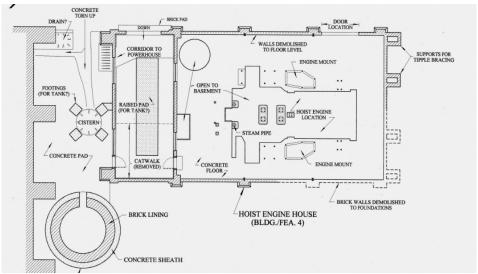
# ILLINOIS DEPARTMENT OF NATURAL RESOURCES CULTURAL RESOURCE MANAGEMENT PROGRAM ABANDONED MINED LANDS RECLAMATION CULTURAL RESOURCES EVALUATION

# JEFFERSON NO. 20 MINE SITE (11JN334) (THE NASON MINE) NASON, JEFFERSON COUNTY, ILLINOIS



Plan of Hoist Engine House, Jefferson No. 20 Mine

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# **Locational Information and Survey Conditions**

**County:** Jefferson County **Quadrangle:** Ina, Illinois (1975)

**Project Type/Title:** Phase II National Register evaluation/documentation of the Jefferson No.

20 Mine Site (11JN334).

Nearest Community: Nason, Illinois

Responsible Federal/State Agencies: IDNR (Abandoned Mined Lands Reclamation Division)

## **Legal Location:**

NE1/4, SW1/4 Section 29 Township 4 South, Range 2 East of 3<sup>rd</sup> P.M. (Elk Prairie Township) Jefferson County

Illinois

**UTM:** North 4,226,910m

East 326,732m

**Natural Division:** 9b; Mt. Vernon Hill Country Section (b) of the Southern Till Plain Division (9) (Schwegman 1973:2).

**Project Description:** The project consisted of a Phase II National Register evaluation of the Jefferson No. 20 Mine Site (11JN334), an abandoned coal mining property located in Nason, Jefferson County, Illinois. Documentary sources indicate that the mine was opened in 1923 and operated until 1951, with a ten-year hiatus from 1928 to 1938. The purpose of the project was to document standing structures and above-grade foundation remains not previously recorded in detail but considered contributing elements to the historic mine site, prior to the commencement of reclamation work on the property. The proposed AML reclamation project will involve the backfilling of two large mine shafts at the site, as well as the removal of hazardous building remains associated with the mine "top works". A well located adjacent to the extant power house also will be filled.

**Topography:** The mine site is located near the northern edge of Rend Lake, a manmade lake created through the damning of the Big Muddy River. The mine lies on a low upland ridge, though the terrain around the site proper is quite level. An abandoned railroad grade, which is raised above the natural terrain, runs along the northern edge of the site (see Figure 1).

**Soils:** Ava-Bluford-Wynoose Association

Drainage: Intermittent stream, Rend Lake, Big Muddy River, Mississippi River

**Land Use/Ground Cover**. The site is characterized predominately by grass-covered lawn and pasture with scattered trees and brush present. Unlike most abandoned mine sites in

Illinois, the site is well maintained, with several of the extant buildings seeing active use for non-mining-related purposes (general storage, housing of livestock, etc.).

**Survey Limitations:** The tipple structure has been demolished down to its concrete foundations and footings, leaving only a small segment behind for documentation. Two-thirds of the hoist-engine house associated with Shaft A also has been demolished down its foundations.

## **Archaeological and Historical Information**

Historical Plats/Atlases/Source: The Jefferson No. 20 Mine Site is located on the west side of the town of Nason in south-central Jefferson County. The mine operated under a number of different names throughout its history (depending on ownership), including the Illinois Coal Corporation Mine No. 10 (1923-1938), Consolidated Coal Corporation Mine No. 20 (1938-1951), and Bell and Zoller No. 20 (1951). It also was referred to more simply as the "Nason Mine" and "Jefferson Mine." The mine is located on the northern edge of the so-called "Quality Circle" of Southern Illinois, an especially thick section of high BTU, low-sulfur coal within the Herrin Coal Seam extending across potions of Franklin, Williamson, Perry, and Jefferson Counties. Coal mining in Jefferson County was very limited prior to the opening of the mine at Nason. The only other mine known to pre-date it in the county was a shaft opened by the Mount Vernon Coal Company at Mt. Vernon in 1895, which operated until 1916 (Illinois State Geological Survey 2003:1).

The Nason mine was developed by the Illinois Coal and Coke Corporation, under the direction of its then-president Albert J. Nason. In January 1923, this company announced that it would begin sinking a shaft mine in Elk Prairie Township, within a 30,000-acre parcel it already owned in Jefferson County (Hoofer 1994b:7). This development sparked considerable attention regionally at the time:

Jefferson County is the last of the great southern Illinois coal counties to be developed. It has been a coal field that all the great interests have been watching and holding in reserve for years. It has remained until now untouched until Mr. Nason entered as pioneer. The coal lies about 725 feet below the surface. It is the same grade as the best of Franklin County and its slightly greater depth adds to its quality, although the vein is not so thick as that found in the south end of Franklin County. It is only a matter of few years when mining operations in Jefferson County will be very commercial (*Herrin News* 4 June 1923, cited in Hoofer 1994b:41).

With a depth of 735', the mine—designated Illinois Coal and Coke Mine No. 10—was to be the deepest yet sunk in Illinois. It also was designed to be the largest in the state, with an expected daily production of 10,000 to 12,000 tons once fully developed. To meet this production level, the mine was provided with two shafts, designated as Shaft A and B, which reputedly were the "largest pair of shafts of any mine in the world." These were sunk under the direction of Sherman Dowell, a man who "has sunk some of the biggest mines in this part of the state and is considered an expert as a shaft sinker" (Hoofer

1994b:12, 68). The presence of two hoisting shafts was characteristic of the larger mines developed in southern Illinois during World War I and the years immediately following. Initial reports indicated that the coal was of a suitable grade to be used for metallurgical coke (Hoofer 1994b:7). Coal hoisted from the mine was hauled by way of the Jefferson and Southwestern Railroad, which was constructed from Mt. Vernon specifically to service the mine.

The mine featured several innovations. It was the first case where the Edison electric lamp was used by miners. These lamps were brighter than the older style of open-flame lamps, and reduced the chance of igniting gas within the mine (*Nason News* 8 March 1924, p. 1, col. 5; Hoofer 1994b:91]). The mine also had an underground corridor between Shaft A and its associated wash house, which allowed miners to pass between them, without being exposed to inclement weather. No other coal mine in the United States was known to have been equipped with such a feature prior to this time.

A contemporary promotional pamphlet entitled "The Story of Nason—the World's Largest Coal Mine" includes a painting of the mine site, as originally envisioned (see Figure 2). Although the final design would deviate from this painting in some respects, the image nonetheless conveys the imposing character and essential order of the mine's surface works. The buildings followed a neat rectangular plan, arranged around a central "plaza". The largest building was the powerhouse, which was located on the north and was flanked by the tipples and hoist-engine houses for Shafts A and B. Each of the shafts had its own wash house, which formed the east and west ends of the building complex. Two warehouses and a repair shops building formed the south side of the plan. The mine could be approached via a tree-lined thoroughfare. Original plans called for another building to be located off the southeast of the wash house for Shaft A. This building, which possibly was intended to serve as an office, apparently was never constructed. It was to span a tree-lined thoroughfare (an extension of Jefferson Avenue) by which vehicles could enter the mine site. A spur line of the Jefferson and Southwestern Railroad ran along the north side of the mine for coal trains. The main line of the railroad ran and east and south of the mine (Hoofer 1994b:98).

The surface works of the mine clearly were professionally designed, though the name of the engineer(s) responsible has not been identified. Certain aspects of the tipple design originally proposed for the mine suggests that the Allen and Garcia Company, a Chicagobased engineering firm, may have had some involvement. Established in circa 1911 by Andrew Allen and John Garcia, this firm claimed "to include all branches of coal mine engineering and to furnish to the mine operator expert services starting with the development and operation of the mine and extending to the design and construction of all operating units about the plant." The firm also had a patented tipple design. Although much of the firm's projects were in the Midwest, it also undertook projects as far a field

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<sup>&</sup>lt;sup>1</sup> The painting of the mine site included as Figure 2 suggests that the headframes of the tipples were to be of concrete construction and have distinctive diagonal bracing. In 2004, Fever River Research prepared an Illinois Historic American Engineering Record documentation package on a similar concrete tipple designed by Allen and Gracia for the Kathleen Mine in Dowell (Jackson County), Illinois (Mansberger, Stratton, and Stanley 2004:2).

as Pennsylvania and Wyoming and was heavily involved in the southern coal fields (*Keystone Mining Catalog* 1928:20-23; Mansberger, Stratton, and Stanley 2004:2).

In association with their mine, the Illinois Coal and Coke Corporation undertook the development of a completely new town located just to the east of it, where up to 1,000 miners and their families were expected to live. Named Nason, in honor of the company's president, the town had a large enough plat to accommodate 5,000 residents, and featured such amenities as public parks, reserved lots for community buildings, paved sidewalks and streets. The commercial route through town was Jefferson Avenue, which was bracketed on the east by a public square and on the west by the mine itself (see Figure 3). Albert J. Nason envisioned the town as a "model mining city," and wanted to create a community with neat, well-built homes and business that would stand out when compared to other mining towns in the region (Hoofer 1994b:7, 40-41, 107-109).

Construction at the mine site began in March 1923 and continued into the following year. The coal seam beneath Shaft A was struck on November 11, 1923, after nearly seven months of work. At that point, the larger Shaft B, which was intended to serve as a secondary hoisting shaft and air shaft, was still about 100' above the coal seam (Hoofer 1994b:12). Work at Shaft B (including topworks) would continue until November 1927 (Hoofer 1994a:5). By that time, however, the remainder of the surface complex had been completed (see Figures 4 through 7).

Production at the Nason mine never reached the expectations of its developers. During the mine's first full year of production (July 1, 1924—June 30, 1925), 271,000 tons of coal were hoisted over 286 days of operation (a daily average of 948 tons), and 414 men Production then dropped and had ceased altogether by 1928 were employed. (Mansberger 1995:61). A number of factors were at play here. To begin with, the mine was developed at the beginning of a pronounced depression in the coal industry. Many mines opened during the World War I era, when the demand for coal was at all-time high, were closing or slowing down by the time the Nason mine opened. Production levels at the mine also were affected by a number of strikes—some long in duration—throughout the 1920s. In January 1925 miners at Nason went on strike for the first time, one which lasted two weeks. They walked out again in March 1926, due to general strike by UMWA. This strike lasted until November of that year. The UMWA called another general strike in March 1928, which eventually was settled in September of that year, after the union agreed to accept a reduced wage scale and further mechanization in the mines. The final vote on the proposed settlement was contested in some areas, leaving some mines idle or with reduced production (Hoofer 1994a:3-5).

The Nason mine was placed in receivership in January 1926, less than three years after its opening. On April 27, 1928 the properties and assets of the Illinois Coal and Coke Corporation were sold at public auction, being purchased by a group of bondholders for \$616,013.53. In July 1931, all of the properties of the Illinois Coal and Coke Corporation were acquired by M. R. Gano of Philadelphia. Gano's acquisition sparked rumors of the

mine being reopened in the near future. However, by January of 1932, it was announced that its two shafts actually would be sealed. During the spring of that year, the pumps in the mine were removed, causing the mine to flood, and the shafts were closed off (Hoofer 1994a:4-6).

The Nason Mine remained idle until May 1937, when a crew employed by John R. Cox of Granville, Illinois started pumping water from it. Cox was interested in purchasing the property but wanted to conduct a survey of the mine workings before doing so. Apparently satisfied with the mine's condition, Cox sent a letter in July agreeing to buy it (Hoofer 1994a:9). His proposed purchase apparently never came to fruition, however. In November 1937 the Consolidated Coal Company of St. Louis reached an agreement with the Jefferson County Board of Supervisors to buy the Nason Mine, subject to paying the back taxes due on the property. This sale was approved by court decree in February 1938. During the interim, Consolidated pursued the liquidation of any mineral rights, regarding local coal reserves, still attached to the estate of Albert J. Nason. The company changed the formal name of the mine to Jefferson Coal Mine No. 20 (Hoofer 1994a:9-10).

By the time Consolidated Coal Company purchased it, the Nason Mine had sat idle for nearly a decade, and the facility required some refurbishment before production could be renewed. In May 1938, the company started preparing the power plant for use and in June they started pumping water from the mine. Later in the summer, repair work started on the Jefferson and Southwestern Railroad line servicing Nason. This line apparently had seen no regular use since the discontinuance of passenger service to Mt. Vernon in February 1932. The first commercial shipment of coal from Jefferson No. 20 was delivered to Mount Vernon in March 1939 (Hoofer 1994a:6, 10).

Jefferson No. 20 was featured in a 1940 article published in the trade magazine *Coal Age* (Gavin 1940). This article highlighted a number of modifications to the surface complex, including the additions of a new ventilating fan and emergency manhoist at the Shaft B, a new scale facility for truck sales, and an additional 1,500-kilowatt turbo-generator in the powerhouse to meet the increased electrical demands within the mine. By this date, all of the coal was mined with machines, and the haulage was done with electric motors (Mansberger 1995:62).

The coal market experienced a marked resurgence during World War II, as America's industries ramped up production. Even so, Jefferson No. 20 experienced multiple stoppages during this period due to national strikes staged by the UMWA in May 1940, April 1941, June 1943, October 1943, and again in July 1945. On May 1, 1945, it was reported that the mine was sitting idle due to an insufficient number of men to crew it (Hoofer 1994b:13).

In 1950, Jefferson No. 20 was reported to have produced slightly over 385,000 tons of coal. That year, the mine employed 318 individuals. The following year, the Bell and Zoller Mining Company purchased the mine from the Consolidated Coal Company, redesignating it as "Bell and Zoller Mine No. 20" (Mansberger 1995:62). Although Bell

and Zoller was one of the largest coal producers in southern Illinois, the company was on the verge of radically downsizing its operations in the region at this same time (Stratton and Mansberger 1995:7-8). The Nason mine saw no production after 1951—the same year Bell and Zoller closed its massive No. 2 mine at Zeigler in neighboring Franklin County.

The historic surface complex at the Jefferson No. 20 Mine Site is illustrated on two maps. One of these is dated in 1926 and shows the mine as originally constructed. It also depicts the town plat of Nason, with sold and unsold lots indicated. The second map is an illustration of the "top works" and underground workings of the mine and was last updated in 1951 (Mansbeger 1995:62-63; 67-68). Detailed production and employment statistics for the mine are available in the *Annual Coal Report*, published by the Illinois Department of Mines and Minerals. Copies of the *Annual Coal Report* are on file at the Illinois State Archives, Illinois State Library, as well as certain university libraries, including the Lovejoy Library at Southern Illinois University, Edwardsville.

**Previously Reported Sites:** The project area is located entirely within the Jefferson No. 20 Mine Site, previously recorded with the Illinois Archaeological Survey (IAS) as 11JN334.

Previous Surveys: In 1995, Fever River Research prepared a National Register of Historic Places assessment of the Jefferson No. 20 Mine for the Abandoned Mined Lands Reclamation Division of the Illinois Department of Natural Resources. This investigation documented seven extant buildings and/or structures and the foundation remains of seven other mine-related features. The results of the investigation were detailed in "A National Register of Historic Places Assessment of Two Coal Mine Facilities, Franklin and Jefferson Counties, Illinois" (Mansberger 1995). This report concluded that the mine site was potentially was eligible to the National Register under Criterion D (Archaeology).

**Regional Archaeologist Contacted:** No regional archaeologists were contacted.

**Investigation Techniques**: A pedestrian survey was conducted over the majority of the area that historically comprised the surface complex of the mine. Documentary efforts focused on those features that are to be impacted by the proposed reclamation project but had not be recorded in detail by Mansberger (1995). Scaled plan maps were prepared for the structural remains around Shaft A and its associated hoist-engine house. The aboveground structural remains also were recorded through a series of digital photographs and field notes.

Site-specific documentary research for the project was conducted at the C. E. Brehm Memorial Public Library in Mount Vernon, Illinois. This research was aimed at supplementing the research previously done by Mansberger (1995). The library has a multi-volume history of Nason, prepared by Fred Hoofer in 1994, which is an excellent source on the history of the town and Jefferson No. 20 Mine. Hoofer's work is replete with period newspaper accounts of the mine's development and subsequent operation. It

also contains a number of historic photographs of the mine site. These images have been attached to this report, though their quality is variabe.

The National Register of Historic Places assessment of the mine site was based on "Pick, Shovel, Wedge, and Sledge": A Historical Context for Evaluating Coal Mining Resources in Illinois (Mansberger and Stratton 2005). This document provides a detailed discussion of mine types and provides guidelines for determining National Register eligibility for abandoned coal mine sites in Illinois.

**Time Expended**: 7 man-hours (in field)

Sites/Features Found: The survey resulted in the detailed documentation of a tipple complex associated with Shaft A, the ruins of an associated hoist-engine house, and several other adjacent features associated with Jefferson No. 20 Mine. Digital images and line drawings of these features are attached below. Figure captions contain additional commentary to supplement the following feature descriptions. The building/feature descriptions are intended to compliment those previously provided by Mansberger (1995), paying particular attention to those features to be impacted by the proposed reclamation work. Feature numbering follows Mansberger; however, new numbers have been assigned to structural remains not previously so designated. See Figure 9 for a site plan showing feature locations. Figures 10 and 11 are general site views.

<u>Building/Feature 1</u> is the power house at the mine site. This large, impressive brick structure has been previously described by Mansberger (1995:63). Although the boilers and electrical generating equipment have been removed, the power house largely retains its exterior integrity. The structure features massive brick buttresses, a corbelled cornice, and segmental-arched openings (see Figures 12 and 13). The October 23, 1923 edition of the *Nason News* provided a detailed description of the power house:

This will be one of the most modern and up-to-date plants in use at any mine. The boiler room will be approximately forty-five feet wide and ninety feet long and will house four Springfield water boilers of four hundred fifty horsepower capacity. These boilers will be equipped with forced draft chain grate stokers and the steam generated for them will be superheated.

Forced draft equipment will be installed and coal will be brought to the boiler plant by means of conveyors. This plant will be equipped with a reinforced concrete stack approximately ten feet inside diameter and two hundred ten feet high. The turbine room will be about forty-five by ninety feet in size. Upon the main floor will be located two 1000 kilowatt mixed pressure turbines and one 500 kilowatt high pressure turbine together with the necessary switchboard for operating them. The switchboard will contain thirteen separate panels for the proper distribution and recording of the power generated.

The basement of the turbine room will house the necessary auxiliaries and high voltage equipment. The mixed pressure turbines are designed to utilize the waste steam for the hoisting engines. The Illinois Coal Corporation has a similar plant at its No. 9 mine at Nokomis, which plant has been in successful operation for the past three years.

The boiler plant will be designed to utilize all of the waste coal from the picking tables in the tipple, thus the power plant is being designed and equipped to produce power from the sources which have in the past been largely wasted in most mines in Illinois, viz: The steam from the turbine engines and the refuse fuel from the picking tables (Hoofer 1994b:62).

A poured-concrete hopper structure is attached to the north side of the building. This hopper measures 12'x16'x30' tall and extends over what appears to be an abandoned railroad spur, being supported in part by a 15'-high concrete pier. A chute, for dumping whatever material was stored in the hopper, is located at the base of the structure (see Figures 13 and 14). The specific purpose of the hopper is not known, though it may have been used to store coal fueling the boilers in the powerhouse. Although the earlier investigation questioned whether the hopper was an original feature to the powerhouse, the present research located a 1920s-era photograph of the powerhouse showing it in place—thus suggesting that the hopper either was original or at least was added very early on.

The proposed reclamation project includes the removal of the hopper, though the main powerhouse building will not be impacted.

<u>Building/Feature 2</u> is an extant wash house and defines the eastern edge of the mine surface complex (see Figures 15 through 19). The building contained changing and shower rooms for mine personnel, as well as a suspected office (Mansberger 1995b:63). A 1923 newspaper article provided the following description of the wash house:

The wash house for Shaft A will be one of the most modern and up-to-date buildings of its kind in the state. It will be fifty feet wide by one hundred forty feet long, and will contain the accommodations for about 800 men. It will be equipped with showers and clothes hangers, and will have provisions for the mine manager and foreman. It will be a modern brick building, lined inside and out with face brick; large windows of ample size will be provided giving a good light and ventilation (Hoofer 1994b:61; *Nason News* 20 October 1923).

The wash house is connected to Shaft A (Bldg./Fea. 5) by means of an underground corridor, which can be accessed by a stairway in the northwest corner of wash house. The corridor is 10' wide and has a 6'-6" tall ceiling with recessed light fixtures spaced at 5' to 6' intervals (see Figures 20 and 21). This corridor received considerable comment in the local press when the mine was opened:

Outstanding among the features introduced purely for the protection and convenience of the workers is the underground passage from the wash house to the shaft... This is a feature of the Nason mine that is new. So far as is known there is no mine in the country with this feature (Hoofer 1994b:91; *Nason News* 8 March 1924, p. 1, col. 5).

The passageway created a sheltered environment for miners, who often wore light clothing underground, passing between the shaft and wash house and protected them in the most inclement weather. Not surprisingly, this feature was said to have "caused more talk among the miners than any other detail of the new shaft" (Hoofer 1994b:91; *Nason News* 8 March 1924, p. 1, col. 5).

The wash house remains in good condition (aside from the removal of the roof over the shower rooms), and the building's north end presently is being remodeled into an apartment. The building proper will not be impacted by proposed reclamation project. However, the current landowner has expressed an interest in having the underground corridor running to Shaft A being either filled in or sealed off in some manner.

The proposed reclamation plans call for the underground corridor to have its roof collapsed and the exposed void backfilled with rock.

<u>Building/Feature 3</u> is an extant repair shops building (see Figures 22 and 23). This building measures around 40'x140' and once contained "all of the repair shops necessary for the operation of the mine of this size." The building originally was divided into four rooms: a blacksmith shop, carpenter shop, and machine shop—all measuring about 40'x40'—and an electrical repair shop about 20'x40' in size (Hoofer 1994b:61). By 1995, all of the interior partitions in the building had been removed, created a single large room accessed through multiple service doors. Mansberger (1995:63) noted the presence of railroad tracks running through some of the door openings.

At present, the repair shops building is used for the stabling of horses; it will not be impacted by the proposed reclamation work

Building/Feature 4 is the ruins of the hoist-engine house for Shaft A and is positioned off the northeast corner of the powerhouse building. The building was of brick construction, had poured-concrete foundations, and resembled the others at the mine site, stylistically. It featured pilasters on the exterior walls, which help support steel posts and trusses on the interior. The pilasters on the rear (or west) side of the building flared at the base, emulating the buttresses on the adjacent powerhouse. The windows were equipped with steel-frame sash. The walls in the eastern two-thirds of the building have been demolished down to the floor of the main level. The western third of the building, by contrast, largely remains intact (see Figures 24 through 37).

The eastern two-thirds of the building housed the hoist engine itself, and the roof over this section was higher than on the western third of the structure. The engine was located in a large room on the main level (the hoist room) measuring 32'-6"x48'-0". The earlier

investigation had speculated that the hoisting equipment may have been powered by an electric motor, which was very common for mines of this period (Mansberger 1995:63). However, the October 20, 1923 edition of the *Nason News* states that the hoist engine was to be a steam-powered, "high pressure regenerator" and have cylinders measuring 28"x48", driving a "cylinder-conical drum seven feet by eleven feet in size" (Hoofer 1994b:62). The hoist room could be accessed through an exterior door on its north side, as well as through an interior door on the west wall. This room had a full basement beneath it, which was raised approximately 5' above grade and accommodated the steams pipes and other mechanicals for the engine. The basement had at least four windows on its south side and perhaps others on the east and north. Much of the space in the basement was taken up by large concrete footings supporting the hoist engine and associated mechanicals. The basement currently is filled with demolition debris, limiting access and detailed investigation. The hoist engine was removed at some point following the mine's closure.

The western third of the hoist-engine building had a single room measuring 32'-6"x13'-0". This floor of is level with the basement beneath the adjoining hoist room, but its ceiling is high enough to have once allowed access to the hoist room through a doorway in their common wall. This door was located directly opposite an exterior doorway on the west, and the two were joined by means of an elevated steel catwalk, which is no longer present. A third doorway, at floor level, allowed access to the basement beneath the hoist room. The major feature in the room is a raised concrete pad/footing measuring 5'x22'. This pad possibly supported a tank(s), or similar equipment, that was part of the steam system powering the hoist engine, which was a "high pressure regenerator". The entrance to an underground corridor, apparently leading to the powerhouse, is present along the west wall of the room, near the northwest corner. This corridor may have served as a utility chase for steam pipes running from the powerhouse. Other hoistengine buildings documented to date in Illinois have not had a specialized room such as this. The room currently is being used as a chicken house and can be entered through a wide, non-original doorway cut through its north wall, which possibly represents an enlargement of an original window opening.

The hoist engine house will be demolished to grade and the basement filled with soil.

Building/Feature 5 is the remains of Shaft A and its associated tipple (see Figures 38 through 40). The majority of this structure has been raised to grade, except for the elevated concrete base on which the steel headframe rested upon. This concrete base measures 21'-8"x33'-11" and is divided into two cells on the interior. In its present state, the base stands approximately 30' above grade. Historic photographs, however, indicate that the concrete walls of the northern cell originally stood higher and were covered with a tiled gable roof. Similarly, the steel headframe perched over the southern cell stood even higher, and the sheave/head house here was protected by a separate gable roof (ref. Figures 6 and 7). The southern cell represents an extension of Shaft A, which employed a dual hoisting system, using two cages. The cell is open on its south side, where it can be entered from grade or by means of the underground corridor previously discussed in regard to Building/Feature 2. The shaft itself is sealed off with 16"-thick concrete cap.

The function of the northern cell is not entirely clear. The only point of access to its interior, at present, is through the top, which is open to the weather. The cell does have a raised concrete floor, beneath of which is a crawlspace that can be accessed through two "scuttles" on the west side. It is possible that the north cell housed the equipment related to the operation of an automated car dump, crushers, and/or conveyors in the tipple. A concrete retaining wall runs from the northwest corner of the headframe base to the powerhouse.

The section of the tipple extending north of the headframe housed a series of screens and picking tables by which coal was sorted by size and quality. It was of steel construction and was elevated above the railroad spur servicing the mine. The October 20, 1923 edition of the *Nason News* provides a detailed description of this portion of the tipple:

The design of steel tipple for Shaft A is now complete and the fabrication of the steel will begin shortly. This will be a modern five track tipple and will be equipped with the most modern machinery for the preparation of the coal. The screen will be ten feet wide by about eighty feet long and is designed that each size prepared is re-screened before it is discharged to the railroad cars in loading booms.

The slag and No. 2 nut coal will be loaded directly from the screen in the cars and the No. 1 nut, egg, and lump sizes will be passed to the picking tables for the removal of impurities and will be lowered into the railroad cars by loading booms in order to eliminate breakage in loading. In addition to the equipment in the tipple for screening and preparing coal, conveyors and bins will be provided for the handling of rock from the mine and unburnable refuse from the picking tables.

Thus crushers and conveyors will be provided handling the burnable refuse and placing it in the storage bunkers in the collar room. It is expected to put the steel operation shortly after the coal has been reached in A shaft (Hoofer 1994b:62; *Nason News* 20 October 1923).

Very little of this part of the tipple remains, the steel and equipment having been salvaged out after the mine's abandonment. What does survive are four concrete piers, on which steel posts once sat, and a concrete-lined, underground corridor that extends north of the headframe base (see Figures 41 through 45). The corridor runs 127'-6"—a distance that is believed to correspond to the length of the tipple screening/sorting facility—and measures 10' wide and 5' high on the interior. The walls and are ceiling are constructed of 12"-thick reinforced concrete. The corridor possibly served as utility chase through which the pipes used for pumping water from the mine were run (The mine's reservoir is located just north of the corridor). It may also have accommodated a conveyor or other equipment associated with the operation of the tipple. There are a number of concrete patches in the ceiling of the corridor, which mark the location of former openings.

The reclamation activity will involve the filling of Shaft A with concrete demolition debris (obtained on site) and rock hauled in.

Building/Feature 6 is smokestack for powerhouse and is located along the east side of the latter building (see Figures 46 and 47). The smokestack was constructed by John V. Boland of St. Louis, who was reported to have "much experience in this kind of construction." A contemporary account suggests that Boland started work on the stack in late September 1923 (Hoofer 1994:57). The stack measures 17' in diameter at its base, being comprised of a outer sheathing of 1'-1" concrete, an interior sheathing of firebrick 2'-5" in thickness, and inner opening 10'wide. The stack is approximately 200' high<sup>2</sup> and was poured in 7' rings using narrow plank forms. Documentary research indicates that the stack may have been relined with firebrick in the late 1930s when boilers were added to the adjacent powerhouse (Gavin 1940:55; cited in Mansberger 1995:64). There is an ash cleanout on the north side of the stack.

Reclamation plans call for the smokestack to be collapsed by blasting. The demolition material will be dumped into the mine shafts as fill.

Building/Feature 7 is the remains of a spray pond, located on the south side of the repair shops. This feature measures approximately 50'x100' and is a shallow concrete basin. The original function of the spray pond is not known, though it may have been used as a source of condensing water for the powerhouse. Typically, water from such ponds would be passed through the steam leaving the turbine in order to cool and condense the steam. This reduced the steam's exit pressure and also recaptured its heat, which could then be to preheat fluid entering the boiler, thereby increasing the plant's thermodynamic efficiency. The pond originally had a several rows of short concrete piers within it, which presumably supported cooling lines. These were still present in 1995 (Mansberger 1995:64, 85), but have since been removed by the current landowner. The spray pond will not be impacted by the proposed undertaking.

<u>Feature 8</u> is a scale pit located adjacent to the east side of the repair shops, previously documented in 1995 (Mansberger 1995:63, 79). This feature is filled to grade and will not be impacted by the proposed undertaking.

<u>Building/Feature 9</u> is a concrete pad measuring 30'x50' located northeast of the repair shops. Historic maps indicate that this was the site of a "light supply" warehouse (Mansberger 1995:64). This feature will not be impacted by the proposed undertaking.

<u>Building/Feature 10</u> is a concrete pad located southwest of the repair shops building. The pad measures 17'x93'. Historic maps indicate that this was the site of a "heavy supply" warehouse (Mansberger 1995:64, 86). This feature will not be impacted by the proposed undertaking.

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<sup>&</sup>lt;sup>2</sup> Various estimates have been provided for the height of the smokestack. The October 20, 1923 edition of the *Nason News* indicates that the stack was to be 210' high. Mansberger (1995:64) provides an approximate height of 150', while the Environmental Narrative prepared by the Abandoned Mine Division for the Jefferson Coal Company No. 20 2005 Grant Project notes that the height is reported to 187' in height.

<u>Feature 11</u> is a 20'-6"-square concrete pad lying between the repair shops building and heavy supply warehouse, which marks the site of an unidentified building. This feature is not illustrated on the 1926 mine map but does appear on the map from 1951 (Mansberger 1995:64). The pad will not be impacted by the proposed undertaking.

Building/Feature 12 is a complex set of foundations and footings associated with Shaft B. Shaft B initially served as a secondary shaft for men and material. At the time of its sinking, it reputedly was the "largest shaft in the country", being even larger than Shaft A—the main hoisting shaft (Hoofer 1994b:68; *Nason News* 12 November 1923). Its larger size likely was due to the fact that it also served as the air shaft for the mine.<sup>3</sup> Work on the shaft and its topworks apparently was not completed until November 1927 (Hoofer 1994a:5). The shaft proper is located on the east end of Feature 11 and is covered with a thick concrete cap. Extending west of this are the foundations/footings of a tipple and a fan house. A historic photograph of the fan house is attached at Figure 7. Tie down foundations for tipple bracing are located east and south of Shaft B. Scaled line drawings and photographs of these ruins were prepared by Mansberger (1995:87-90).

The proposed reclamation project will involve the removal of the foundation remains comprising Feature 11 to, or below, grade.

<u>Building/Feature 13</u> is the ruins of a hoist-engine house associated Shaft B. This feature was recorded by Mansberger (1995:64, 90). This building was smaller and less complex than that associated with Shaft A. Reclamation plans call for the filling of Shaft B with concrete demolition debris (obtained on site) and rock hauled in.

Landscape Features: An abandoned railroad grade runs along the northern edge of the mine site. A spur line of the Jefferson and Southwestern Railroad formerly ran along this grade, which is nearly 130' wide by Shaft A. Each of the tipples had five tracks passing beneath it, all of which are now removed. An access road now runs along the top of the railroad grade. There also is a pond located to the north of the mine, which may have served as a reservoir when the mine was in operation; this has not been confirmed however.

**Cultural Material:** Outside of the structural remains discussed above, a light scatter of construction/demolition debris and other twentieth-century material was observed.

**Collection Technique:** The field investigation was aimed at the documentation of structural remains rather than the collection of artifacts. No artifacts were collected.

**Curated at:** Fever River Research, Inc., Springfield, Illinois (short-term) Illinois State Museum Research and Collections Center, Springfield (long-term)

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<sup>&</sup>lt;sup>3</sup> A similar arrangement has been documented at the Kathleen Mine in Dowell (Jackson County), Illinois and at Bell Zoller No. 2 at Zeigler (Franklin County), Illinois (see Stratton, Mansberger, and Stanley 1994; Stratton and Mansberger 2005).

**Area Surveyed (acres and square meters):** Approximately 2.2 acres (8,662 square meters).

## RESULTS OF INVESTIGATIONS AND RECOMMENDATIONS

Phase I archaeological reconnaissance has located no archaeological material [in this portion of the site]; project clearance is recommended.
Phase I archaeological reconnaissance has located archaeological materials; site(s) does(do) not meet requirements for National Register eligibility; project clearance is recommended.
Phase I archaeological reconnaissance has located archaeological materials; site(s) may meet requirements for National Register eligibility; further testing is recommended.
Phase II archaeological investigation has indicated that site(s) does(do) not meet requirements for National Register eligibility; project clearance is recommended.
Phase II archaeological investigation has indicated that site(s) meet requirements for National Register eligibility; formal report is pending and a determination of eligibility is recommended.

[Although the site is considered eligible to the National Register under Criteria A, C and D, we recommend clearance on the proposed abandoned mined lands reclamation project. The contributing resources to be impacted have been documented through photographs, field notes, and scaled line drawings. Additional fieldwork and archival investigation are not required. We recommend clearance for the proposed undertaking.]

**Comments:** As with all historical properties assessed within the context of cultural resources management, the value of the Jefferson No. 20 Mine Site and its individual structural components ultimately is determined by their eligibility for listing on the National Register of Historic Places. Eligibility to the National Register is based on four broad criteria that are defined by the National Park Service and used to guide the evaluation process. These criteria state that

The quality of significance in American history, architecture, archaeology, and culture is present in districts, sites, buildings, structures, and objects that possess integrity of location, design, setting, materials, workmanship, feeling, and association, and

- A) that are associated with events that have made a significant contribution to the broad patterns of our history; or
- B) that are associated with the lives of persons significant to our past; or
- C) that embody the distinctive characteristics of a type, period, or method of construction or that represent the work of a master, or that possess high

artistic values, or that represent a significant and distinguishable entity whose component may lack individual distinction; or

D) that have yielded, or may be likely to yield, information important in prehistory or history (36CFR60.4 Criteria for Evaluation).

A property may quality under one or more the above criteria, provided: 1) that it is historically significant, through its association with an important historic context; 2) it retains the historic integrity of those features necessary to convey its significance; and, in the case of archaeological sites, 3) it offers information that can answer relevant research questions and fill in gaps in the historical record. Abandoned coal mine sites represent an atypical category of cultural resource. In order to better assess the significance of these properties, the Illinois Department of Natural Resources has sponsored "Pick, Shovel, Wedge, and Sledge": A Historical Context for Evaluating Coal Mining Resources in Illinois (Mansberger and Stratton 2005). This report provides the basis by which the National Register criteria can be applied to coal mine sites in Illinois.

The historical significance of the Jefferson No. 20 Mine Site has previously been affirmed by Mansberger (1995:92), who cites the dramatic impact the mine had on "local economy and social (as well as physical) well being of a large percentage" of the population in Nason and surrounding area. He also notes the architectural significance of the mine in respect to it being an apparently architect/engineer-designed facility built in a single episode of construction. These initial impressions have been further strengthened by the research conducted as part of the current investigations.

Jefferson No. 20 was only the second coal mine established in Jefferson County, and it was the only one to operate in the county between the two world wars. The three other shaft mines ultimately opened in the county all post date 1949 (ISGS 2003:1). Jefferson No. 20 Mine dates to a distinct period of coal mining, which Mansberger and Stratton (2005) discuss as the "Golden Age of Coal Mining in Illinois" (1915-1945). The first eight years of this period were particularly dynamic ones for the coal industry, witnessing the construction of some of the largest mines ever constructed in the state—many located in the Quality Circle of Southern Illinois. The mine at Nason represents the culmination of mining technology developed during the World War I-era coal boom.

Jefferson No. 20 can be classified as an Electric-Powered, Mechanized Mine. In terms of basic operations, these mines shared many characteristics with the Steam-Powered, Mechanized Mines that had preceded them. Where the two mine types differed was in scale and sophistication of operations, which surpassed anything previously seen in Illinois and allowed them to exploit deep coal seams well adapted to mechanized mining. The surface complexes of Electric-Powered, Mechanized Mines were large, well built, and contained numerous specialized buildings/structures, retention pond(s), and waste piles. In some instances two tipples were present, one of which was used primarily for hoisting coal, while the other was used for moving men and equipment into the mine, though it could also be used for hoisting coal during peak production periods. The processing of coal was more sophisticated at these mines, and preparation plants and coal

washers often were present. The development of Electric-Powered, Mechanized Mines reflected a prevailing trend in the Illinois coal industry toward a smaller number of mines, but ones that were dramatically more productive than those preceding them (Mansberger and Stratton 2005:206).

Jefferson No. 20 reflected many of these trends, including having a large, centralized powerhouse and two tipples, each of which was intended for the regular hoisting of coal (at least originally) and was assigned its own wash house. The two shafts at the mine were considered the largest in the world at the time, and they posed considerable challenges in respect to their depth, which at 735 feet were the deepest to be opened in the state. Architecturally, the mine represented a gem of industrial design for the period, having a neat, uniform plan with aesthetically pleasing, Arts-and-Crafts-influenced buildings arranged around a central plaza. The Illinois Coal and Coke Corporation clearly wanted to make a statement of permanence and industrial might with their Nason mine. The aesthetic detailing evident in the mine buildings at Nason generally is absent at later coal mines, even though those mine might be larger in scale. The Illinois Coal and Coke Corporation also went to extraordinary efforts to provide for their comfort of their workers, seen most noticeably in the caliber of the wash houses and the provision for an underground passageway from Shaft A. Such amenities may have been regarded unnecessary after the financial vicissitudes and labor unrest suffered by the coal industry in the late 1920s and 1930s.

The Illinois Coal and Coke Corporation also intended to make a statement with the town of Nason, creating a template for an "ideal" mining community. The concept of a "company town" was a very old one in the coal mining industry. Such towns had evolved dramatically since the nineteenth century, growing from isolated hamlets with impermanent housing clustered around a mine shaft to attractive, well-planned towns with public amenities and a sense of middle-class prosperity (Mansberger and Stratton 2005:190-201). Model communities like Nason rarely met the vision of their planners, however. Labor unrest often posed a stumbling block, particularly when the company retained ownership of the housing, as was the case with Ziegler in Franklin County (Pullman, Illinois represents a similar non-coal example). The development of Zeigler was rather modest development until the mining company relinquished control over the town lots and offered them for sale, rather than for rent (see Stratton and Mansberger 2005:4). The lots in Nason were put on the market from the start, but the city and its mine never had the chance to flourish due the poor timing of the venture. After a population spike in the middle 1920s, the town was reduced to a mere 261 people by May 1930 (Hoofer 1994a:6). The idea of the company-owned/designed mining town seems to have lost favor in Illinois after the 1920s; as the coal industry in Illinois shrank and miners became increasingly independent and more mobile with the rise of the automobile. In this sense, Nason represents one of the last of such corporate ventures in Illinois.

The 1995 evaluation of the Jefferson No. 20 Mine Site concluded that the property potentially was eligible to the National Register under Criterion D (archaeology) (Mansberger 1995:92). Table 1 below provides a guideline for evaluating the National

Register eligibility for abandoned coal mines under Criterion D. Jefferson No. 20's placement within this subject has been indicated, along with other abandoned coal mines evaluated to date by Fever River Research. The chart is predicated upon the assertion that archaeological integrity alone does not make a mine site eligible to the National Register under Criterion D. In addition to having integrity, a property must also provide important information not otherwise obtained by other sources. National Register eligibility increases in proportion to integrity and ability to fill relevant data gaps.

While the Jefferson No. 20 Mine Site is fairly well documented through historic photographs and maps, the archaeological remains there provide additional data regarding building placement, size, and plan not otherwise available. This data provides further insights and detail into the structure, scale, and operation of this historically significant mining property. With this in mind, the remains of the thirteen identified structures and their associated landscape features are considered contributing elements of the larger National Register eligible property.

The 1995 evaluation also concluded that the mine site would have been potentially eligible to the National Register under Criteria A (social history) and C (architecture), except that it lacked sufficient integrity to warrant listing under either criteria. This assessment merits a re-evaluation, however, in light of more recent research on coal mining sites in Illinois. The property has four fully extant buildings present—the power house (Building 1), washhouse (Building 2), repair shops building (Building 3), and smokestack (Building 6)—which is rare for abandoned coal mine sites. Although the equipment and interior fixtures of these buildings have been removed, they retain their exterior integrity. Much of their interior detail remains intact as well, evidenced most notably in respect to the washhouse. These four structures embody the distinctive characteristics of a type, period, or method of construction, thus meeting the requirements of Criterion C. Although not considered individually eligible to the National Register, the structures as a group are; together, they still convey the atmosphere of a large mining complex. This feeling is enhanced by the archaeological remains of the other buildings once present at the mine, as well by the abandoned railroad grade running along the north side of the site. As such, the site also is considered eligible to the National Register under Criterion A (social history), relating to the themes of engineering and industry in regard to the large-scale efforts at coal mining in the Jefferson County and southern Illinois during the 1920s.

Although the Jefferson No. 20 Mine Site is considered eligible for the National Register under Criteria A, C, and D, we are recommending clearance for this proposed abandoned mined lands reclamation project. The major contributing resources to be impacted by the proposed undertaking—Features 4, 5, 6, 12, and 13—have been documented through photographs, digital images, field notes, and scaled line drawings. Moreover, the contributing resources can be placed within their proper context utilizing relevant sections of Stratton and Mansberger (2003:217-268, 269-273, 290-292), Mansberger, Stratton, and Stanley (2003), and Easton and Stratton (2002). No further fieldwork is considered necessary. We recommend clearance of the proposed undertaking.

# Table 1 National Register Assessment Chart for Mines Evaluated under Criterion D

	SURFACE COMPLEX LARGELY INTACT	SOME BUILDINGS INTACT, GOOD ARCHAEOLOGICAL INTEGRITY	NO STANDING BUILDINGS, GOOD ARCHAEOLOGICAL INTEGRITY	PORTIONS OF SITE DESTROYED, BUT GOOD INTEGRITY FOR SOME RESOURCES	POOR ARCHAEOLOGICAL INTEGRITY
ASSOCIATED WITH SIGNIFICANT EVENT, PERSON, OR TECHNOLOGICAL ADVANCE (I.e. CRITERION A, B, C)		BELL & ZOLLER NO. 2 MINE		CHERRY MINE KATHLEEN MINE	
POORLY DOCUMENTED (NO PHOTOGRAPHS OR MAPS)		POTENTIALLY TONAL REGISTER ELIGIBLE YOUNG SHAFT			SHILOH MINE LINCOLN CC MINE
PARTIALLY DOCUMENTED PORTIONS OF SITE OR BUILDINGS LLUSTRATED THROUGH MAPS OR PHOTOGRAPHS)	RTIALLY DOCUMENTED ONS OF SITE OR BUILDINGS TAYLOR NO. 5 MINE TRATED THROUGH MAPS OR		WORDEN MINE	MOHNS MINE WORDEN MINE CRESCENT NO. 2 MINE	
WELL DOCUMENTED (MAPS AND PHOTOGRAPHS ILLUSTRATE ENTIRE SITE THROUGH TIME)	ROYALTON MINE  JEFFERSON NO. 20		GALATIA MINE HOOSIER MINE BUNSENVILLE MINE	NO	T ELIGIBLE

# **Contractor Information**

**Archaeological Contractor:** Fever River Research, Inc.

PO Box 5234

Springfield, Illinois 62705-5234

Surveyors: C. Stratton, F. Mansberger Survey Date: May 3, 2006

**Report Completed By:** C. Stratton and F. Mansberger **Report Date:** May 2006

Submitted By (Signature and title): Submittal Date: \_\_\_\_\_

Dr. Hal Hassen Cultural Resource Coordinator Division of Ecosystem and Environment Illinois Department of Natural Resources

## **Attachment Check List:**

- 3. Site Form (Two copies)
- 4. Relevant Correspondence
- ∑5. Additional Information Sheets

## Address of Agency to whom SHPO comment should be mailed:

Dr. Hal Hassen Cultural Resource Coordinator Division of Ecosystem and Environment Illinois Department of Natural Resources One Natural Resources Way Springfield, Illinois 62702

cc: Floyd Mansberger
Fever River Research, Inc.
P.O. Box 5234
Springfield, Illinois 62705-5234

#### **Reviewers' Comments:**

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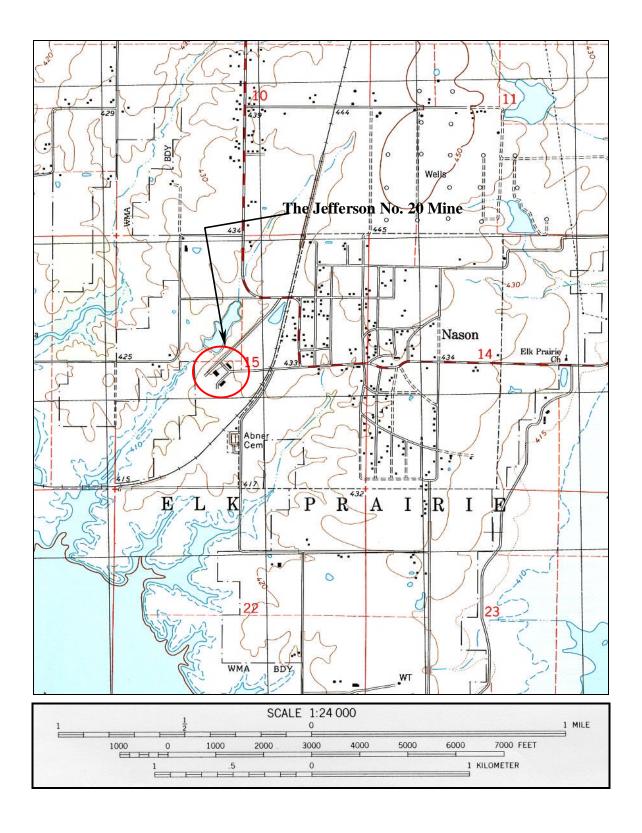


Figure 1. United States Geological Survey (USGS) topographic map showing the location of the Jefferson No. 20 Mine Site in Section 15 of Elk Prairie Township, in southwestern Jefferson County, Illinois (USGS, Ina, Illinois Quadrangle 1998).

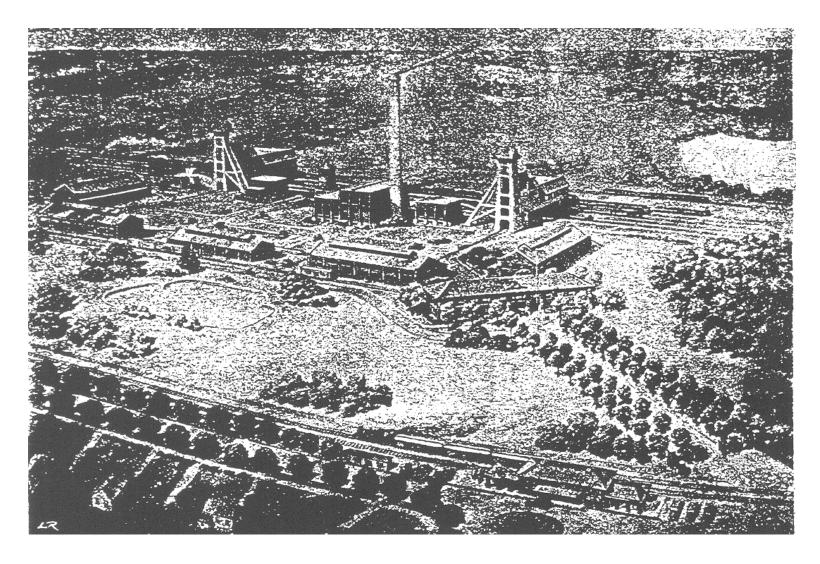


Figure 2. Conceptual drawing of the Jefferson No. 20 Mine, as originally envisioned by its developers. Although this image largely captures the character of the mine as built, the large building shown straddling the entrance drive (possibly an office) apparently was never constructed. The tipple headframe design also was changed (Hoofer 1994b:98).

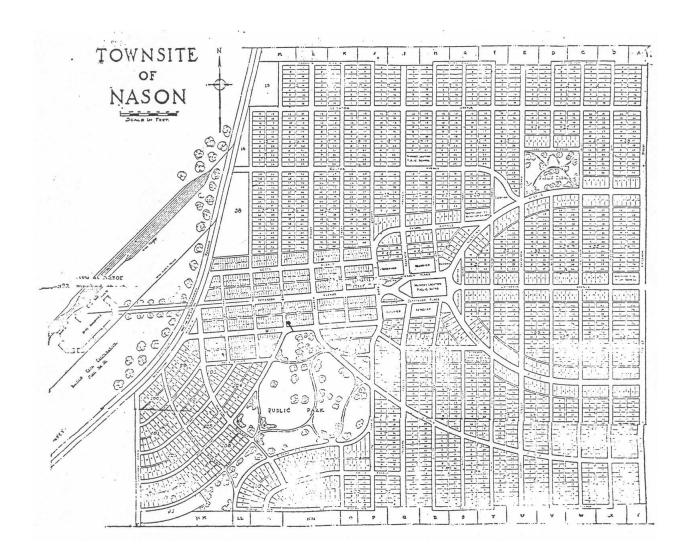


Figure 3. Early plat of the "Townsite of Nason", circa 1923. The desire of Albert B. Nason and the Illinois and Coal and Coke Corporation to create a model community is evidenced in the plat's provisions for two public parks, a public square (or "plaza"), and the graceful curving streets, which broke the monotony of the streetscape (Hoofer 1994b:45). A later plat, dated 1926 and included in Mansberger (1995:66), indicates that the southwest quadrant of the plat shown above was never developed.

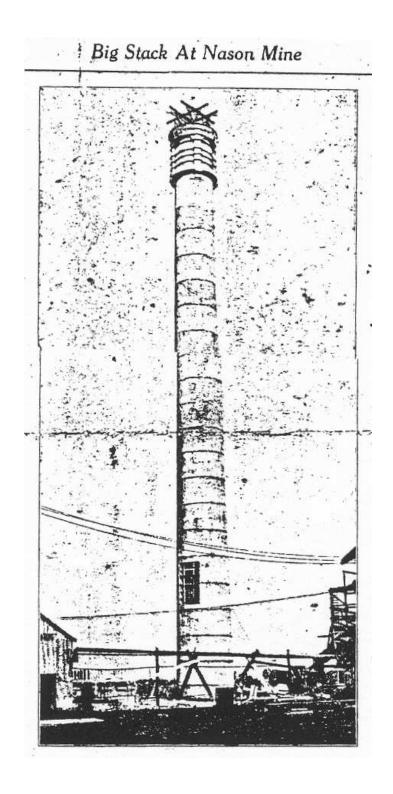


Figure 4. View of the "big stack" at the Nason mine during the course of construction. The opening shown in the side of the smokestack accommodated the nozzle through which the smoke was from the boilers was directed. This image was originally published in *The Nason News* on March 8, 1924 (Hoofer 1994b:91).

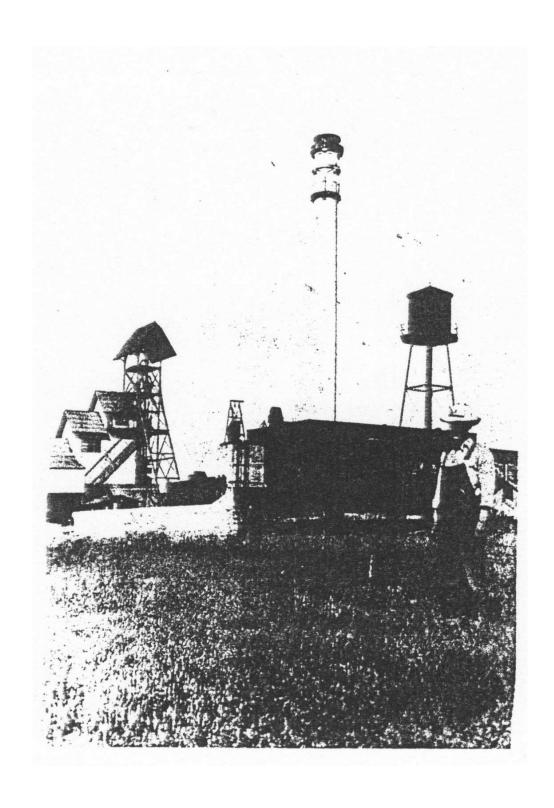


Figure 5. View of power house, with smokestack and shaft "A" in background, 1920s (Hoofer 1994b:145).

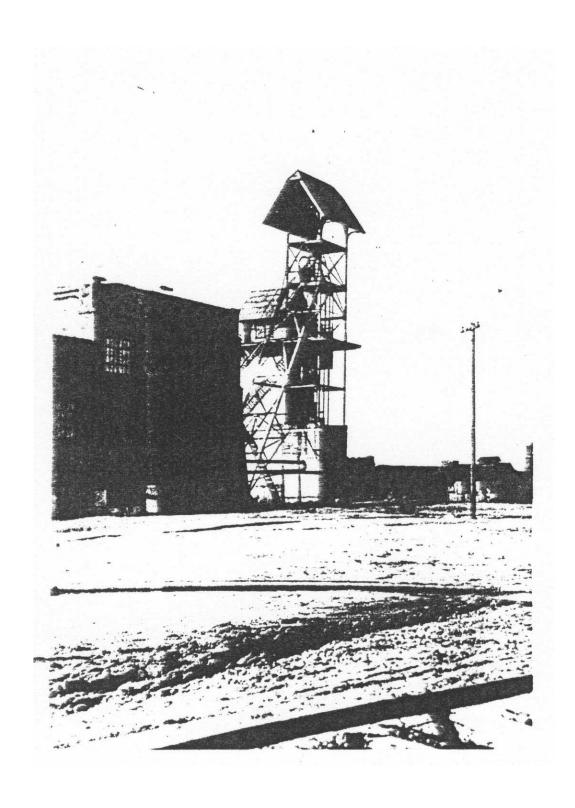


Figure 6. View of tipple and hoist engine house associated with Shaft "A", 1920s. Note the incline bracing extending off the tipple headframe (Hoofer 1994b:144).

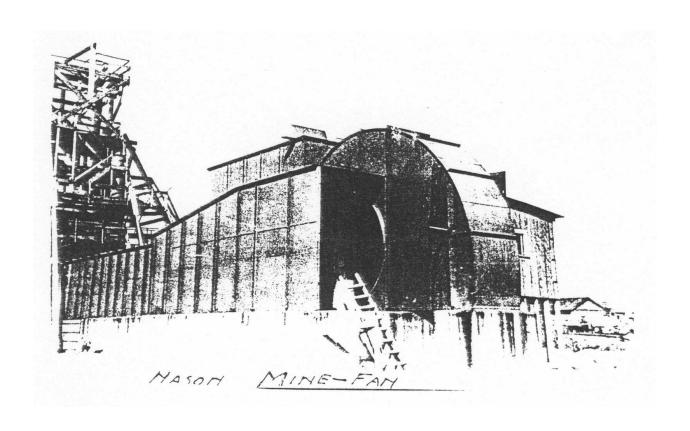


Figure 7. View of fan house associated with Shaft "B" at the mine, 1920s. The tipple over the shaft appears in the background. This photo may have been taken during the course of construction (Hoofer 1994b:147). This image helps elaborate the documentation previously done by Mansberger (1995:64, 87-90).

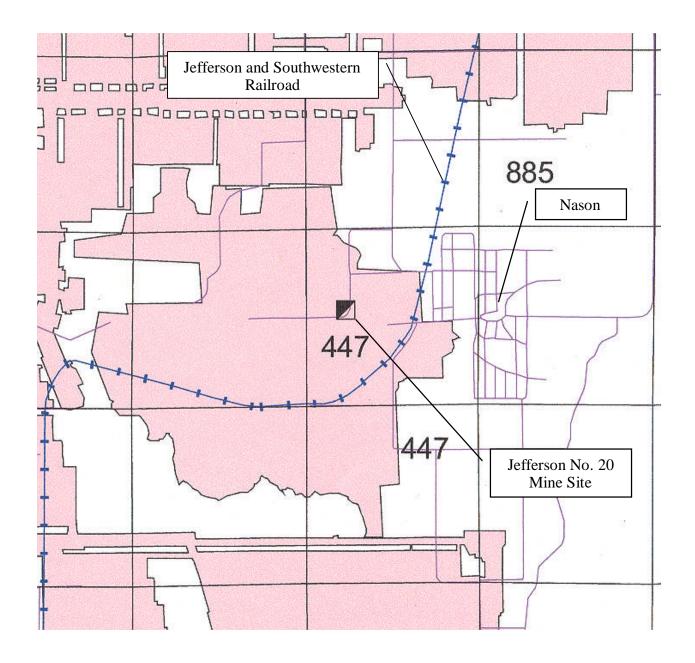


Figure 8. Map produced by the Illinois State Geological Survey showing the extent of underground workings associated with the Jefferson No. 20 Mine (marked above as No. 447). The location of the mine surface complex and town of Nason are noted (ISGS 2003).

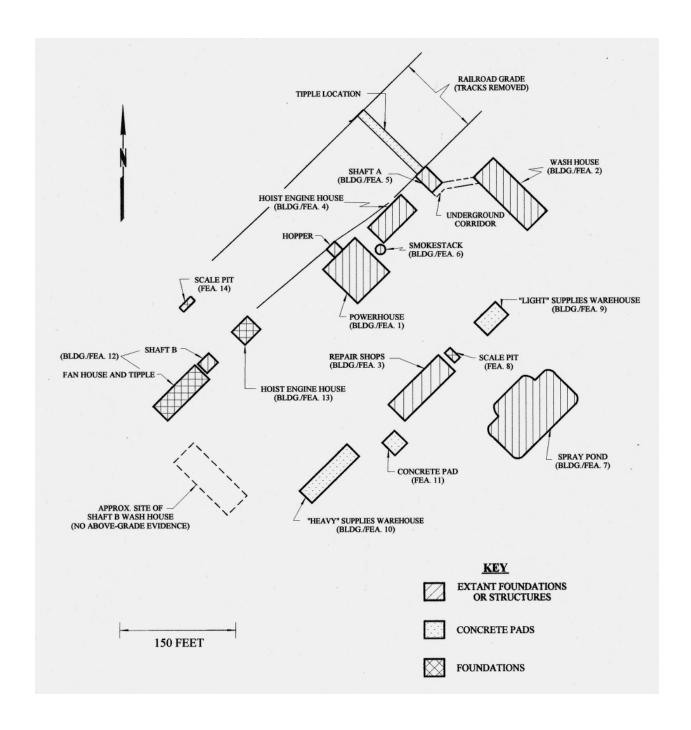


Figure 9. Plan of the Jefferson No. Mine Site, showing existing conditions and feature locations. This map is revision of that included in Mansberger (1995:69).



Figure 10. General view of the Jefferson No. 20 Mine Site, looking west. Moving from right to left, the buildings shown are the wash house, powerhouse (with smokestack), and repair shop. The road accessing the site (shown at left) is an extension of Jefferson Avenue in Nason (FRR May 2006).



Figure 11. View of the central area of the mine site, looking south, showing concrete-lining for Shaft A (at left), the hoist-engine house remains, the powerhouse, and associated smokestack. The proposed mine reclamation work with focus on this area (FRR May 2006).





Figure 12. (LEFT) View of the east side of the powerhouse and towering concrete smokestack. (RIGHT) View of the south and west sides of the powerhouse (FRR May 2006).

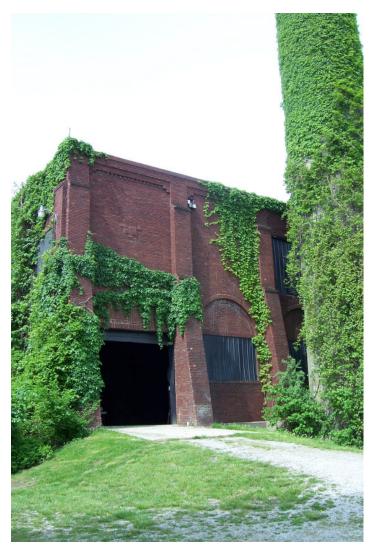




Figure 13. (LEFT) Detail of the east elevation of the powerhouse, showing the massive wall buttresses and corbelled brick cornice on the building. (RIGHT) View of the concrete storage bin on the north side of the powerhouse. This structure possibly was used to hold coal, or perhaps waste cinders, when the powerhouse was in operation. A roadway (or railway) ran beneath it (FRR May 2006).



Figure 14. View the chute on the underside of the concrete hopper. This feature allowed the bin to emptied (FRR May 2006).



Figure 15. Exterior view of the wash house (Building 2) at the Jefferson No. 20 Mine, looking north. Despite this building's very utilitarian purpose, considerable attention was paid to its aesthetic appeal, as evidenced by the faux buttresses, stepped gable end walls, and tile roof (FRR May 2006).



Figure 16. Exterior view of the wash house (Building 2) at the Jefferson No. 20 Mine, looking south (FRR May 2006).

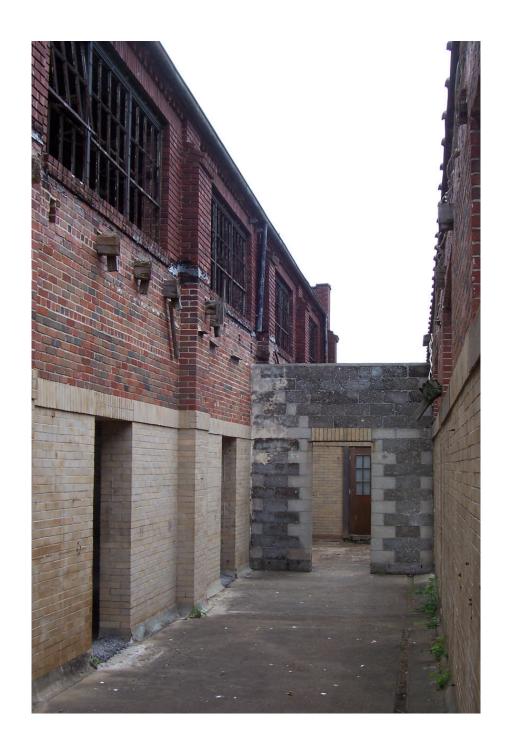


Figure 17. Typical of larger 20<sup>th</sup>-century mines, the wash house at Jefferson No. 20 featured separate shower areas for the miners and management personnel. These areas were separated by the concrete-block wall shown above (FRR May 2006).



Figure 18. Interior view of the wash house, showing the miners' changing room, looking north (FRR May 2006).



Figure 19. View of the wash house entrance to the underground corridor leading to the Shaft A (FRR May 2006).



Figure 20. Interior view of the underground corridor running between Shaft A and the wash house building. This corridor was a unique feature to the mine site and was noted as such in period newspaper accounts of the mine's construction (FRR May 2006).



Figure 21. The corridor between Shaft A and the wash house was illuminated by ceiling fixtures spaced 5' to 6'apart and set within niches. Some of the fixtures still remain in place, like these shown above (FRR May 2006).



Figure 22. View of the repair shops building (Building 3) at the mine site, looking south (FRR May 2006).

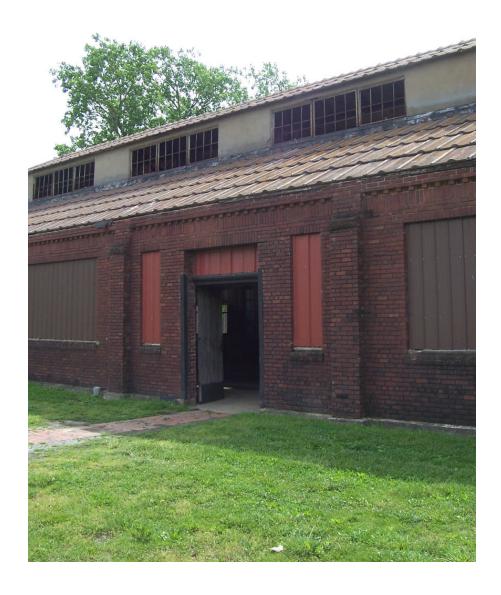


Figure 23. Elevation detail of the repair shops building. This structure, like the others at the mine site, was professionally designed and featured architectural elements intended for aesthetic appeal (FRR May 2006).



Figure 24. View of the hoist engine house and tipple remains associated with Shaft A, looking northwest (FRR May 2006).

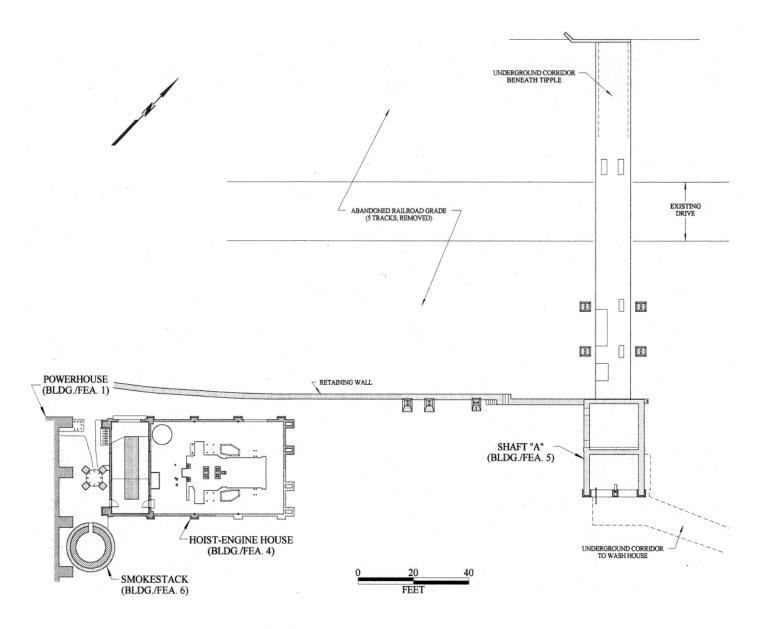


Figure 25. Drawing showing the area around Shaft A, which was the focus of the current investigations (FRR 2006).

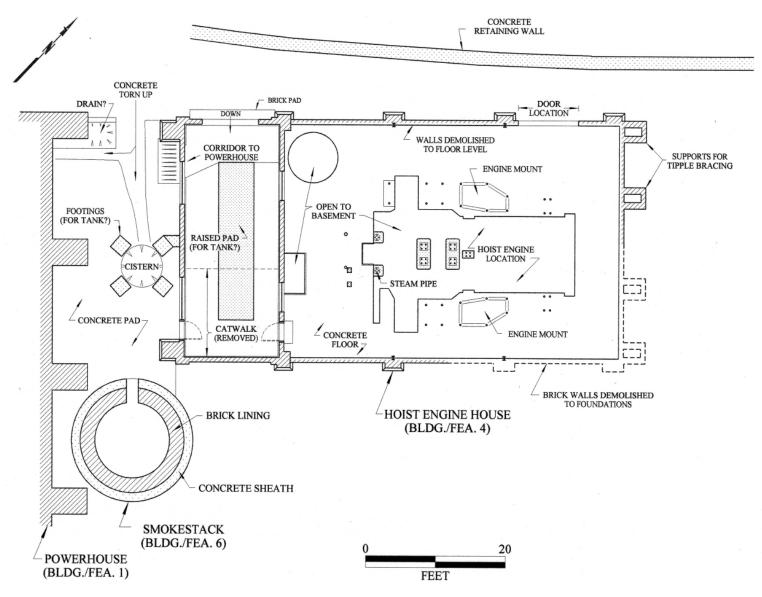


Figure 26. Plan showing Building/Features 4 and 8 and adjacent features (FRR 2006).



Figure 27. View of the south side of the hoist engine house for Shaft A. The west room of the building (at left) remains intact, while the larger east room (in which the hoist engine was located) has been demolished down to the foundations (FRR May 2006).



Figure 28. Detail of the common partition wall between the two rooms in the hoist engine house. Note the use of glazed brick, as a kind of wainscoting, on the lower portion of the wall. A similar treatment was employed in the powerhouse. The plywood panels cover a doorway and window opening (FRR May 2006).

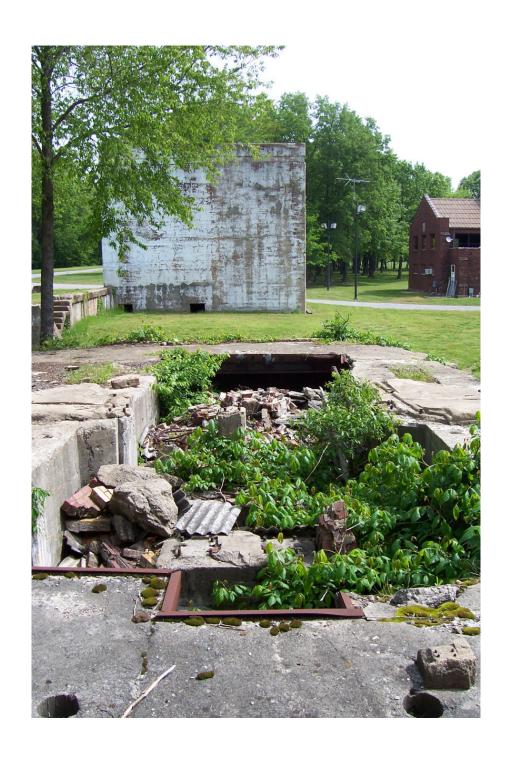


Figure 29. View looking down the length of the hoist engine room, showing the opening in the floor over which the hoist was mounted. Shaft A appears in the background (FRR May 2006).



Figure 30. View looking into the basement beneath the hoist-engine room, showing one of the footings and a steam pipe for the hoist (FRR May 2006).



Figure 31. View of the one of the brick piers on the east end of the hoist engine house, on which the diagonal braces for the tipple over Shaft A rested (FRR May 2006).



Figure 32. View looking into the basement area beneath the hoist-engine house. The plywood panel covers a door leading from west room on the building (FRR May 2006).



Figure 33. Detail of the foundations of the hoist engine house, showing the character of construction. The foundations were brick, set on concrete footings, and their exterior face was parged with mortar (FRR May 2006).



Figure 34. The main level of the hoist engine room had a reinforced-concrete floor supported by steel I-beams (FRR May 2006).

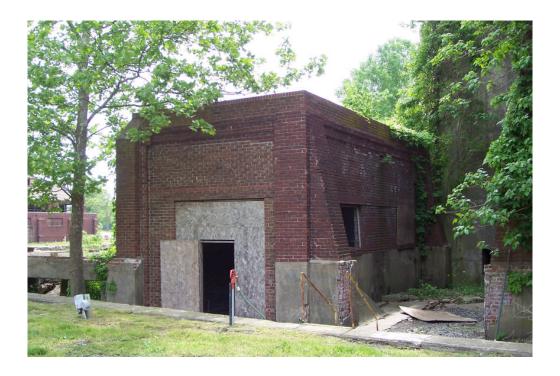


Figure 35. Exterior view of the west end of the hoist-engine house, which largely remains intact. The buttresses on the building are similar to those found on the adjacent powerhouse (FRR May 2006).

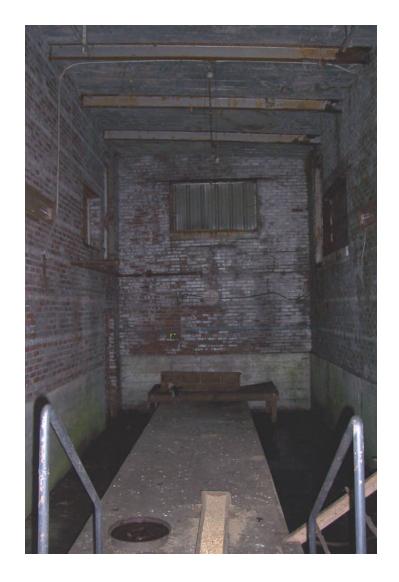




Figure 36. Interior views of the west room in the hoist-engine house. This room possibly held a regulator tank(s?) where steam produced in the adjacent powerhouse was converted for use by the hoist engine. The room had doorway accessing both the basement and main levels of the adjacent engine room (FRR May 2006).





Figure 37. (LEFT) Interior view of the underground utility chase running between the hoist-engine room and powerhouse. This chase possibly was utilized to run steam pipes originally. (RIGHT) Exterior view of the west side of the hoist-engine room, showing the location of the utility chase (with sloped concrete roof) (FRR May 2006).

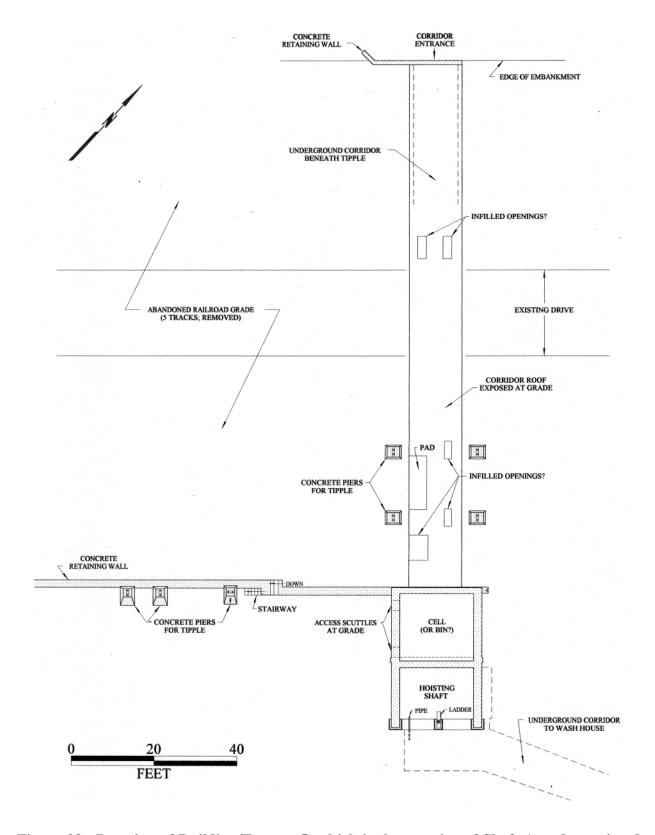


Figure 38. Drawing of Building/Feature 5, which is the remains of Shaft A and associated tipple (FRR 2006).





Figure 39. Two views of the concrete base for the headframe over Shaft A, showing the southern of its two "cells" where the shaft proper was located. When in operation, Shaft A employed a dual hoisting system, with two cages present. The steel framework for the hoisting mechanism has been removed (FRR May 2006).





Figure 40. Views looking down into Shaft A, which is sealed off with a 16"-thick concrete cap approximately 8' below the ground surface. (LEFT) The steel ladder leading down to the cap level. (RIGHT) View of two niches in the northeast corner of the shaft, which may have held electrical panels at one time (FRR May 2006).



Figure 41. View of the concrete retaining wall running between Shaft A and hoist-engine house. The concrete pier shown formerly supported a steel post or brace for the tipple (FRR May 2006).



Figure 42. Two views of the concrete base for the headframe over Shaft A, looking south. The concrete piers shown at center once supported steel uprights for the screening structure (FRR May 2006).



Figure 43. A concrete-lined, underground corridor runs the length of the demolished tipple structure. The roof of this corridor is exposed at grade, as shown above (FRR May 2006).



Figure 44. View of the north entrance to the concrete-lined, underground corridor beneath the tipple complex (FRR May 2006).



Figure 45. Interior view of the corridor beneath the tipple complex. This feature may have served a utility corridor, such as for pipes draining water out of the mine or perhaps for conveyors moving mine waste (FRR May 2006).



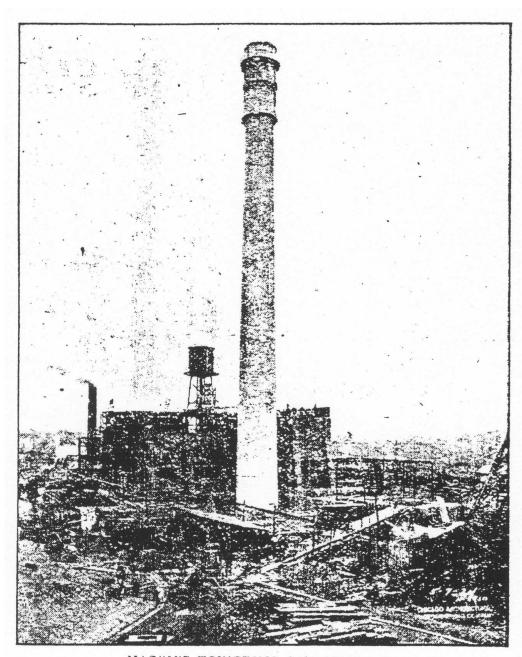
Figure 46. View of the base of the smokestack (Building/Feature 6) for the powerhouse, showing the ash cleanout on its north side. The powerhouse (Building 1) appears at right and the hoist-engine house (Building 4) for Shaft A at left (FRR May 2006).



Figure 47. Detail of the top of the concrete smokestack (Building/Feature 6) for the powerhouse. The stack is decorated with arches, banding, and corbels. This smokestack is one of the most ornate documented at a coal mine in Illinois and is indicative of the high-caliber of design employed at the facility (FRR May 2006).

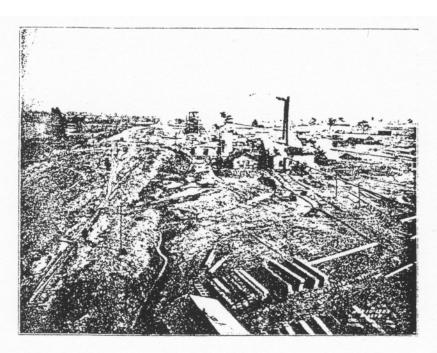
## APPENDIX 1 ADDITIONAL HISTORIC IMAGES

[The following images were copied from Floyd Hoofer's multi-volume history of Nason, produced in 1994. The images in the book were themselves second-generation reproductions, coming mostly from period newspaper accounts, and therefore were not of the best quality to begin with. However poor the quality of the images may be, we considered it appropriate to include them in the report as points of reference for future researchers.]

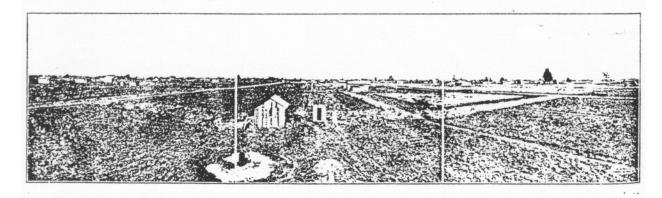


NASON'S TOWERING SMOKE STACK

Bird's eye view of the mine site during construction, showing the "towering smokestack" for the powerhouse. This image was originally published in *The Nason News* on May 30, 1924. The powerhouse building and an associated water tower appear in the background (Hoofer 1994a:39).

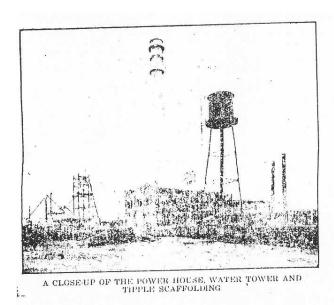


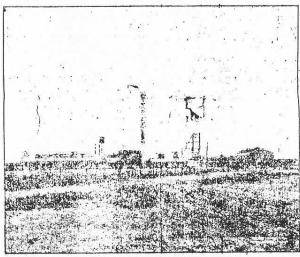
Looking down on activities at Shaft A of the Illinois Coal Corporation's new mine in Jefferson County.



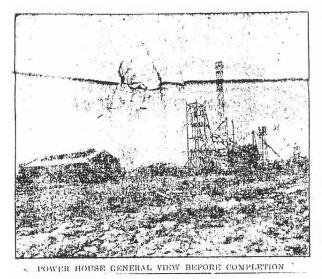
Panorama of the new town site of Nason, Illinois. The small structure in the foreground was erected and occupied within eight hours after the purchase of the property.

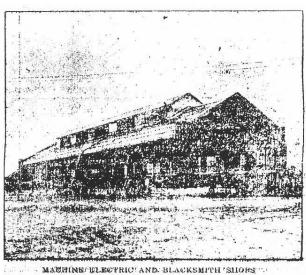
(TOP) View of the mine site during the early stages of its development in 1923. (BOTTOM) View of the site of Nason, presumably taken soon after the sale of lots had begun (Hoofer 1994





HERE'S A BIRDSEYE OF NASON MINES RECENTLY MADE

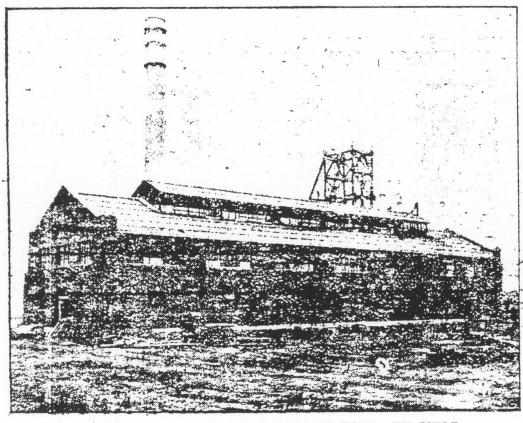




Historic views of mine site during the course of construction. These images originally were published in *The Nason News* on May 30, 1924 (Hoofer 1994a:38).



View of the Repair Shops Building, circa 1920s. The jet of water in the background marks the location of the spray pond (Blg./Fea. 7) (Hoofer 1994b:147).



WASH HOUSE WHERE BANQUET WILL BE HELD

View of the washhouse (Bldg./Fea. 3) located east of Shaft "A" (Bldg./Fea. 3). The tipple framework and smokestack appears in the background (Hoofer 1994a:37; *Nason News* 30 May 1924).