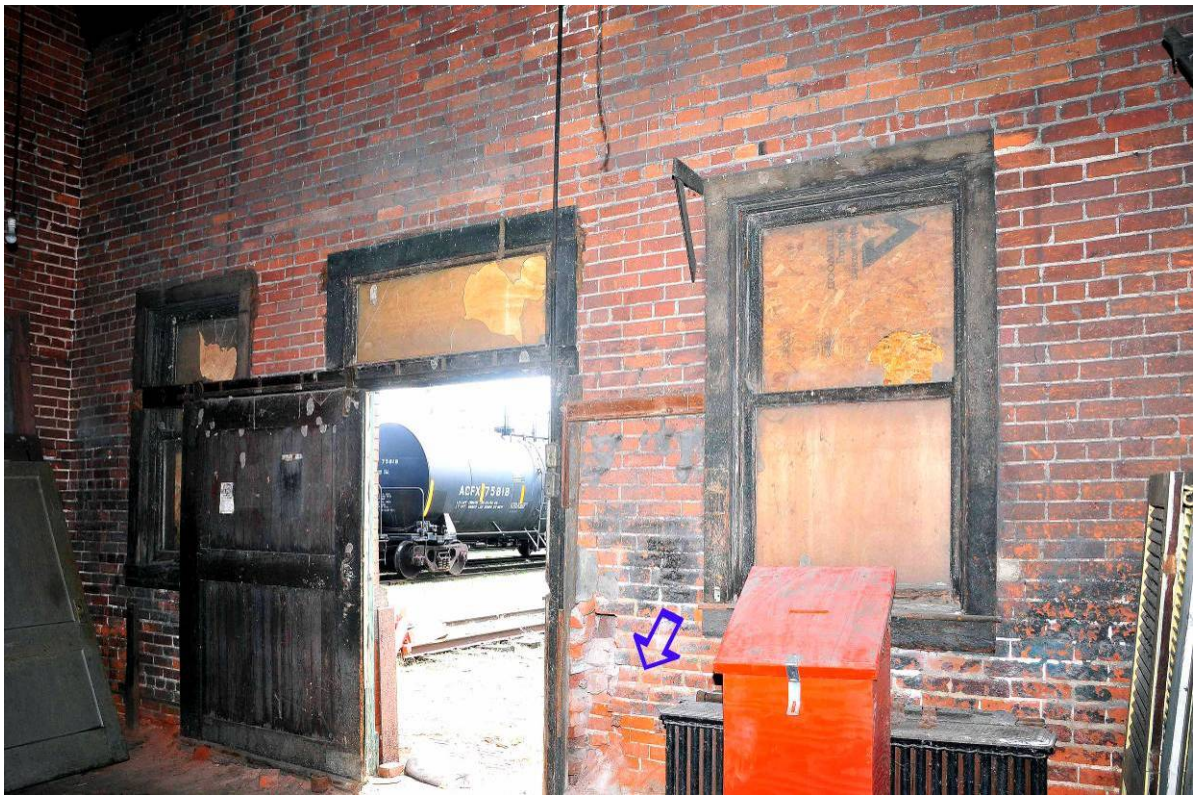

Fig 33. Spalling brick in the lower walls of the boiler room.

Interior Pressed Brick:

The source of the buff pressed brick veneer used for the interior walls of the waiting room has not been identified. According to the local volunteers, no maker's marks were found on the brick during the reconstruction of the upper wall in the southeast corner of the room. The brick is a standard size and laid-up in thin butter-joints in a running bond. Burnham & Root often worked with similar brick and it likely came from an Illinois or Chicago distributor (even if it was manufactured elsewhere). With the exception of this corner, the pressed brick and pinkish-buff mortar in the waiting room is in remarkably good condition **[Fig 34.]**. The brick was painted several times over the years, perhaps first in 1949, and was stripped as part of the ISHS grant in 1991 to partially restore the waiting room.

Fig 34. Stained brick in the southeast corner of the waiting room (January 2011).

Today, efflorescence and staining remains in the southeast corner of the waiting room. The wall has been stabilized but must be partially reconstructed and cleaned by professional restoration masons to restore the original appearance and eliminate the stains. If a matching brick is found, the source should be documented and additional stock purchased for proposed alterations to the waiting room in an effort to convert it as an event center. Brick may be required around the new doorways cut into the downriver baggage room wall to connect the future kitchen and washrooms, and potentially to the bluffside wall, if the final design solution includes removal of the alcove and washrooms from the waiting room.

If matching brick cannot be found, original brick can be harvested from above the ticket office and alcove/washroom to be used in more visible areas. This brick was not stripped during the work in 1991. The best available match can be then used to replace the brick in these concealed areas.

Red Face Brick:

The red face brick (i.e. pressed brick) veneer used on the exterior of the Depot does not have any maker's marks and the origin of this brick has not been identified either. It is a high-quality brick that has performed well in the elements and also likely came from an Illinois or Chicago distributor (even if manufactured elsewhere). The brick is laid-up with thin butter-joints in running bond in a rose-pigmented mortar that was very popular during the "brown decades." The original color of the brick was much more vibrant than the dark patina acquired over the past 123 years **[Fig 35.].**

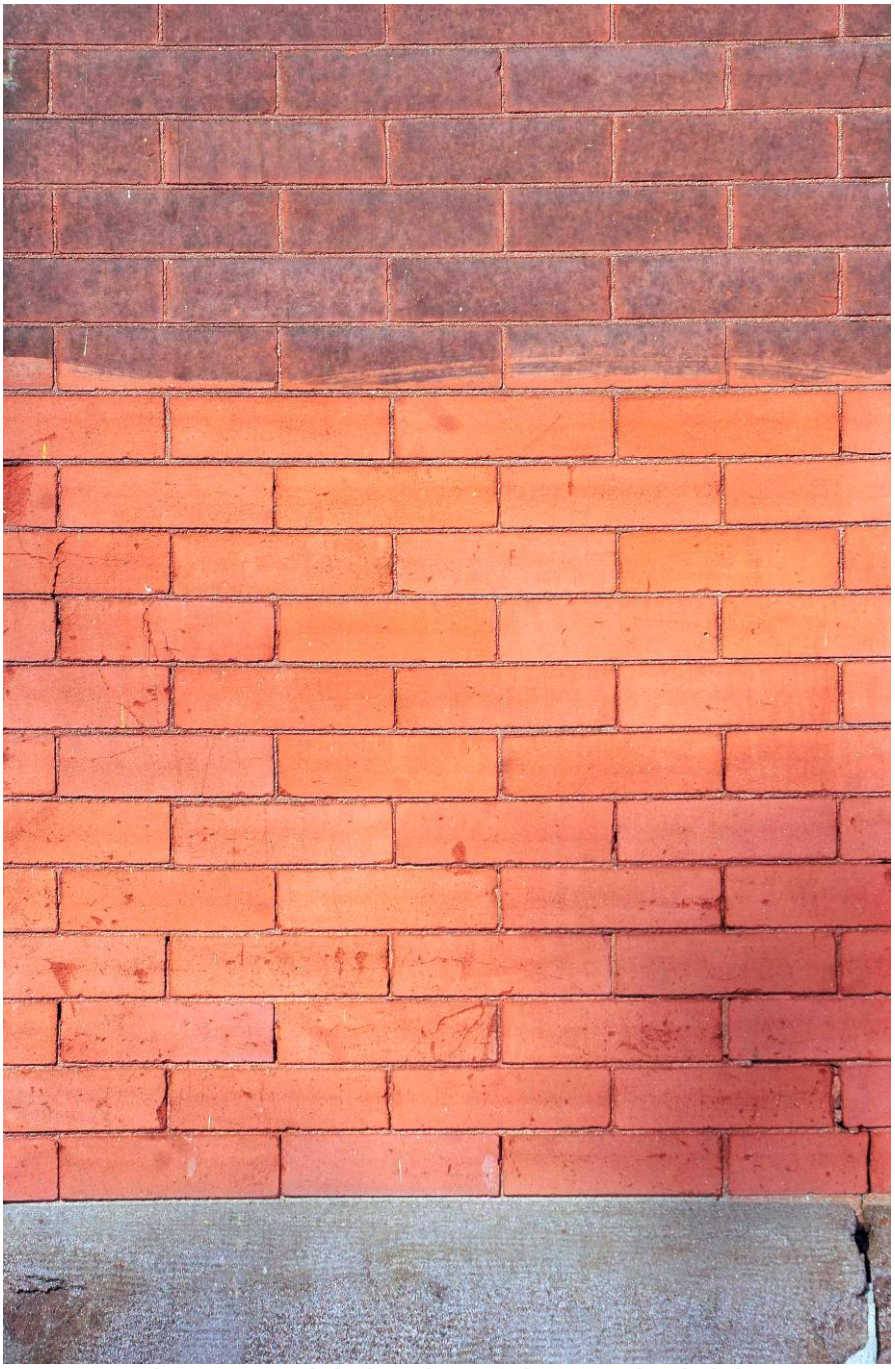

Fig 35. Partial cleaning of the exterior brick.

In the areas protected by the broad overhang of the eaves, the mortar joints remain in excellent condition and the brick only requires cleaning—including a few areas with graffiti. Despite excellent weathering properties and the good condition of the brick overall, approximately 20% to 30% of the brick must be repointed, typically immediately above or below the sandstone water table. While spot repairs are necessary above, the vast majority of work is concentrated below the water table around the entire perimeter of the building—particularly at the outside corners and doorway jambs to the baggage room, freight rooms and boiler room **[Fig 36.]**. Some corners were accidently hit by freight carts or trucks, and a few damaged areas can be attributed to vandalism.

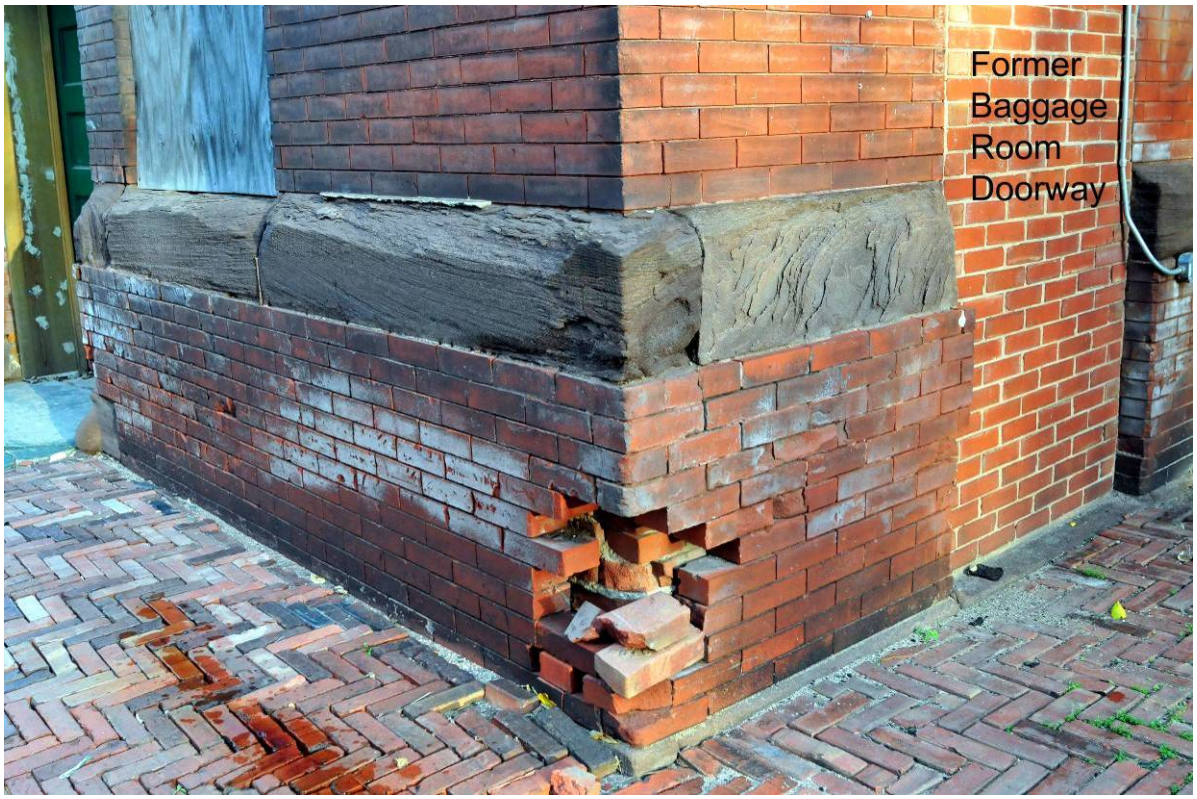

Fig 36. Typical brick repairs at outside corners on bluffside of building.

The brick doorway jambs likely sustained damage in the initial years of Depot operations. The 1907 panoramic image of the Depot shows the heavy steel angles found at the door jambs of the utilitarian rooms today were already installed to protect them from the impact **[Fig 37.]**. The extent of brick damage behind the steel angles is unknown, but it is presumed that the outer bricks along the edge will require replacement at the very least. Beyond physical impact, the masonry below the water table has sustained considerable rising damp and freeze-thaw damage covered previously under **Common Brick**. Here too, the worst damage is concentrated on the bluffside of the building although prevalent around the entire perimeter **[Fig 38.]**.

Due to significant invasive masonry work required to the mudsill and water table around the entire building, the face brick below the water table is slated for complete reconstruction (see Sandstone). A skilled restoration mason will be able to salvage and re-use nearly all of the brick. Nevertheless, approximately 600 new bricks will be needed so finding a good match is paramount. Since freight carts are no longer used at the Depot, the angles should be removed and the masonry repaired here in concert with the water table repairs.

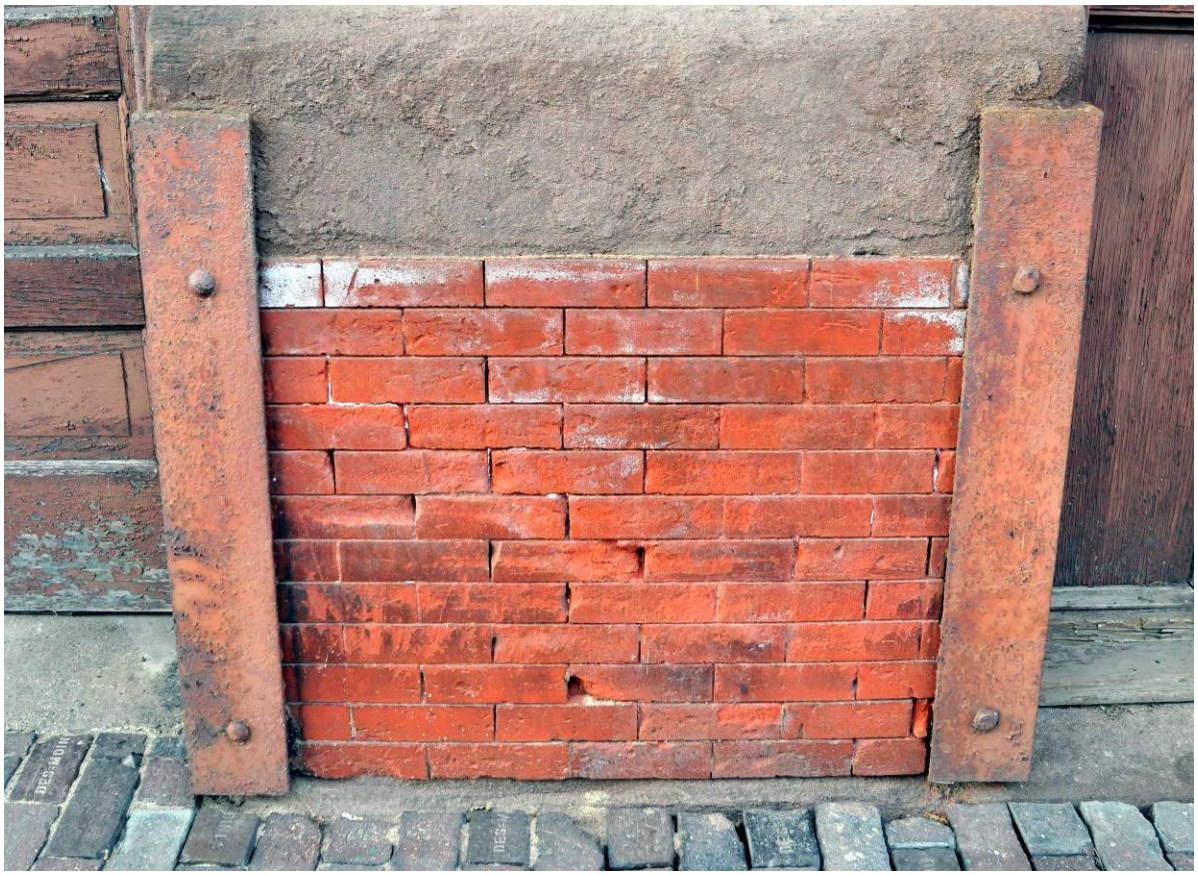

Fig 37. Steel angles installed to protect low corners from impact of heavy baggage /freight carts.

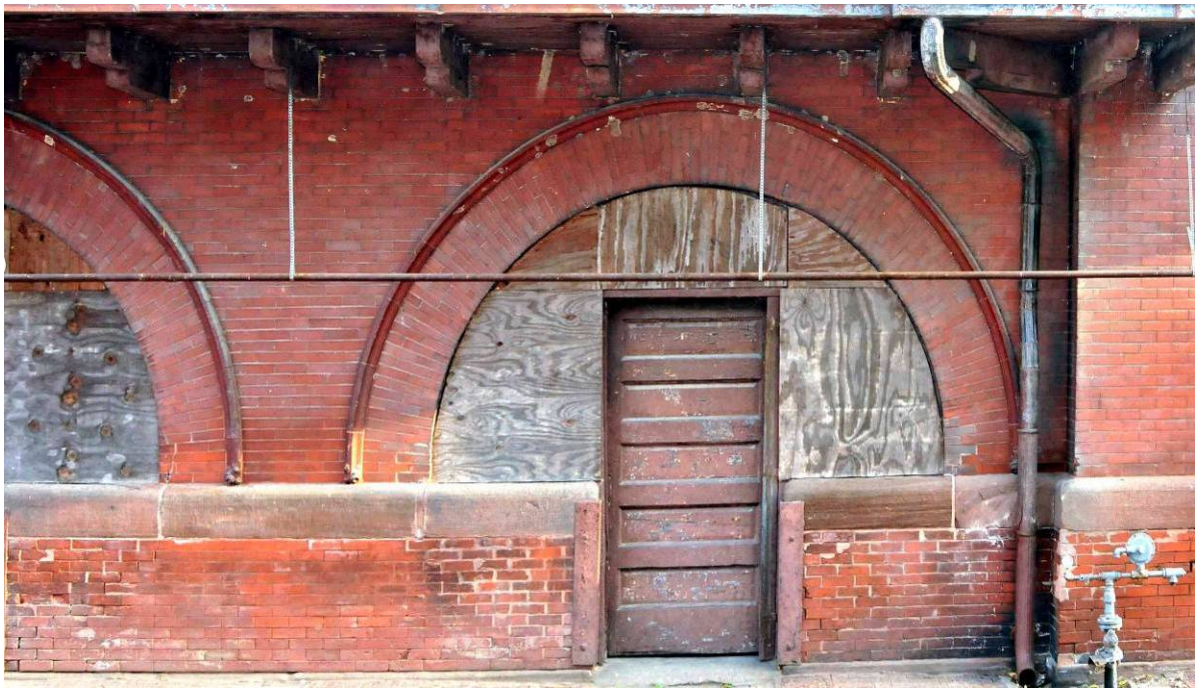

Fig 38. Most of the red face brick repairs are concentrated below the sandstone water table.

The northeast corner of the building was hit by a truck in 2001 and poorly repaired with mismatched brick. **[Fig 39]**. Although structurally sound, this patch should ideally be restored by skilled restoration masons with a better matching brick and appropriate lime mortar with tooled joints to match the adjacent original masonry. This corner must be carefully cleaned with the adjacent undisturbed brick to determine the final brick count for repairs; several hundred bricks may be required. In general this is a low priority compared to other masonry areas that are allowing water infiltration into the back-up masonry resulting in accelerated freeze-thaw damage in winter. Unfortunately, this cosmetic concern is located on a prominent corner closest to the main parking area that is next to the door used as the main entrance at this time. The cosmetics may be temporarily improved with Nawkaw masonry stains (or similar product) but these should only be applied to replacement bricks until a better match can be found. In general, such treatments are more successful when the replacement bricks must be stained darker to match the original.

Fig 39. Poor face brick repairs with mismatched brick and inappropriate mortar.

A small stockpile of original red face bricks can be found atop the wooden top plate above the eaves around the waiting room **[Fig 26.]**. When the eaves are reconstructed, these bricks can be readily harvested to repair exposed walls below the eaves. These bricks may have been intended for a makeshift fire-stop. If necessary, additional bricks can be harvested from above the eaves but below the top plate and replaced with common brick. This will entail greater effort and expense.

The chimney was lowered and must be reconstructed requiring approximately 260 matching red face brick (historic photos prove that the original stack was still standing in 1947 but was lowered by 1962) **[Fig 40.]**. Nevertheless, the stack is the tallest element on the building today and literally at the top of the list of items that must be restored in preparation of restoring the clay tile roof.

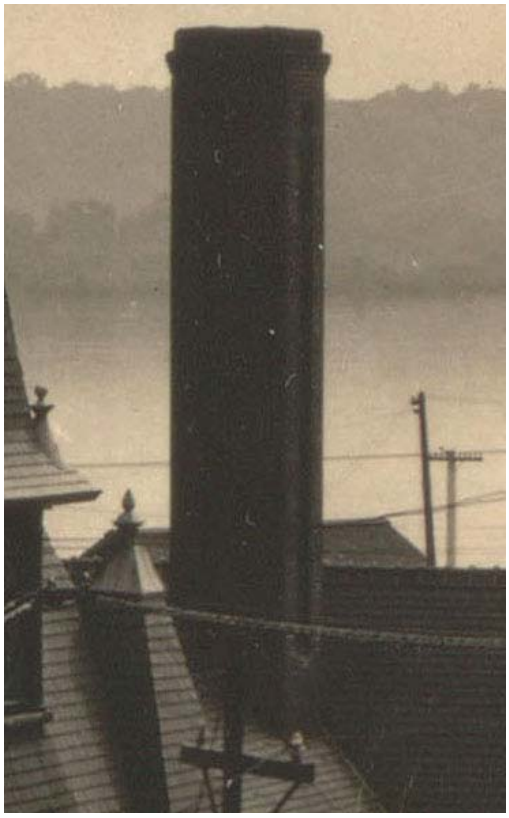

Fig 40. Original chimney stack.

The chimney was inspected in 2011 with the assistance of the Keokuk Fire Department **[Fig 41.]**. It is deteriorated with missing mortar and loose bricks, and is currently capped with an aesthetically inappropriate concrete cap **[Fig 42.]**. The cap is not properly flashed and is causing the upper courses of brick to spread apart from freeze-thaw expansion; loose bricks are beginning to fall out of the top of the chimney. The inner wythe of brick lining the flue was laid with very large head joints and minimal bedding yet the stack in general remains near-plumb after 123 years. The exposed upper stack (above the roofline) is common brick faced with a pressed-brick veneer laid up with narrow 1/8" "butter" joints; it has buttressed corners that add mass, stability and architectural interest. The original mortar of the face brick must be analyzed to determine the appropriate composition and color. Below the roofline, the chimney is a two-tiered straight stack of common brick laid up in common bond with wider ⅜ to ½" lime mortar joints. The lower stack has only minor deterioration at the dirt floor grade of the boiler room floor and is in stable, sound condition.

Fig 41. The shortened and deteriorate chimney stack with a concrete cap (January 2011).

Restoration of the chimney is paramount prior to restoring the clay tile roof and will result in considerable savings by avoiding protection and possible damage working above the new clay tile. The stack should be restored as an architectural element but will not be functionally required for the proposed new high-efficiency HVAC systems (which may include a geothermal system). The flue should not be capped off, however, as this can introduce new masonry deterioration issues—particularly since the open flue has been open for a century and is not exhibiting any concerns beyond typical mortar loss.

The proper restoration of the chimney includes the partial deconstruction and rebuilding of the deteriorated and missing brick courses at the top of the chimney with matching brick. The original corbelled (or stepped) design of the chimney at the top of the chimney common to 19th-century buildings should be restored **[Fig 42.]**. The entire stack above the roofline must be cleaned and repointed and a new 20 oz. copper step flashing will be installed at the roof juncture.

The original chimney cap cannot be clearly discerned from the historic photos but was presumably brick or clay tile. A new glazed brick-red clay tile cap flashed beneath and pitched to shed water and melting snow will extend the longevity of the masonry work. Custom corner tiles must be fabricated for the corners that will have a double pitch to each face.

The exterior mortar joints shall be repointed 100%, matching the original lime mortar and joint profiles, and the brick will be cleaned 100%. Finally, the chimney will be flashed at the roof to address leaks around the stack and in preparation for the eventual restoration of the entire roof. The specific scope of work will require an initial investigation and reconnaissance work from a lift to obtain brick and mortar samples for analysis and matching. Matching lime putty should be pre-mixed based on the mortar analysis for color and quality control.

The concrete cap must be removed and the upper chimney deconstructed approximately ten courses prior to cleaning the remaining stack to the roofline to remove the soot, algae and dark carbon deposits for a more uniform appearance to the original red face brick color. While the preservation cleaning intent is to leave a light, aged patina (not to clean the brick to a “like new” appearance), the chimney should visually harmonize with brand new clay tile slated for restoration in 2016—the 125th anniversary of the Depot grand opening. Cleaning should only commence after testing the least aggressive methods to achieve the desired results and ensure that there is no damage to the face brick. Water should initially be used with light scrubbing with nylon brushes progressing to mild detergents and ProSoCo Sure Klean Light Duty Restoration Cleaner (or similar product) as required followed by a low-pressure rinse.

The exhausted mortar must be removed to a depth of 2.5 times the width of the joint (⅜” to ½”) with hand tools per masonry preservation industry standards and repointed with the appropriate matching lime putty to the original mix tooled to match the original joint profile. The top nineteen courses must then be reconstructed and flashed prior to installing a custom glazed clay tile cap to match the red face brick color as closely as possible.

It will be important to coordinate the repair and restoration of the boiler chimney with the restoration of the clay tile roof. The chimney should be completed before the new roof is installed to avoid potential damage and reduce the costs associated with protecting the new roof.

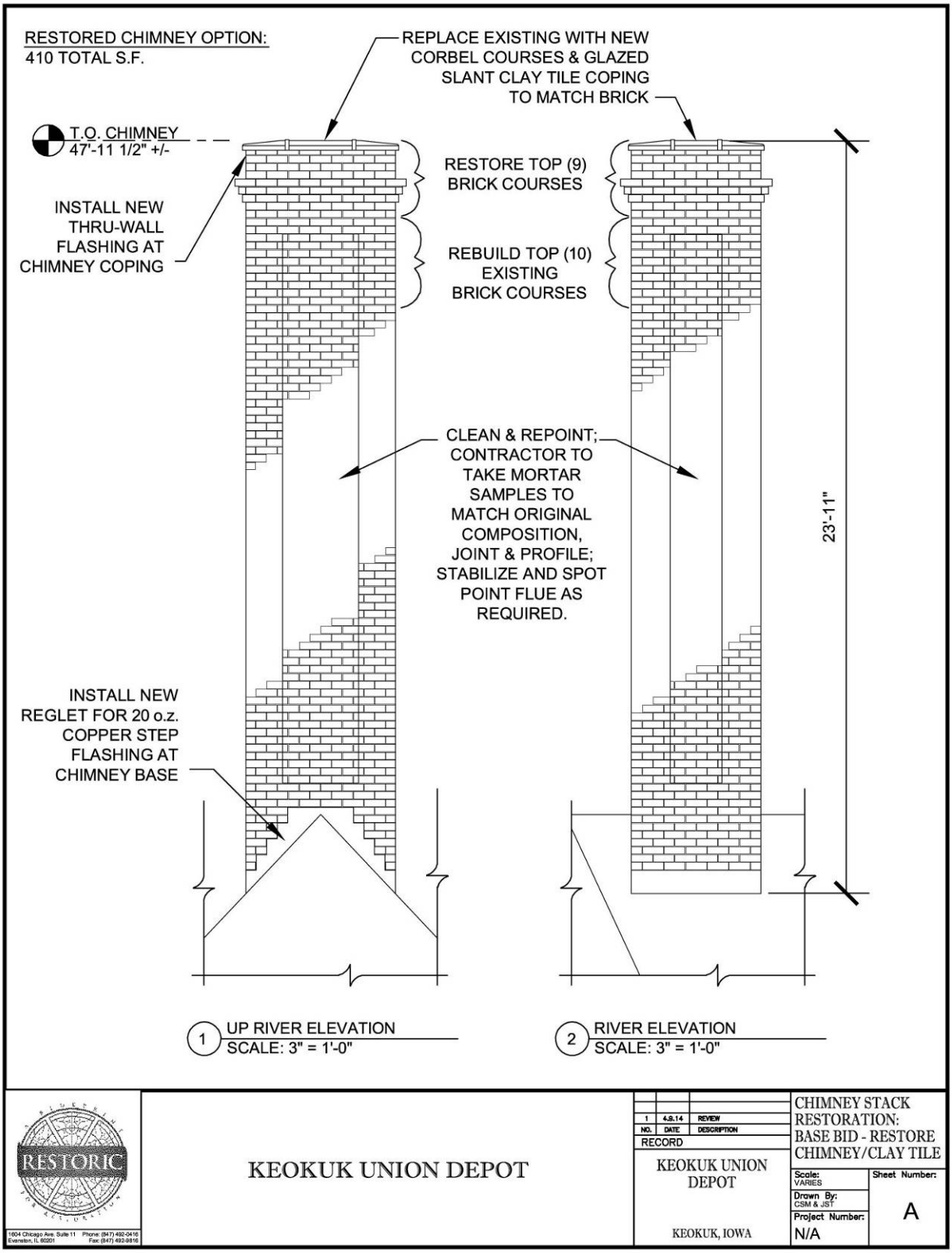

Fig 42. Restored chimney plan.

Sandstone:

The brown sandstone presents the most challenging masonry preservation concern for the Depot. Historic articles in the local papers and Inland Architect both mention that "Peachblow" (also commonly spelled "Peach Blow") sandstone from Colorado was used for the Depot and this has been heavily recited ever since. Considerable time and effort was invested to verify this history because the physical evidence on the building contradicts the written record. Visually, the stone closely resembles Wolf's Carbondale Brownstone from Southern Illinois—a chief source for sandstone in the central Midwest during the late 19th Century.

Geologists and masons from Colorado, Illinois, Michigan and Wisconsin have been contacted in an effort to positively identify the stone. Moreover, stone samples from Rocky Mountain stone distributors and salvaged Lake Superior stone samples have been compared to stone on the Depot; of these, the Lake Superior sample was the closest **[Fig 43.]**. Stone samples from the Keokuk Depot were removed and compared to several buildings in Colorado reportedly constructed with Peachblow sandstone to verify a match without success. The physical evidence indicates the stone used for the Depot was either a gross anomaly of the Peachblow quarry, or was an undocumented change during construction by the mason or builder. Burnham & Root may have specified Peachblow, but if quarry, fabrication, or delivery problems arose during construction, Carbondale was the closest source to Keokuk. A stone sample from the Depot was compared to the sandstone walls of Christ Episcopal Church (1888) in Waukegan, Illinois which has documented Wolf's Carbondale brownstone. This comparison proved to be the best match to date **[Fig 44.]**. The high mica content in the Depot stone is also a characteristic of Carbondale brownstone.[40]

Fig 43. Initial comparison of sandstone samples from Colorado and Michigan in 2012.

[40] http://crystal.isgs.uiuc.edu/maps-data-pub/isgs-quads/c/pdf-files/carbondale_bg_map.pdf

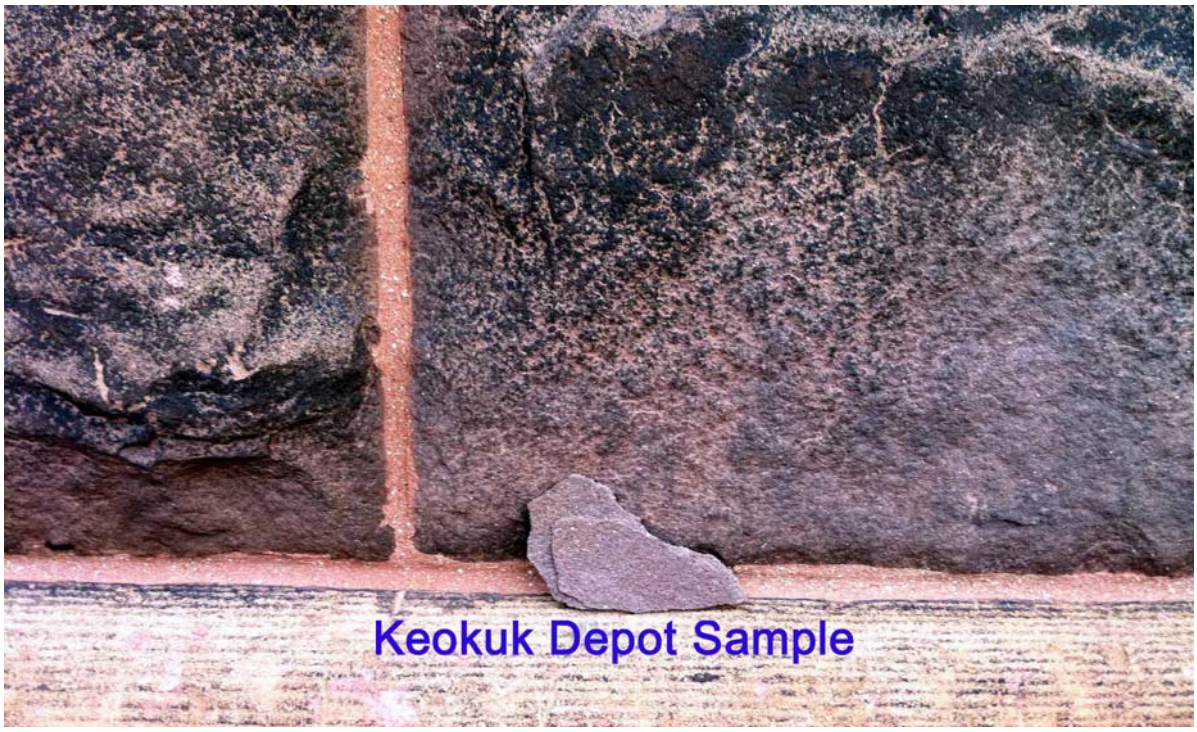

Fig 44. Wolf's Carbondale brownstone on Christ Episcopal Church (1888) in Waukegan, IL.

The "Peachblow" quarry was on the Fryingpan River east of Basalt, Colorado. The quarry was only active from circa 1880 to 1908 but certainly an option when the Keokuk Depot was built. While primarily found on Colorado buildings, it was used "as far east as Chicago."[41] Research indicates that Peachblow stone was heavily marketed in Colorado while the quarry was active and it can be found in: the Hotel Colorado, Hot Springs Lodge and railroad Depot in Glenwood Springs; Hotel Jerome, Wheeler Opera House and Pitkin County Courthouse in Aspen; First National Bank, Colburn Library and Palmer Hall in Colorado Springs; and perhaps most famously, the Brown Palace in Denver. Samples from the Keokuk Depot did not match these buildings. Common to many sandstones, the Peachblow stone did not weather well once quarried. By 1920, it was noted that "the sandstone is rather soft, and very little has been used during the past few years."[42]

Regardless of the sandstone's origin, there are no known active quarries producing replacement stone to match the dark-sparkly nature of the Depot's stone. However, verifying the source may help refine a search for salvage stone to be used for repairs and replacement stone. The key point is to match the stone found on the building, rather than a historic reference to the stone.

Unfortunately, the Depot's sandstone is suffering from serious conservation problems depending on its setting and location on the building. Where the stone is flush with the wall, properly bedded, and protected by roof overhangs it has performed well. However, when it was not properly bedded, or when projected from the wall (window sills, watertable), the stone exfoliates. That is, where the natural bedding planes of the stone are perpendicular to the ground, thin (sedimentary) layers of stone are peeling off in sheets causing open mortar joints. This leads to water infiltration and contributes to freeze-thaw concerns and efflorescence in the lower wall.

[41] Industrial Chicago: The Building Interests. 1891.
[42] Aurand, Harry A. "Fluorspar Deposits of Colorado," Issue 18-24.

The Secretary of the Interior's Standard for Rehabilitation calls for the repair of deteriorated historic materials in lieu of replacement whenever possible. Although the advanced deterioration of nearly 50% of the water table stone calls for replacement, no reasonable match has been found to date which tips the scales back to repair with composite patching materials such as HS60 sandstone repair mortar from U.S. Heritage in Chicago. Unfortunately, this approach may cost more than replacement stones. Moreover, when there is more patching material than original stone, the longevity of the repairs is considerably less. This may further warrant harvesting and shifting stones around the Depot to group original stones adjacent to each other. One challenge to harvesting and relocating stones is that even though the profile is consistent and they were all once similarly textured with a tooth chisel, they are often sized or shaped to fit corners, bay windows and walls between doorways. The freestanding depot essentially has no "secondary facades;" the long formal front of the building facing the bluff and the opposite side of the building along the train platform have equal status so stones cannot be located to a less visible or important façade. A watertable stone removed in 2013 for restoration with U.S. Heritage composite patching materials will be reinstalled in 2014 and allowed to weather for a few years. This will be a good test to monitor the durability of this repair approach before specifying complete masonry restoration.

The deteriorated sandstone mudsills are causing a myriad of fundamental moisture related problems—namely rising damp—that call for even more drastic intervention **[Fig 45.]**. Given their discreet location at the very bottom of the wall, butting up to the brick hardscape, dark-red granite is recommended to replace all of the sandstone here. The aesthetic impact on the historic character of the Depot will be minimal and the granite, which has a much lower porosity, will perform far better in this location as a permanent repair and solution to the rising damp.

Fig 45. Porous sandstone mudsills are contributing to rising damp in the lower walls.

Terra Cotta:

Terra cotta was used sparingly around the building to accent the arched window and doorway hoods as decorative lintels; the source for these pieces was not documented but there were several terra cotta producers around Chicago that Burnham & Root utilized for many commissions. Unglazed buff lintels were employed on the interior of the waiting room with a simple molded profile that terminates at the wainscot. The interior lintels are slightly lighter than the buff brick walls but the color shift is so subtle the intent was likely to match the brick as closely as possible. These all remain in good condition with the exception of staining at the southeast corner from roof leaks and the reconstruction of the masonry above. This area can be carefully cleaned and restored to its original appearance.

The exterior terra cotta lintels are found at all of the large arched windows and doorways around the Depot. They are thin-glazed reddish-brown in different profile from the interior lintels and terminate with a restrained foliage detail **[Fig 46.]**. These lintels also appear to closely match the hue and value of the adjacent brick; once both materials are properly cleaned a more pronounced, but intentional, color shift may be revealed to accent their presence. The vast majority of these pieces are in excellent condition requiring cleaning only. However, a few pieces have been damaged by overly aggressive cleaning or replaced with poor matches **[Fig 47.]**. These pieces should be replaced with a closer match when the masonry is restored.

Fig 46. Terra cotta foliage detail on exterior.

Fig 47. Poorly matched repair of terra cotta window hood to baggage room.

Brick Pavers:

A variety of paving bricks is found in the train platform and hardscape around the Depot. Many of these are stamped "Purington" 4' x 4" x 8" bricks which may be original, or used since the 19th century for repairs. The Purington Brick Company was formed around 1890 acquiring an even earlier brick industry in East Galesburg, Illinois, just 90 miles from Keokuk.[43] Purington began producing hard-fired paving brick around this time and continued until 1949. Reclaimed bricks are still available through Gavin Historical Bricks in Iowa City, Iowa.

Local volunteers have been sorting and relaying the brick dry-laid in sand since 2011, working with the materials available and prioritizing the work by addressing the worst conditions first closest to the building. Today, the bricks can be found on the flat and on the edge all around the Depot including the train platform, loading "dock," sidewalks and on Water Street. The 1907 panoramic photo reveals that the original bricks were also laid on the flat and on edge, although not necessarily in the same fashion found today. The high-resolution image was unfortunately discovered after the volunteers had already repaired many areas but should be used moving forward to follow the original design. In general, the bricks were laid on edge when they were subject to higher impact from unloading wagons (later trucks) with heavy materials. However, even greater architectural interest was added by laying the bricks parallel, perpendicular and at a 45° angle to the building depending on the proximity to the façade and projecting bays.

[43] http://www.historicalbricks.com/brick_history.html

WINDOWS AND DOORS:

All of the window and door sizes and their configuration are detailed in the Window & Door Schedule in **Appendix D**. Virtually all of the original window and door frames and the vast majority of original window sashes and doors survived decades of neglect on the Depot. A few openings have been altered with replacement windows or doors as detailed on the schedule. The windows were all single-light, one-over-one double-hung, or single-lights surrounding a center-pivot window in the case of the arched waiting room windows. The large waiting room windows and doors are 2¼" stock, smaller window openings downriver tend to be 1¾" stock. The windows are all pine/fir while most of the doors are pine/fir cores with a thick oak veneer. Beneath decades of green paint, the original waiting room windows were faux grained to match the oak wainscot and trim on the interior **[Fig 48.]**. The door assembly on the trackside of the baggage room has been altered the most and requires complete reconstruction; approximately half of the openings are beyond practical repair and should be replaced with reproduction doors for a long lasting repair **[Fig 49.]**.

When the Depot was acquired by the City of Keokuk, the windows/doors were heavily painted and missing hardware; a lot of original glass was broken or simply replaced with plywood. Since 2010, volunteers have been repairing the window sashes and frames. Since this work remains in progress, their condition is not itemized or detailed in this HSR and the schedule merely reflects their status as of May 2014. The volunteers have worked hard and saved many of the windows/doors that may have otherwise been replaced to ensure the current and ongoing use of the depot until the formal interior restoration can commence with professional equipment, materials and restoration specialists. Window and door issues to be addressed when they can be completed to the Secretary of the Interior's Rehabilitation Standards are as follows:

- Historic hardware must be restored or replicated where missing
- Windows/doors must be weather-stripped for better energy performance
- Operable windows/doors must be balanced/hung for smoother operation
- Historic "reamy" reproduction drawn glass should replace modern glass
- Permanently racked/warped windows and doors must be replaced
- Decorative (faux bois) finishes in the waiting room must be restored
- Hard, exhausted putty-glazing must be replaced with new back-bedding
- Exterior frames must be stripped and perimeter caulk replaced

Fig 48. Original Faux bois finish on waiting room Windows.

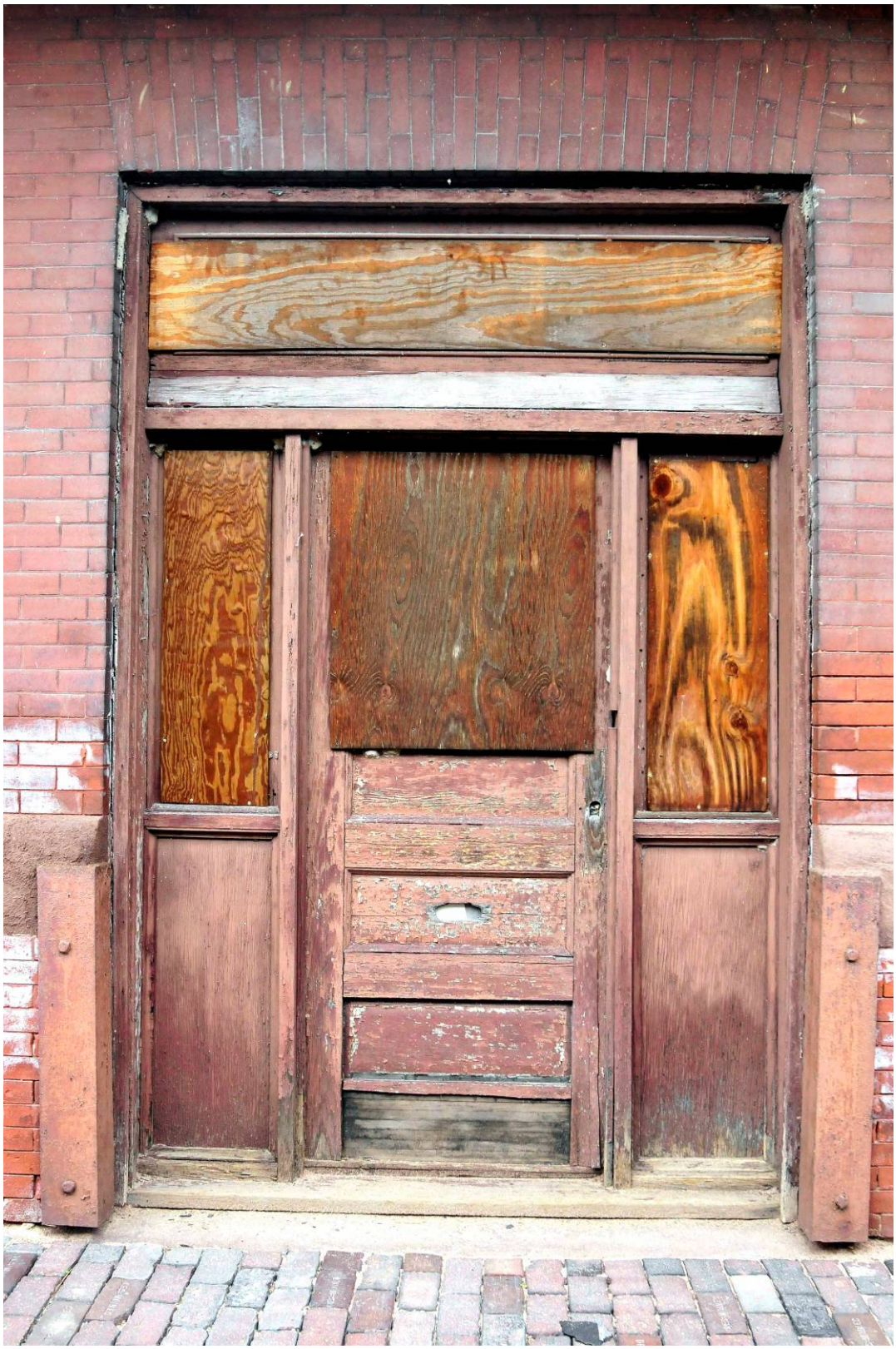

Fig 49. The mail room door assembly must be reconstructed to match the original design.