

Todd Jacobs General Manager - Kansas todd.jacobs@blackhillscorp.com 601 N. Iowa St. Lawrence, KS 66044 P: 785-832-3951

May 6, 2015

Lawrence City Commission 6 East 6th Street Lawrence, KS 66044 620 East 8th Street, Lawrence Kansas

Re: Demolition Request No. DR-15-0035 Appeal from Historic Resources Commission

Dear Lawrence City Commission:

Black Hills/Kansas Gas Utility Company, LLC ("Black Hills") is seeking to demolish its former warehouse structure at 620 East 8th Street to allow for additional environmental sampling beneath the structure. The Historic Resources Commission's ("HRC") denied Black Hills' request. We ask the City Commission to reverse the HRC's decision and allow the demolition to proceed in accordance with City Code and the 8th and Penn Neighborhood Redevelopment Zone Design Guidelines. This letter provides information in support of Black Hills' request.

I. Background

For many years, Black Hills and its predecessors used the property at 620 East 8th Street as a maintenance garage/service centers and for storage. From about 1869-1905, previous owners operated a manufactured gas plant on the property, converting coal into gas used for lighting and heating until natural gas became available. Residual materials from the gas manufacturing process, including coal tar, coke and purifier materials remained on the property after gas manufacturing ceased. In the 1990s, the soil and groundwater on the property were investigated under KDHE oversight. Soils containing gas plant residuals were removed and a deed restriction limiting use of the property was put in place. More recently, in 2011 KDHE sampled soils in front of the building. The only area remaining to be investigated is soil beneath the existing building, which was constructed in 1955.

Black Hills has not used the building for three years and has no further use for the building. Instead, Black Hills wants to make the property available for reuse. However, in keeping with our commitment to the community, Black Hills believes the most responsible course is to sample beneath the building to provide the community and subsequent owners and occupants sufficient confidence that no potential risk associated with historic gas plant residuals remains. Demolishing the building is the only technically and economically feasible means of achieving this. To that end, Black Hills filed its demolition request on January 20, 2015. On March 26, 2015, the Historic Resources Administrator issued a letter disapproving Black Hills' request. At its meeting on the same day, the Historic Resources Commission:

1. Interpreted the Design Guidelines 8th and Penn Neighborhood Redevelopment Zone to include Black Hills' structure in the category of Quonset Huts;

2. Found that Black Hills' request was not related to public safety and demolition would require additional documentation; and

3. Denied the proposed project as it did not meet the intent of the Design Guidelines 8th and Penn Neighborhood Redevelopment Zone.

This decision effectively prevents Black Hills from managing its property in the most responsible way and will cause the building and the property to remain idle and unused indefinitely. Black Hills respectfully requests the City Commission reverse the HRC's decision and grant Black Hills' demolition request to allow the sampling to proceed and free up the property for redevelopment.

II. The Building is not a Historic Resource Subject to Historic Resources Review

Issuance of a demolition permit is regulated by Lawrence City Ordinance Chapter 5 Article 12 (Sec. 5-1206) which requires a Building Official to send a copy of an application for demolition to the Commission if the structure in question is designated as a landmark, located within a historic district, or qualifies as an environ. This property is not designated as a landmark and is not within a historic district. Moreover, although the building is within 250 feet of the boundaries of the East Lawrence Industrial District, the City specifically identified Black Hills' structure as "non-contributing" to the East Lawrence Industrial Historic District. (See Exhibit A.) Therefore, this building is not an "environs" within the meaning of the Chapter 5 or Chapter 22, and thus is not subject to historic resources review. Even if the building were within an environs, Section 22-505 provides a presumption that a certificate of appropriateness be approved for an application to demolish an environs unless the proposed demolition would significantly encroach on, damage, or destroy the landmark or historic district. In sum, the Commission no authority under Chapters 5 and 22 to deny the demolition permit based on a historic resources review.

III. 8th and Penn Neighborhood Design Guidelines

In 2006, the City established the Design Guidelines for the 8th and Penn Neighborhood Redevelopment Zone (the "Design Guidelines"). Although the Guidelines, which were updated in 2011, contemplate HRC review of demolition permits, the Guidelines specifically mirror and cross-reference Chapters 5 and 22 and do not provide authority to deny a demolition request beyond that established in Chapters 5 and 22.

A. Demolition Should be Allowed under the Design Guidelines

Even if the Commission does have authority to review the demolition request under the Design Guidelines, the requested demolition is wholly consistent with the Design Guidelines for Zone 4 in which the building is located. The Design Guidelines are expressly intended to provide opportunity for new types of development that would retain the characteristics of Zone 4, including a lack of density, open spaces and the visual connection to the railroad right-of-way. The proposed demolition is consistent with these goals and is consistent with the transitional nature of this area.

B. Black Hills' building is not a Quonset Hut

The HRC erroneously decided to categorize Black Hill's building as a Quonset Hut, which is a specific and unique World War II-era structure. The Design Guidelines provide that Quonset Huts should be adapted for reuse *if economically feasible*. The building, which was constructed in approximately 1955, is *not* a Quonset Hut. The enclosed memorandum from Burns & McDonnell, provides additional information in this regard. (See Exhibit B.) Moreover, the building has numerous architectural alterations of the type expressly discouraged by the Design Guidelines, including a large addition and replacement overhead doors. Because the building is not a Quonset Hut, the Design Guidelines' recommendation of adaptive reuse does not apply. Even if it did, the given the building's design and condition and the impediment to sampling posed by the building, Black Hills sees no economically feasible alternative for re-use of the building.

C. Adaptive Reuse is not Economically Feasible

1. Disassembly and Reassembly would be Cost Prohibitive

In their discussion, HRC members and staff suggested the building could be disassembled to allow for sampling then reassembling the building when the sampling effort is completed. Burns & McDonnell, an engineering firm, inspected the building and prepared a cost estimate to disassemble and reassemble the building. The cost estimate is enclosed herewith. (See Exhibit C.) Burns & McDonnell estimated it would cost \$691,980 to disassemble and reassemble the building. It is important to note this estimate does *not* include the cost of bringing the building into compliance with current code standards.

2. Core Sampling through Slab is not viable option

Also in their discussion, HRC members suggested that sampling through the concrete slab could be conducted without demolishing the building. Black Hills disagrees.

Core sampling within the building (and keeping the building intact while doing so) does not allow the environmental contractor to ensure that the subsurface has been thoroughly characterized. Drilling, probing and other methods of sampling that could be used inside a building are extremely limited in their ability to access all necessary areas horizontally and their ability to advance to the depths necessary to adequately determine the horizontal and vertical extent of contamination. Maintaining the structural integrity of the building may restrict adaptive management of a field sampling plan thus deteriorating the quality of the data set obtained.

Based on experience at other former manufactured gas plant sites, debris from plant structures often were deposited in the footprint of the operating plant and then buried. This debris can

include brick, concrete, abandoned pipes that are not compatible with conventional sampling techniques. If subsurface structures are encountered with the drill rig and auger refusal occurs, the sample location can be off-set or re-attempted with a more powerful (e.g. larger) drill/probe or completed as a pothole /trench with a small excavator. The ability to use these tools when facing sample refusal or poor recovery inside a building is extremely limited due to the physical constraints associated with maintaining structural integrity of the building. These very limited methods often also require extensive control measures (shoring, bracing, etc.) to protect the health and safety of the workers and preserve the building for its intended/current use. These actions can incur substantial cost and result in significant delays in the completion of otherwise normal sampling tasks in the absence of a building. Even in cases where shoring and structural support can be installed, sampling restrictions and economic costs may result in the impracticability of doing so. As such, sampling within the building (and keeping the building intact while doing so) does not allow the environmental contractor the full flexibility needed to relocate sampling locations as needed to obtain adequate sample recovery and delineation of source materials discovered.

In the absence of a building, conventional drilling, probing and excavation equipment (to the extent necessary) may be used to collect samples more efficiently and economically and with a much higher probability of successful and adequate delineation of the horizontal and vertical extent of contamination. This allows for a more accurate and complete assessment of potential risk to human health and the environment and remediation or management of those risks.

D. HRC will have Opportunity to Review Future Proposed Plans

Some HRC members and staff suggested that the demolition request could be approved if it were accompanied by a redevelopment plan for the property. This does not provide a basis for denying the request. First, neither the Design Guidelines nor the Code require a redevelopment plan in connection with a demolition request. In addition, imposing such a requirement is both unnecessary and counter-productive to the goals of the Design Guidelines. It is unnecessary because the HRC will have the opportunity to review any future redevelopment plans for the property as provided in the Design Guidelines. It is counter-productive in that imposing a requirement for redevelopment plan before the building is demolished, the sampling completed and results evaluated to determine if any additional removal work is needed will effectively paralyze Black Hills' efforts. This will result in the building and property remaining idle and unused – a result that is contrary both to the goals of the Design Guidelines and Black Hills' commitment to the community.

IV. The Demolition Request is Related to Public Safety

The primary purpose of the demolition request is to allow environmental sampling beneath the building slab. Black Hills' plan to conduct sampling "relates to public safety" within the meaning of Section 5-1206. Because it is related to public safety, Black Hills is not required to provide additional documentation regarding the proposed use of the site or an explanation of why it is not feasible to use the existing building. The HRC erroneously determined the environmental sampling as not "related to public safety" by concluding, without basis, that alternatives to accomplish the testing exist.

Demolition of the building will benefit the City and 8th and Penn Neighborhood

Demolition of this building will directly benefit the City and the surrounding neighborhood by allowing Black Hills' planned sampling to proceed. Productive re-use of the property will not be achieved without conducting the planned sampling, and completing any additional soil removal, should it be warranted. Demolition of the building will allow these efforts to proceed. Denial of the demolition permit, on the other hand, denies the property owner the economically beneficial use of the property. For these reasons, we ask that the Commission grant the Demolition Permit Application.

Sincerely,

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Todd J. Jacobs

General Manager Black Hills Energy – Kansas Gas

Enclosures

Improving life with energy www.blackhillsenergy.com East Lawrence Industrial District

Contributing

Non-Contributing





Memorandum



Date: March 25, 2015

To: Kevin White/Burns & McDonnell

From: Brandy Harris/Burns & McDonnell

Subject: 620 E. 8th Street Historic Assessment Memorandum

I. Introduction

This memorandum is intended to provide additional background information and a historical assessment for the building at 620 E. 8th Street in Lawrence, Kansas. The property owner, Black Hills Energy, is proposing to demolish the building to facilitate environmental remediation of the site (Project). The City of Lawrence (City) has indicated they may deny the demolition permit application based on to the building's location within the 8th and Pennsylvania Urban Conservation Overlay District and the associated design guidelines used to control development within that area. As a result, a hearing regarding the permit application has been scheduled with the City's Historic Resources Commission (HRC) for March 26, 2015. The information contained herein is intended to assist the project sponsor in preparing rebuttal testimony for use in the hearing.

II. Previously Designated Resources in the Vicinity of the Project

As referenced in the introduction, the Project is within the 8th and Pennsylvania Urban Conservation Overlay (Zone 4). This district contains the State- and National Register of Historic Places (NRHP)-listed East Lawrence Industrial Historic District (Zone 1) as well as streetscapes and alleys within the overlay's boundaries (Zone 2), a mixed-use zone at the 800 block of Pennsylvania Avenue (Zone 3), and areas identified as prime candidates for new construction (Zone 4). The Project is within Zone 4 (Figure 1), which includes "several irregularly shaped parcels...adjacent to the railroad right-of-way...[that]...have traditionally served as areas for light manufacturing, storage, and railroad-related activities." The zone is defined further by "[o]pen space and temporary and permanent storage and manufacturing facilities" and is characterized by industrial infrastructure (Historic Preservation Services 2011).

The City has enacted design guidelines to govern development within this area. These guidelines dictate that all projects impacting properties listed in the NRHP, the Register of Historic Kansas Places, or the Lawrence Register of Historic Places and resources within 250-feet of such properties in the Conservation Overlay are subject to "additional review as required by KSA 75-2724 and/or Chapter 22, Code of the City of Lawrence." The subject building is not currently listed on any local, state, or federal registers and is specifically identified as non-contributing to the East Lawrence Industrial Historic District.

The design guidelines also indicate that while Zone 4 of the Conservation Overlay does not contain "any historic buildings dating to the period of significance of the buildings found in Zone





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1 or the residential enclave to the west" it does include several buildings 50-years-of -age, which is the cut-off for NRHP consideration. These buildings include "Quonset Hut buildings dating to the World War II period and erected for industrial purposes." The building at 620 East 8th Street is not a true Quonset Hut (see Sections III and IV).

The NRHP nomination for the East Lawrence Industrial Historic District identifies the Project Area as containing "[m]odern commercial/light industrial buildings." The historic district itself includes a mix of nineteenth and early twentieth century "masonry manufacturing, processing, wholesale distribution, and warehouse buildings and structures that range from one story to four stories in height and date from the early 1880s through the 1920s" (Schwenk 2005). A map of the district included in the nomination specifically identifies the building at 620 E. 8th as non-contributing.

The Project is also within the boundaries of the Historic Resources of Lawrence Multiple Property Submission (MPS). The boundaries for this district include the entire 1997 city limits of Lawrence with a period of significance ranging from 1854 to 1945. Quonset huts and industrial building types in general are not identified as contributing features of this district (Wolfenbarger and Nimz 1997).

III. The Quonset Hut as a Historic Resource Type

In recent years, the need to evaluate Quonset Huts as potential historic resources and their overall architectural significance has become a widely-debated issue in the historic preservation field. Though opinions vary regarding what makes such resources significant, there has been some general consensus on their character-defining features and on the fact that they must retain a high level of integrity to warrant NRHP consideration or other historic designation.

The Quonset Hut was designed at Quonset Point Naval Air Station in Rhode Island in 1941 by the George A. Fuller Company. Its design was based on that of the Nissen Hospital Hut used by the British military during World War I and "met the military's needs during World War II for a prefabricated, lightweight shelter that could be used in the war effort" (City of San Diego 2011). Estimates suggest over 153,000 of the utilitarian structures were constructed during World War II with many then adapted for postwar use.

Quonset Huts are half-cylindrical steel framework structures with rectangular plans available in various sizes and configurations. The buildings are clad in corrugated metal siding, and the metal arches are bolted directly to a concrete slab or grade beams. The main entrance to the structures is usually on one or both of the short, arched elevations, and they were typically expandable in 10-foot increments. Most feature few or no side windows; however, the ends can be clad in any material and feature a variety of door and window configurations. Though available in a variety



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of sizes, the typical sizes produced were the "20," which measured 20 feet by 48 feet, and the "40," also known as the Elephant Hut, which was 40-feet-wide by 100-feet-long (Washington State Department of Archaeology and Historic Preservation 2015).

In general, most State Historic Preservation Officers (SHPOs) and other members of the historic preservation field have identified the character-defining features of these resource types as:

- Steel structure with continuous arch/barrel shape
- No distinction between roof and wall
- Corrugated metal cladding
- Curved steel ribs attached to concrete slab or grade-beams
- Fenestration concentrated in short/arched elevation(s)
- Secondary features can include false fronts and shed dormers

Additionally, many SHPOs have specified that such resources must be specifically associated with the World War II mobilization effort rather than with post-World War II interpretations of the form, be part of a grouping of such resource types, and maintain a high degree of integrity to merit NRHP consideration.

IV. Description and Evaluation of 620 E. 8th Street

The building at 620 E. 8th Street is a circa 1955 massed plan, metal frame industrial building with a Gothic arch roof clad in corrugated metal. The walls, which are separate from the roof structure, are also clad in corrugated metal paneling, and the building rests on a concrete slab foundation. The western façade features three, 4-light fixed frame windows with metal canopies and a louvered dormer vent. There is no entrance on this elevation. The other short facade (east) is a 40-foot by 40-foot non-historic-age addition. It also features fixed frame windows and no entrance. The primary (southern) facade is punctuated by three hinged glass and wood paneled doors accessed via concrete stairs with metal railings, an original sliding metal bay door, a replacement overhead bay door, and five multi-light metal fixed-frame windows. This elevation, which is visible from E. 8th Street, also features a large (40-foot by 40-foot) side-gabled addition with two overhead bay entries. The rear (northern) elevation features a row of similar fixed frame windows to those on the main elevation with a replacement bay and original hinged door at the eastern end of the original portion. The elevation of the addition on this side is punctuated by an overhead bay door, a metal hinged door, and a metal fixed frame, 4-light window. The entire building is 40-feet-wide by 160-feet-long with 40-feet of the length being a modern addition (see Photograph Appendix).

The post-World War II-era building is not a traditional Quonset Hut but rather represents one of the mid-twentieth century adaptations of the form for industrial use. Alterations to the building,



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including a large addition visible from the street side of the building, and replacement of overhead bay doors have detracted from its integrity of design, materials, workmanship, and feeling. Additionally, it is not associated with a period of significant industrial development in Lawrence as per established historic contexts in associated NRHP nominations or with any other significant events or individuals. As a result, it does not appear to qualify for designation in the NRHP, Register of Historic Kansas Places, or as a City of Lawrence historic landmark.

This assessment of the building is supported in the NRHP nominations for the East Lawrence Industrial Historic District and the Historic Resources of Lawrence Historic District and by language in the Conservation Overlay design guidelines, particularly the following:

- The building is excluded from the boundaries of the East Lawrence Industrial Historic District and specifically identified as non-contributing;
- The Historic Resources of Lawrence nomination does not identify industrial resources or those post-dating 1945 as potentially significant; and
- The building is not identified as a resource that would qualify for federal or state tax credits in the design guidelines for the 8th and Pennsylvania Urban Conservation Overlay, indicating it is not significant individually or as part of an established historic district.

In addition to its lack of architectural and historic significance, limited review of the built environment in the vicinity of the Project revealed the presence of at least two nearby examples of original, World War II-era Quonset Huts in the area (Figure 2; Photograph Appendix). One of the resources (Quonset Hut 01, Figure 2) is in Zone 3 of the Urban Conservation Overlay. Both resources appear to date to the World War II era, possess physical integrity, and display many of the character-defining features of the resource type including continuous arch design with no distinction between the roof and walls, corrugated metal cladding, main entrance and fenestration concentrated on the short/arched elevations, and continued industrial associations. These resources represent better examples of the resource type than the subject building, and Quonset Hut 02 (Figure 2) is located only approximately 300 feet from the property aligned along the railroad corridor. Overall, the resources better reflect the period of World War II-era industrial development in the area, and their presence ensures this period and structural form would continue to be represented if the proposed Project was approved.

The design guidelines for the conservation district indicate that land use within Zone 4 was historically characterized by "a lack of density, buildings of all sizes, and large amounts of open space, particularly in zones adjacent to railroad right of way." The guidelines define the zone further as providing good "opportunities for new types of development that would retain open spaces and enhance the visual connection to the railroad right-of-way" (Historic Preservation Services 2011). They also suggest retaining existing Quonset Huts "in adaptive re-use when



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economically feasible" but do not identify examples of the resources or define economic feasibility (Historic Preservation Services 2011).

With the exception of retaining the subject building, the proposed Project satisfies all other design goals for this area. Specifically, removal of the building would:

- Retain the area's traditional open space and provide unimpeded view of the rail corridor from the NRHP-listed East Lawrence Industrial Historic District; and
- Allow use of the tract as a parking lot, which would provide visitors to the area with an unobstructed view of the NRHP-listed Poehler Mercantile Company building to the south, of the overall streetscape within the historic district, and increase access to the district overall.

Initial coordination with the City's Historic Resources Administrator indicated the demolition permit for the building was denied because it was not going to be replaced with another building. This denial was likely to protect the zone's "design, scale, and massing" as described in the associated design guidelines. Though the building's loss would disrupt the current distribution of built resources in the conservation overlay, its demolition would improve another character-defining feature of Zone 4 identified in the guidelines, namely its "lot openness." Additionally, there are numerous remaining examples of railroad-oriented, linear plan industrial buildings in the area to support the continued identification of the zone as having an industrial character as well as actual examples of World War II-era Quonset Huts nearby that illustrate their role in postwar development in east Lawrence. As a result, it does not appear that removal of the building would adversely impact the overall character of the area as a railroad-related, mixed-use area characterized by industrial infrastructure.

V. Summary Conclusions and Recommendations

The resource's lack of historic significance, the presence of several more historically significant examples of the Quonset Hut resource type in the area, and the benefits to the viewshed of the rail corridor and the East Lawrence Industrial Historic District support Black Hills Energy's proposal to demolish the existing building at 620 E. 8th Street. Previous submittals to the City and the Historic Resource Administrator have demonstrated the environmental concerns associated with the property and the need to remove the building to allow additional potential environmental response. These issues combined with economic concerns that make reuse of the building unfeasible suggest approval of demolition of the building is warranted.



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If the demolition permit cannot be granted based on the herein presented information, the following actions may mitigate impacts to the resource and to the associated Urban Conservation Overlay:

- Preparation of a sales package providing both the public and the City the opportunity to purchase and relocate the building
- Additional documentation and research into the history of the property and summary of how it and other similar resource types fit into the context of historic industrial development in the community. This documentation could be archived at the local library to provide a permanent archival record documenting the resource that would be accessible to the public.
- Assist the City with preparation of an interpretive historic marker documenting the resource type and its significance to be installed in the proposed parking lot on the subject tract

VI. References

City of San Diego

2011 Barrio Logan Historical Resources Survey. City Planning and Community Investment, Community Planning and urban Form Divisions. San Diego, California.

Historic Preservation Services

2011 Design Guidelines, 8th and Penn Neighborhood Redevelopment Zone. Prepared for the City of Lawrence, Kansas.

Schwenk, Sally F.

2005 National Register of Historic Places Registration Form, East Lawrence Industrial Historic District. Prepared by Historic Preservation Services. Copy on file at the Kansas State Historical Society.

Washington State Department of Archaeology and Historic Preservation

2015 Quonset Hut, 1941-1960. <u>http://www.dahp.wa.gov/styles/quonset-hut</u>. Accessed March 2014.

Wolfenbarger, Deon and Dale Nimz

1997 National Register of Historic Places Multiple Property Documentation Form, Historic Resources of Lawrence, Douglas County, Kansas. Prepared by Three Gables Preservation. Copy on file at the Kansas State Historical Society.





3/24/2015

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View of 620 E. 8th Street, camera facing northeast



View of 620 E. 8th Street, camera facing east



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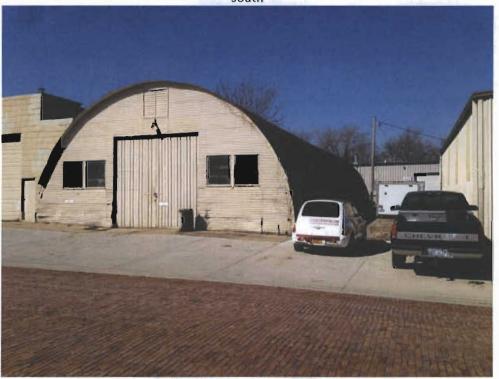
View of addition to 620 E. 8th Street, camera facing west



View of 620 E. 8th Street, camera facing northwest



View of 620 E. 8th Street with NRHP-listed Poehler Mercantile Company in background, camera facing south



View of Quonset Hut 01 in Zone 3, camera facing southwest



View of Quonset Hut 02, camera facing northwest



View of Quonset Hut 02, camera facing southeast

BURNS

April 20, 2015

Chuck Hoag, Operations Manager Black Hills Energy 601 N. Iowa Street Lawrence, KS 66044

 Re: Inspection and Disassembly/Reassembly Study Metal Shop Building
 620 East 8th Street Lawrence, Kansas 66044

Dear Mr. Hoag:

On Tuesday afternoon, April 7, 2015, I visited the former maintenance and storage building to inspect and explore opinions for its temporary disassembly and removal to allow for testing of the soil and possible soil removal work. Upon completion of this work, the metal building would be reconstructed. This site is adjacent to a designated historic district, although the metal building has been designated by the City of Lawrence as "non-contributing" to the historic nature of the district. (See Exhibit A enclosed herewith).

The primary building, which reportedly was constructed in 1955, is a 120-foot by 40-foot clearspan, light-weight, pipe-truss rigid frame pre-engineered metal building. Rigid frames are spaced at six-feet on center for 20 bays. The eave height of the building is approximately 11'-6" with the roof trusses and metal roof panels fabricated with a slight curved configuration near the eaves. This building configuration should not be confused with the "Quonset hut" type buildings which were common military construction during World War II and fabricated in a half-circle configuration. The concrete floor and foundation steps up 1'-10" on the west half for a loading dock with a concrete ramp on the interior connecting it to the east half. Wall panels and roof panels are 1/2-inch deep corrugated metal fabricated from galvanized sheet metal. The roof and wall panels are backed up with fiberboards (approximately 1/2-inch in thickness) visible on the inside of the building. Four rows of these fiber boards have been removed in the roof. There is no insulation in the walls or roof except for what insulating properties the thin fiber boards may have. The east end has a two-bay rigid frame metal building addition of more recent construction which was not figured into this evaluation.

The building is not currently in use. The roof leaks when it rains and there are some visible patches on the metal roof on the east side on the south slope. Metal wall panels on the front facade, where vehicles park, have dents and damage. The metal roof surface has experienced some surface rust. The fiber boards, where they are still present, are uncoated and have deteriorated to the point was they would not be salvageable if removed. For cost purposes, we are proposing to replace the fiber boards with plywood sheathing of the same thickness (approximately 1/2-inch). Keeping the same thickness would be important to maintain the same



Black Hills Energy – Metal Shop Bldg. April 20, 2015 Page 2

fit-up and all the building components. The plywood may have to be custom fabricated to match the curve at the lower roof areas. Adding combustible materials to the roof and wall construction may also trigger fire protection code issues. This would have to be accounted for with a complete design analysis of the reconstructed facility.

A typical rigid pipe-truss frame is assembled from eight sections connected with splice plates and 1/2-inch diameter bolts and could be disassembled in the same manner. All end-wall columns, roof purlins, wall girts, and miscellaneous door frames also are assembled with bolted connections and could be dissembled during demolition. Wall and roof panels are secured with self-drilling sheet metal screws secured to $4\frac{1}{2}$ -inch deep purlin and girt channels. If the metal building is to be reassembled, we would recommend all fasteners, bolts, and nuts be replaced and upgraded due to unknown past histories of overstresses, over-tightening, and unknown material properties.

Of biggest concern are the unknown original design criteria and capacities and fabrication standards of the original metal building components. For the building to be disassembled, repaired, and reassembled with replacement sheathing, new bolts/fasteners, and on a new foundation with new anchor bolts, all new building code requirements must be complied with. Any applicable requirements would have to be analyzed and reassembly and construction configuration redesigned by a design team of professional engineers and architects to ensure compliance with code requirements. Load and material testing may also be required by the new design team.

Enclosed as Exhibit B is a cost estimate to disassemble the metal building, demolish the concrete foundation and floor slab, repair existing damaged building components, and reassemble building to a weather-tight shell for future tenant build-out. Assumptions in the cost estimate are as follows:

- 1. Estimate assumes a four-man crew for a combined wage of \$100 per hour.
- 2. Duration of eight months necessary for warehouse for housing and managing building components.
- 3. Placement of a new membrane roofing system between the old metal roof and the new sheathing to act as the actual weather/water barrier.
- 4. Cost estimate does not include site restoration, parking pavement, tenant finishing with HVAC/plumbing/electrical/insulation, and roof configurations and finishing. These costs would depend on the eventual reuse of the space.

This review, assessment, and cost estimate is based on brief walk-through inspection of the property. If disassembly and reconstruction of this metal building is seriously considered, I recommend a qualified design team and property developer be identified to perform a complete feasibility study and preliminary design for its reuse to determine final design standards, building materials for wall and roof restorations, and necessary code compliant features before any work is planned or implemented. This study should involve the City of Lawrence Planning and

Black Hills Energy – Metal Shop Bldg. April 20, 2015 Page 3

Development Department for compliance with building codes and standards along with local land use zoning and preservation guidelines. The preliminary design should include a detailed structural analysis of existing framing elements to ensure a safe and code-compliant building can be economically achieved.

If you have any questions of my assessment and estimate of potential work, please give me a call at 816-822-3368 and we can discuss.

Sincerely,

Brian K. Snyder, Building Structure Preservation Expert

Enclosures

Non-Contributing Designation on Property Cost Estimate Summary Brian K. Snyder CV

East Lawrence Industrial District

Contributing

Non-Contributing

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Exhibit B Cost Estimate Summary

1

BLACK HILLS METAL SHOP BLDG DISASSEMBLY & RECONSTRUCTION

620 E 8th Street, Lawrence KS	UNITS	U	INIT PRICE	QUANTITY		TOTAL COST
SITE PREPARATION & STAGING	di la cara da la cara	116				STATISTICS.
Permits	ls	\$	500.00	1		500
Cut Off Utilities	ls	\$	8,000.00	1		8,000
Salvage Interior Elements	ls	\$	6,000.00	1		6,000
Gut Interior Elements & Disposal	s	\$	35,000.00	1		35,000
Set Up Construction/Security Fence	lf	\$	9.00	800		7,200
Set Up Temporary Utilities	ls	\$	5,000.00	1	-	5,000
SUBTOTAL					\$	61,700
DISASSEMBLY OF METAL BLDG	La The Lord			A CONTRACTOR OF THE	-	
Mark/Label Wall & Roof Panels	hrs	\$	100.00	12	\$	1,200
Scaffolding/Lift Rentals	day	\$	250.00	45	\$	11,250
Warehouse Rental	month	\$	600.00	8	\$	4,800
End Wall Disassembly (2)	hrs	\$	100.00	16	\$	1,600
Framed Bay Disassembly (20 bays)	hrs	\$	100.00	240	\$	24,000
Disassembly of 2-bay Metal Bldd Add.	hrs	\$	100.00	32	\$	3,200
Repairs to metal roof & wall panels	ls	\$	20,000.00	1	\$	20,000
Repairs to metal bldg framing elements	ls	\$	20,000.00	1	\$	20,000
SUBTOTAL					\$	86,050
CONCRETE DEMOLITION			and the second	S. M. L. S. Mar		and the second second
Concrete Slab & Foundation Demo	ls	\$	15,000.00	1	\$	15,000
Disposal of Demolition Debris	ls	\$	3,500.00	1	\$	3,500
SUBTOTAL					\$	18,500
PROFESSIONAL SERVICES	1	1000				
Structural Analysis & Code Compliance	ls	\$	35,000.00	1	\$	35,000
Geotechnical Investigation	ls	\$	9,000.00	1	\$	9,000
Design of Structural Upgrades	ls	\$	5,000.00	1	\$	5,000
Design of Repairs	Is	\$	5,000.00	1	\$	5,000
Design Submittal to Client & City	ls	\$	2,500.00	1	\$	2,500
Permits	ls	\$	2,000.00		\$	2,000
SUBTOTAL					\$	58,500
NEW CONCRETE WORK	E TOR SYN	1		A STATE OF THE STATE	11	Martin Martin
Site Utilities	ls	\$	20,000.00	1	\$	20,000
Backfill, Compaction, Granular Subbase	ls	\$	40,000.00	1	\$	40,000
Perimeter Foundation	су	\$	600.00	50	\$	30,000
Slab Placement, Finishing, Curing	sf	\$	8.50	5,000	\$	42,500
Perimeter Curb	If	\$	8.00	2,000	\$	16,000
New Anchor Bolts	ea	\$	65.00	125	\$	8,125
SUBTOTAL					\$	156,625
REASSEMBLY OF METAL BLDG	I TRANSFER	1 35		MARCH NO.		
New Bolts for Reassembly (1/2" dia)	ea	\$	1.50	4,000	\$	6,000
New Plywood Sheathing for Roof	sf	\$	25.00	300	\$	7,500
New Plywood Sheathing for Walls	ea	\$	25.00	200	\$	5,000
New Roof Membrane Underlayment	sf	\$	1.50	15,000	\$	22,500
Lift & Scoffolding Rental	day	\$	250.00	100	\$	25,000
Assemble Frames (20 bays)	hr hr	\$	100.00	504	\$	50,400
Assemble Sheathing, Roof/Wall Panels	hr	\$	100.00	288	\$	28,800
Budget for Struct Upgrades for Code	ls	\$	50,000.00	1	\$	50,000
SUBTOTAL	10	− + +	00,000.00	'	\$	195,200
	₽ \$					
		576,575				
					\$	115,315
	Bu	dgeta	ry Constructi	on Cost Total	\$	691,890



Exhibit C Brian K. Snyder Credentials 7

Brian K. Snyder, P.E.

Senior Associate Structural Engineer

Expertise:

Structural Rehabilitation & Design, Adaptive Reuse

Education:

B.S. in Civil Engineering, University of Missouri-Rolla, 1980M.S. in Civil Engineering, University of Missouri-Rolla, 1982

Organizations:

American Society of Civil Engineers National & Missouri Societies of **Professional Engineers** Structural Engineers Assoc. of Kansas & Missouri National Trust for Historic Preservation Association for Preservation Technology International & Central Plains Chapter International Council on Monuments and Sites Friends of Sacred Structures

Since joining Burns & McDonnell in 1984, Mr. Snyder has been responsible for the design and renovation of several government, aviation, military, and environmental facilities. He has also been actively involved in historic preservation activities as a professional engineer and as a volunteer for not-for-profit organizations and government agencies.

- Army Corps of Engineers / US Army Alternative Reuse Study: Mr. Snyder served as project manager and lead engineer for a alternative reuse study for the US Disciplinary Barracks and Prison complex at Fort Leavenworth Military Post in Kansas. The study included the investigation of 18 historic brick buildings and limestone prison walls within a National Landmark District. Alternatives explored included conversion of the facility to a conference center, records storage center, military training facility, and general office and administrative use.
- U.S. General Services Administration Feasibility Study: Mr. Snyder served as project manager and lead engineer for a feasibility study of the C. Clifton Young Federal Building in Reno, Nevada for the San Francisco office of GSA. The study included exploring several alternatives to house federal tenants in renovated space in a circa 1965 courthouse and office building. Upgrading seismic capacity, security, building systems, and abating asbestos contamination was considered in the study.
- U.S. General Services Administration Feasibility Study: Mr. Snyder completed a study with the San Francisco office of GSA on the feasibility of relocating several government agencies and laboratories to their office complex in Alameda, California. The existing facility was a former World War II vintage military training facility and barracks.
- U.S. General Services Administration Feasibility Study: Mr. Snyder serviced as engineering coordinator and project manager working with the San Francisco office of GSA on the feasibility of relocating the units of the FBI to existing office space in the Los Angeles area. The studies include evaluating existing building systems, site design, and security for approximately 900,000 square feet of office space.

Brian K. Snyder, P.E. (Continued)

- City of St. Joseph, Missouri Façade Assessment: Mr. Snyder performed an assessment and analysis of a Victorian-era four-story masonry façade left from the demolition of its adjoining structure. The work included checking its steel support system for wind/seismic loading and making recommendations for its preservation and eventual reuse. The façade consisted of brick and cut stone with a cast iron store-front frame and was part of a contiguous block of Victorian-ear commercial buildings and facades in the downtown historic district.
- Washington National Airport New Interim Airport Terminal; Washington, D.C.: Mr. Snyder served as lead project engineer for a new interim airport terminal at Washington National Airport in the Washington, D.C. area. This eight-gate facility was converted from a circa-1940's aircraft hangar and two-story shop area. This work included the extensive modernization and remodeling of the historic hangar, the addition of a concourse building, the addition of a curb side canopy shelter supported from the existing concrete structure, baggage handling faculties, and tenant improvements. The project had a fast-track schedule for design and construction.
- U.S. General Services Administration Rehabilitation of Warehouse Space; Bell, California: He recently worked as engineering coordinator and structural engineer for the preparation of a feasibility study for the rehabilitation of World War II vintage warehouse space totaling more than 1.6 million square feet. This study was for the U.S. General Services Administration=s facilities located at the original Cheli Air Force Base site in Bell, California. The project included determining several alternatives for best use of the facility, engineering evaluation of existing building systems, seismic evaluation, review of code compliance, and cost estimating. An environmental assessment report was also produced in conjunction with this feasibility study.
- U.S. Navy Aircraft Engine Testing Facilities; California, Italy, and Virginia: Mr. Snyder served as project engineer on the design and renovation of several aircraft engine testing facilities for the U.S. Navy at Camp Pendleton MCAS in California, Sigonela NAS in Italy, and Oceana NAS in Virginia. The projects included the design, repair, and modifications of existing reinforced concrete structures to support new loading and equipment.
- Honeywell / Department of Energy Kansas City Plant; Kansas City, Missouri: Mr. Snyder was lead engineer in multiple projects with the renovation, repairs, and upgrades to the 2 million square foot WWII-vintage facility. Projects included working with site

Brian K. Snyder, P.E. (Continued)

contaminated with PCB's, concrete strengthening using CFRP, masonry restoration, floor/roof loading studies, load database inventory consulting/management, and installation of new building components and equipment. The existing circa-1940 facility consists of a concrete barrel roof structure and concrete framing.

- Missouri Department of Natural Resources Feasibility Study; Independence, Missouri: Mr. Snyder assisted with the Kansas City Chapter of the AlA and the Missouri Department of Natural Resources - Historic Preservation Program on an endangered building evaluation team working on a feasibility study for the renovation of a historic 1879 railroad depot in Independence, Missouri.
- Olin Corporation Seismic Evaluation of 16 Structures, Lake City Army Ammunition Plant; Kansas City, Missouri: Mr. Snyder served as project manager and lead engineer for the seismic evaluation of 16 structures for the Olin Corporation at Lake City Army Ammunition Plant in Independence, Missouri. The facilities evaluated included buildings for hazardous waste storage, explosive waste storage, and an explosive waste incinerator. The project was in response to permit requirements for hazardous waste facilities. Buildings varied in construction types in included World War II vintage buildings and earth-bermed shelters.
- GE Global Services Building Condition Assessment; JFK International Airport, New York: Mr. Snyder recently completed a building conditions assessment report for GE Global Services and Greenwich Air Services for their facilities at JFK International Airport in New York. This report evaluated facilities constructed between 1959 and 1970 and made recommendations for repairs and upgrades.
- San Francisco and Los Angeles Airport Authorities Repair of Concrete Structures; San Francisco and Los Angeles, California: He has served as engineering consultant for miscellaneous environmental project involving the repair of concrete structures at San Francisco International Airport and Los Angeles International Airport.
- Missouri Department of Natural Resources Historic Preservation Program: Independence, Missouri: Mr. Snyder worked with the Missouri Department of Natural Resources on several projects in Independence and in this region. One was the masonry restoration of the Owens-McCoy House circa 1840/1852 using a Historic Preservation Grant from MDNR. Another project

Brian K. Snyder, P.E. (Continued)

was the structural restoration of the partially collapsed 1853 Choplin House using the Missouri Historic Preservation Loan Fund. Both of these projects involved assessment and restoration of two-story clay brick masonry structures, working with lime mortars, contracts administration, and coordination with city and state officials. The Choplin House project was highlighted in Bob Vila's "Restore America" television program on HGTV in August 1999. In May 2006, the preservation of the Owens-McCoy House covered on HGTV "If Walls Could Talk" Mr. Snyder also served on the assessment team for a feasibility study on the reuse of Longview Farms in Lee's Summit, Missouri.

- Friends of Sacred Structures Christ Temple Church, 34th &
 Paseo; Kansas City, Missouri: He worked with FOSS and Joseph J. Oshiver, AIA on the restoration of the original Beth Shalom Synagogue structure which is currently serving a local Christian congregation. The project has included studies and recommendations for waterproofing the front entry structure and mosaic tiled domes, structural repair and restoration of the masonry dome, and the design of the front stairway and entry structure to match historical records. The circa 1927 building is on the National Register of Historic Places.
- Volunteer Consulting Services: In addition to projects with Friends of Sacred Structures and Missouri Department of Natural Resources, Mr. Snyder has assisted St. Joseph Preservation Inc., City of St. Joseph, and the Lexington Missouri Historical Society on the restoration of several masonry and wood framed historic structures. He has presented case studies at several historic preservation conferences sponsored by the Missouri Alliance for Historic Preservation and the National Park Service. In 2000, Mr. Snyder was the recipient of an annual Historic Preservation Award from the Jackson County Historical Society. In 2009, he and his wife, Sharon, were honored by Missouri Preservation at their annual meeting for outstanding achievements.

LAWRENCE HISTORIC RESOURCES COMMISSION ITEM NO. 11: DR-15-00035 STAFF REPORT

A. SUMMARY

DR-15-00035 620 E 8th Street; Demolition; Design Guidelines 8th and Penn Review. The property is located in the 8th and Pennsylvania Urban Conservation Overlay District. Submitted by Remediation Services, Inc. for Black Hills Corporation, the property owner of record.

B. PROJECT DESCRIPTION

The applicant is requesting to demolish the structure located at 620 E 8th Street.



C. STANDARDS FOR REVIEW

8th and Pennsylvania Urban Conservation Overlay District Guidelines

The City Commission and the Historic Resources Commission have adopted a set of *Design Guidelines 8th and Penn Neighborhood Redevelopment Zone* to review projects within the 8th and Pennsylvania Urban Conservation Overlay District. The guidelines that relate to this project are:

PRINCIPLES, STANDARDS, AND CRITERIA

DEMOLITION

Demolition should be the result of a holistic planning and development process. Properties listed in the National Register of Historic Places, the Register of Historic Kansas Places, or the Lawrence Register of Historic Places are subject to additional review as required by KSA 75-2724 and/or Chapter 22, Code of the

City of Lawrence. Moreover, demolition of properties within the environs of listed properties is also subject to review. Historic tax credit programs include the anticipated demolition as part of the compliance review process. Federal agencies must consider the impact of demolition on project undertakings as well.

Any demolition request not related to public safety shall be accompanied by additional documentation indicating the existing condition of the building and the proposed use for the site. Documentation shall include proposed elevations and an explanation of why it is not feasible to use the existing structure/building.

Demolition permits shall be reviewed by the Historic Resource Commission. If the permit is denied by the Historic Resource Commission, it may be appealed to the City Commission.

ZONE 4

Architectural Characteristics and Materials

- 1. Retaining the Quonset Huts in adaptive re-use when economically feasible.
- 2. Incorporating new construction that uses mid- to large-scale buildings. Constructing buildings that reference the street grid or the railroad alignment.
- Continuing new mixed-use residential commercial development patterns established in Zone 3 in the zone north of East 8th Street between New Jersey and Pennsylvania Streets, creating a buffer zone or locating large industrial size buildings within surrounding open space.
- 4. Building scale should be consistent with the zoned usage.
- 5. Building materials and fenestration should be consistent with building use but complementary to the surrounding zones.

Landscape

Retaining traditional open spaces.

Access

- 1. Locating dual access drives for service and delivery vehicles so that they do not disrupt pedestrian or vehicular circulation and do not visually detract from the front of the buildings by shifting them to parking areas or providing alley access.
- 2. Designing and locating access drives so that they prevent headlights from shining into adjacent residential zones.

Parking

- 1. Locating surface parking lots on all sides of the primary buildings and structures.
- 2. Retention of existing on-street parking in front of existing Zone 4 buildings.
- 3. Parking design should be consistent with other zones in the UC-O District.
- 4. Low bollard lighting will be used to limit lighting impacts to adjacent residential areas.

Signage

- 1. Having all signs conform with the Sign Code provisions of Article 7 of the Code of the City of Lawrence
- 2. Depending upon the building's use, signs may be oriented toward both pedestrian and vehicular traffic.
- 3. Having storefront façades that do not extend past the storefront cornice line. Locating storefront signs in the zone between the display windows and the roofline or the second story. Signs for multiple storefronts within the same building should align with each other.
- 4. Using signs that reflect the overall symmetry of the building

Lighting

Unless noted otherwise, lighting in Zone 4 will be consistent with City of Lawrence Code Section 20-14A01 through Section 20-14A03, or subsequent applicable City standards.

D. STAFF ANALYSIS

The applicant proposes to demolish the structure located at 620 E 8th Street to allow for significant environmental testing. The testing is required because the site has a history of uses that have potentially contaminated the site. Due to the site history, the application material notes that the site was only granted a "Resolved with Restriction" determination in 2000. This restricted use does not allow residential uses or drinking water wells. The restrictive covenant must be conveyed with any sale of the land and KDHE must be provided notice of any excavation activities. The application materials also note that the needed testing is not possible with the building remaining in-place. The clean-up of the site will be required before the site can be redeveloped. The applicant would like to discover the extent of the required remediation prior to redevelopment of the property.

Staff is sympathetic to the applicant's request. However, the Guidelines for the 8th and Penn Urban Conservation Overlay District pose two questions for consideration:

- (1) Is the structure a Quonset hut as identified in the guidelines as a structure that should be rehabilitated?
- (2) Is the demolition request related to public safety and not required to be accompanied by additional documentation indicating the existing condition of the building and the proposed use for the site. Documentation would include proposed elevations and an explanation of why it is not feasible to use the existing structure/building.

Quonset Hut

Please see the information at this link

http://www.quonsethuts.org/index.htm

The information below is taken from this web site and from additional research. *Quonset Hut: Metal Living for a Modern Age* is the book associated with the above link.

A Quonset hut is typically identified as an architectural type of structure with corrugated galvanized steel siding and semicircular shape that could be prefabricated and assembled on site. Based on the Nissen hut developed during WWI by the British, the Quonset hut was first developed with a 16' diameter and had steel arch frames. The huts were in full production by 1941. The most recognizable huts are the original T-Rib that has the arch to the ground level and a redesigned hut that had a modified arch with four foot vertical sidewalls. There are variations on hut designs and generally the metal siding, arched frames, and semicircular design are the connecting elements.

According to *Quonset Hut: Metal Living for a Modern Age* web site

By 1941, companies other than original contractors George A. Fuller and Stran-Steel began developing their own versions of the Quonset hut. Some, like Butler and Cowin, developed Quonset-type structures to sell to the Army or anyone else who wanted to buy them. Others created hut designs in response to a special need, such as the wooden Pacific hut, which was created to save metal resources, and the heavy-steel Armco hut, which was intended for ordnance storage and air raid shelters. In addition, Stran-Steel began manufacturing a larger version and a multi-arched

version of the Quonset hut. Nicknames abound for various hut types. Some are "official" military nicknames, such as "Elephant Shelter" and "Igloo."

After World War II, some companies continued to make metal prefabricated buildings, however, few continued in the old arched shape. The main descendant of the Quonset hut today is the arch-roofed warehouse, now often clad in aluminum, and the tent-like Weather-port $\mbox{\ensuremath{\mathbb{B}}}$ — a direct descendant of the Jamesway hut.

One of the structures identified as "other" on the web page is the EmKay Hut.

Emkay Hut

20' x 48'

Morrison-Knudsen Company designed the "Emkay" (M-K) hut to shelter their crews for their large and remote military construction contracts. While they credit the origin of the design—inspired by a chicken shed—to their engineer G. D. Paxson, the similarities to the Quonset and Pacific huts are undeniable. Built in Boise, Idaho, beginning in 1943, the Emkay had laminated wood ribs. Its distinct "two-centered arch" appears pointed, or gothic, in profile. All styles were built entirely of wood and wallboard, could be built to any lengths in multiples of twelve feet, and could accommodate different climates.



While there are some similarities to the EmKay, the structure at 620 E 8th does not have the arch system to the ground but has side walls. The structure at 620 E 8th is also 42' X 121'.

The existing structure at 620 E 8th Street does not show on the 1927-1949 Sanborn Fire Insurance Maps. This particular parcel may not have been resurveyed with the 1949 maps; however properties to the south were resurveyed in 1949. The date provided by the applicant as the early 1950's is likely the construction timeframe.

Staff is of the opinion that the structure at 620 E 8th, while not a specific type of "Quonset Hut," is likely one of the "other" metal buildings associated with the Quonset Hut architectural style.

The guidelines identify that Quonset huts should be adaptively reused when economically feasible.

Additional Documentation

Staff rarely supports demolition without a replacement plan. The Historic Resources Commission has not typically approved the demolition of a structure without a replacement plan. The *Design Guidelines* 8th and Penn Neighborhood Redevelopment Zone, state that

Any demolition request not related to public safety shall be accompanied by additional documentation indicating the existing condition of the building and the proposed use for the site. Documentation shall include proposed elevations and an explanation of why it is not feasible to use the existing structure/building.

Typically, demolition requests related to public safety are structures that have been deemed by the Building Codes Administrator to be unsafe and dangerous to the public health, safety and welfare. To staff's knowledge, this determination has not been made at this time.

The applicant has provided information that should be considered to meet the criteria for public safety. The entire site has been contaminated. Remediation has taken place on the site except for the area covered by the building. This area needs to be addressed. And likely remediation will be needed. The environmental site overview identifies that neither VOCs nor PHAs were detected during the last three groundwater sampling events. The environmental site overview states that due to the type of sampling that needs to occur under the building, there is no option other than demolition. The applicant is not arguing that the structure warrants demolition due to the building condition, but rather the site on which the building stands is the issue.

While staff is sympathetic to the need to discover if and how much work will need to be done to clean the site for future use, the demolition of a structure without a replacement plan is not recommended and does not meet the guidelines. The purpose of a replacement plan is to ensure that the property will not remain vacant and that the spacial relationships that characterize the district by the buildings, setbacks and open spaces are not damaged.

E. STAFF RECOMMENDATION

In accordance with the *Design Guidelines* 8th and Penn Neighborhood Redevelopment Zone, the standards of evaluation, staff recommends the Commission deny the proposed project and make the determination that the proposed project does not meet the intent of the *Design Guidelines* 8th and Penn Neighborhood Redevelopment Zone. Specifically, the project does not include plans for a replacement structure and or proposed development of the site if demolition were to occur.



Building Safety Division Riverfront Plaza, Suite 110 Lawrence, Kansas 66044 p. (785) 832-7700 f. (785) 832-3110 www.lawrenceks.org/pds buildinginspections@lawrenceks.org

DEMOLITION PERMIT APPLICATION

Date: 1/20/20	15			
Site Address:	620 East 8th Street, I	Lawrence, KS		
Legal Descriptio	n:			
	Block	Lot	Subdivision	
documents sub that is inconsi Chapter V, Arti I also understa I further underst	omitted in support of istent or in conflict cle 12 of the City of and that no demolitic stand that the discov	this application are a with this application Lawrence Code, Dem on work shall take p very that the building	ccurate. I understand a, the supporting doc olition of Structures i ace until a permit ha	tion on this application and on that any demolition performed uments, or the provisions of s a violation of the City Code. s been approved by the City. s friable asbestos or materials nolition permit.
Applicant Sign	ature:	Ali	Date	e:1/20/2015
	(Print):Robby Klin	/)		ne: <u>620-331-1200</u>
	clim@rsi-ks.com			
Property Owne Property Owner Email:K	r Signature: Name (Print): <u>Μ΄ c</u> δε, ρο <i>9914 ®</i> b	act Poggary act hillscorp.	Date	ne: <u>605-721-27</u> 37
Person, Firm, o	or Corporation respon	sible for the building,	if is someone other th	an the owner:
Name (please p	rint): <u>N.A.</u>			
Address:				
Email:	·	Phone:		
•	on of Structure: uare foot single story	slab on grade wareho	ouse structure.	
	npany Name: <u>Reme</u>			
	Grant V. Sherwoo			
	P.O. Box 587, Ind			
Email: gsherw	vood@rsi-ks.com	Phone:	620-331-1200	

There is a 30-day public comment period before any demolition work can begin. Expiration of the public comment period, along with verification from gas, electric, and water utility providers that services have been retired is necessary before a permit will be issued. This application must be signed by the record owner(s) and any contract purchaser(s).



March 3, 2015

Lynn Zollner Historic Resources Administrator City of Lawrence 6 East 6th Street Lawrence, KS 66044

Dear Ms. Zollner,

Thank you for meeting with me, my colleague Monique Pope, and Kevin White of Burns and McDonnell at our former warehouse on February 17. We appreciated your time, discussion of the building, as well as the potential questions for us to consider from the Historic Resources Commission meeting on March 26. As we discussed, Black Hills Energy's primary interest is to finish assessment and remediation of the site for the benefit of future owners and future use. We look forward to partnering with you on that effort.

Per your request, please find the enclosed historical documents associated with the building, interior and exterior photos including a building footprint map and a historical summary of the efforts that Black Hills (and predecessor companies) have taken to remediate the site since 1992.

As we discussed at our meeting last month, Black Hills Energy submitted a demolition permit to the city of Lawrence on January 20 to propose the demolition of the remaining structure and to conduct an environmental assessment of the soils under the former maintenance facility at 620 E. Eighth Street. Historically, a former manufactured gas plant operated at this site from 1869-1905, converting coal into gas for lighting and heating purposes. By 1905, pipeline natural gas was available and the plant shuttered operation. Residual byproducts from the gas process including coal tar, coke and purifier wastes generated from the gas process have been adequately addressed for other areas on the site. The next step is to analyze and address the soils underneath the building, which is required to prepare this site for future use.

The demolition of the building is necessary to adequately sample soils beneath the existing foundation. Core sampling within the building is not a cost effective and feasible option due to height limitations and likely underground restrictions that may be encountered (piping, tanks, foundations, etc.). Accordingly, core sampling within the building (and keeping the building intact while doing so) does not allow the environmental contractor to ensure that the subsurface has been thoroughly characterized. In addition, if remediation is necessary, the building will need to be demolished to properly remove impacted soils beneath the foundation. It is crucial for Black Hills to characterize the remaining soils beneath the building so that we have a full understanding of any environmental risks at the site and how best to address or mitigate them for future use.

We plan to continue to work in conjunction with the Kansas Department of Health and Environment on mitigating any issues on the property, and explore potential future uses for the property with developers and/or other interested stakeholders. We understand that the city of Lawrence may have an interest in the site, and we look forward to discussing other uses for the property such as a parking lot, or other possible future uses. We recognize that our property is located in the midst of a vibrant and growing part of east Lawrence, and believe that it is important to keep it a safe and functional part of the community.

If you need further information, please contact me at 785-832-3944.

Sincerely,

Chuck Hoag / Manager, Gas Operations - Lawrence

Attachment A

Historical Information

Kansas Public Service - History

Kansas Public Service, as it is known today, has had a long and illustrious past. The company was originally incorporated as Lawrence Coal, Gas and Oil Company on November 7, 1865. The first owners of Lawrence Coal, Gas and Oil Company were G.W. Deitzler, C. Robinson, S. Thacher and W. Lykins. On January 10, 1866 the city of Lawrence approved Ordinance No. 21, granting exclusive rights that the company could install pipe down the city streets, lanes and public grounds, for the conveyance of gas, to operate gas street lights and for the use of the inhabitants of the city. The pipe used for the conveyance of gas in those days was wooden. The ordinance also gave Lawrence Coal, Gas and Oil the exclusive right to mine for coal near the Kansas River.

Ordinance 21 also provided that the company could manufacture their own gas. Manufactured gas was produced for lighting and heating purposes before pipeline gas became available. Gas was produced by heating coal, and sometimes oil, under extreme pressure in a fire clay retort and the gas driven off in the retort, taken into a holder, purified and then distributed to the town. The plant was located at the east end of Eighth Street and the Santa Fe tracks.

On May 4, 1868, the owners of Lawrence Coal, Gas and Oil sold the rights and franchise to C.E. Gray. Mr. Gray renamed the company Lawrence Gas, Coke and Coal Company. Lawrence Gas, Coke and Coal Company was incorporated August 4, 1869.

On February 13, 1878, the Lawrence Gas, Coke and Coal Company sold its franchise and rights to Lawrence Gas, Fuel and Electric Light Co. The historical records of the company become somewhat vague at this point until about 1904.

One of the most interesting points in the history of Kansas Public Service started June 9, 1904. Upon graduation from college, Mr. Caryl J. Dodds secured employment with Lawrence Gas, Fuel and Electric Light Co. What makes C.J. Dodds interesting is that until his death in October 1976, Mr. Dodds was involved in the business affairs of KPS for seventy-two (72) years. During his years of involvement with the company, C.J. Dodds held the following positions: office clerk, collector, meter reader, accountant, Vice President and General Manager, and upon his retirement, served on the Board of Directors until his death.

During the month of July 1905, the construction of the Kansas Natural Gas Company's pipe line was progressing rapidly and natural gas was being brought to the Lawrence area. Joseph J. Heim of Kansas City and Arnold Kalman of St. Paul, Minnesota, secured a contract with the pipeline company for distribution of natural gas in Lawrence. After some financial maneuvering, they bought the gas plant of the old Lawrence Gas, Fuel and Electric Company and secured a franchise for the distribution of natural gas in Lawrence.

The company operated under the name of Citizens Light, Heat & Power with Joseph H. Dunkel serving as General Manager. On October 16, 1905, with the pipeline being completed, natural gas was turned on in Lawrence. At a later date, the electric portion of the company was sold to Lawrence Electric Light Company and was one of the predecessors of the present KPL. Citizens Light, Heat & Power Company continued to operate until January 1927.

During January of 1927, Wilbur Foshay of Minneapolis, a promoter who was buying properties and putting them into various holding companies, purchased Citizens. The Lawrence property was organized as the Peoples Utilities, Kansas Corporation and was part of the Peoples Light and Power Corporation. Soon after the purchase, control of Peoples Light and Power Corporation was taken over by a New York utility organization operated by Mr. Foshay and the headquarters were moved to New York. The company later formed as a Delaware Corporation. During this time, L.O. Gordon acted as General Manager. On June 22, 1927 C.J. Dodds was appointed General Manager and Mr. Gordon served on the Board of Directors. In August 1929, the office location was moved to 733 Massachusetts St. During August 1930, Peoples Utilities formally changed the corporations name to Kansas Public Service Company.

The management of Peoples started looking for prospective buyers, because of the Utility Holding Company Act, when D.E. Dunne, a member of the Board of Directors of Kansas Public Service, convinced his brother G.M. Dunne, George Docking and C.B. Holmes that they should purchase the utility. The four (4) stockholders agreed to purchase all the outstanding shares (2,000) and First Mortgage Bonds, Series A 5% due 1961 (\$350,000) of the company. The sales needed final approval from the Securities and Exchange Commission pursuant to Rule 12D-1 under the Public Utility Holding Company Act of 1935.

On May 1, 1939, upon SEC approval, Kansas Public Service was sold to the principle four stockholders. These four men, and later their families, guided Kansas Public Service until the sale to Missouri Public Service in October 1984. While serving as stockholders of Kansas Public Service, George Docking served two terms as Governor of Kansas and his son, Robert Docking, served as Governor of Kansas for four terms. On May 20, 1942, Kansas Public Service dropped its Articles of Incorporation with the State of Delaware and formed a Kansas Corporation.

During 1944, Kansas Public Service obtained a 20 year renewal of its franchise from the City of Lawrence with some unusual circumstances. The city council passed the renewal of the franchise and no one from the company knew that it was on the agenda for that meeting. This speaks well of the public relations which the company had with the community at that time.

Between 1950 and 1960 the company grew and developed as did the City of Lawrence. In the early 50's, Kansas Public Service constructed a new warehouse and meter shop at its present location at E. 8th and Pennsylvania St. C.J. Dodds retired as Vice President and General Manager on June 30, 1954 and was replaced by C.W. McCoy. Mr. McCoy served until January 1, 1958 when he retired. Kansas Public Service looked outside the organization for new leadership and hired L.C. DeMoss, a District Manager for Missouri Utilities Company located in Columbia, Missouri.

In the time period between 1960 and 1970 the company continued to grow. The Board of Directors authorized the use of plastic pipe for services and mains on June 17, 1964, although very little was used until the early 70's. The primary type of pipe used at this time was steel. Kansas Public Service also received a renewal of its franchise in 1964. Until January 1965, the building at 733 Massachusetts St., where the main office was located, was being rented. KPS purchased that location and also the building next to it at 735 Massachusetts St.

L.C. DeMoss retired from Kansas Public Service in March 1970, because of illness. The Board of Directors hired William C. Salome III, as Vice President and General Manager in April 1970. In 1971, KPS began the use of plastic piping for mains and services. On September 22, 1976, Mr. C.J. Dodds attended his last Board of Directors meeting and later that year passed away.

In the decade between 1980 and 1989, Kansas Public Service experienced more changes. In December 1981, the company purchased its first computer, a Burroughs mainframe, which was used primarily for customer billings, payroll and some accounting functions. During December 1982, Kansas Public Service moved to its present location, 110 E. 9th, after extensive remodeling of the old Kroger grocery store. In late 1983 or early 1984, the Board of Directors decided to sell KPS. Several larger utilities looked at the possibility of purchasing the company, then Missouri Public Service made an offer. In October 1984, Kansas Public Service was sold to Missouri Public Service. The last KPS Board of Directors meeting, was held on October 17, 1984. Some of the members of the Board of Directors were retained as part of the Advisory Board after Missouri Public Service took over control of the company. In 1988, Kansas Public Service became certified by the Kansas Corporation Commission and is now regulated by the State of Kansas.

In the mid-1980's, Missouri Public Service, under the leadership of Ms. Avis Tucker, began looking to grow further via mergers and acquisitions. To enhance these efforts, on May 2, 1985 Missouri Public Service changed its corporate name to UtiliCorp United Inc. Richard C. Green Jr was named the first President and Chairman of the Board of UtiliCorp United. Green is a fourth generation member of the family that started the business in 1908 that would eventually become UtiliCorp United.

With deregulation of the natural gas industry, the mid-1990's has seen tremendous change and reorganization within the corporation. William C. Salome III retired as KPS Divisional President on December 31, 1994. During 1995, UtiliCorp United introduced EnergyOne, a marketing concept designed to unite all future UtiliCorp products and services under one brand name.

Attachment B

Environmental Site Overview

Environmental Background:

A manufactured gas plant operated at 620 E. Eighth Street (the Site) from 1869 to 1905, which converted coal into gas for lighting and heating purposes. By 1905, pipeline natural gas was available and the plant shuttered operation. The process of manufacturing gas resulted in residual byproducts, including coal tar, coke and purifier wastes, which are typical byproducts of coal processing or combustion. It was common practice at the time to bury those byproducts on or adjacent to the gas plant. Concentrations of tar are commonly found in "tar wells" or other buried gas plant structures.

The Site was previously used as a natural gas service center. The site is currently owned by Black Hills Energy, is currently unoccupied, but is being used as a storage area and warehouse. The west side of the site also currently houses a compressed natural gas fueling station. The Site is contained by a six-foot security fence with barbed wire.

The Site is bound to the north and east by railroad tracks. The parcel immediately west of the Site is owned by JMG Properties LLC and is zoned for commercial/industrial urban use. Properties to the south of the Site are primarily residential use.

The area underneath the maintenance shop has not been investigated; however, it is anticipated that the nature and extent of impacts in this area will be similar to those previously identified at the rest of the Site, as discussed below. Historically, data has been collected as part of the following sampling events:

- Preliminary Assessment of the Former Manufactured Gas Plant at Lawrence, Kansas for Kansas Public Service, Burns & McDonnell Engineering Co., Inc., September 1992, (PA).
- Site Investigation of the Lawrence Manufactured Gas Plant at Lawrence, Kansas for Kansas Public Service, Burns & McDonnell Engineering Co., Inc., April 1994, (SI).
- Final Corrective Action Report, Lawrence Former Manufactured Gas Plant Site, Kansas Public Service, Burns & McDonnell Engineering Co., Inc., December 1999.

Those findings are summarized below:

Soil and groundwater analytical data collected during historical investigation activities in the 1990's indicated the presence of both benzene and polynuclear aromatic hydrocarbon (PAH) compounds,

which are typical byproducts of manufactured gas production. Based on the results of the investigations, excavation of the material associated with the former tar well was recommended. Excavation and monitoring well installation activities started in 1998. Since the exact location of the tar well was unknown, the initial excavation consisted of the removal of the upper one to two feet of soil in the approximate area of the former tar well to locate the subsurface structure. A total of 33.15 tons of stained soil was excavated from the tar well structure, and the excavation was backfilled with clean material.

After the removal action, an on-site monitoring well was completed and sampled twice a year for two years (four sampling events) to assess the effectiveness of the remedy. Ground water samples were taken, which tested for volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs). Those results were found to be below current (March 2014) residential Kansas Department of Health & Environment ("KDHE") Risk-Based Standards (RSKs). Neither VOCs nor PAHs were detected during the remaining three groundwater sampling events.

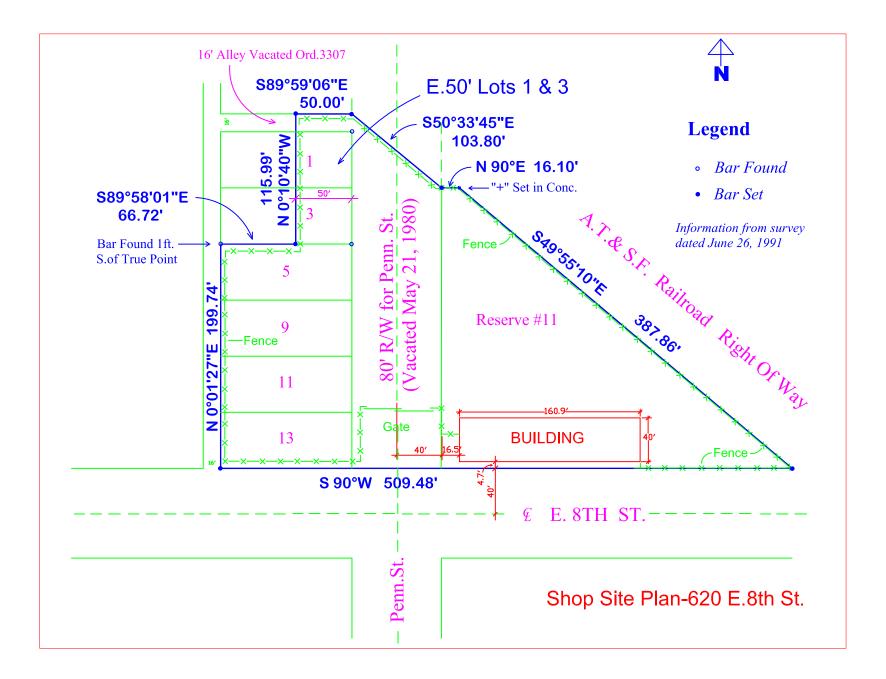
The Site was granted a "Resolved with Restrictions" determination on June 1, 2000 by KDHE. The Site restrictions include:

- Prohibiting residential use;
- Prohibiting installation of drinking water wells;
- Requiring the conveyance of the restrictive covenant with any sale; and
- Requiring notice be provided to KDHE prior to any excavation activities.

Based on historical Sanborn Maps for the Site, there are several former MGP operational areas contained within the footprint of the maintenance shop, including purifiers, exhaust and retort rooms, and coke piles. The investigation of MGP sites are often complicated by unforeseen subsurface structures (i.e., piping, foundations, etc.). Demolition of above-grade structures prior to investigation allows for lateral exploration of incomplete probes so that nature and extent of contamination can be defined. Typically, an excavator would be used when obstructions are encountered that the direct push rig cannot penetrate to laterally trench away from the direct push location. This provides for a more comprehensive site investigation to be completed and for appropriate remedial decisions to be made; this simply is possible with the building remaining in-place. not

Attachment C

Site Layout Plan



Attachment D

Aerial Photograph with Site Boundaries

KDHE Restricted Covenant Area

Property Boundaries

NGV

© 2015 Google

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Attachment E

Work Plan Assessment Maps



KEYED NOTES:



① ABATEMENT OF APPROXIMATELY 130 SQUARE FEET OF CAT 1 NON-FRIABLE ACM IN WAREHOUSE RECEIVING OFFICE.

COORDINATE WITH APPLICABLE UTILITIES
 AND OWNER, TERMINATE AND ABANDON
 MARKED UTILITIES CONNECTIONS INTO
 BUILDINGS. OWNER WILL DISCONNECT
 ELECTRIC, GAS, AND WATER UTILITIES, AND AIR
 CONDITIONER UNIT. CONTRACTOR WILL
 DISCONNECT, PLUG, AND ABANDON SEWER
 CONNECTION, SEWAGE PUMPING PIT, SUMP
 DRAINS, AND FLOOR DRAIN.

③ DEMOLISH AND TRANSPORT DEBRIS FROM EXISTING BUILDINGS AT APPROVED CONSTRUCTION / DEMOLITION LANDFILL. ASBESTOS ABATEMENT TO BE CONDUCTED PRIOR TO DEMOLITION.

GENERAL NOTES:

1. ALL UTILITIES TO BE DISCONNECTED PRIOR TO DEMOLITION/EXCAVATION ACTIVITIES.

2. UTILITIES AND TOPOGRAPHIC MAP PROVIDED BY CITY OF LAWRENCE, KS. CONTRACTOR WILL VERIFY EXISTENCE AND LOCATIONS IN FIELD PRIOR TO CONSTRUCTION ACTIVITIES.

3. WORK BEING COMPLETED UNDER BHE STATEMENT OF SERVICES #33764.

1				
		0	50'	100'
1	SCALE IN FEET			
		D	RAWING WP	01
	Burns & McDonnell STRGE 1898	620	SITE PLAN G LAWRENCE) E. 8TH STRE /RENCE, KAN	ET



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LEGEND:

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PROPOSED DIRECT-PUSH SOIL SAMPLE LOCATION



SAMPLING NOTES:

1. SAMPLE LOCATIONS BASED ON HISTORICAL SANBORN MAPS, ANALYTICAL DATA, AND EXPERIENCE AT SIMILAR SITES.

> DP-01: FORMER COKE PILE DP-02: EXISTING FLOOR DRAIN DP-03: FORMER COKE PILE **DP-04: FORMER RETORT ROOM DP-05: FORMER RETORT ROOM** DP-06: FORMER LIME STORAGE DP-07: FORMER PURIFIERS

2. DIRECT-PUSH CORES LOGGED AND FIELD SCREENED USING PID.

IG PID. • 1 SAMPLE COLLECTED FROM ZONE OF GREATEST IMPACT • 1 SAMPLE COLLECTED JUST ABOVE THE GROUNDWATER TABLE • 1 SAMPLE COLLECTED IN BETWEEN BASED ON FIELD SCREENING RESULTS • SHOULD PID SCREENING SUGGEST LITTLE TO NO CONTAMINATION, THE ZONE OF GREATEST IMPACT SAMPLE WILL BE REPLACED BY A SAMPLE COLLECTED WITHIN THE HISTORICAL ZONE OF THE GREATEST IMPACT WITHIN THE HISTORICAL ZONE OF THE GREATEST IMPACT FOR OTHER AREAS OF THE SITE (5-8 FT. BGS)

3. ANALYZED BY OFF-SITE LABORATORY FOR: • BTEX USING EPA METHOD 8260

- PAHS USING EPA METHOD 8270 SIM
- RCRA METALS USING EPA METHOD 6010/7471

4. NO GROUNDWATER SAMPLES WILL BE COLLECTED.

GENERAL NOTES:

1. GROUND WATER DEPTH IS APPROXIMATELY 17 FEET BELOW GROUND SURFACE (bgs).

and the second				
		0	50' SCALE IN FEET	100'
		DRAWING WP02		
	Burns & McDonnell STRGE 1828	BHKS 620	IVESTIGATIC G LAWRENC) E. 8TH STR /RENCE, KA	E MGP



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KEYED NOTES:

1) BASED ON HISTORICAL INVESTIGATIONS, EXCAVATION EXTENT IS ANTICIPATED TO BE LIMITED TO THE BUILDING FOOTPRINT ONLY.

2 PROTECT ALL EXISTING STRUCTURES, UTILITIES, AND FACILITIES UNLESS DIRECTED OTHERWISE BY REFERENCE IN DRAWINGS OR ENGINEER.

③ THE LIMITS OF CONSTRUCTION HAVE BEEN DEFINED AS THE FORMER MGP SITE. DO NOT PLACE, CONSOLIDATE, STABILIZE, LOAD, OR OTHERWISE HANDLE EXCAVATED MATERIALS OUTSIDE THE AOC BOUNDARIES.

④ ENGINEER WILL FURNISH, INSTALL, AND MAINTAIN PERIMETER AIR MONITORING EQUIPMENT. LOCATIONS MAY BE ADJUSTED AT ENGINEER'S DISCRETION.

GENERAL NOTES:

SINCE 1898

1. ALL UTILITIES TO BE DISCONNECTED PRIOR TO DEMOLITION/EXCAVATION ACTIVITIES.

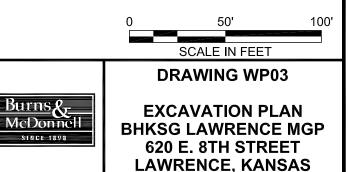
2. UTILITIES AND TOPOGRAPHIC MAP PROVIDED BY CITY OF LAWRENCE, KS. CONTRACTOR WILL VERIFY EXISTENCE AND LOCATIONS IN FIELD PRIOR TO CONSTRUCTION ACTIVITIES.

3. WORK BEING COMPLETED UNDER BHE STATEMENT OF SERVICES #33764.

4. GROUND WATER DEPTH IS APPROXIMATELY 17 FEET BELOW GROUND SURFACE (bgs).

5. GROUNDWATER IS NOT ANTICIPATED TO BE ENCOUNTERED DURING EXCAVATION ACTIVITIES.

6. LATERAL AND VERTICAL EXTENT OF EXCAVATION WILL BE DETERMINED BY RESULTS OF DIRECT-PUSH INVESTIGATION DETAILED ON DRAWING WP-02.







① IF EXCAVATION IS REQUIRED, EXCAVATION WILL BE BACKFILLED WITH QUARRY SCREENINGS.

② QUARRY SCREENINGS WILL BE ANALYZED AND SHOWN TO BE FREE OF MGP CONTAMINANTS BY CONTRACTOR.

③ GRANULAR AGGREGATE SURFACING MATERIAL WILL BE PLACED OVER ENTIRE FOOTPRINT OF BUILDING.

4 existing fence to remain.

GENERAL NOTES:

1. CONTOURS REPRESENT APPROXIMATE FINAL GROUND SURFACE AT COMPLETION OF PROJECT.

2. CONTRACTOR SHALL MATCH ELEVATION OF CRUSHED ROCK SURFACING TO SURROUNDING SURFACES.

3. PERIMETER FENCE TO REMAIN.

	0 50' 100' SCALE IN FEET
Burne 0	DRAWING WP04
 Burns & McDonnell	SITE RESTORATION PLAN BHKSG LAWRENCE MGP 620 E. 8TH STREET LAWRENCE, KANSAS

Attachment F

Building Photo Documentation





















Chuck Hoag Operations Manager Chuck.Hoag@blackhillscorp.com 601 N Iowa Street Lawrence, KS 66044 P: 785.832.3944 F: 785.832.3901

March 26, 2015

Lynne Braddock Zollner Historic Resources Administrator City of Lawrence Historic Resources Commission 6 East 6th Street Lawrence, KS 66044

Re: Demolition Permit Application, 620 East 8th Street, Lawrence Kansas

Dear Ms. Zollner:

This letter responds to the denial, which we received today, of the above-referenced Demolition Permit application and the documentation pertaining to the Historic Resources Commission Item No. 11: DR-15-0035 on the Historic Resources Commission (the "Commission") agenda for March 26, 2015, and supplements the information previously submitted in connection with the application.

Your March 26 letter states that we normally would have 10 days to appeal the denial to the Commission. By the City's mistake, this issue was already scheduled for hearing this evening. You advised us in February that this item would be on today's agenda for Commission decision, based apparently on the Historic Resources review procedure in Chapter 22 of the Lawrence City Code. Today's denial appears to be based on a design guideline review under Chapter 20. Due to time constraints relating to this project, Black Hills wishes to proceed at this evening's meeting as previously planned. In making this request, Black Hills agrees only to waive the 10-day period for appealing today's denial letter established under Section 20-302(f). Black Hills waives no other defect that may have occurred prior to issuance of this determination and expressly reserves all other rights with respect to its demolition request and the denial thereof, including any rights to challenge the Commission's authority to review the demolition request.

The Building is not a Historic Resource Subject to Commission Review

Issuance of a demolition permit is regulated by Lawrence City Ordinance Chapter 5 Article 12 (Sec. 5-1206) which requires a Building Official to send a copy of an application for demolition to the Commission if the structure in question is designated as a landmark, located within a historic district, or qualifies as an environ. This property is not designated as a landmark and is not within a historic district. Moreover, although the building is within 250 feet of the boundaries of the East Lawrence Industrial District, the map of that historic district specifically identifies the

building as "non-contributing" to the East Lawrence Industrial Historic District. Contributing buildings should be more carefully reviewed than those buildings that have been identified as non-contributing to the National Register East Lawrence Industrial Historic District. Therefore, this building is not an "environs" within the meaning of the Chapter 5 or Chapter 22, and thus is not subject to Commission review. Even if the building were within an environs, Section 22-505 provides a presumption that a certificate of appropriateness be approved for an application to demolish an environs unless the proposed demolition would significantly encroach on, damage, or destroy the landmark or historic district. In sum, the Commission has no authority under Chapter 5 and 22 to deny the demolition permit based on historic resources.

Further, although the Design Guidelines for the 8th and Penn Neighborhood Redevelopment Zone (the "Design Guidelines") contemplate Commission review of demolition permits, the specific provisions of the Guidelines mirror and cross-reference Chapters 5 and 22. The Design Guidelines do not provide authority to deny a demolition permit beyond that established in Chapters 5 and 22. Thus the Commission has no authority to deny the permit under the Guidelines.

Demolition Should be Allowed under the Design Guidelines

Even if the Commission does have authority to review the demolition request under the Design Guidelines, the requested demolition is wholly consistent with the Design Guidelines for Zone 4 in which the building is located. The Design Guidelines are expressly intended to provide opportunity for new types of development that would retain the characteristics of Zone 4, including a lack of density, open spaces and the visual connection to the railroad right-of-way. The proposed demolition is consistent with these goals and is consistent with the transitional nature of this area.

The staff analysis relies heavily on its claim that the building is *like* a Quonset Hut, a unique World War II era structure and thus should be adapted for reuse if economically feasible. However, the building, which was constructed in approximately 1955, is <u>not</u> a Quonset Hut. The enclosed memorandum from Burns & McDonnell, provides additional information in this regard. Moreover, the building has numerous architectural alterations of the type expressly discouraged by the Design Guidelines, including a large addition and replacement overhead doors. Because the building is not a Quonset Hut, the Design Guidelines' recommendation of adaptive reuse does not apply. Even if it did, given the building's design and condition, Black Hills sees no economically feasible alternative for re-use of the building.

The Demolition Request is Related to Public Safety

The primary purpose of the demolition request is to allow environmental sampling beneath building slab. Black Hills' plan to conduct sampling "relates to public safety" within the meaning of Section 5-1206. As such, Black Hills is not required to provide additional documentation regarding the proposed use of the site or an explanation of why it is not feasible to use the

existing building. The Staff Analysis dismisses the environmental sampling as not "related to public safety" by concluding, without basis, that alternatives to accomplish the testing exist.

Demolition of this building will directly benefit the City and the surrounding neighborhood by allowing Black Hills' planned sampling to proceed. Second, it will facilitate and create opportunity for the type of re-development the City is encouraging in this neighborhood. As a practical matter, productive re-use of the property will not be achieved without conducting the planned sampling, and completing any additional response action, should it be warranted. Demolition of the building will allow these efforts to proceed. For these reasons, we ask that the Commission grant the Demolition Permit Application.

Sincerely,

auch

Chuck Hoag Operations Manager

Enclosure

Improving life with energy www.blackhillsenergy.com

Memorandum



Date: March 25, 2015

To: Kevin White/Burns & McDonnell

From: Brandy Harris/Burns & McDonnell

Subject: 620 E. 8th Street Historic Assessment Memorandum

I. Introduction

This memorandum is intended to provide additional background information and a historical assessment for the building at 620 E. 8th Street in Lawrence, Kansas. The property owner, Black Hills Energy, is proposing to demolish the building to facilitate environmental remediation of the site (Project). The City of Lawrence (City) has indicated they may deny the demolition permit application based on to the building's location within the 8th and Pennsylvania Urban Conservation Overlay District and the associated design guidelines used to control development within that area. As a result, a hearing regarding the permit application has been scheduled with the City's Historic Resources Commission (HRC) for March 26, 2015. The information contained herein is intended to assist the project sponsor in preparing rebuttal testimony for use in the hearing.

II. Previously Designated Resources in the Vicinity of the Project

As referenced in the introduction, the Project is within the 8th and Pennsylvania Urban Conservation Overlay (Zone 4). This district contains the State- and National Register of Historic Places (NRHP)-listed East Lawrence Industrial Historic District (Zone 1) as well as streetscapes and alleys within the overlay's boundaries (Zone 2), a mixed-use zone at the 800 block of Pennsylvania Avenue (Zone 3), and areas identified as prime candidates for new construction (Zone 4). The Project is within Zone 4 (Figure 1), which includes "several irregularly shaped parcels…adjacent to the railroad right-of-way...[that]…have traditionally served as areas for light manufacturing, storage, and railroad-related activities." The zone is defined further by "[0]pen space and temporary and permanent storage and manufacturing facilities" and is characterized by industrial infrastructure (Historic Preservation Services 2011).

The City has enacted design guidelines to govern development within this area. These guidelines dictate that all projects impacting properties listed in the NRHP, the Register of Historic Kansas Places, or the Lawrence Register of Historic Places and resources within 250-feet of such properties in the Conservation Overlay are subject to "additional review as required by KSA 75-2724 and/or Chapter 22, Code of the City of Lawrence." The subject building is not currently listed on any local, state, or federal registers and is specifically identified as non-contributing to the East Lawrence Industrial Historic District.

The design guidelines also indicate that while Zone 4 of the Conservation Overlay does not contain "any historic buildings dating to the period of significance of the buildings found in Zone



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1 or the residential enclave to the west" it does include several buildings 50-years-of -age, which is the cut-off for NRHP consideration. These buildings include "Quonset Hut buildings dating to the World War II period and erected for industrial purposes." The building at 620 East 8th Street is not a true Quonset Hut (see Sections III and IV).

The NRHP nomination for the East Lawrence Industrial Historic District identifies the Project Area as containing "[m]odern commercial/light industrial buildings." The historic district itself includes a mix of nineteenth and early twentieth century "masonry manufacturing, processing, wholesale distribution, and warehouse buildings and structures that range from one story to four stories in height and date from the early 1880s through the 1920s" (Schwenk 2005). A map of the district included in the nomination specifically identifies the building at 620 E. 8th as non-contributing.

The Project is also within the boundaries of the Historic Resources of Lawrence Multiple Property Submission (MPS). The boundaries for this district include the entire 1997 city limits of Lawrence with a period of significance ranging from 1854 to 1945. Quonset huts and industrial building types in general are not identified as contributing features of this district (Wolfenbarger and Nimz 1997).

III. The Quonset Hut as a Historic Resource Type

In recent years, the need to evaluate Quonset Huts as potential historic resources and their overall architectural significance has become a widely-debated issue in the historic preservation field. Though opinions vary regarding what makes such resources significant, there has been some general consensus on their character-defining features and on the fact that they must retain a high level of integrity to warrant NRHP consideration or other historic designation.

The Quonset Hut was designed at Quonset Point Naval Air Station in Rhode Island in 1941 by the George A. Fuller Company. Its design was based on that of the Nissen Hospital Hut used by the British military during World War I and "met the military's needs during World War II for a prefabricated, lightweight shelter that could be used in the war effort" (City of San Diego 2011). Estimates suggest over 153,000 of the utilitarian structures were constructed during World War II with many then adapted for postwar use.

Quonset Huts are half-cylindrical steel framework structures with rectangular plans available in various sizes and configurations. The buildings are clad in corrugated metal siding, and the metal arches are bolted directly to a concrete slab or grade beams. The main entrance to the structures is usually on one or both of the short, arched elevations, and they were typically expandable in 10-foot increments. Most feature few or no side windows; however, the ends can be clad in any material and feature a variety of door and window configurations. Though available in a variety



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of sizes, the typical sizes produced were the "20," which measured 20 feet by 48 feet, and the "40," also known as the Elephant Hut, which was 40-feet-wide by 100-feet-long (Washington State Department of Archaeology and Historic Preservation 2015).

In general, most State Historic Preservation Officers (SHPOs) and other members of the historic preservation field have identified the character-defining features of these resource types as:

- Steel structure with continuous arch/barrel shape
- No distinction between roof and wall
- Corrugated metal cladding
- Curved steel ribs attached to concrete slab or grade-beams
- Fenestration concentrated in short/arched elevation(s)
- Secondary features can include false fronts and shed dormers

Additionally, many SHPOs have specified that such resources must be specifically associated with the World War II mobilization effort rather than with post-World War II interpretations of the form, be part of a grouping of such resource types, and maintain a high degree of integrity to merit NRHP consideration.

IV. Description and Evaluation of 620 E. 8th Street

The building at 620 E. 8th Street is a circa 1955 massed plan, metal frame industrial building with a Gothic arch roof clad in corrugated metal. The walls, which are separate from the roof structure, are also clad in corrugated metal paneling, and the building rests on a concrete slab foundation. The western façade features three, 4-light fixed frame windows with metal canopies and a louvered dormer vent. There is no entrance on this elevation. The other short façade (east) is a 40-foot by 40-foot non-historic-age addition. It also features fixed frame windows and no entrance. The primary (southern) façade is punctuated by three hinged glass and wood paneled doors accessed via concrete stairs with metal railings, an original sliding metal bay door, a replacement overhead bay door, and five multi-light metal fixed-frame windows. This elevation, which is visible from E. 8th Street, also features a large (40-foot by 40-foot) side-gabled addition with two overhead bay entries. The rear (northern) elevation features a row of similar fixed frame windows to those on the main elevation with a replacement bay and original hinged door at the eastern end of the original portion. The elevation of the addition on this side is punctuated by an overhead bay door, a metal hinged door, and a metal fixed frame, 4-light window. The entire building is 40-feet-wide by 160-feet-long with 40-feet of the length being a modern addition (see Photograph Appendix).

The post-World War II-era building is not a traditional Quonset Hut but rather represents one of the mid-twentieth century adaptations of the form for industrial use. Alterations to the building,



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including a large addition visible from the street side of the building, and replacement of overhead bay doors have detracted from its integrity of design, materials, workmanship, and feeling. Additionally, it is not associated with a period of significant industrial development in Lawrence as per established historic contexts in associated NRHP nominations or with any other significant events or individuals. As a result, it does not appear to qualify for designation in the NRHP, Register of Historic Kansas Places, or as a City of Lawrence historic landmark.

This assessment of the building is supported in the NRHP nominations for the East Lawrence Industrial Historic District and the Historic Resources of Lawrence Historic District and by language in the Conservation Overlay design guidelines, particularly the following:

- The building is excluded from the boundaries of the East Lawrence Industrial Historic District and specifically identified as non-contributing;
- The Historic Resources of Lawrence nomination does not identify industrial resources or those post-dating 1945 as potentially significant; and
- The building is not identified as a resource that would qualify for federal or state tax credits in the design guidelines for the 8th and Pennsylvania Urban Conservation Overlay, indicating it is not significant individually or as part of an established historic district.

In addition to its lack of architectural and historic significance, limited review of the built environment in the vicinity of the Project revealed the presence of at least two nearby examples of original, World War II-era Quonset Huts in the area (Figure 2; Photograph Appendix). One of the resources (Quonset Hut 01, Figure 2) is in Zone 3 of the Urban Conservation Overlay. Both resources appear to date to the World War II era, possess physical integrity, and display many of the character-defining features of the resource type including continuous arch design with no distinction between the roof and walls, corrugated metal cladding, main entrance and fenestration concentrated on the short/arched elevations, and continued industrial associations. These resources represent better examples of the resource type than the subject building, and Quonset Hut 02 (Figure 2) is located only approximately 300 feet from the property aligned along the railroad corridor. Overall, the resources better reflect the period of World War II-era industrial development in the area, and their presence ensures this period and structural form would continue to be represented if the proposed Project was approved.

The design guidelines for the conservation district indicate that land use within Zone 4 was historically characterized by "a lack of density, buildings of all sizes, and large amounts of open space, particularly in zones adjacent to railroad right of way." The guidelines define the zone further as providing good "opportunities for new types of development that would retain open spaces and enhance the visual connection to the railroad right-of-way" (Historic Preservation Services 2011). They also suggest retaining existing Quonset Huts "in adaptive re-use when



March 25, 2015 Page 5

economically feasible" but do not identify examples of the resources or define economic feasibility (Historic Preservation Services 2011).

With the exception of retaining the subject building, the proposed Project satisfies all other design goals for this area. Specifically, removal of the building would:

- Retain the area's traditional open space and provide unimpeded view of the rail corridor from the NRHP-listed East Lawrence Industrial Historic District; and
- Allow use of the tract as a parking lot, which would provide visitors to the area with an unobstructed view of the NRHP-listed Poehler Mercantile Company building to the south, of the overall streetscape within the historic district, and increase access to the district overall.

Initial coordination with the City's Historic Resources Administrator indicated the demolition permit for the building was denied because it was not going to be replaced with another building. This denial was likely to protect the zone's "design, scale, and massing" as described in the associated design guidelines. Though the building's loss would disrupt the current distribution of built resources in the conservation overlay, its demolition would improve another character-defining feature of Zone 4 identified in the guidelines, namely its "lot openness." Additionally, there are numerous remaining examples of railroad-oriented, linear plan industrial buildings in the area to support the continued identification of the zone as having an industrial character as well as actual examples of World War II-era Quonset Huts nearby that illustrate their role in postwar development in east Lawrence. As a result, it does not appear that removal of the building would adversely impact the overall character of the area, endanger the historic setting of adjacent historic districts, or visually impede perception of the area as a railroad-related, mixed-use area characterized by industrial infrastructure.

V. Summary Conclusions and Recommendations

The resource's lack of historic significance, the presence of several more historically significant examples of the Quonset Hut resource type in the area, and the benefits to the viewshed of the rail corridor and the East Lawrence Industrial Historic District support Black Hills Energy's proposal to demolish the existing building at 620 E. 8th Street. Previous submittals to the City and the Historic Resource Administrator have demonstrated the environmental concerns associated with the property and the need to remove the building to allow additional potential environmental response. These issues combined with economic concerns that make reuse of the building unfeasible suggest approval of demolition of the building is warranted.



March 25, 2015 Page 6

If the demolition permit cannot be granted based on the herein presented information, the following actions may mitigate impacts to the resource and to the associated Urban Conservation Overlay:

- Preparation of a sales package providing both the public and the City the opportunity to purchase and relocate the building
- Additional documentation and research into the history of the property and summary of how it and other similar resource types fit into the context of historic industrial development in the community. This documentation could be archived at the local library to provide a permanent archival record documenting the resource that would be accessible to the public.
- Assist the City with preparation of an interpretive historic marker documenting the resource type and its significance to be installed in the proposed parking lot on the subject tract

VI. References

City of San Diego

2011 *Barrio Logan Historical Resources Survey*. City Planning and Community Investment, Community Planning and urban Form Divisions. San Diego, California.

Historic Preservation Services

2011 Design Guidelines, 8th and Penn Neighborhood Redevelopment Zone. Prepared for the City of Lawrence, Kansas.

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Washington State Department of Archaeology and Historic Preservation

2015 Quonset Hut, 1941-1960. <u>http://www.dahp.wa.gov/styles/quonset-hut</u>. Accessed March 2014.

Wolfenbarger, Deon and Dale Nimz

1997 National Register of Historic Places Multiple Property Documentation Form, Historic Resources of Lawrence, Douglas County, Kansas. Prepared by Three Gables Preservation. Copy on file at the Kansas State Historical Society.



Path: C.\Users\gacox\GIS StuffBlackHillsEntergy\Figure1.mxd COPYRIGHT © 2015 BURNS & McDONNELL ENGINEERING (

Source: Burns & McDonnell Engineering; ESRI





View of 620 E. 8th Street, camera facing northeast



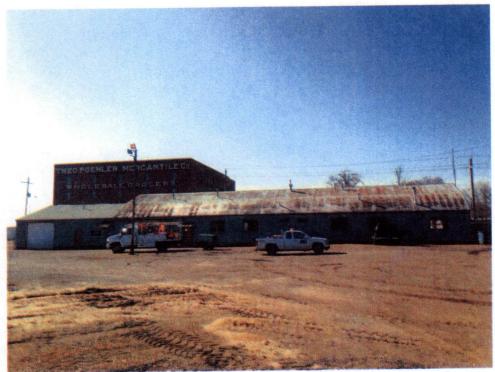
View of 620 E. 8th Street, camera facing east



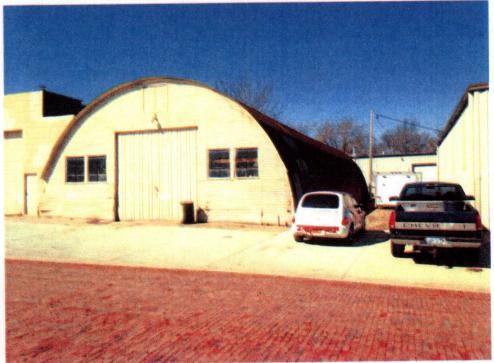
View of addition to 620 E. 8th Street, camera facing west



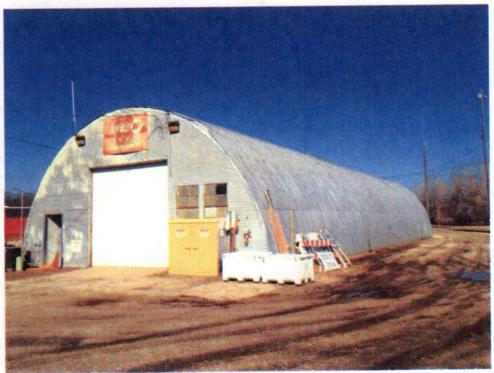
View of 620 E. 8th Street, camera facing northwest



View of 620 E. 8th Street with NRHP-listed Poehler Mercantile Company in background, camera facing south



View of Quonset Hut 01 in Zone 3, camera facing southwest



View of Quonset Hut 02, camera facing northwest



View of Quonset Hut 02, camera facing southeast



March 3, 2015

Lynn Zollner Historic Resources Administrator City of Lawrence 6 East 6th Street Lawrence, KS 66044

Dear Ms. Zollner,

Thank you for meeting with me, my colleague Monique Pope, and Kevin White of Burns and McDonnell at our former warehouse on February 17. We appreciated your time, discussion of the building, as well as the potential questions for us to consider from the Historic Resources Commission meeting on March 26. As we discussed, Black Hills Energy's primary interest is to finish assessment and remediation of the site for the benefit of future owners and future use. We look forward to partnering with you on that effort.

Per your request, please find the enclosed historical documents associated with the building, interior and exterior photos including a building footprint map and a historical summary of the efforts that Black Hills (and predecessor companies) have taken to remediate the site since 1992.

As we discussed at our meeting last month, Black Hills Energy submitted a demolition permit to the city of Lawrence on January 20 to propose the demolition of the remaining structure and to conduct an environmental assessment of the soils under the former maintenance facility at 620 E. Eighth Street. Historically, a former manufactured gas plant operated at this site from 1869-1905, converting coal into gas for lighting and heating purposes. By 1905, pipeline natural gas was available and the plant shuttered operation. Residual byproducts from the gas process including coal tar, coke and purifier wastes generated from the gas process have been adequately addressed for other areas on the site. The next step is to analyze and address the soils underneath the building, which is required to prepare this site for future use.

The demolition of the building is necessary to adequately sample soils beneath the existing foundation. Core sampling within the building is not a cost effective and feasible option due to height limitations and likely underground restrictions that may be encountered (piping, tanks, foundations, etc.). Accordingly, core sampling within the building (and keeping the building intact while doing so) does not allow the environmental contractor to ensure that the subsurface has been thoroughly characterized. In addition, if remediation is necessary, the building will need to be demolished to properly remove impacted soils beneath the foundation. It is crucial for Black Hills to characterize the remaining soils beneath the building so that we have a full understanding of any environmental risks at the site and how best to address or mitigate them for future use.

We plan to continue to work in conjunction with the Kansas Department of Health and Environment on mitigating any issues on the property, and explore potential future uses for the property with developers and/or other interested stakeholders. We understand that the city of Lawrence may have an interest in the site, and we look forward to discussing other uses for the property such as a parking lot, or other possible future uses. We recognize that our property is located in the midst of a vibrant and growing part of east Lawrence, and believe that it is important to keep it a safe and functional part of the community.

If you need further information, please contact me at 785-832-3944.

Sincerely,

Chuck Hoag / Manager, Gas Operations - Lawrence

Attachment A

Historical Information

Kansas Public Service - History

Kansas Public Service, as it is known today, has had a long and illustrious past. The company was originally incorporated as Lawrence Coal, Gas and Oil Company on November 7, 1865. The first owners of Lawrence Coal, Gas and Oil Company were G.W. Deitzler, C. Robinson, S. Thacher and W. Lykins. On January 10, 1866 the city of Lawrence approved Ordinance No. 21, granting exclusive rights that the company could install pipe down the city streets, lanes and public grounds, for the conveyance of gas, to operate gas street lights and for the use of the inhabitants of the city. The pipe used for the conveyance of gas in those days was wooden. The ordinance also gave Lawrence Coal, Gas and Oil the exclusive right to mine for coal near the Kansas River.

Ordinance 21 also provided that the company could manufacture their own gas. Manufactured gas was produced for lighting and heating purposes before pipeline gas became available. Gas was produced by heating coal, and sometimes oil, under extreme pressure in a fire clay retort and the gas driven off in the retort, taken into a holder, purified and then distributed to the town. The plant was located at the east end of Eighth Street and the Santa Fe tracks.

On May 4, 1868, the owners of Lawrence Coal, Gas and Oil sold the rights and franchise to C.E. Gray. Mr. Gray renamed the company Lawrence Gas, Coke and Coal Company. Lawrence Gas, Coke and Coal Company was incorporated August 4, 1869.

On February 13, 1878, the Lawrence Gas, Coke and Coal Company sold its franchise and rights to Lawrence Gas, Fuel and Electric Light Co. The historical records of the company become somewhat vague at this point until about 1904.

One of the most interesting points in the history of Kansas Public Service started June 9, 1904. Upon graduation from college, Mr. Caryl J. Dodds secured employment with Lawrence Gas, Fuel and Electric Light Co. What makes C.J. Dodds interesting is that until his death in October 1976, Mr. Dodds was involved in the business affairs of KPS for seventy-two (72) years. During his years of involvement with the company, C.J. Dodds held the following positions: office clerk, collector, meter reader, accountant, Vice President and General Manager, and upon his retirement, served on the Board of Directors until his death.

During the month of July 1905, the construction of the Kansas Natural Gas Company's pipe line was progressing rapidly and natural gas was being brought to the Lawrence area. Joseph J. Heim of Kansas City and Arnold Kalman of St. Paul, Minnesota, secured a contract with the pipeline company for distribution of natural gas in Lawrence. After some financial maneuvering, they bought the gas plant of the old Lawrence Gas, Fuel and Electric Company and secured a franchise for the distribution of natural gas in Lawrence.

The company operated under the name of Citizens Light, Heat & Power with Joseph H. Dunkel serving as General Manager. On October 16, 1905, with the pipeline being completed, natural gas was turned on in Lawrence. At a later date, the electric portion of the company was sold to Lawrence Electric Light Company and was one of the predecessors of the present KPL. Citizens Light, Heat & Power Company continued to operate until January 1927.

During January of 1927, Wilbur Foshay of Minneapolis, a promoter who was buying properties and putting them into various holding companies, purchased Citizens. The Lawrence property was organized as the Peoples Utilities, Kansas Corporation and was part of the Peoples Light and Power Corporation. Soon after the purchase, control of Peoples Light and Power Corporation was taken over by a New York utility organization operated by Mr. Foshay and the headquarters were moved to New York. The company later formed as a Delaware Corporation. During this time, L.O. Gordon acted as General Manager. On June 22, 1927 C.J. Dodds was appointed General Manager and Mr. Gordon served on the Board of Directors. In August 1929, the office location was moved to 733 Massachusetts St. During August 1930, Peoples Utilities formally changed the corporations name to Kansas Public Service Company.

The management of Peoples started looking for prospective buyers, because of the Utility Holding Company Act, when D.E. Dunne, a member of the Board of Directors of Kansas Public Service, convinced his brother G.M. Dunne, George Docking and C.B. Holmes that they should purchase the utility. The four (4) stockholders agreed to purchase all the outstanding shares (2,000) and First Mortgage Bonds, Series A 5% due 1961 (\$350,000) of the company. The sales needed final approval from the Securities and Exchange Commission pursuant to Rule 12D-1 under the Public Utility Holding Company Act of 1935.

On May 1, 1939, upon SEC approval, Kansas Public Service was sold to the principle four stockholders. These four men, and later their families, guided Kansas Public Service until the sale to Missouri Public Service in October 1984. While serving as stockholders of Kansas Public Service, George Docking served two terms as Governor of Kansas and his son, Robert Docking, served as Governor of Kansas for four terms. On May 20, 1942, Kansas Public Service dropped its Articles of Incorporation with the State of Delaware and formed a Kansas Corporation.

During 1944, Kansas Public Service obtained a 20 year renewal of its franchise from the City of Lawrence with some unusual circumstances. The city council passed the renewal of the franchise and no one from the company knew that it was on the agenda for that meeting. This speaks well of the public relations which the company had with the community at that time.

Between 1950 and 1960 the company grew and developed as did the City of Lawrence. In the early 50's, Kansas Public Service constructed a new warehouse and meter shop at its present location at E. 8th and Pennsylvania St. C.J. Dodds retired as Vice President and General Manager on June 30, 1954 and was replaced by C.W. McCoy. Mr. McCoy served until January 1, 1958 when he retired. Kansas Public Service looked outside the organization for new leadership and hired L.C. DeMoss, a District Manager for Missouri Utilities Company located in Columbia, Missouri.

In the time period between 1960 and 1970 the company continued to grow. The Board of Directors authorized the use of plastic pipe for services and mains on June 17, 1964, although very little was used until the early 70's. The primary type of pipe used at this time was steel. Kansas Public Service also received a renewal of its franchise in 1964. Until January 1965, the building at 733 Massachusetts St., where the main office was located, was being rented. KPS purchased that location and also the building next to it at 735 Massachusetts St.

L.C. DeMoss retired from Kansas Public Service in March 1970, because of illness. The Board of Directors hired William C. Salome III, as Vice President and General Manager in April 1970. In 1971, KPS began the use of plastic piping for mains and services. On September 22, 1976, Mr. C.J. Dodds attended his last Board of Directors meeting and later that year passed away.

In the decade between 1980 and 1989, Kansas Public Service experienced more changes. In December 1981, the company purchased its first computer, a Burroughs mainframe, which was used primarily for customer billings, payroll and some accounting functions. During December 1982, Kansas Public Service moved to its present location, 110 E. 9th, after extensive remodeling of the old Kroger grocery store. In late 1983 or early 1984, the Board of Directors decided to sell KPS. Several larger utilities looked at the possibility of purchasing the company, then Missouri Public Service made an offer. In October 1984, Kansas Public Service was sold to Missouri Public Service. The last KPS Board of Directors meeting, was held on October 17, 1984. Some of the members of the Board of Directors were retained as part of the Advisory Board after Missouri Public Service took over control of the company. In 1988, Kansas Public Service became certified by the Kansas Corporation Commission and is now regulated by the State of Kansas.

In the mid-1980's, Missouri Public Service, under the leadership of Ms. Avis Tucker, began looking to grow further via mergers and acquisitions. To enhance these efforts, on May 2, 1985 Missouri Public Service changed its corporate name to UtiliCorp United Inc. Richard C. Green Jr was named the first President and Chairman of the Board of UtiliCorp United. Green is a fourth generation member of the family that started the business in 1908 that would eventually become UtiliCorp United.

With deregulation of the natural gas industry, the mid-1990's has seen tremendous change and reorganization within the corporation. William C. Salome III retired as KPS Divisional President on December 31, 1994. During 1995, UtiliCorp United introduced EnergyOne, a marketing concept designed to unite all future UtiliCorp products and services under one brand name.

Attachment B

Environmental Site Overview

Environmental Background:

A manufactured gas plant operated at 620 E. Eighth Street (the Site) from 1869 to 1905, which converted coal into gas for lighting and heating purposes. By 1905, pipeline natural gas was available and the plant shuttered operation. The process of manufacturing gas resulted in residual byproducts, including coal tar, coke and purifier wastes, which are typical byproducts of coal processing or combustion. It was common practice at the time to bury those byproducts on or adjacent to the gas plant. Concentrations of tar are commonly found in "tar wells" or other buried gas plant structures.

The Site was previously used as a natural gas service center. The site is currently owned by Black Hills Energy, is currently unoccupied, but is being used as a storage area and warehouse. The west side of the site also currently houses a compressed natural gas fueling station. The Site is contained by a six-foot security fence with barbed wire.

The Site is bound to the north and east by railroad tracks. The parcel immediately west of the Site is owned by JMG Properties LLC and is zoned for commercial/industrial urban use. Properties to the south of the Site are primarily residential use.

The area underneath the maintenance shop has not been investigated; however, it is anticipated that the nature and extent of impacts in this area will be similar to those previously identified at the rest of the Site, as discussed below. Historically, data has been collected as part of the following sampling events:

- Preliminary Assessment of the Former Manufactured Gas Plant at Lawrence, Kansas for Kansas Public Service, Burns & McDonnell Engineering Co., Inc., September 1992, (PA).
- Site Investigation of the Lawrence Manufactured Gas Plant at Lawrence, Kansas for Kansas Public Service, Burns & McDonnell Engineering Co., Inc., April 1994, (SI).
- Final Corrective Action Report, Lawrence Former Manufactured Gas Plant Site, Kansas Public Service, Burns & McDonnell Engineering Co., Inc., December 1999.

Those findings are summarized below:

Soil and groundwater analytical data collected during historical investigation activities in the 1990's indicated the presence of both benzene and polynuclear aromatic hydrocarbon (PAH) compounds,

which are typical byproducts of manufactured gas production. Based on the results of the investigations, excavation of the material associated with the former tar well was recommended. Excavation and monitoring well installation activities started in 1998. Since the exact location of the tar well was unknown, the initial excavation consisted of the removal of the upper one to two feet of soil in the approximate area of the former tar well to locate the subsurface structure. A total of 33.15 tons of stained soil was excavated from the tar well structure, and the excavation was backfilled with clean material.

After the removal action, an on-site monitoring well was completed and sampled twice a year for two years (four sampling events) to assess the effectiveness of the remedy. Ground water samples were taken, which tested for volatile organic compounds (VOCs) and polycyclic aromatic hydrocarbons (PAHs). Those results were found to be below current (March 2014) residential Kansas Department of Health & Environment ("KDHE") Risk-Based Standards (RSKs). Neither VOCs nor PAHs were detected during the remaining three groundwater sampling events.

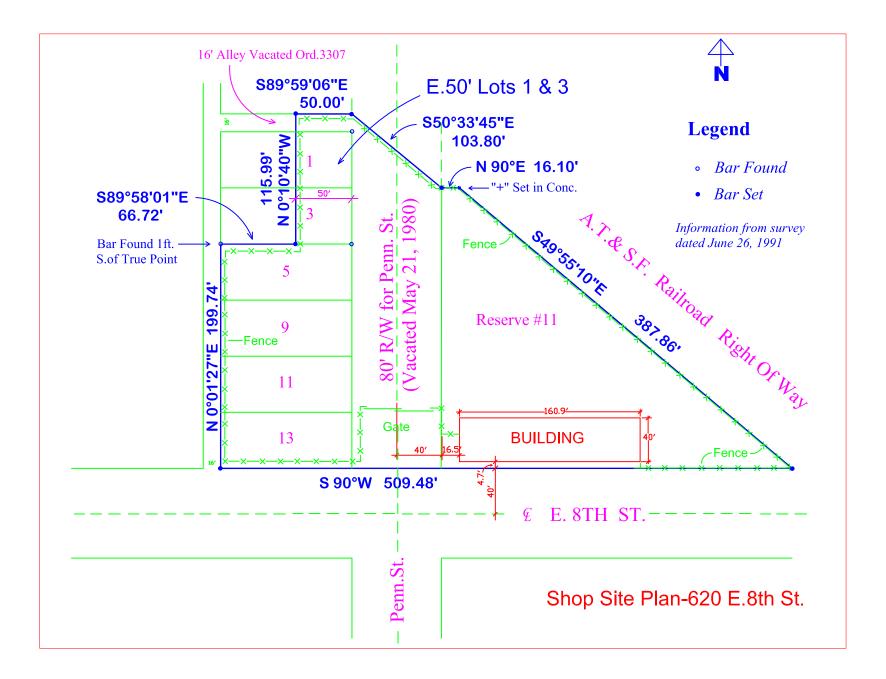
The Site was granted a "Resolved with Restrictions" determination on June 1, 2000 by KDHE. The Site restrictions include:

- Prohibiting residential use;
- Prohibiting installation of drinking water wells;
- Requiring the conveyance of the restrictive covenant with any sale; and
- Requiring notice be provided to KDHE prior to any excavation activities.

Based on historical Sanborn Maps for the Site, there are several former MGP operational areas contained within the footprint of the maintenance shop, including purifiers, exhaust and retort rooms, and coke piles. The investigation of MGP sites are often complicated by unforeseen subsurface structures (i.e., piping, foundations, etc.). Demolition of above-grade structures prior to investigation allows for lateral exploration of incomplete probes so that nature and extent of contamination can be defined. Typically, an excavator would be used when obstructions are encountered that the direct push rig cannot penetrate to laterally trench away from the direct push location. This provides for a more comprehensive site investigation to be completed and for appropriate remedial decisions to be made; this simply is possible with the building remaining in-place. not

Attachment C

Site Layout Plan



Attachment D

Aerial Photograph with Site Boundaries

KDHE Restricted Covenant Area

Property Boundaries

NGV

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Attachment E

Work Plan Assessment Maps



KEYED NOTES:



① ABATEMENT OF APPROXIMATELY 130 SQUARE FEET OF CAT 1 NON-FRIABLE ACM IN WAREHOUSE RECEIVING OFFICE.

COORDINATE WITH APPLICABLE UTILITIES
 AND OWNER, TERMINATE AND ABANDON
 MARKED UTILITIES CONNECTIONS INTO
 BUILDINGS. OWNER WILL DISCONNECT
 ELECTRIC, GAS, AND WATER UTILITIES, AND AIR
 CONDITIONER UNIT. CONTRACTOR WILL
 DISCONNECT, PLUG, AND ABANDON SEWER
 CONNECTION, SEWAGE PUMPING PIT, SUMP
 DRAINS, AND FLOOR DRAIN.

③ DEMOLISH AND TRANSPORT DEBRIS FROM EXISTING BUILDINGS AT APPROVED CONSTRUCTION / DEMOLITION LANDFILL. ASBESTOS ABATEMENT TO BE CONDUCTED PRIOR TO DEMOLITION.

GENERAL NOTES:

1. ALL UTILITIES TO BE DISCONNECTED PRIOR TO DEMOLITION/EXCAVATION ACTIVITIES.

2. UTILITIES AND TOPOGRAPHIC MAP PROVIDED BY CITY OF LAWRENCE, KS. CONTRACTOR WILL VERIFY EXISTENCE AND LOCATIONS IN FIELD PRIOR TO CONSTRUCTION ACTIVITIES.

3. WORK BEING COMPLETED UNDER BHE STATEMENT OF SERVICES #33764.

1				
		0	50'	100'
1	SCALE IN FEET			
		D	RAWING WP	01
	Burns & McDonnell STRGE 1898	620	SITE PLAN G LAWRENCE) E. 8TH STRE /RENCE, KAN	ET



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LEGEND:

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PROPOSED DIRECT-PUSH SOIL SAMPLE LOCATION



SAMPLING NOTES:

1. SAMPLE LOCATIONS BASED ON HISTORICAL SANBORN MAPS, ANALYTICAL DATA, AND EXPERIENCE AT SIMILAR SITES.

> DP-01: FORMER COKE PILE DP-02: EXISTING FLOOR DRAIN DP-03: FORMER COKE PILE **DP-04: FORMER RETORT ROOM DP-05: FORMER RETORT ROOM** DP-06: FORMER LIME STORAGE DP-07: FORMER PURIFIERS

2. DIRECT-PUSH CORES LOGGED AND FIELD SCREENED USING PID.

IG PID. • 1 SAMPLE COLLECTED FROM ZONE OF GREATEST IMPACT • 1 SAMPLE COLLECTED JUST ABOVE THE GROUNDWATER TABLE • 1 SAMPLE COLLECTED IN BETWEEN BASED ON FIELD SCREENING RESULTS • SHOULD PID SCREENING SUGGEST LITTLE TO NO CONTAMINATION, THE ZONE OF GREATEST IMPACT SAMPLE WILL BE REPLACED BY A SAMPLE COLLECTED WITHIN THE HISTORICAL ZONE OF THE GREATEST IMPACT WITHIN THE HISTORICAL ZONE OF THE GREATEST IMPACT FOR OTHER AREAS OF THE SITE (5-8 FT. BGS)

3. ANALYZED BY OFF-SITE LABORATORY FOR: • BTEX USING EPA METHOD 8260

- PAHS USING EPA METHOD 8270 SIM
- RCRA METALS USING EPA METHOD 6010/7471

4. NO GROUNDWATER SAMPLES WILL BE COLLECTED.

GENERAL NOTES:

1. GROUND WATER DEPTH IS APPROXIMATELY 17 FEET BELOW GROUND SURFACE (bgs).

and the second s				
		0	50' SCALE IN FEET	100'
		DRAWING WP02		
	Burns & McDonnell	BHKS 62	NVESTIGATIO 6G LAWRENO 0 E. 8TH STR VRENCE, KA	E MGP



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KEYED NOTES:

1) BASED ON HISTORICAL INVESTIGATIONS, EXCAVATION EXTENT IS ANTICIPATED TO BE LIMITED TO THE BUILDING FOOTPRINT ONLY.

2 PROTECT ALL EXISTING STRUCTURES, UTILITIES, AND FACILITIES UNLESS DIRECTED OTHERWISE BY REFERENCE IN DRAWINGS OR ENGINEER.

③ THE LIMITS OF CONSTRUCTION HAVE BEEN DEFINED AS THE FORMER MGP SITE. DO NOT PLACE, CONSOLIDATE, STABILIZE, LOAD, OR OTHERWISE HANDLE EXCAVATED MATERIALS OUTSIDE THE AOC BOUNDARIES.

④ ENGINEER WILL FURNISH, INSTALL, AND MAINTAIN PERIMETER AIR MONITORING EQUIPMENT. LOCATIONS MAY BE ADJUSTED AT ENGINEER'S DISCRETION.

GENERAL NOTES:

SINCE 1898

1. ALL UTILITIES TO BE DISCONNECTED PRIOR TO DEMOLITION/EXCAVATION ACTIVITIES.

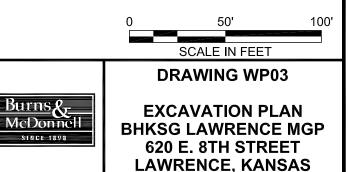
2. UTILITIES AND TOPOGRAPHIC MAP PROVIDED BY CITY OF LAWRENCE, KS. CONTRACTOR WILL VERIFY EXISTENCE AND LOCATIONS IN FIELD PRIOR TO CONSTRUCTION ACTIVITIES.

3. WORK BEING COMPLETED UNDER BHE STATEMENT OF SERVICES #33764.

4. GROUND WATER DEPTH IS APPROXIMATELY 17 FEET BELOW GROUND SURFACE (bgs).

5. GROUNDWATER IS NOT ANTICIPATED TO BE ENCOUNTERED DURING EXCAVATION ACTIVITIES.

6. LATERAL AND VERTICAL EXTENT OF EXCAVATION WILL BE DETERMINED BY RESULTS OF DIRECT-PUSH INVESTIGATION DETAILED ON DRAWING WP-02.







① IF EXCAVATION IS REQUIRED, EXCAVATION WILL BE BACKFILLED WITH QUARRY SCREENINGS.

② QUARRY SCREENINGS WILL BE ANALYZED AND SHOWN TO BE FREE OF MGP CONTAMINANTS BY CONTRACTOR.

③ GRANULAR AGGREGATE SURFACING MATERIAL WILL BE PLACED OVER ENTIRE FOOTPRINT OF BUILDING.

4 existing fence to remain.

GENERAL NOTES:

1. CONTOURS REPRESENT APPROXIMATE FINAL GROUND SURFACE AT COMPLETION OF PROJECT.

2. CONTRACTOR SHALL MATCH ELEVATION OF CRUSHED ROCK SURFACING TO SURROUNDING SURFACES.

3. PERIMETER FENCE TO REMAIN.

	0 50' 100' SCALE IN FEET
Burne 0	DRAWING WP04
 Burns & McDonnell	SITE RESTORATION PLAN BHKSG LAWRENCE MGP 620 E. 8TH STREET LAWRENCE, KANSAS

Attachment F

Building Photo Documentation

















