United States Department of the Interior
National Park Service

National Register of Historic Places Registration Form

This form is for use in nominating or requesting determinations of eligibility for individual properties or districts. See instructions in *Guidelines for Completing National Register Forms* (National Register Bulletin 16). Complete each item by marking "x" in the appropriate box or by entering the requested information. If an item does not apply to the property being documented, enter "N/A" for "not applicable." For functions, styles, materials, and areas of significance, enter only the categories and subcategories listed in the instructions. For additional space use continuation sheets (Form 10-900a). Type all entries.

1. Name of Property

historic name Kay Moor; Kay Moor No. 1 Coal Mine
other names/site number Kaymoor

2. Location

street & number ☐ not for publication
city, town Fayetteville ☒ vicinity
state West Virginia code WV county Fayette code 019 zip code 25840

3. Classification

Ownership of Property	Category of Property	Number of Resources within Property	
		Contributing	Noncontributing
☐ private	☐ building(s)	8	____ buildings
☐ public-local	☒ district	2	____ sites
☐ public-State	☐ site	33	1 structures
☒ public-Federal	☐ structure	6	____ objects
	☐ object	49	1 Total

Name of related multiple property listing: N/A

Number of contributing resources previously listed in the National Register N/A

4. State/Federal Agency Certification

As the designated authority under the National Historic Preservation Act of 1966, as amended, I hereby certify that this ☐ nomination ☐ request for determination of eligibility meets the documentation standards for registering properties in the National Register of Historic Places and meets the procedural and professional requirements set forth in 36 CFR Part 60. In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of certifying official — Date

State or Federal agency and bureau

In my opinion, the property ☐ meets ☐ does not meet the National Register criteria. ☐ See continuation sheet.

Signature of commenting or other official — Date

State or Federal agency and bureau

5. National Park Service Certification

I, hereby, certify that this property is:

☐ entered in the National Register.
☐ See continuation sheet.
☐ determined eligible for the National Register. ☐ See continuation sheet.
☐ determined not eligible for the National Register.
☐ removed from the National Register.
☐ other, (explain:) _____

Signature of the Keeper — Date of Action

6. Function or Use

Historic Functions (enter categories from instructions)	Current Functions (enter categories from instructions)
Industry/Processing/Extraction	
extractive facility	not in use
processing facility	not in use
company town	not in use

7. Description

Architectural Classification (enter categories from instructions)

Other: mining structures, town site

Materials (enter categories from instructions)

foundation Stone
walls Stone, Metal (tin, iron)
roof Metal (tin)
other Concrete

Describe present and historic physical appearance.

Kay Moor consists of an abandoned coal mine, associated extractive and processing machinery, and the site of the accompanying coal town. The town was in two locations, one on top of the New River Gorge, the other alongside the New River at the bottom of the gorge. Kay Moor's major physical characteristics include extant mining machinery, buildings and other features located along the Sewell Bench, 560 ft. vertical above New River. These include openings in the gorge wall for electrical service and ventilation, fan houses, headhouse, three main drift openings, car repair shop, lamp house, superintendent's office, stairway to Kay Moor Top, mountain haulage, powder house, and electrical repair shop. Leading down the gorge wall 1,000 ft. over a 30 degree slope to the railroad track and river level are monitors, conveyor, processing plant, power house, and two batteries of coke ovens at the bottom. Only the shell of one gutted and one collapsed house, and foundations remain of the Kay Moor Bottom town site, located next to both the river and coke ovens.

The integrity of the mine site and machinery proper is good in terms of the mine's relatively undisturbed state, protected by its isolated location within the New River Gorge. Individual structures are disintegrating due to weather and vegetation. Caustic deterioration of wood and metal is occurring because of rainwater mixing with the coal dust in the structures and on the ground. It is difficult to envision the mass and scale of the mine and its auxiliary buildings because of the foliage overgrowth, but close inspection does reveal the technological nature of the materials and workmanship involved with mining and processing of the Sewell Seam "smokeless" coal. Even though only a few structures remain at the Kay Moor Bottom townsite, including the company store ruins, the site itself provides the feeling of a company town whose access to the outside world lay only in the nearby Chesapeake & Ohio Railroad tracks. Many industrial artifacts are strewn about the mine site and side of the gorge wall; these have historical value in and of themselves, but are not counted as contributing for the purposes of this nomination.

THE MINE

Kay Moor Coal Mine No. 1 operated from 1900 until 1962. It was located within the New River Gorge, in the New River coalfields, famous for low volatile coal known as "smokeless" coal. The mine entry was made into the Sewell Seam, 560 ft. above the floor of the gorge and the southside branch of the Chesapeake and Ohio Railroad which ran along New River. Abiel Abbott Low, a founder of The Low Moor Iron Company of Low Moor, Virginia, purchased the property just after the Chesapeake and Ohio Railroad's entry into the New River Gorge in 1873. The Low Moor Iron Company kept the coal property in reserve until 1899, when it opened the Kay Moor coal mine as a source of supply of coal and coke to fuel the company's blast furnaces. The first shipment of coal was made in 1900. This company sold the Kay Moor complex in 1925 when the merchant pig iron industry waned and beehive coke ovens fell into disuse. Kay Moor was sold to

[X] See continuation sheet

the New River and Pocahontas Consolidated Coal Company, a subsidiary of Berwind-White Corporation of Philadelphia.[1]

Miners, equipment and townspeople were transported from the company towns located at the top and bottom of the gorge by a mountain haulage, a single track incline with a steam powered cable hoisting drum. Coal was lowered to the processing plant and beehive coke ovens located near the railroad tracks at the bottom of the gorge. This was a two-track gravity incline. Both of these systems operated, with few modifications, from 1900 until 1962.[2]

Kay Moor miners worked the mine in small rooms, known as the "room and pillar" system, to pick and blast the Sewell Seam coal face. They loaded the coal into cars, which were hauled to the main locomotive track and transported out of the mine. Mules were used at first to pull the cars, but were soon replaced by locomotives. Main haulage locomotives picked up the coal cars and pulled them to the surface. The mine cars were disconnected from the locomotive, which reentered the mine, and were either rolled to the headhouse or, if filled with slate, were hauled off on another incline to be dumped at the top of the gorge. Repairs were performed on the locomotives at the electrical shop while damaged coal cars and slate cars were sent to the car repair shop.[3]

The drift opening at Kay Moor was more than 500 vertical feet above the level of the processing plant. Coal was lowered 1000 feet down the 30 degree slope from the headhouse so it could be loaded into coke ovens or railroad cars. A two track gravity incline and two eight-ton monitor cars carried the coal down the slope. The two monitors were attached by wire rope cable to an eight-foot diameter drum in the headhouse at the mine opening. The cable was wound so that one monitor could be loaded at the top of the slope while the other was dumped at the bottom. The system was balanced so the loaded monitor rolling downhill turned the

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[1]Jerry Bruce Thomas, "Coal Country: The Rise of the Southern Smokeless Coal Industry and Its Effect on Area Development, 1872 - 1910" (Ph.D. dissertation, University of North Carolina, 1971), p. 101; Fayette Tribune, June 21, 1917; Lou Athey, Kaymoor A New River Community (n.p.: Eastern National Park & Monument Association, 1986), p. 2; Fayette Tribune, February 25, 1925. A major source of primary documentation on Kay Moor from 1900-1925 is the Papers of the Low Moor Iron Company, Accession 662, Manuscripts Division, Special Collections Department, University of Virginia Library.

[2]U. S. Department of the Interior. National Park Service. Historic American Engineering Record. "Kay Moor Coal Mine -- 1900 Fayetteville Vicinity West Virginia." HAER No. WV-38. Sheets 1 and 2.

[3]Ibid., Sheet 3; Keith Dix, Work Relations in the Coal Industry The Hand-Loading Era, 1880-1930 Institute for Labor Studies (Morgantown: West Virginia University, 1977), pp. 4-5.

drum which pulled the empty monitor to the top. An operator controlled the rate of descent by working a brake. Thirty trips an hour could be made.[4]

The coal was moved from the drift opening to the railroad track level through a highly organized route. When the coal was taken from the mine it was taken to the headhouse, weighed, and dumped into a storage bin where it was fed directly into the monitor cars through two chutes. At the base of the monitor incline, the coal was discharged into a 100-ton capacity storage chute. A reciprocating feeder distributed the coal onto a horizontal belt conveyor which led into the processing plant. Up until 1924 a wooden tipple stood at the site; this burned and was replaced with more technologically efficient equipment. Berwind installed a new processing plant in 1925, and a Simon-Carves Baum Jig Washer around 1928, both built by Link Belt Co. of Chicago.[5]

Inside the plant the coal was either screened, or washed and then screened. The screening sorted the coal by size before it was loaded into railroad cars. The washing and screening process served to remove impurities from the coal before being sorted by size and loaded into the cars. When the Low Moor Iron Company owned Kay Moor the finer coal was coked in the beehive coke ovens located a short distance from the processing plant. After Kay Moor was purchased by the New River and Pocahontas Consolidated Coal Company the beehive coke ovens were shut down and the coal was shipped by rail to customers.[6]

The processing plant screening process involved the coal being sorted by shaking screens which sorted the coal into appropriate sizes to be transported to different parts of the processing plant for storage, washing, or loading. Screens measuring 9/16" and 5/8" were used to gather the slack coal which was fed through chutes into the slack storage tank, from where the coal could be loaded into railroad cars. Larger sizes of coal were sent one of two ways. Sizes passing through 3 and 3/4" screens were sent to the washer room by a conveyor fed by chutes which led off the main shaking screen. This coal was washed and sorted into various sizes for shipment. The largest sizes of coal, which did not pass through the 3 and 3/4" screens, were passed onto an apron conveyor loading boom. The large coal could also be sorted into lump and other sizes. A chute located under the large screens collected spillage to be transported by a chain conveyor to an unloading chute.[7]

Coal to be washed passed from a conveyor to the washbox of the Simon-Carves Baum Jig Washer. As coal passed across the washbox water pulsations produced in the agitator by four air piston jigs kept the coal suspended in water. Heavier articles of refuse dropped to the bottom of the washer where it was removed. As the coal reached the far end of the wash box it moved into sluices which carried it to sizing screens. These two shaker screens carried the fine and slack coal onto a flight conveyor leading back to the main screening room and to the railroad cars or the slack storage tank. The screens sorted the coal into 1/2" x 5/6" pea, 5/6"

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[4]U. S. Department of the Interior. National Park Service. Historic American Engineering Record. "Kay Moor Coal Mine – 1900 Fayetteville Vicinity West Virginia." HAER No. WV-38. Sheet 2.

[5]Ibid., Sheets 2 and 9.

[6]Ibid., Sheet 2.

[7]Ibid., Sheets 9 and 11.

x 1 and 3/4" nut, 1 and 1/4" x 3" stove, and 3" by 3 and 3/4" egg coal. These sizes could be run through a crusher, loaded separately, or mixed into combinations.[8]

Kay Moor, named for its builder James Kay, a Low Moor Iron Company employee, was a captive mine from 1900-1925. The mine and its accompanying coal town were self-sufficient. A workforce was housed in the company town, a steam powered generating plant located next to the processing plant supplied power, and coal was coked before being shipped to Low Moor. Additional surplus coal was sold on the open market.

The making of coke began at Kay Moor soon after the mine opened. In June 1901 a battery of 120 coke ovens were completed near the processing plant next to the railroad. These ovens were beehive ovens made of firebrick. Each was a circular, vaulted chamber with a flat tile bottom. The ovens had an opening at the top and an arched door at the bottom. A fire was built inside the oven to heat the firebrick, and the coal was added from the top from a "larry" car, which ran on tracks on top of the ovens. The coal was then burned for forty-eight or seventy-two hours with low oxygen. Workers then opened the door, watered down the fire, and withdrew the brittle, grey coke. Fifty-nine more ovens of the same size, shape and dimensions were built in 1917 by the Janutolo Construction Company of Fayetteville, West Virginia. A total of 202 coke ovens operated during World War I. These ovens were closed in the 1930s.[9]

The present condition of the mine site has been altered from its condition during the mining operation because of the growth of trees and foliage. Adverse weather had deteriorated some of the buildings onsite. Trees have also grown in and among the coke oven batteries. Caustic action of water mixing with the coal dust has deteriorated both wood and metal. Otherwise, the site is relatively physically intact. The site's bench level was salvaged in 1981-1982. The presence of the Sewell Seam dictated the location of the mine entry, while the steepness of the gorge slope determined that the mine be a drift mine, and the use of conveyor and incline systems to move both coal and people up and down the gorge wall to the mine and town sites. Springs, wells and the river provided water for both the coal processing and the townspeople, while the railroad guaranteed transportation of both coal and people. The current physical environment continues to determine general characteristics of not only West Virginia coal mining, but the nature of the industry in mountain areas -- isolated, and located next to railroads and rivers or streams.

All of the mine entries and auxiliary coal processing and administrative structures contribute to the district's significance. Many industrial artifacts associated with the mining and processing tasks are strewn over the site. Most of these are in a rusted, deteriorated condition, but many are salvageable and appropriate for interpreting the coal mining industry.

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[8]Ibid., Sheet 9.

[9]Athey, Kaymoor, pp. 14-16; Thomas, "Coal Country," pp. 116-117.

THE TOWN

The coal town of Kay Moor consisted of two sections; Kay Moor Top, located at the top of the New River Gorge, and Kay Moor Bottom, located at the bottom of the gorge next to the river and the south side main line of the C&O. (Only a small portion of Kay Moor Top is located within the boundary of the New River Gorge National River; therefore, the town site will not be included within this nomination. Any change in its status will be dealt with in a later nomination. The CSX tracks next to the New River are also not included in the nomination.) The settlement of Kay Moor was an adaptation to the environment. The layout of mines and town in New River Gorge was dictated by geography, with mine workings and housing being placed as close as possible to the drift mouth wherever flat space existed. The railroad imposed a linear pattern to the settlement, which was also affected by the narrow valley and the river front. The gorge forced settlement into a linear pattern, which in Kay Moor's case, was a two-tiered effect; top and bottom of the gorge, in addition to the vertical mining operation. Kay Moor Bottom was blessed with more level space than most West Virginia coal towns.[10]

The first houses were constructed in Kay Moor in 1901. Fifty were built that year, with 45 more in 1902, and 17 in 1905. An additional settlement, called "New Camp" or "New Town," of 19-24 houses was built a short distance from Kay Moor Top in 1918-1919. Although it is located outside the New River Gorge National River boundary, New Camp represents the only extant town site connected with Kay Moor. It is not known how many houses were built at the top and bottom of the gorge during the years of house construction. Maintenance on the houses was done by the Low Moor Iron Company and presumably by the New River and Pocahontas Consolidated Coal Company.[11]

In 1923 there were 131 houses at Kay Moor. Eighteen were on the public road, 48 were located on the company road, 65 were not located on a road. All of the houses in 1923 were single family dwellings. All had four rooms, fireplaces or stoves, single floors, and were made of wood with a ground floor size of 34 ft. x 34 ft. The outside finish of the houses was board and batten, the exceptions being 17 of the 1902 houses and all of the 1918 houses being covered with weather board. The inside finish of most of the houses was wood sheath, with the 1918 houses having plastered lathe. Electricity was available in all 50 of the 1901 houses, but only in 28 of the 1902 houses. Only 25 of the 1901 houses had inside running water. All of the houses, regardless of construction date, had roofs of composition paper, rock post foundations, privy and a coal shed, but no cellars. In 1923 the Kay Moor houses were all bungalows.[12]

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[10]R. T. Hill, "Line Villages in Southern West Virginia: Examples in the New River Gorge," Proceedings New River Symposium Pipestem, West Virginia, April 11-13, 1985, pp. 123-124.

[11]Athey, Kaymoor, p. 32.

[12]Record Group-68, United States Coal Commission, Records of the Division of Investigation of Labor Facts, Living Conditions Section, Completed Mining Community "A" Schedules, (Form LC-12), with Camp Ratings 1922-23. (Logan District, W.Va. - New River District W. Va.), Entry 62, Box 31, National Archives, Suitland, Maryland.

In 1923 inhabitants were supplied with drinking water from nine hydrants, eight drilled wells, four springs, and river water. This amounted to 21 supply points for 106 houses, while 25 others had indoor plumbing. The sewage system consisted of surface privies for all 131 houses. The privies were not flyproof and had no covers or screens. Each family had its own privy, located anywhere from 20 to 100 feet from the house. Most garbage was thrown to the animals. Waste water was thrown out onto the ground or disposed of through 25 piped drains.[13]

Kay Moor's appearance in 1923 personified the typical West Virginia coal town. There were no streetlights in Kay Moor in 1923. There were no sidewalks, but hard paths led from house to house. Fences were around each house, and were generally well kept. Most families grew gardens and kept chickens, pigs and cows. There was no bank, no churches and no saloons in Kay Moor Top and Bottom proper. There was a theatre and a tennis court at Kay Moor Bottom. Other recreational facilities included a ball field and pool hall. There was no union hall or other public hall. Because the facilities at Kay Moor were segregated, there were two grade schools at Kay Moor Top and two at Kay Moor Bottom. These were segregated schools for black and white students. The post office was located in one of the company stores.[14]

Kay Moor Bottom was abandoned in 1952 and most of the inhabitants moved out. In April 1960 most of the vacant structures were destroyed by fire. Most remaining houses were dismantled. The present site of Kay Moor Bottom is intact and discernable. It is partially overgrown with brush, kudzu, and trees. Only sections of one house remains standing, while an adjacent house has collapsed. Foundations of houses are visible, with a few chimneys in ruins. The major ruin is of company store #9, located between the C&O tracks and the river.

CONTRIBUTING RESOURCES

Kay Moor Mine No. 1

1. Mine – Kay Moor No. 1, opened in 1900 and closed in 1962, was mined by the room and pillar system. The main opening is a double drift entry with two parallel openings and side openings at a 90 degree angle. Side entries were spaced at 450-foot intervals. Running parallel to the main entry were rooms, opened backward toward the main entry. The rooms were not spaced far apart, and openings into them facilitated air circulation. In 1902 the openings, or break-throughs, were 45 to 50 feet apart. The pillars, left between the rooms and break-throughs, were spaced 45 to 50 feet apart. The pillars served to support the roof. At the time Kay Moor No. 1 was opened a transition in mining techniques was occurring, from pick mining to the use of compressed air punching machines which would undercut the coal seam. By 1905 more efficient chain breast cutting machines were being used. By the 1930s conveyors were used, eliminating much of the handloading, although some handloading remained until the mine closed. The intent of the nomination is to protect what is visible at the mine openings, and to include at least first cross side openings to illustrate the room and pillar mining technique.

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[13]Ibid.

[14]Ibid.

2. Drift Opening with Roof Bolts – n.d., Located north of the main mining complex along the Sewell Bench, this opening was cut into the rock face of the gorge, 13 ft. wide and 6 ft. high at some points. The opening is oval in shape, but much material has sloughed off which prohibits an accurate idea of its former size. Metal roof bolts extend down from the natural rock roof. Much rock roof material has fallen, yet the coal seam is visible on the sides of the opening. A low concrete retaining wall extends along the right side, and timbering is visible. The Office of Surface Mining placed an iron bat gate over this opening during reclamation efforts in fall 1987-spring 1988.

3. Fan House Drift Opening – Built by New River and Pocahontas Consolidated Coal Company after 1928, located 200 ft. north of Butcher Branch. Main opening was cut into the gorge in a westerly direction. A steel channel frame is on the opening exterior, 9.8 ft. wide and 10.3 ft. high. Concrete walls, 6 inches thick, are connected to the frame and extend 6 ft. back into the opening. The walls were originally tied into the excavated rock sides, but have broken off. The roof was once lined with concrete for 20 ft., but much has fallen. The opening is visible for 50 ft. before it bends, and has a height of 15 ft. Steel beams placed perpendicular to the drift form the floor and are tied into the rock wall on each side. Rails laid on top of the beams are visible. The coal seam, 4 ft. thick, is visible. Water flows out of the opening 10 ft. beneath the steel beams. The fan house remnants consist of the corners of two walls with three window openings and a section of a concrete roof. This sits on top of a concrete slab spanning a drift opening filled with water. This opening is 6 ft. wide and 5 ft. high, with steel beams supporting the concrete roof, which also serves as a floor of the fan house. The Office of Surface Mining placed an iron bat gate, with a door for access, over this opening during reclamation efforts in 1987-1988.

4. Right Main Drift Entry – n.d., Northernmost of a three entry drift complex, cut directly into layered, weathered rock located on the Sewell Bench. The opening is 12.5 ft wide and 6 ft. high. Material from the roof has sloughed and partially covers the opening floor. Many timbers stand up from the floor but no longer support the roof. The Office of Surface Mining placed an iron bat gate over this opening during reclamation efforts in 1987-1988.

5. Right Main Drift Entry – n.d., Middle drift entrance, 12 ft. wide and 11 ft. high, the opening is visible for 18 ft., thereon it is caved in. Surrounding rock is layered and weathered. The Office of Surface Mining filled in this opening with a form core covered with soil, during reclamation efforts in 1987-1988.

6. Right Main Drift Entry – n.d., Southernmost drift entry, was cut into the gorge in a westerly direction, and is 8.5 ft. wide and 6 ft. high. Concrete blocks are placed above the opening about 5 ft. high and along the right side to retain the slope. Concrete lines the left wall for 10 ft. The right wall and roof are lined with rock for 6 ft. Beyond the opening the entry is filled with timber and caved rock. The Office of Surface Mining filled in this opening with a form core covered with soil, during reclamation efforts in 1987-1988.

7. Fan House and Shop – Built c. 1919, the first fan houses on this location were wooden, all destroyed by fires. This concrete and brick fan house adjacent to the right main drift entry complex was built by the Low Moor Iron Company. The replacement fans forced air into the mine, a change from the previous exhaust system which drew air through the main drift entry. Abandoned, allowed to deteriorate, only one wall and a portion of another remain. The foundation is of natural stone. Attached to the fan house are three extant walls of a shop building, made from natural stone. No roof remains for either building. Extending above the fan house

is a concrete exhaust chimney 10.2 ft. long and 7.4 ft. wide, with walls 14 inches thick. The concrete roof, 6 ft. high, serves as a base for a coal bin, 20 ft. above the floor of the mine opening. A concrete slab roof extends from the base of the fan exhaust to the drift opening. The slab roof is supported by steel I-beams. As this nomination form was being updated, work was underway to demolish part of the fan house because its deterioration posed a safety threat to visitors on the Mary Ingles Trail.

8. Tipple or Car Dump – n.d., Constructed of large wooden timbers and corrugated tin roof, used as a loadout facility. The structure is in very poor condition and is collapsing.

9. Electrical Substation – n.d., This structure is partially demolished, only remnants of concrete foundations remain.

10. Headhouse – c. 1899., Located at the main drift opening, served as a tipple and cable drum room for the monitor incline. Approximately 100 ft. long and 25 ft. wide, constructed primarily of wooden timbers, 18 to 24 inches in thickness. Steel plates are used as brackets and braces to join the timber framework. The roof was of wood sheathing, covered with asphaltic roofing material. The structure has been modified, including replacement of coal car dumping equipment, but it probably is the original structure built in 1899-1900. The scales are missing. The first car dumpers in the headhouse were probably cradle or side dumps that tipped coal cars sideways. The headhouse is in poor condition: much of the timbering is rotted. Salvors pulled the roof off between 1981-82. In 1989 stabilization efforts were undertaken to prevent the headhouse's collapse.

11. Left Drift Entry – n.d., Located immediately across the bench level from the headhouse and upslope. The roof of the entry was falling in, rail headers were visible, and much fallen slate was visible. Most of the approximately 18-20 ft. entry was filled in, yet the back portion was intact. The Office of Surface Mining filled in this opening with a form core covered with soil, during reclamation efforts in 1987-1988.

12. Left Drift Entry – n.d., Located upslope from the bench level, this entry has minimal cave in and the entrance is clear. Remnants of railroad ties can be seen. The Office of Surface Mining filled in this opening with a form core covered with soil, during reclamation efforts in 1987-1988.

13. Main Left Drift Entry – n.d., One of the main openings of the Kay Moor complex. A concrete headwall, inscribed "1927," is on top of the opening, supported by a steel I-beam. The opening is 17 ft. wide, and 8 ft. high. Other steel I-beams are spaced 15, 14, and 12 feet apart back into the opening for 41 ft. The I-beams support the concrete roof. The concrete area was used as a waiting room for the miners. Wooden ties are on the entry floor, along with a steel hopper. Visible distance in the entry extends 60 ft. The Office of Surface Mining placed an iron bat gate, with a door for access, over this opening during reclamation efforts in 1987-1988.

14. Lamp House/Superintendent's Office – Built c. early 1950s, cinder block building, 56 ft. long and 17 ft. wide, with walls of 9 ft. high, held lamp house where miners would store their lamps, and offices. The northern and a portion of the eastern walls are missing; the roof is missing but steel I-beams are used for roof trusses. Miners once hung their lamps on the extant racks. Much iron debris and racks were strewn about, and salvaged as artifactural evidence.

15. Concrete Staircase – n.d., Led from the bench level to a 30-40 foot stone escarpment, and continued up to the hoisthouse/haulage waiting area at the top of the gorge. The stairs served as an alternative to riding the mountain haulage. Extant remains include the steps, made of concrete, and sections of metal railing. The steps are covered with lichens, but were cleared of leaves and other vegetation in 1989.

16. Arched Drift Entry – n.d., Entry topped by a stone arch, 5 ft. high and 16 ft. wide. A concrete headwall sits on top of the opening. A concrete and stone wingwall retains the right side slope. A 76 ft. concrete retaining wall connects to the arch on the left side. The entry walls are lined with concrete block for 15 ft. The concrete roof is racked, broken, and supported by rails and timber. Some railroad ties remain on the floor. Visible distance in the entry is 30 ft. The Office of Surface Mining placed an iron bat gate, with a door for access, over this opening during reclamation efforts in 1987-1988.

17. Water Tank – n.d., Located up gorge wall above arched drift entry, and can be reached by stairs. The tank, approximately 20 ft. high and circular in shape, is steel and sits on T-rails and 4 sections of concrete foundation. Appears to be in good condition.

18. Mountain Haulage or Tram – n.d., Built to haul miners, townspeople, and equipment up and down the gorge. Extant remains include concrete foundations I-beam steel tracks, wooden structures with rollers, wooden ties, and bolts. Remnants of a hoist house is at Kay Moor Top.

19. Kay Moor Safety Board – n.d., Wooden bulletin board once displayed mine safety and other notices. It had fallen down and was rotting in 1986; however, in 1989, clearing and stabilization crews working at Kay Moor reconstructed the safety board by standing it up, painting it, and placing it alongside the Mary Ingles Trail. The board was moved about 25 ft. upslope due to ongoing stabilization efforts.

20. Coal Car Repair Shop – n.d., Wood frame two-story structure, bottom floor served as a repair shop for coal cars, top floor was office and storage space. Abandoned, and in very deteriorated condition. Numerous abandoned mine cars are strewn on the slope below the bench. Remnants also include a concrete platform, 61 ft. long and 28 ft. wide, with thickness of four inches, located on the downslope side of the bench between the car repair shop and the lamp house. A concrete retaining wall, seven ft. high is connected to the platform, which is supported by I-beam stringers, 12 inches deep on two ft. centers. Platform is in good condition.

21. Steel I-beam – n.d., Erected over bench level, main beam is 28 ft. long, 2.2 ft. deep with height of 15 ft. above the bench. A partial painted message is readable, "YOUR FAMILY WANTS YOU TO WORK SAFELY."

22. Powder House – n.d., Located along the Sewell Bench, south of the major drift openings, excavated into the hillside above the bench. Main building is 20 ft. x 19 ft., with walls of stone 1 ft. thick placed on a natural rock foundation, 3 ft. high. This is one of the best preserved structures, reflecting quality workmanship and materials. Black powder and fuses were stored here, later became a storage room for detonator caps and dynamite. The main building has a steel door with a circular opening for storing explosives. The ceiling is concrete supported by steel rails which extend to the walls. Wooden rafters form the roof pitch, which has a wooden subroof covered with tin shingles and corrugated metal. The north and east walls are stone, the south wall is concrete with wooden timbers and the west wall is concrete to a 3 ft. height with stone on top. The

floor consists of wooden planks. An added room, which served as a detonator storage room, about 10 ft. square, has stone walls and a flat roof installed in 1989. Outer portions of the structure are relatively intact. A temporary roof was placed over the structure in 1989.

23. Cap Magazine – n.d., Located immediately adjacent to the north, but not attached to the powder house, is this structure of brick, 4 ft. x 3.5 ft., with a steel door. Probably used as a cap magazine. The structure was stabilized in 1989.

24. Twin Drift Openings – n.d., Located 500 ft. south of the powder house on the bench level, the openings are 30 ft. apart. Loose rock has filled in so that no significant openings remain. The easternmost opening has loose rock with old mine cars and debris. Southeast of it are the remains of a wooden loadout, built by punch miners in the 1950s. The westernmost opening contained loose rock with an excavated area above it. Opposite stands a concrete retaining wall, 4 ft. high and 75 ft. long.

25. Electrical Shop – n.d., Electric locomotives were repaired in this shop. No extant remains except for a concrete slab with a rectangular concrete well recess, or trough, 24 ft. long, 6 ft. wide, which was infilled in 1989, debris, and a a stone wall on the bench slope. The trough probably served as a motor pit.

26. Slate Disposal Incline – Built as early as 1919, replaced earlier system of dumping slate down the slope near the electrical shop. The only evidence remaining are two tunnels, cut through the cap rock at the top of the gorge, through which the slate car tracks passed.

27. Cap House – Built prior to 1932, located halfway down haulage on gorge wall. The house is brick on a concrete foundation, with an iron door, handle and peephole. The roof is corrugated tin with a wooden ceiling and metal grates on 2 side vents. The house is 8 ft. tall and 15 ft deep, and is in excellent condition.

28. Water Tank – n.d., Located halfway down the gorge wall from the Sewell Bench to the conveyor, the tank is 20 ft. high. It sits on 8 "T"-rails across 4 concrete slabs and is in good condition.

29. Monitor Incline – n.d., Built by New River and Pocahontas Consolidated Coal Company, consisted of two sets of parallel tracks. The drum cable on the monitor incline lowered rather than raised coal; thus the workings inside the headhouse consisted of only the cable drum and cement moorings. The two monitors were on cables precisely wound to take advantage of the gravity. Extant remains include two sets of tracks, ties, stone support walls and support timbers. Strewn debris consists of rails and cables.

30. Monitors – n.d., Four of these remain on the site, one on the slope, one in the ruins of the conveyor house, and two at Kay Moor bottom, on a side track near the oil tanks. Each monitor carried 8 tons of coal, with a 45 degree angle open loading chute at one end, a chute on the other end, all riding on wheels. The cargo boxes are 12 ft. long 4 ft. wide, made of sheet steel with bolts. The monitor in the conveyor house ruins remains hitched onto cable.

31. Conveyor – n.d., Built by New River and Pocahontas Consolidated Coal Company, consists of house and conveyor. Monitors emptied coal into the house where it was fed onto covered conveyor. The wooden house

is in ruins, with a collapsed roof. The extant conveyor, in good condition, has rollers, corrugated tin roof, side railings, and stands on steel frames.

32. Sand House – Built c. 1950s, located west of the processing plant, the house is of concrete block with a corrugated tin roof, and is supported by steel rails and wooden beams. Much rail and machinery debris is strewn about the structure, along with a sand dryer inside. A sand car remains on rails next to the house. Sand was used for traction on the rails for the electric locomotives.

33. Oil Tanks – Built prior to 1932, located next to sand house, is small wooden pumphouse with two oil storage tanks. Both tanks sit on concrete platforms and are approximately 25 ft. long and 5 ft and 6 ft. in diameter. They are railroad tanker cars with their carriages removed.

34. Car Dropper – n.d., Located northwest of oil tanks on railroad tracks. Ruins are of a wooden shelter used to haul or drop cars into the processing plant.

35. Tin Shelter – n.d., Located next to processing plant, consists of 4 walls and roof, all corrugated tin. The structure contains wooden benches, with front and back door, a small back room, metal screens on windows, and is approximately 10 ft. wide, 15 ft. long. The shelter served as the "tipple" boss' office.

36. Processing Plant – Built c. 1925, the extant structure is a totally different one from the original. The first feed system of coal from the monitors to the processing plant is difficult to document; however, the original plant probably consisted of facilities and equipment for recovering, storing and transferring slack to the coke ovens. These facilities were dismantled after the coke ovens were abandoned. Because most of Kay Moor's output was run-of-mine coal intended for blast furnaces, no elaborate preparation, or processing equipment was probably needed. The limited number of coal sizes needed required only three loading tracks. The first track, nearest the slope wall, loaded slack, the second loaded nut and egg, while the third loaded lump. The tipple burned in 1924 and the extant structure, a corrugated metal, brick and concrete five-track processing plant, was built soon after. The Link Belt Company of Chicago supplied the belt conveyor from the monitor track, the main shaker screens and two loading booms. The facility also contained a large flight conveyor and slack storage tank. An exact date of construction is unknown. It is not known if the coal washing plant is part of the original plant or was added, no earlier than 1928. The Simon-Carves Baum Jig Washer is the most significant piece of machinery extant at Kay Moor Mine No. 1. The processing plant contains three major systems: the screening system, the slack recovery and storage system and the coal washing and sorting system. The screens could be changed to suit customer demands for different size coals.

37. Power House – Built 1900, to produce compressed air needed to power the ventilation fan and compressed air coal cutters, located next to processing plant. Steam was supplied by three 72" diameter 18-foot Erie City boilers, with a capacity of 150 horsepower each. Between 1902-1903 the power house was enlarged for a new steam engine and dynamo. An additional Erie City Boiler was installed. Electricity was produced for the mine locomotive, the mountain haulage motor, electric lights and other purposes. By 1915 an Atlas Water Tube boiler was installed with two generators. In 1916 a rotary convertor for transforming AC to DC power was installed. By 1919 a new turbine and Sterling boiler was installed. The power house also contained a Ballwood steam engine and Buckeye and Exciter engines. However, the plant never produced adequate power. After 1927 electricity was purchased from the local power company. Abandoned, and allowed to deteriorate, with 3 rooms,

and partial roof. The structure contains arched entrances, screened and open windows, and the roof in the middle room is supported by steel girders. Much debris is strewn around the building, including machinery, turbines, coal screens, rope wheels, links, and other equipment. There is high probability that toxic materials are on the site.

38. Coke Ovens – Built 1901 and 1917, stand in two batteries of 101 ovens each, built of firebrick and stone, with arched stone doorways and iron handles. The ovens are located on both sides of each battery. Several ovens are numbered. Railroad tracks are no longer located beside or on top of the ovens. Abandoned, allowed to deteriorate with foliage growing around them. Some ovens are in good condition while others are almost in ruins. Cut stone sleepers survive on top of the ovens.

NONCONTRIBUTING

39. Truck Road, built c. 1950s by unknown persons, was used to haul coal from the site by truck, rather than use the railroad. The road extends from Fayette Station Road underneath the New River Bridge, along the Sewell Bench level past the Kay Moor complex and up to the top of the gorge. The road is unpaved. The Mary Ingles Chapter of the West Virginia Scenic Trails Association of Fayetteville wishes to use the road as part of a trail system. The section of road from the Kay Moor bench level to the top of the gorge was used daily by the stabilization crew in 1989.

Kay Moor Top

CONTRIBUTING

40. Hoist House/Haulage complex – n.d., Located directly above the Kay Moor complex on top of the gorge, consists of concrete foundation and partial stone and brick walls shaped as an oblong room. Timbers and iron rails are also visible. Used as part of the haulage system, containing a hoist and rope to carry people and machinery up and down the gorge wall. The structure is in a very deteriorated condition. The haulage waiting room presently consists of a tunnel and remnants of the waiting area. Also remaining are sections of a wooden trestle over the rock escarpment, the haulage bull wheel, and stone foundations of an early hoisthouse, all located at the bottom of the steps at the cliff.

Kay Moor Bottom

CONTRIBUTING

41. Company Store #9 – n.d., Located between the railroad tracks and river, two-story stone building used as mercantile establishment. Ruins include partial walls, stone foundations and adjacent ice house.

42. Kay Moor Bottom town site – Originally built 1901, 1903, and 1905, the town site is located next to the railroad tracks and coke ovens. Stone foundations and chimneys are scattered throughout the trees at the west

end of the site. Kudzu covers remaining foundations at the east end of the site which burned in 1960 and is still largely clear of trees. Railroad tracks run through the site. Future vegetation removal and archeological work could result in the gathering of more information on the town site, i.e. placement of houses, orientation of pathways, gardens, fences, and outbuildings. Also remaining are various railroad-associated features, such as side tracks, retaining walls, and trestles.

43. Kay Moor Bottom houses – n.d., ruins of two houses remain in the trees above the railroad tracks, west of the Kay Moor Bottom town site. Both are in very deteriorated condition and one has fallen over.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:
☐ nationally ☐ statewide ☐ locally

Applicable National Register Criteria ☒ A ☒ B ☐ C ☐ D

Criteria Considerations (Exceptions) ☐ A ☐ B ☐ C ☐ D ☐ E ☐ F ☐ G

Areas of Significance (enter categories from instructions)
Industry
Engineering

Period of Significance
1900-1940

Significant Dates
1900
1925
1928

Cultural Affiliation
N/A

Significant Person
Low, Abiel Abbott

Architect/Builder
Low Moor Iron Company, James Kay
New River & Pocahontas Consolidated Coal and Coke Company

State significance of property, and justify criteria, criteria considerations, and areas and periods of significance noted above.

Kay Moor includes a coal mine, associated machinery and physical plant for processing coal, administrative structures, and a town built for housing mine workers and their families. The mine's headhouse and incline systems illustrate the special techniques employed by early 20th century American miners to extract coal from outcrops on steep slopes. Kay Moor's fan house, power house, drift openings, rail lines, and other integral elements survive, providing examples of typical mining practice of the era. The two extant inclines and headhouse are examples of specialized engineering adaptations to mining coal from the steep sloped outcrops. The processing plant with its Baum jig washer patented by Simon-Carves of England, shaker screens and other equipment, is exemplary of the move in the 1920s to produce mechanically cleaned coal for a general market. Kay Moor's coal was produced more cheaply because of the easier slope mining and the low labor costs associated with the absence of an established United Mine Workers of America local until 1933. The beehive coke ovens were an integral part of the captive operation. Kay Moor Top and Bottom are significant for being representative of coal towns associated with bituminous coal mining in West Virginia. Company towns were a visible symbol of the new industrial order in West Virginia, and they were the dominant institution in miners' lives. Kay Moor represents the best extant remains of a turn-of-the-century operation in the New River "smokeless" coal fields of central West Virginia.

During its lifetime the coal town of Kay Moor, Top and Bottom, exhibited general characteristics of West Virginia coal town social history. In the 1920s four-fifths of West Virginia mine workers lived in company towns, which were built immediately after a mine opened to house workers as no established communities were usually nearby. Construction of houses in Kay Moor Top and Bottom began within a year of the mine's opening. The history of coal town society involved the following issues focusing on the control of almost all aspects of miners' lives by the coal town owners: the instability due to the lack of home ownership; the economic health of the town being directly related to the economic health of the mine; and the quality and availability of schools, recreation facilities, stores, churches, and sanitation being directly under the control of the operators.[15]

Kay Moor was generally typical of this pattern. The town was built within a year of the mine opening. Like most West Virginia coal towns, it was located on a railroad which offered a market for the coal and was the

[15]Ronald D. Eller, Miners, Millhands, and Mountaineers (Knoxville, University of Tennessee Press, 1982), pp. 162-163.

☒ See continuation sheet

Significant Person

Berwind, Charles F.

reason for the town's existence. Residents had easy access to outside communities and cities, but Kay Moor offered no stability in terms of property ownership or job security. Control was the key to life in a company town, and certain aspects of life were dictated by the coal mine owners. Miners were not allowed the right to join a union for many years, and the town died when the mine was closed.[16]

The Kay Moor site was part of a larger economic picture; the coal and coke produced at the site fueled the Virginia iron industry from 1900-1925 and was subsequently shipped nationwide as part of the larger national and international market supplied by the New River and Pocohontas Consolidated Coal and Coke Company. The Kay Moor mine and town are examples of the coal mining system which dominated in West Virginia after the 1870s. This system was composed of mines located on a railroad, supported by a company town built and controlled by the coal operator. Few true company towns exist in West Virginia today. Private ownership, automobiles, and roads all contributed to the demise of company-owned towns.

The story of Kay Moor's mine and town history is representative of West Virginia's coal mining history. The traditional ways of mountain life were transformed with the coming of the railroad and coal industry. New ways of thinking and value systems were introduced by industrialists who controlled not only the coal companies and labor, but owned the land. Labor was provided by southern blacks and European immigrants who came to work the railroads and mines. In Kay Moor's case, capitalists such as Abiel Abbott Low founded the Low Moor Iron Company and purchased the New River property while Collis P. Huntington helped push the C&O through the New River Gorge, which resulted in the coalfields being opened. Charles F. Berwind, president of the Berwind-White Corporation of Philadelphia, owned Kay Moor after 1925, through the New River and Pocahontas Consolidated Coal and Coke Company, a subsidiary.[17]

Coal was very important to the United States in the late nineteenth and early twentieth century. The growth of the bituminous coal industry occurred after 1850 to fuel steam locomotives and river steamers, and to power the burgeoning industrial order. Bituminous coal was cheaper than anthracite, more abundant, easier to mine,

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[16]Ibid., p. 162; Morton S. Baratz, The Union and The Coal Industry (New Haven: Yale University Press, 1955; reprint ed., Westport, Connecticut: Greenwood Press, Publishers, 1983), p. 69.

[17] David Alan Corbin, Life, Work, and Rebellion in the Coal Fields The Southern West Virginia Miners 1880-1922 (Urbana: University of Illinois Press, 1981), pp. 6-7; Kenneth R. Bailey, "A Judicious Mixture: Negroes and Immigrants in the West Virginia Mines, 1880-1917." in Blacks in Appalachia, ed. William H. Turner and Edward J. Cabbell (Lexington: University Press of Kentucky, 1985), p. 117; Athey, Kaymoor, p. 47.

and soon became a more important fuel source. Another major factor influencing the development of a West Virginia coal industry was the belief that an iron boom was beginning in Virginia in the 1880s. Virginia's blast furnaces were fed by West Virginia coals. In 1910, 75 percent of the energy used in the United States was supplied by coal. Within a few decades West Virginia's cheaper and superior coals outsold the midwestern fields. These coals were cheaper in part due to the easier slope mining and the low labor costs associated with the absence of the United Mine Workers of America on any significant scale until 1933.[18]

The Kay Moor complex is unique as a district because it has been relatively isolated and its mining features are intact, although deteriorated. The pattern of events which occurred at Kay Moor – including the mine's opening and town construction by outside industrial interests, its clearly identifiable solutions to the problems of coal mining within steep gorge walls, its economic contribution to both coal and coke use, the use of immigrant and black labor, the fierce struggle to keep out the United Mine Workers of America, the observable transition from hand loading to mechanical processing from the extant equipment, and the legacy of coal town society which influenced West Virginia history to a great extent -- are all nationally significant due to the impact West Virginia coal mining had upon the national scene in economic, social, industrial, and labor terms. These events reflected the fortunes of the coal mining industry in America as well as the pig iron industry in Virginia. Events involving union issues reflected the broader national struggles. The mining technology used both inside and outside the mine reflected prevalent useage in drift mining in the New River coalfields.

Very little data exists on West Virginia coal mines, even within the New River Gorge, against which to compare Kay Moor. The only other known extant coal mine within the gorge which has relatively intact support structures is located at Nuttalburg. The extant mining facilities associated with this mine are of a completely different type than that associated with Kay Moor. The conveyance system is of primary importance; there was no monitor system for transporting the coal from the seam to the river, but there was a button and string operation. It is not understood how many processes were developed to overcome the 630 ft. drop from the coal seam to the river; these two conveyance systems are the only two known within the New River Gorge National River even though at one time there were more than 40 mines operating within the gorge. There is no town left at Nuttalburg. It is not known where people lived, or if there was a similar haulage system, as at Kay Moor.

The state of West Virginia has no survey of coal mines in the state. There is also no cultural resource inventory of features located within the New River "Smokeless" coal fields. It is known that Kay Moor is the most intact coal mining site within the boundary of the New River Gorge National River. Dr. Kenneth Sullivan, author of "Coal Men and Coal Towns: Development of the Smokeless Coalfields of Southern West Virginia 1873-1923," Ph.D. dissertation, University of Pittsburgh, 1979, is editor of Goldenseal and Folklife Director for the Department of Culture and History, Charleston, West Virginia. In his opinion, no other comparable site to Kay Moor exists in Fayette and Raleigh counties, West Virginia. According to Dr. Sullivan, Kay Moor is representative of West Virginia coal mines; topographically the entire mining site is undisturbed and is unlikely to be disturbed.

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[18]Thomas, "Coal Country," pp. 2-5; Eller, Miners, p. 128.

Dr. Emory Kemp of the Department of History, Program for the History of Science and Technology, West Virginia University, has been involved with numerous projects regarding industrial archeology in West Virginia for the past 20 years. In his opinion:

> the Kay Moor Mining Complex is the finest example of a coal mine operation in the great southern West Virginia-Virginia Coal Fields that [he has] discovered over the past two decades. It represents a unique historical resource epitomizing both the technical and social history of coal mining in the middle Atlantic Region. Other examples of mining . . . exist but none of them represent the history of coal mining from the 1870s to the Second World War, because of the extensive surviving structures which represent nearly all aspects of coal mining over more than a century.[19]

Even though no survey of coal mine properties is available against which to compare Kay Moor, it is believed to be the most representative, relatively intact, coal mine complex remaining in the New River region of West Virginia.

[19]Correspondence, Emory L. Kemp to Sharon A. Brown, December 5, 1989.

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U. S. Department of the Interior. National Park Service. Historic American Engineering Record. "Kay Moor Coal Mine – 1900 Fayetteville Vicinity West Virginia." HAER No. WV-38. HAER documentation, compiled in 1986, consisted of 16 sheets of measured and interactive drawings, 76 large-format photographs, and written data. Reproductions of all documentation are available from the Library of Congress, Division of Prints & Photographs, Washington, D. C.

UTM References

USGS 7.5' Series Fayetteville quadrangle
UTM locations:

A 17 E 493 900 N 42 10 800
B 17 E 494 140 N 42 10 580
C 17 E 494 340 N 42 10 680
D 17 E 494 280 N 42 10 880
E 17 E 494 470 N 42 10 960
F 17 E 494 700 N 42 10 860
G 17 E 495 400 N 42 10 940
H 17 E 495 410 N 42 11 240
I 17 E 494 400 N 42 11 160
J 17 E 494 380 N 42 11 000
K 17 E 494 200 N 42 10 920
L 17 E 494 140 N 42 11 020
M 17 E 493 740 N 42 11 300
N 17 E 493 690 N 42 11 300
O 17 E 493 700 N 42 11 200
P 17 E 494 060 N 42 11 000
Q 17 E 494 090 N 42 10 880

Verbal Boundary Description

All that certain tract or parcel of land lying and being situated in Plateau District, Fayette County, West Virginia, consisting of the following three (3) parcels, and being more particularly described as follows:

Parcel 1: BEGINNING at a point on the centerline of a trail, said point having West Virginia State Plane Coordinates (South Zone) of N 382,880 and E 1,979,400; thence, leaving the centerline of said trail,

South 72 degrees 16' 19" West 15.00 feet; thence
North 87 degrees 15' 56" West 95.82 feet; thence
South 00 degrees 00' 00" West 300.00 feet to a point on Butcher Branch; thence, leaving said Butcher Branch,
North 88 degrees 11' 26" East 98.29 feet; thence
North 06 degrees 44' 24" East 15.00 feet to a point on the centerline of said trail; thence, leaving said centerline,
North 51 degrees 20' 25" East 19.21 feet; thence
North 11 degrees 46' 06" West 122.58 feet; thence
North 12 degrees 30' 24" East 158.33 feet; thence
South 72 degrees 15' 19" West 15.00 feet to the centerline of said trail and the point of beginning.

The above parcel of land contains 0.71 of an acre, more or less.

Parcel 2: BEGINNING at the aforementioned point on the centerline of said trail. said point being on or near the center of Butcher Branch and having West Virginia State Plane Coordinates (South Zone) of N 382, 598 and E 1,979,390; said Parcel 2 to consist of a strip of land fifteen (15) feet to each side of a trail described approximately as following centerline bearings and distances:

South 83 degrees 15' 36" East 110.77 feet;
South 48 degrees 20' 18" East 169.99 feet;
South 82 degrees 58' 38" East 139.04 feet;
North 59 degrees 44' 37" East 208.39 feet;
South 59 degrees 02' 10" East 87.46 feet;
South 15 degrees 45' 04" West 121.57 feet;
South 25 degrees 05' 53" East 384.28 feet;
South 86 degrees 45' 54" East 230.37 feet;
South 45 degrees 00' 00" East 193.75 feet to the end of said Parcel 2.

The above parcel of land contains 1.13 acres, more or less.

Parcel 3: BEGINNING at a point on the centerline of a trail. said point being the end point of the above described Parcel 2. having West Virginia State Plane Coordinates (South Zone) of N 381,900 and E 1,980,517; thence, leaving said centerline

South 45 degrees 00' 00" West 15.00 feet; thence
South 72 degrees 17' 28" West 80.19 feet; thence
South 22 degrees 37' 12" East 455.00 feet; thence
South 66 degrees 25' 06" West 687.41 feet; thence
South 48 degrees 44' 40" East 1,073.99 feet; thence
North 66 degrees 53' 35" East 732.82 feet; thence
North 20 degrees 22' 10" West 765.47 feet; thence
North 65 degrees 45' 08" East 652.57 feet; thence
South 63 degrees 44' 59" East 813.94 feet; thence
North 83 degrees 00' 00" East 2,325.00 feet; thence
North 10000.00 feet, more or less, to a point on the southerly edge of New River, said point also being on the westerly boundary line of that same land upon which a "flowage" easement was acquired by The Franklin Real Estate Company from the Electro Metallurgical Company by deed dated December 20, 1930, and recorded in Deed Book 72, page 277, in the Office of the County Clerk of Fayette County, West Virginia; thence along said southerly edge of New River westerly downstream 3,500 feet, more or less, to a point on the northeast extention of a line, said line referred to as "South 40 degrees 36' 05" West 230.49 feet" in that certain deed showing land acquired by Berwind Land Company from New River and Pocahontas Consolidated Coal Company, dated January 1, 1930 and recorded January 27, 1930 in Deed Book 70, page 202, in the Office of the County Clerk of Fayette County, West Virginia; thence South 40 degrees 36' 05"

West 180.00 feet, more or less, to a point on the westerly or southerly right-of-way line of the Chesapeake and Ohio Railway Company's (CSX) South Side Branch; thence continuing;

South 40 degrees 36' 05" West 230.49 feet; thence
South 48 degrees 34' 35" East 340.07 feet; thence
South 65 degrees 33' 22" West 749.15 feet; thence
North 21 degrees 55' 24" West 436.57 feet; thence
South 72 degrees 57' 11" West 185.55 feet; thence
South 45 degrees 00' 00" West 15.00 feet to the centerline of aforementioned trail and the point of beginning, excepting the reserving from the above described parcel those lands of the Chesapeake and Ohio Railway Company's (CSX) right-of-way.

The above parcel of land contains 70.00 acres, more or less.

The above bearings and distances are based upon the "West Virginia State Plane Coordinate System, South Zone."

Boundary Justification

The Kay Moor boundary includes all lands owned by the New River Gorge National River, National Park Service, containing extant features relating to the Kay Moor Coal Mine No. 1 complex. Features which visually tie together the mining operation are included. This includes remnants of the hoist house used to operate the mountain haulage at the top of the gorge, all of the mine entries and related structures located on the Sewell bench level, the monitor/conveyor systems leading down to the river level, the processing plant, power plant and coke ovens, and the Kay Moor Bottom town site. The active CSX Railroad tracks located at the bottom of the gorge between the site and the New River are not owned by the National Park Service and thus are not included in this nomination.

9. Major Bibliographical References

[X] See continuation sheet

Previous documentation on file (NPS):

- [ ] preliminary determination of individual listing (36 CFR 67) has been requested
- [ ] previously listed in the National Register
- [ ] previously determined eligible by the National Register
- [ ] designated a National Historic Landmark
- [ ] recorded by Historic American Buildings Survey # _____
- [X] recorded by Historic American Engineering Record # WV-38

Primary location of additional data:

- [ ] State historic preservation office
- [ ] Other State agency
- [ ] Federal agency
- [ ] Local government
- [X] University
- [ ] Other

Specify repository:
University of Virginia Library
Charlottesville, VA

10. Geographical Data

Acreage of property 71.84 acres more or less

UTM References

	Zone	Easting	Northing
A			
B			
C			
D			

[X] See continuation sheet

Verbal Boundary Description

[X] See continuation sheet

Boundary Justification

[X] See continuation sheet

11. Form Prepared By

name/title Sharon A. Brown
organization Denver Service Center National Park Service date 7/13/90
street & number 12795 W. Alameda Parkway telephone (303) 969-2810
city or town Denver state CO zip code 80225

KAYMOOR COAL MINE - 1900

FAYETTEVILLE VICINITY WEST VIRGINIA

LOCATED ON THE PRECIPITOUS SLOPE OF THE NEW RIVER GORGE, IN THE HEART OF WEST VIRGINIA'S FAMOUS "SMOKELESS COAL FIELD", KAYMOOR COAL MINE OPERATED FROM 1900 TO 1962, PRODUCING APPROXIMATELY 17,000,000 TONS OF COAL. NAMED FOR JAMES KAY, WHO OVERSAW CONSTRUCTION, KAYMOOR WAS ORIGINALLY A CAPTIVE MINE OPENED BY THE LOW KAYMOOR IRON COMPANY TO PROVIDE COKE FOR ITS HOT BLAST IRON FURNACES 100 MILES EAST IN THE COMPTON, VIRGINIA IRON REGION.

THE SEWELL SEAM OF THE NEW RIVER GORGE, INTO WHICH KAYMOOR'S 10 FOOT DRIFT OPENING WAS DRIVEN, CONTAINED LOW VOLATILE BITUMINOUS COAL (HENCE THE NAME "SMOKELESS") WHICH PRODUCED THE BEST BLAST FURNACE COKE IN THE COUNTRY. BUT THE ELEVATION OF THE SEAM, 540 FEET ABOVE THE FLOOR OF THE GORGE AND THE TRACKS OF THE CHESAPEAKE AND OHIO RAILWAY, POSED SPECIAL ENGINEERING CHALLENGES. TO MOVE MEN AND EQUIPMENT FROM COMPANY TOWNS AT BOTH THE TOP AND BOTTOM OF THE GORGE TO THE DRIFT OPENING, A "MOUNTAIN HAULAGE". A SINGLE TRACK INCLINE WITH A STEAM POWERED CABLE HOISTING DRUM, WAS BUILT TO QUICKLY AND SAFELY LOWER COAL TO THE PROCESSING PLANT AND BEEHIVE COKE OVENS AT THE FLOOR OF THE GORGE. A TWO TRACK GRAVITY INCLINE WAS INSTALLED WITH NEW MODIFICATIONS. BOTH SYSTEMS REMAINED IN SERVICE THROUGHOUT KAYMOOR'S 62 YEARS OF OPERATION.

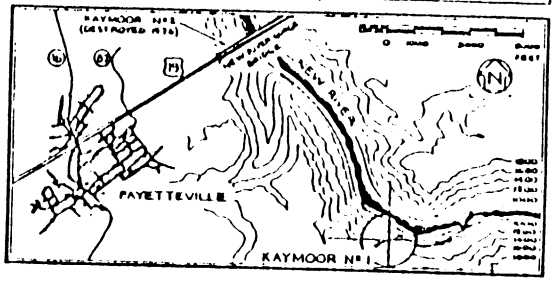
AS THE ERA OF THE BEEHIVE COKE OVEN AND THE MERCHANT PIG IRON INDUSTRY WANED, SO DID THE FORTUNES OF LOW MOOR. WHEN ITS TIPPLE BURNED IN 1924, KAYMOOR WAS SOLD TO THE NEW RIVER AND POCAHONTAS CONSOLIDATED COAL COMPANY, A SUBSIDIARY OF BERWIND-WHITE CORP OF PHILADELPHIA. BERWIND INSTALLED A NEW PROCESSING PLANT IN 1925 AND A SIMON-CARVES BAUM JIG WASHER AROUND 1928. BOTH BUILT BY LINK BELT CO OF CHICAGO.

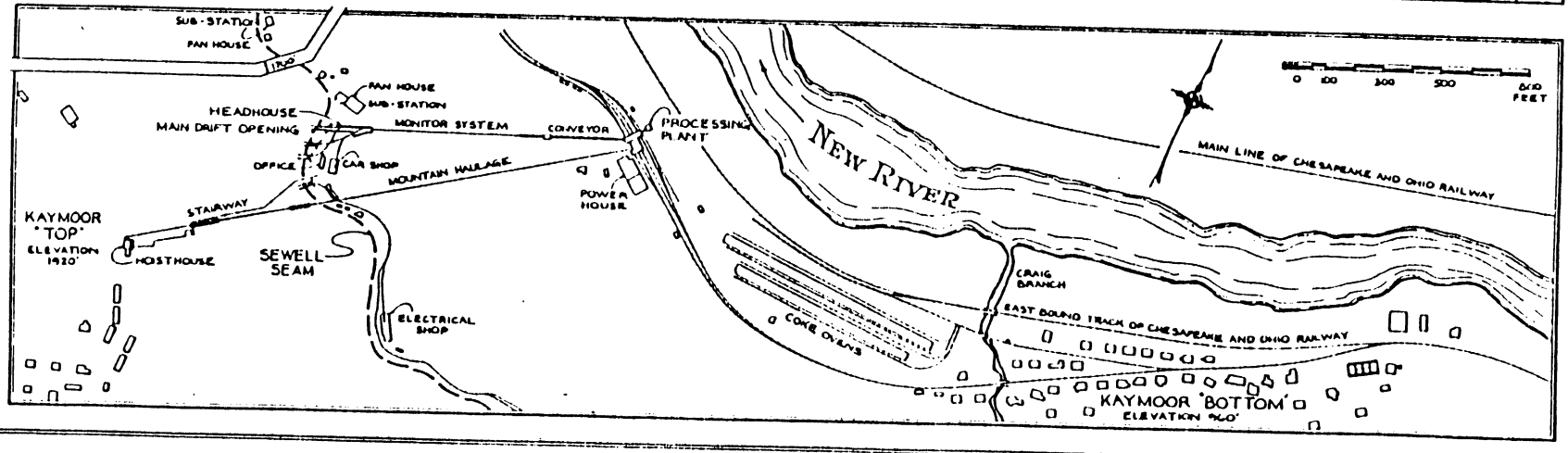
KAYMOOR IS A SIGNIFICANT INDUSTRIAL ARCHEOLOGICAL SITE FOR SEVERAL REASONS. ITS HEADHOUSE AND INCLINE SYSTEMS ILLUSTRATE THE SPECIAL TECHNIQUES EMPLOYED BY EARLY 20TH CENTURY AMERICAN MINERS TO WIN FAT COAL FROM OUTCROPS ON STEEP SLOPES. ITS BAUM JIG WASHER, PATENTED BY SIMON CARVES OF ENGLAND, IS EVIDENCE OF THE MAJOR TRANSITION TO THE PRODUCTION OF WASHED COAL THAT BEGAN IN THE UNITED STATES IN THE LATE 1920s. ITS FAN HOUSES, POWER HOUSE, DRIFT OPENINGS, AND OTHER INTEGRAL ELEMENTS SURVIVE, PROVIDING EXAMPLES OF TYPICAL MINING PRACTICE OF THE ERA.

THE KAYMOOR COAL MINE RECORDING PROJECT WAS UNDERTAKEN BY THE HISTORIC AMERICAN ENGINEERING RECORD (HAER), AN AGENCY OF THE NATIONAL PARK SERVICE, U.S. DEPARTMENT OF THE INTERIOR, DURING THE SUMMER OF 1986. THE PROJECT WAS CO-SPONSORED BY THE NEW RIVER GORGE NATIONAL RIVER, OAK HILL, WEST VIRGINIA, JIM CARRICO, SUPERINTENDENT, AND THE HISTORIC AMERICAN BUILDINGS SURVEY/HISTORIC AMERICAN ENGINEERING RECORD (HABS/HAER), ROBERT J. KAPSCH, CHIEF. THE FIELD TEAM, UNDER THE DIRECTION OF ERIC DELONY, PRINCIPAL ARCHITECT, HAER, CONSISTED OF DONALD KRAFT, PROJECT CO-SUPERVISOR AND ENGINEER (COLUMBIA UNIVERSITY); JACK BEALSTRASSER, PROJECT CO-SUPERVISOR AND HISTORIAN (AUBURN UNIVERSITY), ARCHITECTURAL TECHNICIANS MABEL A. BAILES (KANSAS STATE UNIVERSITY), BENITA C. WELCH (UNIVERSITY OF ILLINOIS), AND MICHAEL P. O'BOYLE (VISCOUNTS AND UNIVERSITY COLLEGE, DUBLIN, IRELAND), AND GRAPHIC DESIGNER RICHARD SARIAN (CLEVELAND INSTITUTE OF ART). FORMAL ON-SITE PHOTOGRAPHY WAS DONE BY JET LOWE, HAER STAFF PHOTOGRAPHER. SPECIAL CONSULTING SERVICES WERE PROVIDED BY JOHN P. BANVIE, AIA (WALLINGFORD, PA.).

LOCATION MAP TAKEN FROM USGS 7.5' SERIES FAYETTEVILLE QUADRANGLE (PHOTOREVISED 1976)
UTM LOCATIONS:
17.499190 4210690 (HEADHOUSE)
17.494460 4211020 (PROCESSING PLANT)

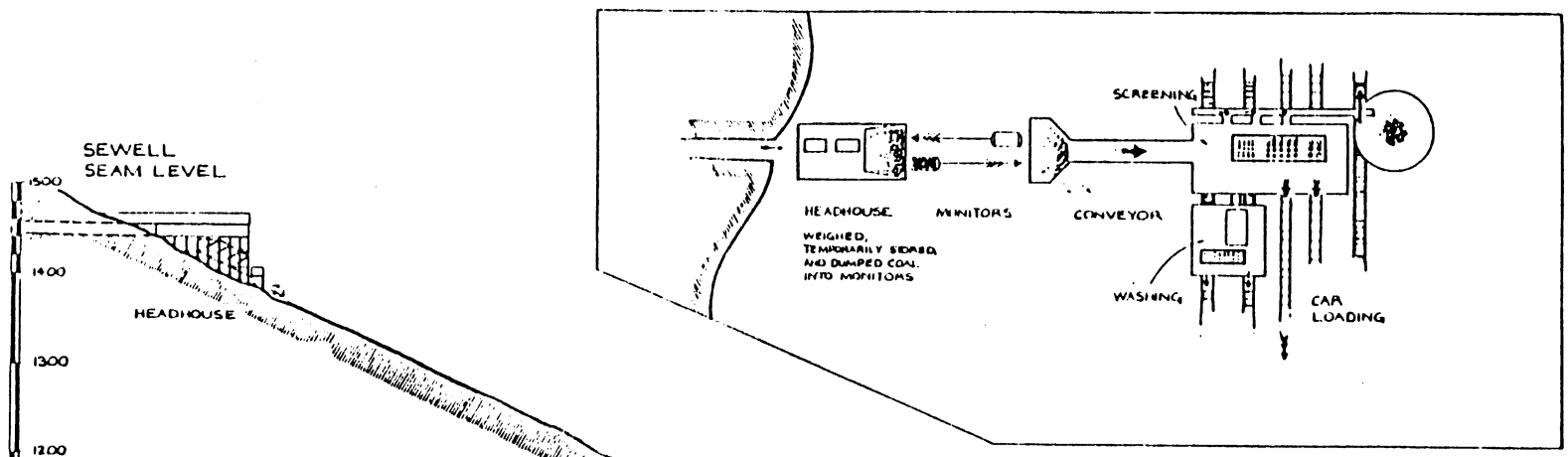
SITE PLAN FROM "INSURANCE MAP OF KAYMOOR No 1", PREPARED FOR NEW RIVER AND POCAHONTAS CONSOLIDATED COAL CO., KAYMOOR DIVISION, 1926. (FROM BERWIND-WHITE LAND COMPANY, CHARLESTON, WEST VIRGINIA)





DONALD KRAFT 1986

KAYMOOR COAL MINE - 1900
SOUTH SIDE OF NEW RIVER, 1/8 MILES UPSTREAM OF NEW RIVER BRIDGE ON U.S. 19
FAYETTEVILLE VICINITY
FAYETTE COUNTY
WEST VIRGINIA



BECAUSE THE DRIFT OPENING AT KAYMOOR WAS MORE THAN 500 VERTICAL FEET ABOVE THE LEVEL OF THE PROCESSING PLANT, COAL HAD TO BE LOWERED 1000 FEET DOWN A DIFFICULT AND OCCASIONALLY DANGEROUS 30 DEGREE SLOPE BEFORE IT COULD BE LOADED INTO COKE OVENS (ABANDONED IN THE EARLY 1930s) OR RAILROAD CARS. A TWO TRACK GRAVITY INCLINE AND TWO 8 TON MONITOR CARS WERE USED TO CARRY THE COAL DOWN THE SLOPE. THE TWO MONITORS WERE ATTACHED BY WIRE ROPE CABLE TO AN 8 FOOT DIAMETER DRUM IN THE HEADHOUSE AT THE DRIFT OPENING. THE CABLE WAS CAREFULLY WOUND SO THAT WHEN ONE MONITOR WAS AT THE TOP OF THE SLOPE BEING LOADED, THE OTHER WAS AT THE BOTTOM BEING DUMPED. THE SYSTEM WAS BALANCED SO THAT THE LOADED MONITOR ROLLED DOWNHILL, THEREBY TURNING THE DRUM WHICH PULLED THE EMPTY TO THE TOP. A HIGHLY SKILLED OPERATOR WOULD CONTROL THE RATE OF DESCENT BY CAREFULLY WORKING THE DRUM'S BRAKE. THE PROCESS COULD CONTINUE AT 30 TRIPS PER HOUR AS LONG AS COAL WAS AVAILABLE.

WHILE THE INCLINE, TRACK AND MONITORS WERE AN IMPRESSIVE FEATURE OF THE KAYMOOR MINE; THE MOVEMENT OF COAL WAS A HIGHLY ORGANIZED ROUTINE THAT BEGAN AT THE LEVEL OF THE DRIFT OPENING AND CONTINUED DOWN TO THE TRACK LEVEL. AS THE COAL WAS TAKEN FROM THE MINE, IT WAS BROUGHT INTO THE HEADHOUSE THERE, IT WAS WEIGHED AND THEN DUMPED INTO THE STRUCTURE'S LARGE STORAGE BIN, WHERE IT WAS FED DIRECTLY INTO THE MONITOR CARS THROUGH TWO CHUTES. AT THE BASE OF THE MONITOR INCLINE, THE COAL WAS DISCHARGED INTO A 100 TON CAPACITY STORAGE CHUTE. A RECIPROCATING FEEDER THEN DISTRIBUTED THE COAL ONTO A HORIZONTAL CONVEYOR WHICH LED INTO THE PROCESSING PLANT.

INSIDE THE PROCESSING PLANT, COAL WAS EITHER SCREENED, OR WASHED AND THEN SCREENED. THE BASIC SCREENING PROCESS WAS DESIGNED TO SORT THE COAL BY SIZE BEFORE IT WAS LOADED INTO RAILROAD CARS. THE WASHING AND SCREENING PROCESS, WHICH WAS CONFINED TO MEDIUM OR SMALLER SIZES OF COAL, WAS DESIGNED TO REMOVE IMPURITIES BEFORE BEING SORTED BY SIZE AND LOADED INTO RAILROAD CARS.

DURING THE PERIOD THAT KAYMOOR SERVED AS A CAPTIVE MINE OF THE LOW MOOR IRON COMPANY, MUCH OF THE SMALLER COAL WAS COKED IN BEEHIVE COKE OVENS A SHORT DISTANCE FROM THE PROCESSING PLANT. LATER, AFTER KAYMOOR WAS PURCHASED BY THE DEPUTED-WHITE CORPORATION, THE COKE OVENS WERE ABANDONED AND ALL COAL WAS SHIPPED BY RAIL TO A VARIETY OF CUSTOMERS.

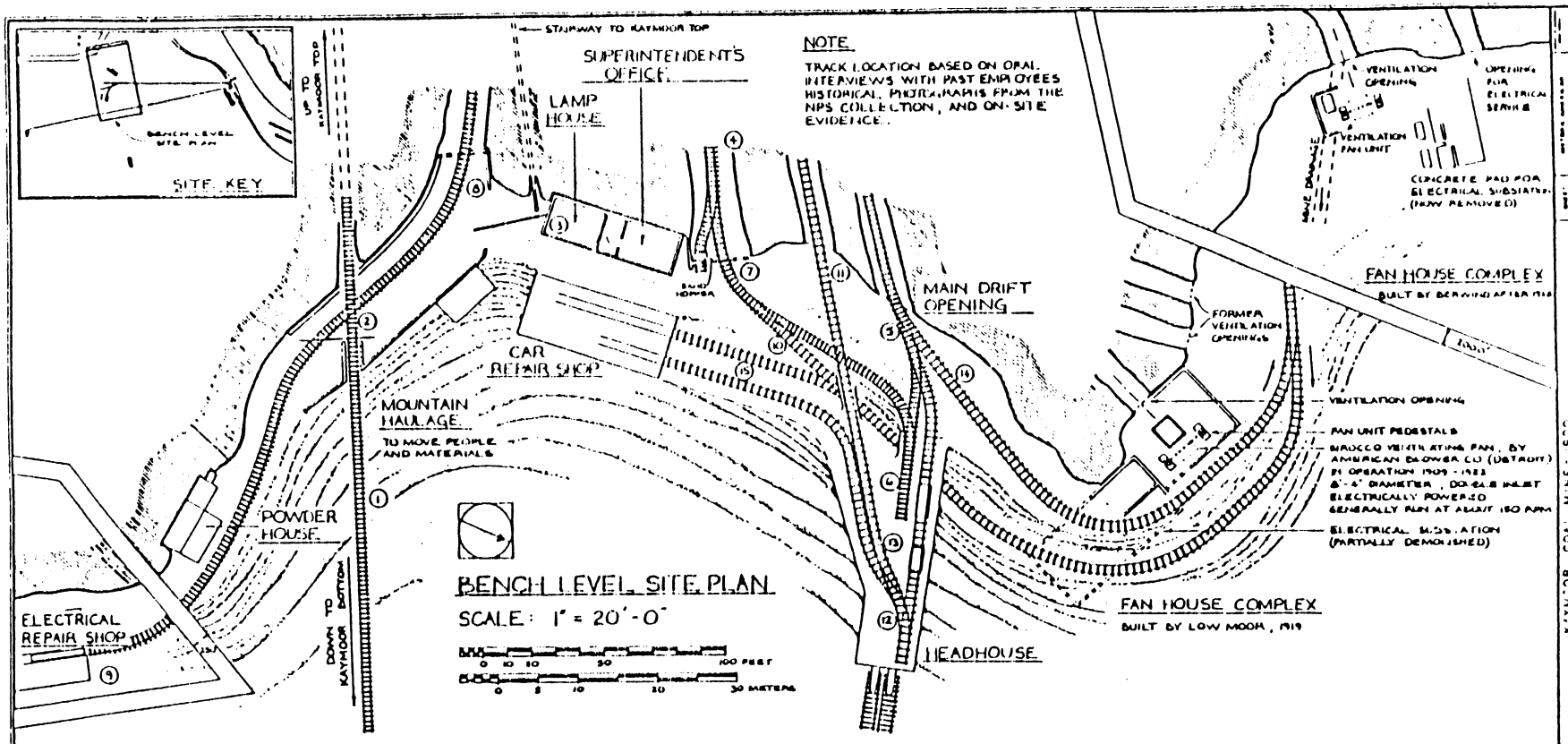
SITE SECTION

AND PROCESS SCHEMATIC

(LOOKING NORTHWEST)

0 50 100 200 300 FEET

KAYMOOR COAL MINE - 1930



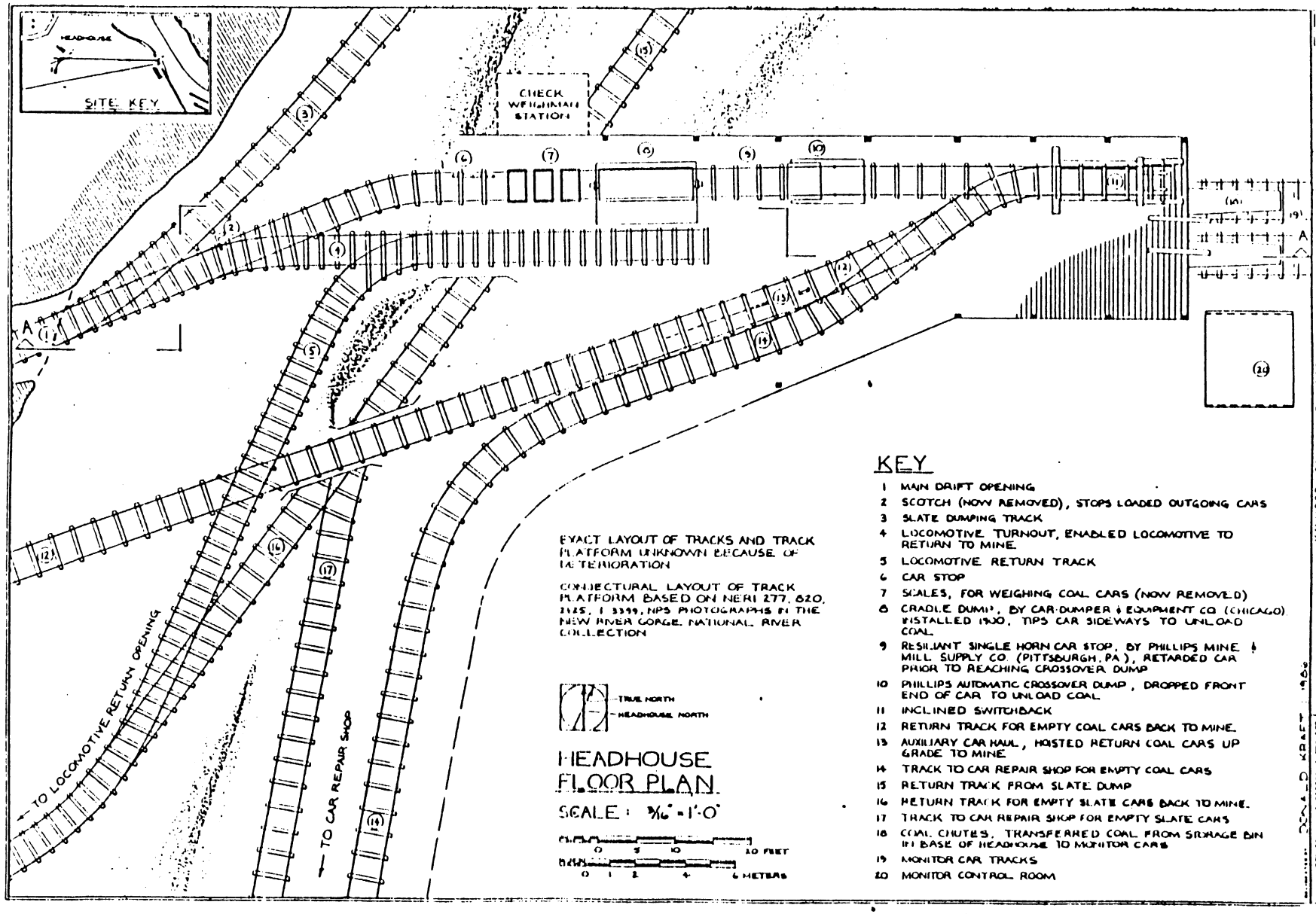
THE MOVEMENT OF MEN, COAL CARS, AND MINE LOCOMOTIVES ALONG THE BENCH AT THE DRIFT OPENINGS, 500 FEET ABOVE THE FLOOR OF THE GORGE, WAS A COMPLICATED PROCESS PERFORMED IN A NARROW AREA. MINERS WERE SHUTTLED TO THE BENCH FROM COMPANY TOWNS AT THE TOP AND BOTTOM OF THE GORGE VIA THE "MOUNTAIN HAULAGE" (1), A SINGLE TRACK INCLINE POWERED BY A HOISTING ENGINE AND CABLE DRUM AT THE TOP OF THE GORGE. THE MINERS MOVED FROM THE HAULAGE DROP-OFF POINT (2), NEAR THE DRIFT OPENING, TO THE LAMPHOUSE (3), WHERE THEY PICKED UP THEIR LAMPS AND OTHER EQUIPMENT. THEY THEN ENTERED A WAITING ROOM JUST INSIDE THE DRIFT OPENING (4), AND AWAITED A MINE LOCOMOTIVE PULLING EMPTY CARS THAT WOULD TRANSPORT THEM TO THEIR WORK PLACES DEEP WITHIN THE MINE.

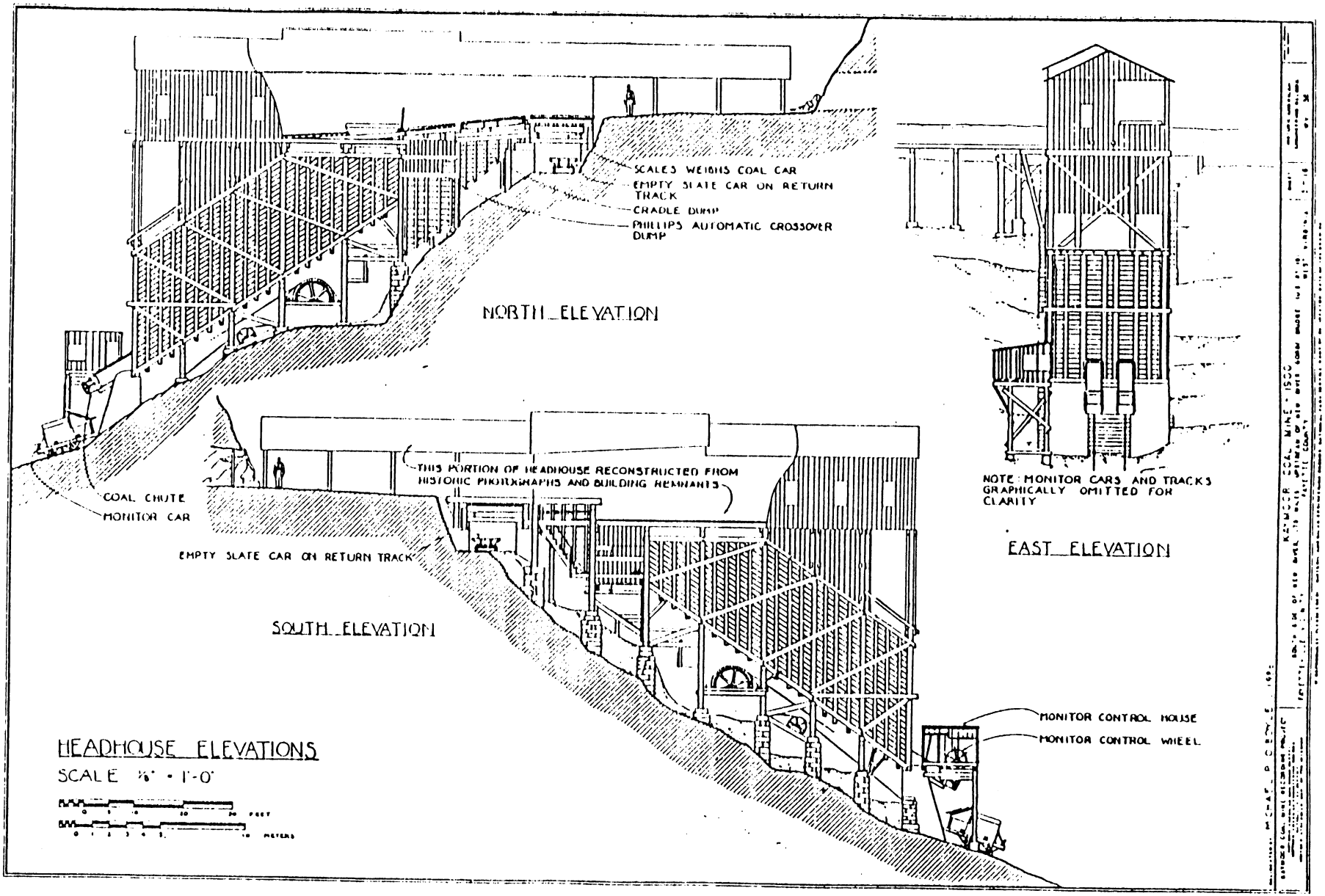
ONCE AT WORK IN ROOMS ON EITHER SIDE OF THE MAIN LOCOMOTIVE TRACK, MINERS BEGAN LOADING CARS EITHER WITH COAL OR SHALE. WHEN LOADED, THESE CARS WERE HAULED TO THE MAIN LOCOMOTIVE TRACK TO BE TRANSPORTED OUT OF THE MINE. DURING KAYMOOR'S EARLY YEARS, MULES PERFORMED THIS INTERMEDIATE HAULAGE, BUT THEY SOON WERE REPLACED BY GATHERING LOCOMOTIVES, SMALLER VERSIONS OF THE ELECTRIC LOCOMOTIVES THAT TRAVELED IN AND OUT OF THE MINE.

ONCE A MAIN HAULAGE LOCOMOTIVE HAD PICKED UP A FULL STRING OF COAL CARS AND "SLATE" CARS (COAL CARS FILLED WITH SHALE), IT PROCEEDED TO THE SURFACE. AT THE DRIFT OPENING, THE LOCOMOTIVE, COAL CARS, AND SLATE CARS DIVERGED AND FOLLOWED ONE OF THREE SEPARATE TRACKS. THE LOCOMOTIVE SIGNED MOMENTARILY TO ALIGN A "SCOTCH MAN" (5) TO DISCONNECT THE STRING OF MINE CARS IT THEN SWITCHED OFF THE MAIN TRACK, PROCEEDED ONTO A SIDING IN THE HEADHOUSE (6), REVERSED ITS MOTOR, AND RE-ENTERED THE MINE THROUGH A SEPARATE LOCOMOTIVE OPENING (7). IF THE LOCOMOTIVE NEEDED REPAIRS, IT COULD PROCEED A FEW HUNDRED FEET INTO THE MINE, SWITCH OVER TO ANOTHER TRACK, REVERSE ITS MOTOR, AND EXIT THROUGH A THIRD MINE OPENING. THE LOCOMOTIVE REPAIR EXIT (8), TO THE ELECTRICAL SHOP (9). GATHERING LOCOMOTIVES NEEDING REPAIR USED THE SAME EXIT. IF REPAIRS WERE NOT NECESSARY, THE MAIN HAULAGE LOCOMOTIVE WOULD PICK UP ANY EMPTY SLATE CARS THAT MIGHT BE WAITING ON THEIR SEPARATE TRACK (10) OUTSIDE THE MINE. IT THEN ENTERED THE LOCOMOTIVE RETURN OPENING, IMMEDIATELY INSIDE THE MINE. THE LOCOMOTIVE PICKED UP ANY WAITING EMPTY COAL CARS THAT HAD BEEN HAULED BACK INTO THE MINE THROUGH A FOURTH OPENING, THE EMPTY COAL CAR ENTRANCE (11).

THE COAL AND SLATE CARS THAT HAD BEEN DETACHED FROM THE LOCOMOTIVE AT THE MAIN DRIFT OPENING WERE RELEASED INDIVIDUALLY ONTO ONE OF TWO TRACKS. THE COAL CARS WERE ALLOWED TO ROLL DOWN A SLIGHT GRADE INTO THE HEADHOUSE, WHERE THEY WERE STOPPED, WEIGHED, AND DUMPED. THEY WERE THEN SWITCHED BACK ONTO ANOTHER TRACK IN THE HEADHOUSE (12), WHERE THEY WERE ENGAGED ONTO WHAT THE MINERS REFERRED TO AS A CRABPERS). THIS CHAIN MECHANISM SNAGGED THE CARS AND PULLED THEM BACK INTO THE MINE THROUGH THE EMPTY COAL CAR ENTRANCE.

THE SLATE CARS WERE SWITCHED BY THE SCOTCH MAN ONTO A SEPARATE TRACK (14) AND ROLLED DOWNHILL AROUND THE NORTH SIDE OF THE BENCH. THEY WERE THEN CONNECTED TO A CABLE AND PULLED TO THE TOP OF THE GORGE BY AN ENGINE DRIVEN HOISTING DRUM. AFTER BEING DUMPED WELL AWAY FROM THE SLOPE, THE CARS RETURNED TO THE BENCH LEVEL, PASSED UNDER THE SCALES IN THE HEADHOUSE, AND CAME TO A STOP THEY WERE THEN READY TO BE HAULED BACK INTO THE MINE BY THE MAIN HAULAGE LOCOMOTIVE VIA THE LOCOMOTIVE RETURN OPENING. IF REPAIRS WERE NECESSARY, BOTH THE COAL AND SLATE CARS COULD BE SWITCHED ONTO TRACKS THAT LED INTO THE CAR REPAIR SHOP (15).

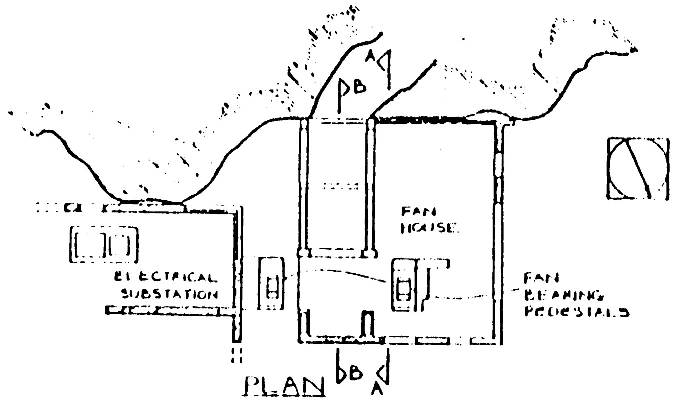

SITE KEY
HEADHOUSE
CHECK WEIGHMAN STATION
TO LOCOMOTIVE RETURN OPENING
TO CAR REPAIR SHOP
EXACT LAYOUT OF TRACKS AND TRACK PLATFORM UNKNOWN BECAUSE OF DETERIORATION
CONJECTURAL LAYOUT OF TRACK PLATFORM BASED ON HERI 277, 820, 2185, 3399, NPS PHOTOGRAPHS IN THE NEW RIVER GORGE NATIONAL RIVER COLLECTION
TRUE NORTH
HEADHOUSE NORTH
HEADHOUSE FLOOR PLAN
SCALE: 3/16" = 1'-0"
0 5 10 20 FEET
0 1 2 4 6 METERS
KEY
1 MAIN DRIFT OPENING
2 SCOTCH (NOW REMOVED), STOPS LOADED OUTGOING CARS
3 SLATE DUMPING TRACK
4 LOCOMOTIVE TURNOUT, ENABLED LOCOMOTIVE TO RETURN TO MINE
5 LOCOMOTIVE RETURN TRACK
6 CAR STOP
7 SCALES, FOR WEIGHING COAL CARS (NOW REMOVED)
8 CRADLE DUMP, BY CAR-DUMPER & EQUIPMENT CO. (CHICAGO) INSTALLED 1930, TIPS CAR SIDEWAYS TO UNLOAD COAL
9 RESILIANT SINGLE HORN CAR STOP, BY PHILLIPS MINE & MILL SUPPLY CO. (PITTSBURGH, PA), RETARDED CAR PRIOR TO REACHING CROSSOVER DUMP
10 PHILLIPS AUTOMATIC CROSSOVER DUMP, DROPPED FRONT END OF CAR TO UNLOAD COAL
11 INCLINED SWITCHBACK
12 RETURN TRACK FOR EMPTY COAL CARS BACK TO MINE
13 AUXILIARY CAR HAUL, HOISTED RETURN COAL CARS UP GRADE TO MINE
14 TRACK TO CAR REPAIR SHOP FOR EMPTY COAL CARS
15 RETURN TRACK FROM SLATE DUMP
16 RETURN TRACK FOR EMPTY SLATE CARS BACK TO MINE
17 TRACK TO CAR REPAIR SHOP FOR EMPTY SLATE CARS
18 COAL CHUTES, TRANSFERRED COAL FROM STORAGE BIN AT BASE OF HEADHOUSE TO MONITOR CARS
19 MONITOR CAR TRACKS
20 MONITOR CONTROL ROOM
KAYMOOR COAL MINE - 1960
DONALD KRAFT 1986



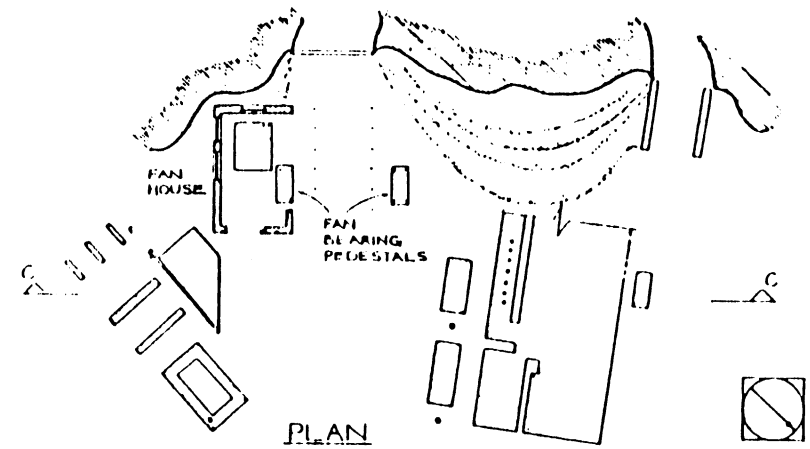
HEADHOUSE ELEVATIONS

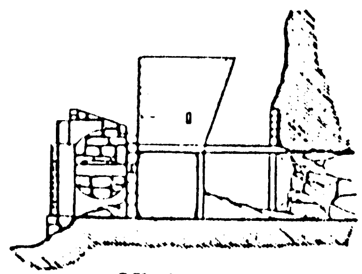
SCALE ⅜" = 1'-0"

LOW MOOR - 1919

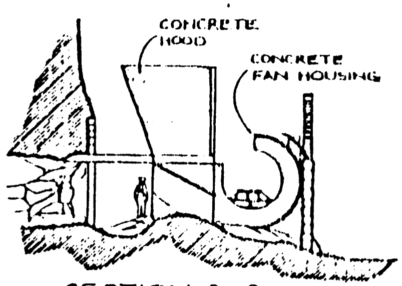


BERWIND - 1925





SECTION A-A



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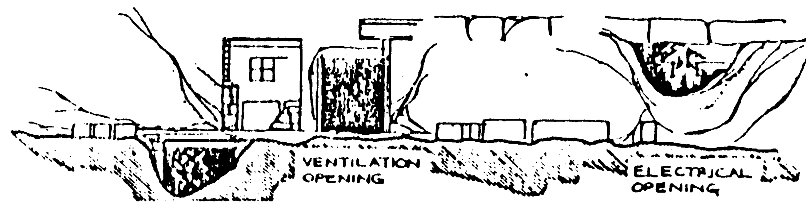
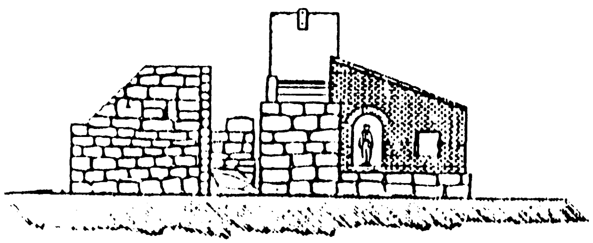


SECTION C-C



FRONT ELEVATION

VENTILATION STRUCTURES AND OPENINGS - LOW MOOR AND BERWIND ERAS

SCALE: 1/8"=1'-0"   0 5 10 20 30 FEET   0 1 3 5 10 METERS

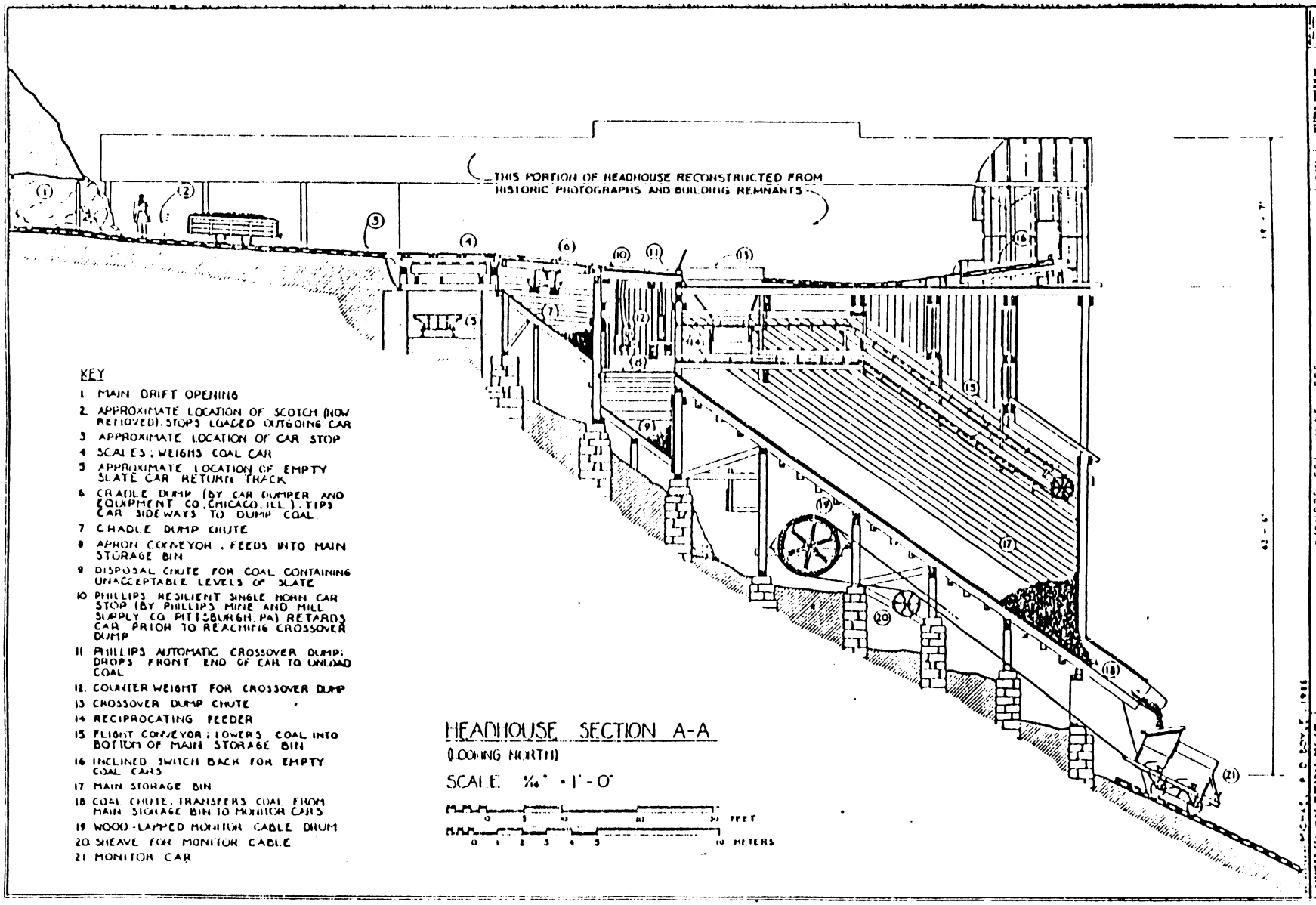
THE REMAINS OF THE TWO FAN HOUSES STILL STAND AT KAYMOOR. THE BRICK AND CONCRETE FAN HOUSE ADJACENT TO THE MAIN DRIFT ENTRY WAS BUILT IN 1919 AND WAS USED THROUGHOUT THE REMAINING SIX YEARS OF LOW MOOR IRON COMPANY'S OWNERSHIP. LOW MOOR BUILT THE FIREPROOF STRUCTURE AFTER 16 YEARS OF ILL-LUCK WITH WOODEN FAN HOUSES, DURING WHICH TIME THREE FIRES OCCURRED.

WHETHER THE FAN SYSTEM SHOULD FORCE AIR INTO THE MINE AND OUT THE DRIFT OPENINGS OR PULL AIR THROUGH THE DRIFT OPENINGS TO EXHAUST VIA THE FAN HOUSE WAS A QUESTION NEVER FULLY RESOLVED DURING THE LOW MOOR ERA. LIKEWISE, ANOTHER VARYING FACTOR WAS THAT OF PROPER FAN DIAMETER AND ROTATIONAL SPEED. KAYMOOR WAS ORIGINALLY VENTILATED BY A 20 FOOT DIAMETER CRAWFORD MCCRIMMON FAN, WHICH WAS EXCHANGED FOR A 16 FOOT DIAMETER MODEL AROUND 1906. IN 1910, AN 8'-4" DIAMETER SIROCCO FAN WAS INSTALLED, AND IT CONTINUED IN USE AFTER CONSTRUCTION OF THE CONCRETE AND BRICK FAN HOUSE IN 1919. DOCUMENTARY EVIDENCE INDICATES THAT IT SERVED MOST OF ITS LIFETIME AS A FORCE FAN, BUT WAS POSSIBLY USED AS AN EXHAUST FAN FOR A TIME AROUND 1919-1920.

WHEN BERWIND ACQUIRED KAYMOOR IN 1925, THEY ABANDONED THE OLD SYSTEM AND INSTALLED A NEW FAN HOUSE AT A NEW VENTILATING SHAFT TWO THOUSAND FEET DOWN RIVER FROM THE MAIN DRIFT OPENINGS. ONLY FOUNDATIONS AND TRACES OF FORMER WALLS SURVIVE AS OF 1986.

KAYMOOR COAL MINE · 1900

FAYETTE COUNTY



KEY

1. MAIN DRIFT OPENING
2. APPROXIMATE LOCATION OF SCOTCH (NOW REMOVED). STOPS LOADED OUTGOING CAR
3. APPROXIMATE LOCATION OF CAR STOP
4. SCALES; WEIGHS COAL CAR
5. APPROXIMATE LOCATION OF EMPTY SLATE CAR RETURN TRACK
6. CRADLE DUMP (BY CAR DUMPER AND EQUIPMENT CO. CHICAGO, ILL.). TIPS CAR SIDEWAYS TO DUMP COAL
7. CRADLE DUMP CHUTE
8. APRON CONVEYOR. FEEDS INTO MAIN STORAGE BIN
9. DISPOSAL CHUTE FOR COAL CONTAINING UNACCEPTABLE LEVELS OF SLATE
10. PHILLIPS RESILIENT SINGLE HORN CAR STOP (BY PHILLIPS MINE AND MILL SUPPLY CO. PITTSBURGH, PA) RETARDS CAR PRIOR TO REACHING CROSSOVER DUMP
11. PHILLIPS AUTOMATIC CROSSOVER DUMP; DROPS FRONT END OF CAR TO UNLOAD COAL
12. COUNTER WEIGHT FOR CROSSOVER DUMP
13. CROSSOVER DUMP CHUTE
14. RECIPROCATING FEEDER
15. FLIGHT CONVEYOR; LOWERS COAL INTO BOTTOM OF MAIN STORAGE BIN
16. INCLINED SWITCH BACK FOR EMPTY COAL CARS
17. MAIN STORAGE BIN
18. COAL CHUTE; TRANSFERS COAL FROM MAIN STORAGE BIN TO MONITOR CARS
19. WOOD-LAPPED MONITOR CABLE DRUM
20. SHEAVE FOR MONITOR CABLE
21. MONITOR CAR

HEADHOUSE SECTION A-A

(LOOKING NORTH)

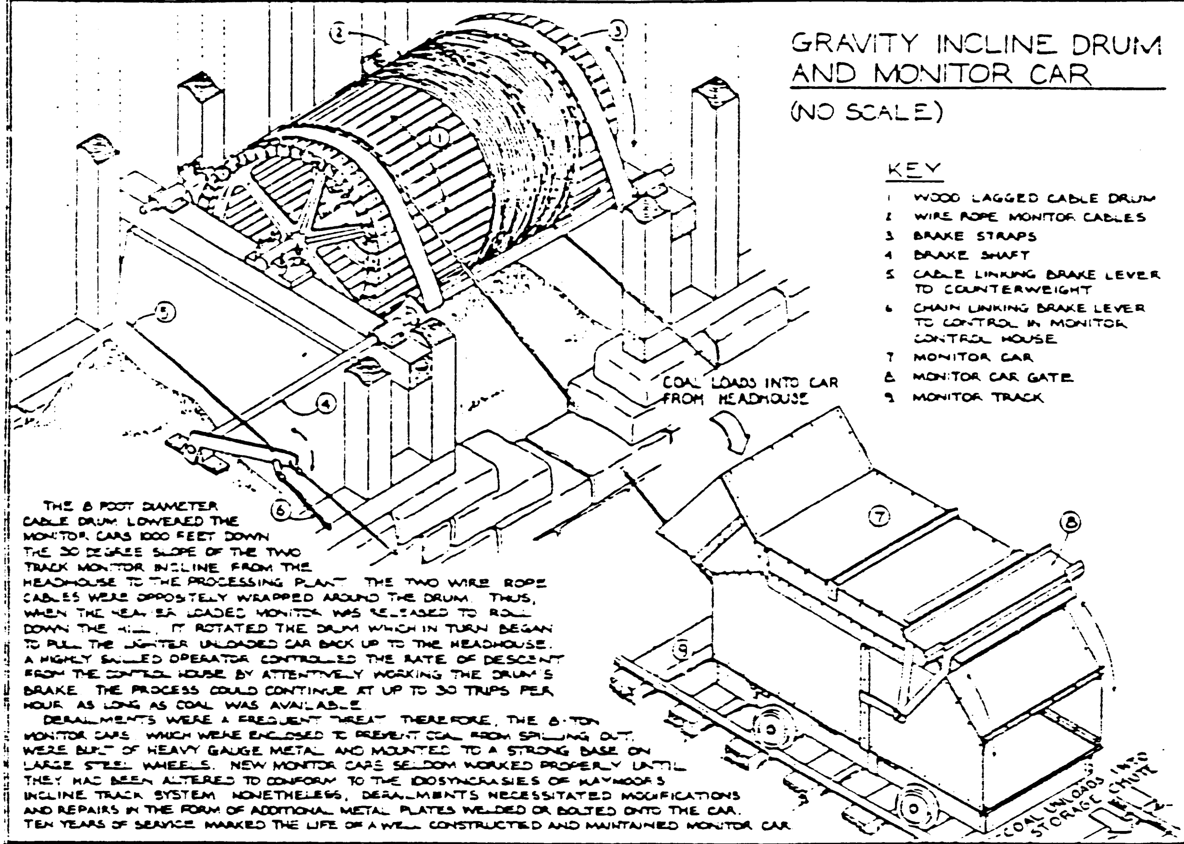
SCALE: ⅜" = 1'-0"

0 5 10 20 30 FEET

0 1 2 3 4 5 10 METERS

GRAVITY INCLINE DRUM AND MONITOR CAR

(NO SCALE)



KEY

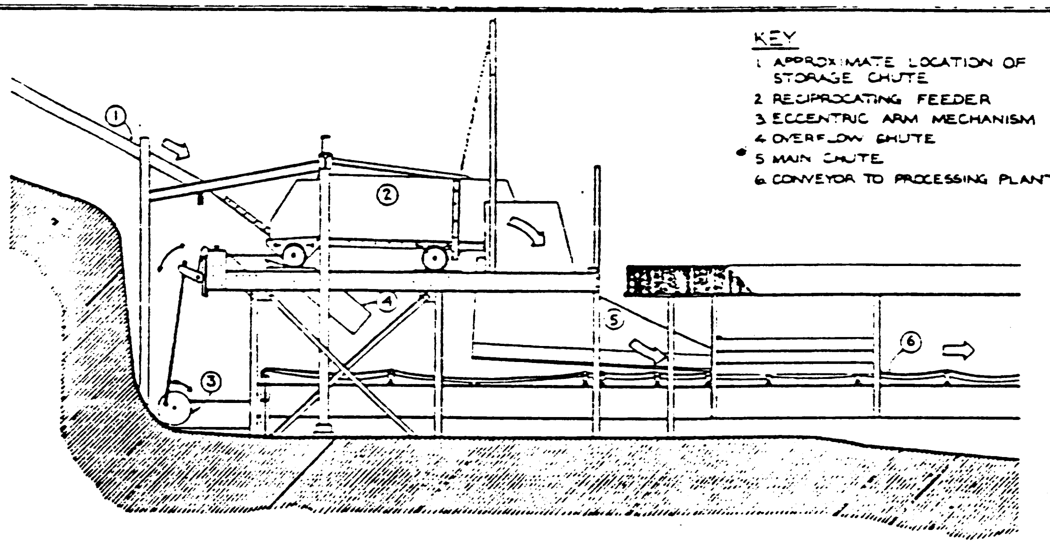
1. WOOD LAGGED CABLE DRUM
2. WIRE ROPE MONITOR CABLES
3. BRAKE STRAPS
4. BRAKE SHAFT
5. CABLE LINKING BRAKE LEVER TO COUNTERWEIGHT
6. CHAIN LINKING BRAKE LEVER TO CONTROL IN MONITOR CONTROL HOUSE
7. MONITOR CAR
8. MONITOR CAR GATE
9. MONITOR TRACK

THE 8 FOOT DIAMETER CABLE DRUM LOWERED THE MONITOR CARS 1000 FEET DOWN THE 30 DEGREE SLOPE OF THE TWO TRACK MONITOR INCLINE FROM THE HEADHOUSE TO THE PROCESSING PLANT. THE TWO WIRE ROPE CABLES WERE OPPOSITELY WRAPPED AROUND THE DRUM. THUS, WHEN THE HEAVIER LOADED MONITOR WAS RELEASED TO ROLL DOWN THE HILL, IT ROTATED THE DRUM WHICH IN TURN BEGAN TO PULL THE LIGHTER UNLOADED CAR BACK UP TO THE HEADHOUSE. A HIGHLY SKILLED OPERATOR CONTROLLED THE RATE OF DESCENT FROM THE CONTROL HOUSE BY ATTENTIVELY WORKING THE DRUM'S BRAKE. THE PROCESS COULD CONTINUE AT UP TO 30 TRIPS PER HOUR AS LONG AS COAL WAS AVAILABLE.

DERAILMENTS WERE A FREQUENT THREAT. THEREFORE, THE 8-TON MONITOR CARS, WHICH WERE ENCLOSED TO PREVENT COAL FROM SPILLING OUT, WERE BUILT OF HEAVY GAUGE METAL AND MOUNTED TO A STRONG BASE ON LARGE STEEL WHEELS. NEW MONITOR CARS SELDOM WORKED PROPERLY UNTIL THEY HAD BEEN ALTERED TO CONFORM TO THE IDIOSYNCRASIES OF KAYMOOR'S INCLINE TRACK SYSTEM. NONETHELESS, DERAILMENTS NECESSITATED MODIFICATIONS AND REPAIRS IN THE FORM OF ADDITIONAL METAL PLATES WELDED OR BOLTED ONTO THE CAR. TEN YEARS OF SERVICE MARKED THE LIFE OF A WELL CONSTRUCTED AND MAINTAINED MONITOR CAR.

KEY

1. APPROXIMATE LOCATION OF STORAGE CHUTE
2. RECIPROCATING FEEDER
3. ECCENTRIC ARM MECHANISM
4. OVERFLOW CHUTE
5. MAIN CHUTE
6. CONVEYOR TO PROCESSING PLANT



RECIPROCATING FEEDER-SOUTH ELEVATION

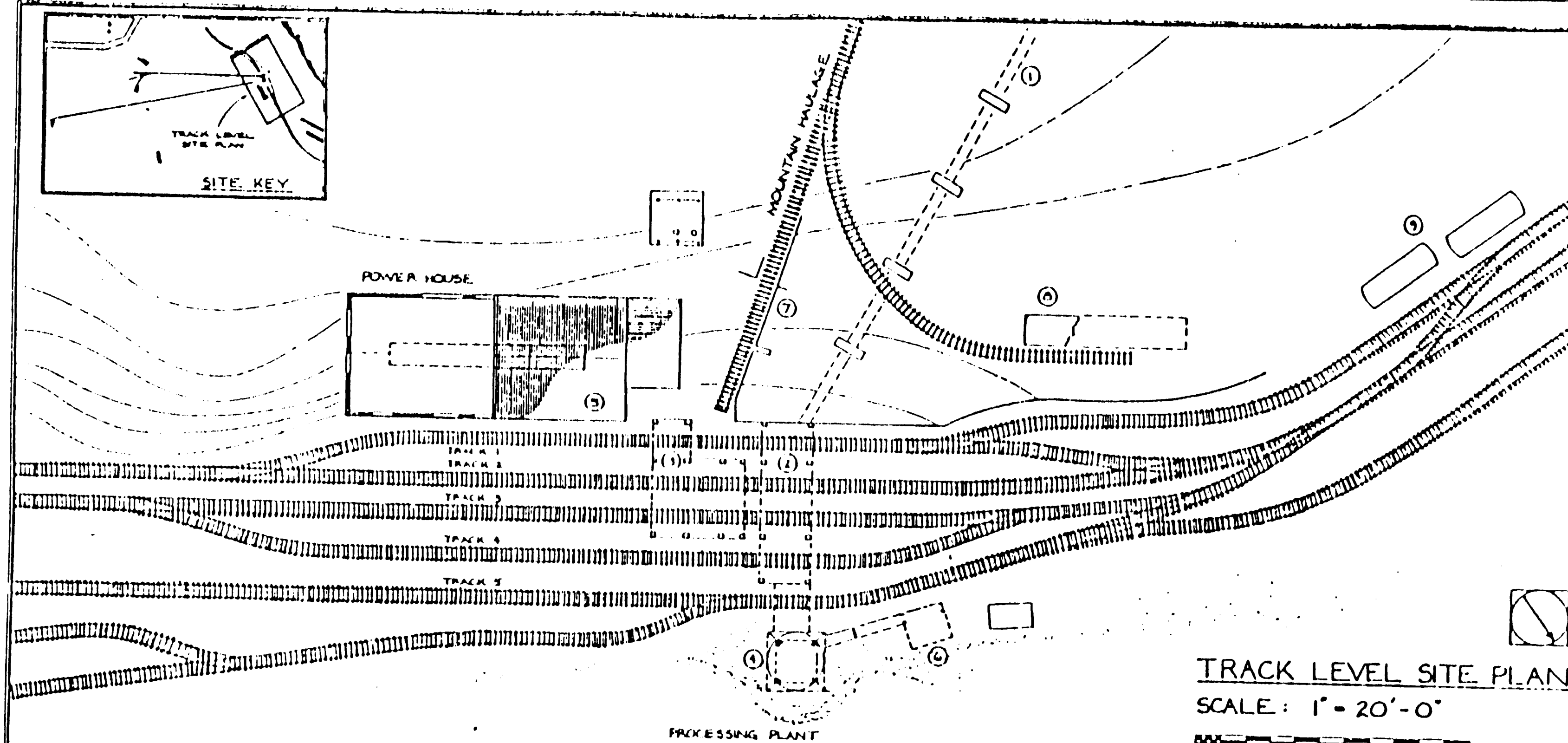
SCALE: ½" = 1'-0"

0 1 5 10 FEET
0 1 2 METERS

AT THE BOTTOM OF THE MONITOR CAR'S DESCENT, ITS GATE WAS OPENED BY A MECHANICALLY ACTIVATED LATCH AND THE LOAD DISCHARGED INTO A 100 TON STORAGE CHUTE. AT THE BASE OF THE STORAGE CHUTE, A RECIPROCATING FEEDER DISTRIBUTED THE COAL ONTO THE CONVEYOR BELT WHICH LED INTO THE PROCESSING PLANT. THIS RECIPROCATING FEEDER WAS MOUNTED ON WHEELS AND ATTACHED TO AN ARM ECCENTRICALLY MOUNTED TO THE ELECTRICAL MOTOR, WHICH PRODUCED THE DESIRED BACK AND FORTH SHAKING MOTION. THE SPEED OF THIS MOTION COULD BE REGULATED, THUS INSURING A STEADY, EVEN FLOW OF COAL ONTO THE CONVEYOR BELT.

MICHAEL P. O BOYLE 1996

KAYMOOR COAL MINE RECORDING PROJECT
KAYMOOR COAL MINE 1900
FAYETTEVILLE VICINITY
FAYETTE COUNTY
WEST VIRGINIA



TRACK LEVEL SITE PLAN

SCALE: 1" = 20'-0"

0 10 20 50 100 FEET

0 5 10 20 30 METERS

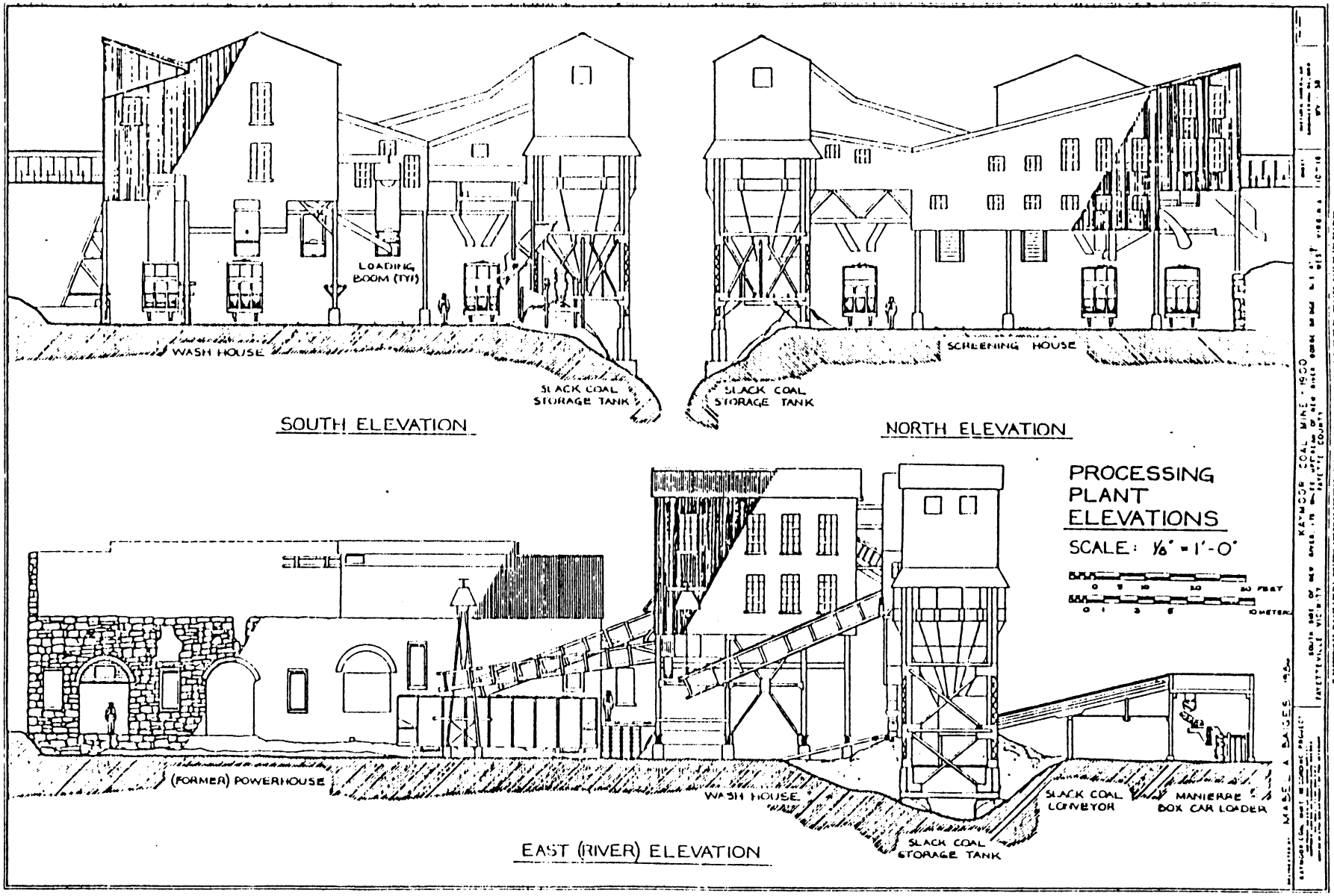
AFTER BEING LOWERED DOWN KAYMOOR'S GRAVITY INCLINE, FRESHLY MINED COAL ARRIVED AT THE RAILROAD TRACK LEVEL, WHERE IT WAS DUMPED INTO A 100 TON HOPPER AND FED BY A RECIPROCATING FEEDER ONTO A HORIZONTAL BELT CONVEYOR (LINK BELT COMPANY, CHICAGO)(1). FROM THERE, IT WAS CARRIED INTO THE PROCESSING PLANT, WHERE IT WAS SORTED, WASHED IF NECESSARY, AND LOADED INTO RAILROAD CARS FOR SHIPMENT.

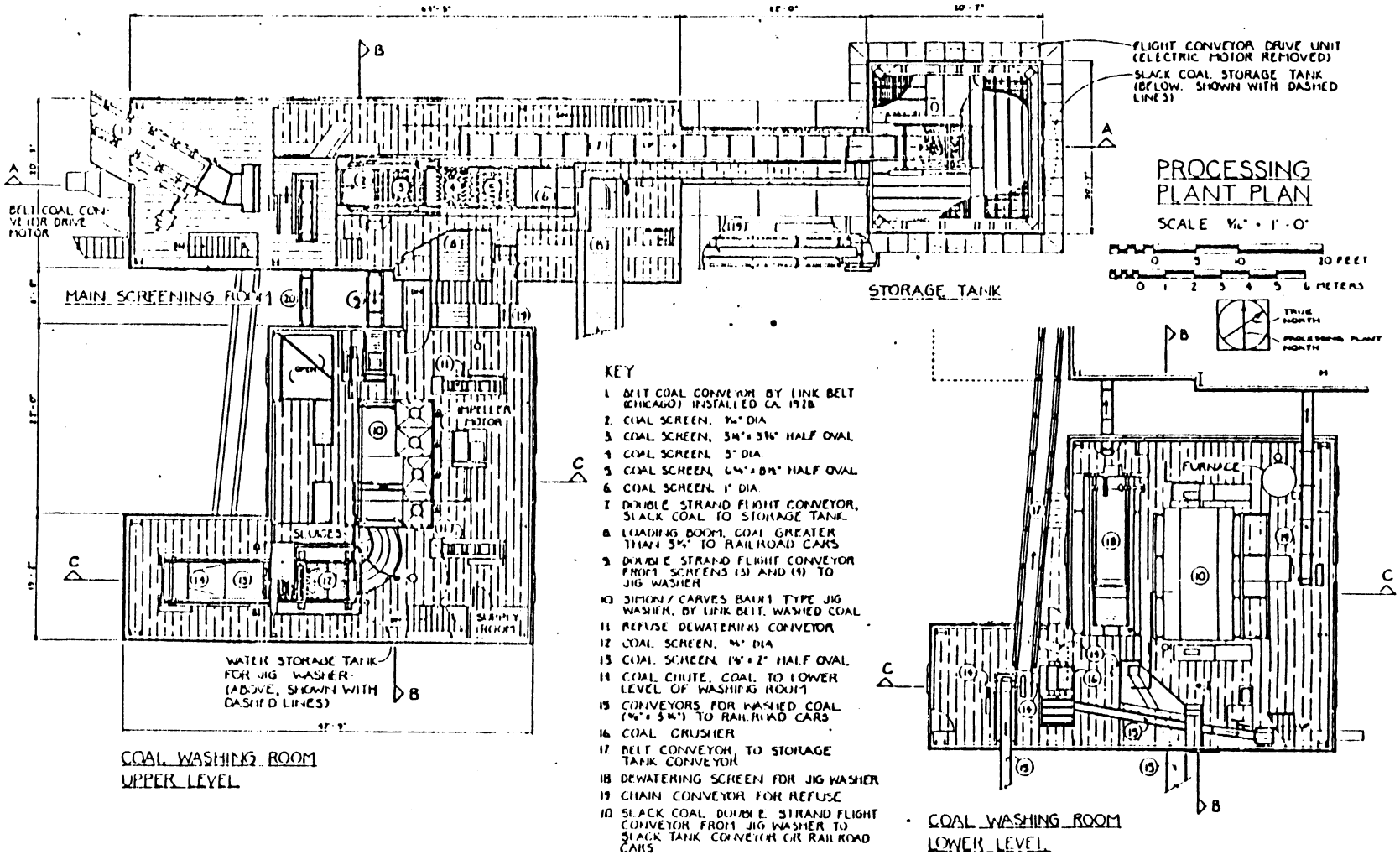
THE PROCESSING PLANT (ACTUALLY THREE FACILITIES, A COAL SCREENING ROOM (2), A COAL WASHING AND SCREENING ROOM (3), AND A SLACK COAL STORAGE TANK (4)) IS NOT THE OLDEST BUILDING AT THE TRACK LEVEL. IT IS PREDATED BY THE POWER HOUSE (5), COKE OVENS, AND VARIOUS MINOR SUPPORT STRUCTURES. THE ORIGINAL PROCESSING PLANT, BUILT BY THE LOW MOOR IRON COMPANY IN 1900, WAS CAPABLE OF LOADING COAL ONTO THREE RAILROAD TRACKS. THE TIMBER STRUCTURE CONTAINED A COAL CRUSHER AND GRAVITY COAL SCREENS. LOADING BOOMS WERE EVENTUALLY ADDED TO REDUCE BREAKAGE WHEN COAL WAS LOADED INTO RAILROAD CARS. AFTER THE PROCESSING PLANT BURNED IN 1924, KAYMOOR WAS SOLD TO NEW RIVER AND POCAHONTAS CONSOLIDATED COAL COMPANY, A SUBSIDIARY OF BERWIND-WHITE COMPANY OF PHILADELPHIA. THE NEW OWNERS BUILT A MODERN, FIREPROOF, CORRUGATED METAL PROCESSING PLANT SHORTLY THEREAFTER IN 1925. A SIMON-CARVES BAUM JIG COAL WASHING PLANT (LINK BELT COMPANY, CHICAGO), WHICH COULD WASH 60 TONS OF COAL PER HOUR, WAS ADDED CA. 1926.

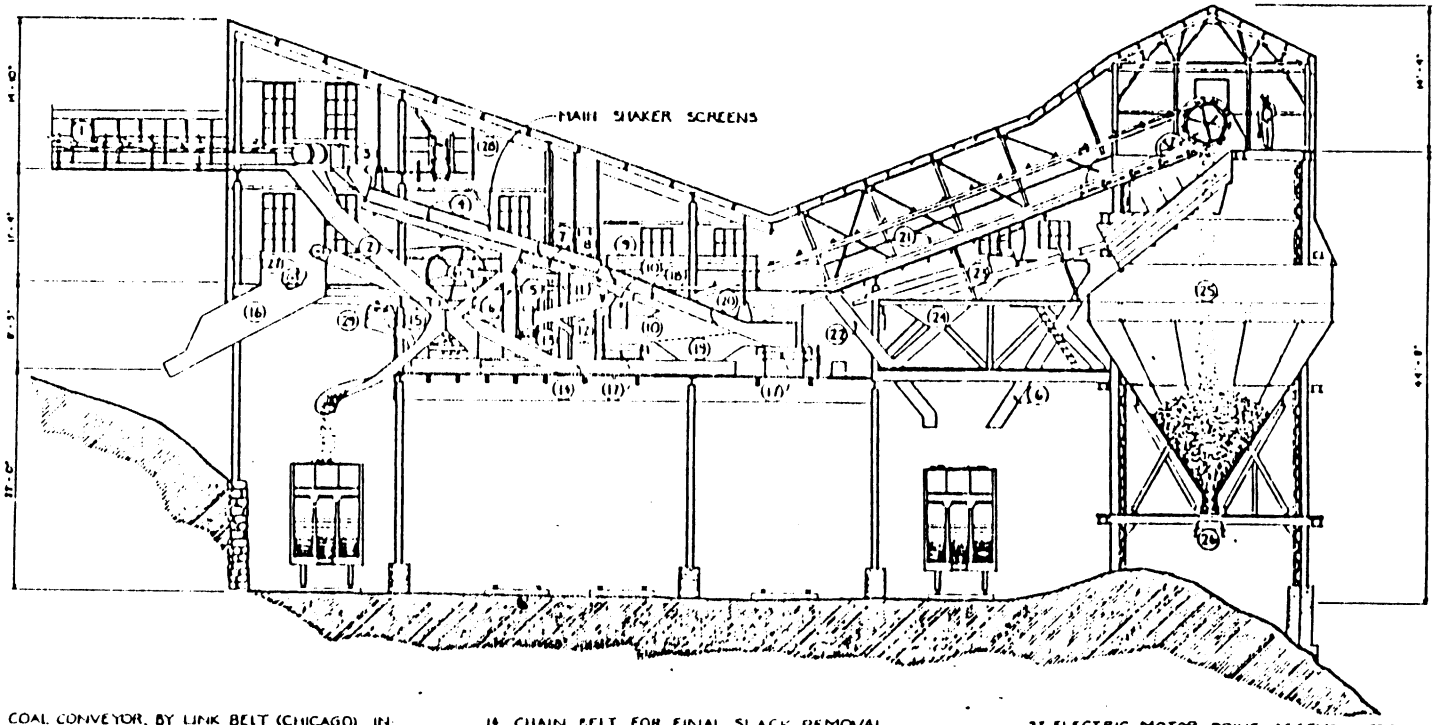
THE NEW PROCESSING PLANT COULD LOAD COAL ONTO FIVE RAILROAD TRACKS SIMULTANEOUSLY. WHILE THE PLANT WAS EQUIPPED WITH A VARIETY OF COAL LOADING CHUTES WHICH ALLOWED NUMEROUS OPTIONS, THE ROUTINE LOADING SCHEME WAS RELATIVELY SIMPLE. COAL FROM THE WASHER ROOM, GENERALLY SIZES UNDER 3½", WAS LOADED INTO CARS ON TRACKS 1 AND 2. LARGE COAL, OVER 3½", MOVED FROM THE SHAKER SCREEN ROOM ONTO LOADING BOOMS (APRON CONVEYORS) AND INTO RAILROAD CARS ON TRACKS 3 AND 4. SLACK COAL, SMALL COAL USUALLY LESS THAN ⅛", WAS LOADED FROM THE SLACK STORAGE TANK INTO CARS ON TRACK 5. SLACK COAL WAS FREQUENTLY LOADED INTO BOX CARS VIA A MANIERRE BOX CAR LOADER (6), WHICH ALSO FED ONTO TRACK 5.

THE POWER HOUSE, WHICH WAS BUILT IN 1899-1900 AND EXPANDED IN 1903, ORIGINALLY CONTAINED THREE BOILERS, TWO STEAM ENGINES, AND AIR COMPRESSORS WHICH POWERED THE MINE'S HARRISON PICK-MACHINES. IN 1903, A GENERATING PLANT WAS INSTALLED TO PROVIDE ELECTRICITY FOR ELECTRIC MINE LOCOMOTIVES, COAL CUTTING MACHINERY, LIGHTING, AND OTHER PURPOSES. THE POWER PLANT WAS ABANDONED CA. 1934 WHEN BERWIND-WHITE SHIFTED TO ELECTRICITY PURCHASED FROM OUTSIDE SOURCES.

THE BASE OF THE MOUNTAIN HAULAGE (7), LOCATED BETWEEN THE POWER HOUSE AND THE PROCESSING PLANT, WAS THE LOADING AND UNLOADING POINT FOR PEOPLE, EQUIPMENT, AND SUPPLIES BEING TRANSPORTED TO THE MINE OPENINGS 850 FEET UP, AND TO THE TOP OF THE GORGE. SAND WAS TRANSPORTED FROM THE SAND DRYING HOUSE (8) UP TO THE MINE LEVEL, WHERE IT WAS USED TO PROVIDE TRACTION TO HAULAGE LOCOMOTIVES. TWO LARGE OIL TANKS (9) STORED OIL WHICH WAS SPRAYED ON COAL AS IT WAS LOADED INTO RAILROAD CARS TO HOLD DOWN DUST AND PREVENT THE COAL FROM FREEZING TOGETHER IN COLD WEATHER. TWO BANKS OF BEEHIVE COKE OVENS, LOCATED BETWEEN THE PROCESSING PLANT RAILROAD TRACKS AND THE EAST BOUND TRACK OF THE CHESAPEAKE AND OHIO RAILWAY, WERE ABANDONED CA. 1934.


LOADING BOOM (TYP.)
WASH HOUSE
SLACK COAL STORAGE TANK
SOUTH ELEVATION
SCREENING HOUSE
SLACK COAL STORAGE TANK
NORTH ELEVATION
PROCESSING PLANT ELEVATIONS
SCALE: 1/8" = 1'-0"
(FORMER) POWERHOUSE
WASH HOUSE
SLACK COAL CONVEYOR
MANIERRE BOX CAR LOADER
SLACK COAL STORAGE TANK
EAST (RIVER) ELEVATION


FLIGHT CONVEYOR DRIVE UNIT (ELECTRIC MOTOR REMOVED)
SLACK COAL STORAGE TANK (BELOW. SHOWN WITH DASHED LINES)
BELT COAL CONVEYOR DRIVE MOTOR
MAIN SCREENING ROOM
STORAGE TANK
IMPELLER MOTOR
SLUICES
SUPPLY HOPPER
WATER STORAGE TANK FOR JIG WASHER (ABOVE, SHOWN WITH DASHED LINES)
COAL WASHING ROOM UPPER LEVEL
FURNACE
COAL WASHING ROOM LOWER LEVEL
PROCESSING PLANT PLAN
SCALE 1/16" = 1'-0"
0 5 10 20 FEET
0 1 2 3 4 5 6 METERS
TRUE NORTH
PROCESSING PLANT NORTH
KEY
1 BELT COAL CONVEYOR BY LINK BELT (CHICAGO) INSTALLED CA. 1928
2 COAL SCREEN, 1¼" DIA
3 COAL SCREEN, 3¼" x 3½" HALF OVAL
4 COAL SCREEN, 3" DIA
5 COAL SCREEN, 6¾" x 8¼" HALF OVAL
6 COAL SCREEN, 1" DIA
7 DOUBLE STRAND FLIGHT CONVEYOR, SLACK COAL TO STORAGE TANK
8 LOADING BOOM, COAL GREATER THAN 3½" TO RAILROAD CARS
9 DOUBLE STRAND FLIGHT CONVEYOR FROM SCREENS (3) AND (4) TO JIG WASHER
10 SIMON / CARVES BATH TYPE JIG WASHER, BY LINK BELT. WASHED COAL
11 REFUSE DEWATERING CONVEYOR
12 COAL SCREEN, ¾" DIA
13 COAL SCREEN, 1¾" x 2" HALF OVAL
14 COAL CHUTE, COAL TO LOWER LEVEL OF WASHING ROOM
15 CONVEYORS FOR WASHED COAL (¾" x 3½") TO RAILROAD CARS
16 COAL CRUSHER
17 BELT CONVEYOR, TO STORAGE TANK CONVEYOR
18 DEWATERING SCREEN FOR JIG WASHER
19 CHAIN CONVEYOR FOR REFUSE
20 SLACK COAL DOUBLE STRAND FLIGHT CONVEYOR FROM JIG WASHER TO SLACK TANK CONVEYOR OR RAILROAD CARS
KENMOOR COAL MINE - 1950
BENTA & WELCH 1950



KEY

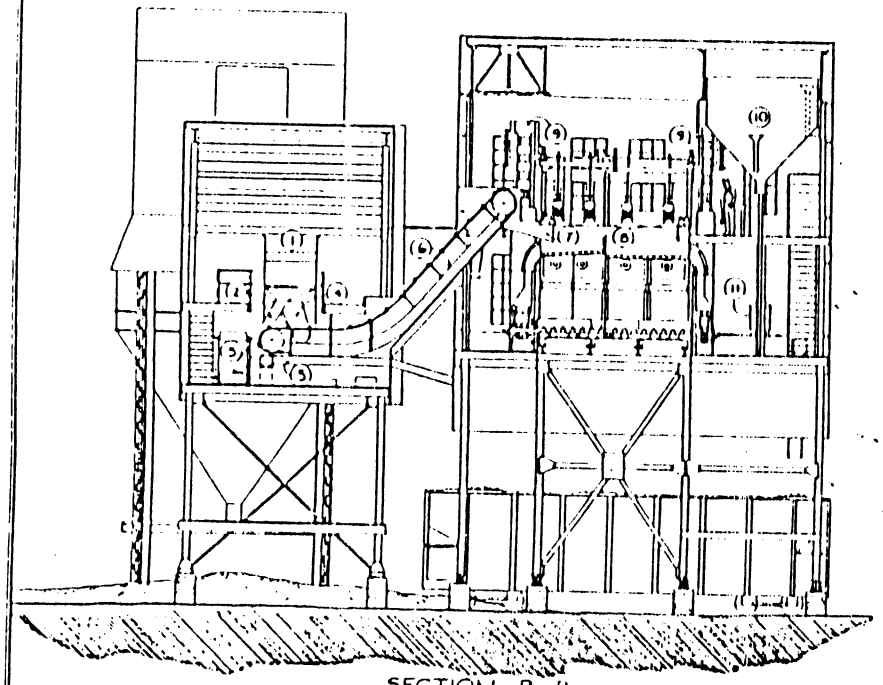
1 BELT COAL CONVEYOR, BY LINK BELT (CHICAGO), INSTALLED CA 1928
2 CHUTE FOR DIVERTING RUN OF MINE COAL (ROM) DIRECTLY INTO RAILROAD CARS
3 CHUTE FROM BELT CONVEYOR (1) TO COAL SCREEN
4 COAL SCREEN, ¾" DIA.
5 CHUTE FROM ¾" AND ½" SCREENS TO STORAGE TANK FLIGHT CONVEYOR (21)
6 SLACK CHUTE TO RAILROAD CARS
7 COAL SCREEN, 3½" x 3½" HALF OVAL
8 COAL SCREEN, ¾" DIA.
9 COAL SCREEN, 3" DIA.
10 CHUTE TO LOADING BOOM (17)
11 CHUTE FROM SCREENS (7) AND (9) TO WASH HOUSE FLIGHT CONVEYOR (13)
12 CHUTE OFF OF ½" SCREEN LEADING TO CHAIN BELT (14)
13 DOUBLE STRAND FLIGHT CONVEYOR TO WASH HOUSE
14 CHAIN BELT FOR FINAL SLACK REMOVAL
15 GATE OFF OF CHAIN BELT (14) TO SLACK CHUTE (19)
16 CHUTE FOR UNDETERMINED PURPOSE
17 LOADING BOOM, TO RAILROAD CAR, FOR COAL GREATER THAN 3½" DIA
18 COAL SCREEN, 6¾" x 8½" HALF OVAL
19 CHUTE (FOR UNDETERMINED PURPOSES) OFF OF 2½" SCREEN
20 SHAKER SCREEN, 1" DIA.
21 DOUBLE STRAND FLIGHT CONVEYOR, SLACK COAL TO STORAGE TANK
22 CHUTE TO RAILROAD CAR FOR UNSCREENED SLACK OFF STORAGE TANK FLIGHT CONVEYOR (21) OR SCREENED SLACK OFF OF VIBRATING SCREEN (23)
23 WIRE MESH VIBRATING SCREEN
24 DUST HOPPER
25 SLACK COAL STORAGE TANK
26 BELT CONVEYOR FROM STORAGE TANK (25) TO BOX CAR LOADER
27 ELECTRIC MOTOR DRIVE ASSEMBLY FOR SHAKER SCREENS
28 SLACK COAL DOUBLE STRAND FLIGHT CONVEYOR FROM JIG WASHER TO STORAGE TANK CONVEYOR
29 BELT CONVEYOR FROM WASH HOUSE TO STORAGE TANK FLIGHT CONVEYOR (21)

PROCESSING PLANT
SECTION A-A
(LOOKING NORTH)

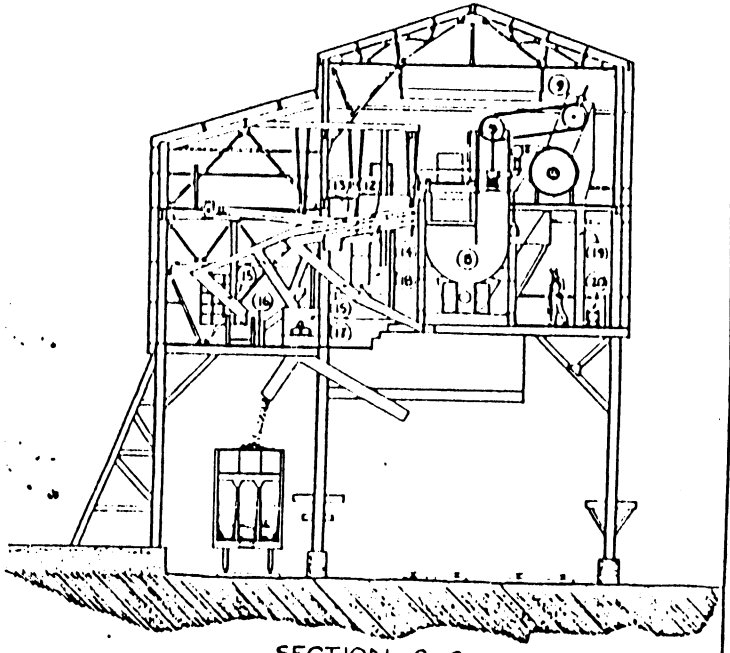
SCALE 3/16" = 1'-0"

0 5 10 20 FEET

0 1 2 3 4 5 6 METERS



SECTION B-B
THROUGH MAIN SCREENING ROOM
AND COAL WASHING ROOM
(LOOKING EAST)



SECTION C-C
THROUGH COAL WASHING ROOM
(LOOKING NORTH)

KEY

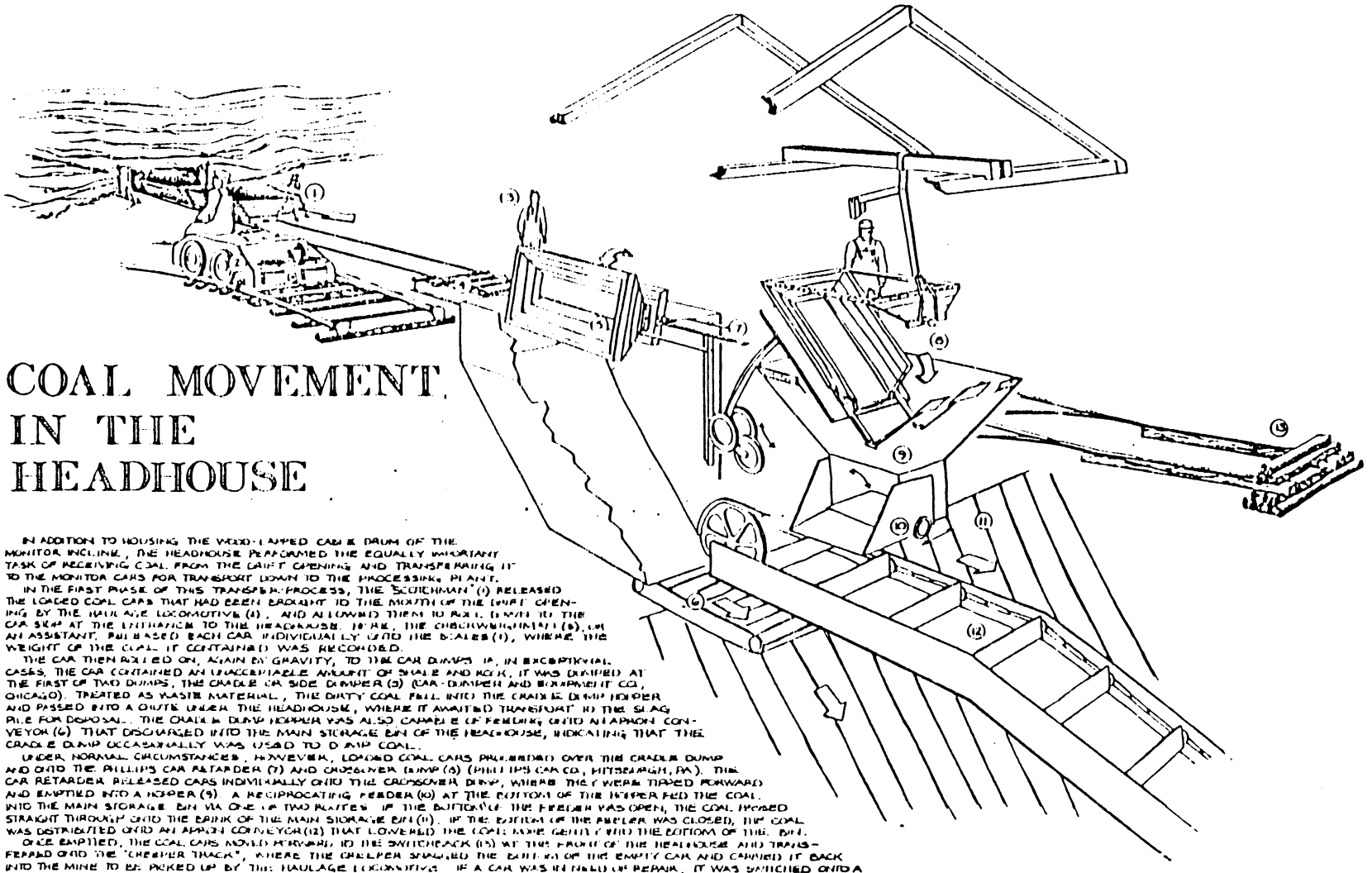
1. MAIN SHAKER SCREEN
2. CHUTE OFF OF 36" SHAKER SCREEN LEADING TO SLACK TANK FLIGHT CONVEYOR (3)
3. DOUBLE STRAND FLIGHT CONVEYOR, SLACK COAL TO STORAGE TANK
4. CHUTE OFF OF 5' SHAKER SCREEN TO WASH HOUSE FLIGHT CONVEYOR (6)
5. LOADING BOOM, TO RAILROAD CAR, FOR COAL GREATER THAN 3½"
6. DOUBLE STRAND FLIGHT CONVEYOR TO WASH HOUSE
7. CHUTE FROM WASH HOUSE FLIGHT CONVEYOR (6) TO JIG WASH (8)
8. SIMON-CARVES BAUM-TYPE JIG WASHER
9. REFUSE DEWATERING CONVEYOR
10. WASHERY RESERVOIR
11. HOIST
12. COAL SCREEN, ¾" DIA
13. COAL SCREEN, 1¾" x 2" HALF OVAL
14. COAL SCREEN, ¾" DIA
15. CHUTE FROM SHAKER SCREENS TO LOWER LEVEL
16. CHAIN CONVEYOR TO RAILROAD CARS
17. COAL CRUSHER
18. DEWATERING SCREEN
19. REFUSE CHUTE
20. CHAIN CONVEYOR TO TRANSPORT REFUSE

SCALE 3/16" = 1'-0"

0 5 10 20 50 FEET

0 1 2 3 4 5 10 METERS

COAL MOVEMENT IN THE HEADHOUSE



IN ADDITION TO HOUSING THE WOOD-LAGGED CABLE DRUM OF THE MONITOR INCLINE, THE HEADHOUSE PERFORMED THE EQUALLY IMPORTANT TASK OF RECEIVING COAL FROM THE DRIFT OPENING AND TRANSFERRING IT TO THE MONITOR CARS FOR TRANSPORT DOWN TO THE PROCESSING PLANT.

IN THE FIRST PHASE OF THIS TRANSFER PROCESS, THE SCOTCHMAN (1) RELEASED THE LOADED COAL CARS THAT HAD BEEN BROUGHT TO THE MOUTH OF THE DRIFT OPENING BY THE HAULAGE LOCOMOTIVE (2), AND ALLOWED THEM TO ROLL DOWN TO THE CAR SKEW AT THE ENTRANCE TO THE HEADHOUSE. THERE, THE CHECKWEIGHTMAN (3), OR AN ASSISTANT, PUSHED EACH CAR, INDIVIDUALLY, ONTO THE SCALES (4), WHERE THE WEIGHT OF THE COAL IT CONTAINED WAS RECORDED.

THE CAR THEN ROLLED ON, AGAIN BY GRAVITY, TO THE CAR DUMPS (5). IN EXCEPTIONAL CASES, THE CAR CONTAINED AN UNACCEPTABLE AMOUNT OF SHALE AND ROCK. IT WAS DUMPED AT THE FIRST OF TWO DUMPS, THE CRADLE OR SIDE DUMPER (5) (CAR-DUMPER AND EQUIPMENT CO., CHICAGO). TREATED AS WASTE MATERIAL, THE DIRTY COAL FELL INTO THE CRADLE DUMP HOPPER AND PASSED INTO A CHUTE UNDER THE HEADHOUSE, WHERE IT AWAITED TRANSPORT TO THE SLAG PILE FOR DISPOSAL. THE CRADLE DUMP HOPPER WAS ALSO CAPABLE OF FEEDING ONTO AN APRON CONVEYOR (6) THAT DISCHARGED INTO THE MAIN STORAGE BIN OF THE HEADHOUSE, INDICATING THAT THE CRADLE DUMP OCCASIONALLY WAS USED TO DUMP COAL.

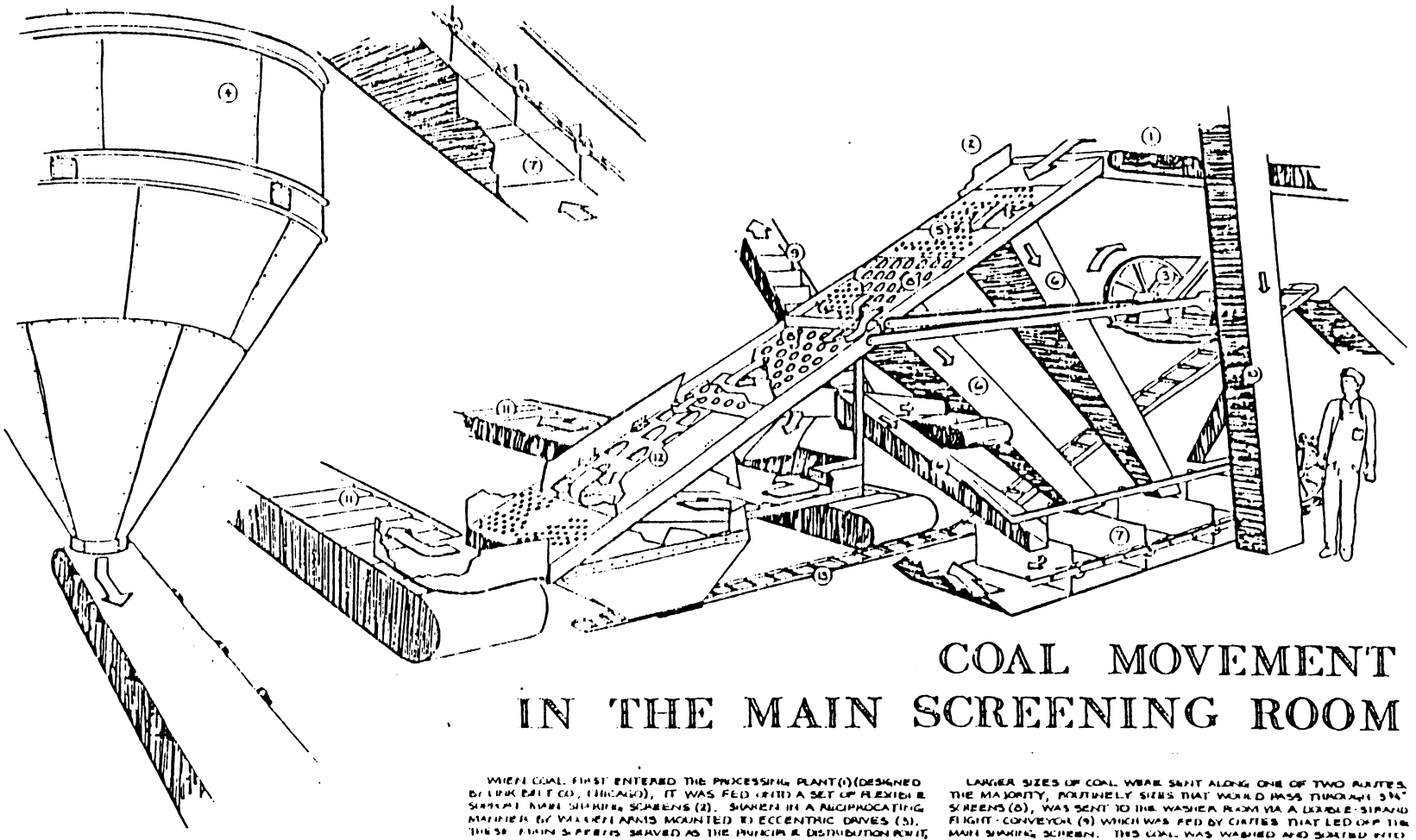
UNDER NORMAL CIRCUMSTANCES, HOWEVER, LOADED COAL CARS PROCEEDED OVER THE CRADLE DUMP AND ONTO THE PHILLIPS CAR RETARDER (7) AND CROSSOVER DUMP (8) (PHILLIPS CAR CO., PITTSBURGH, PA.). THE CAR RETARDER RELEASED CARS INDIVIDUALLY ONTO THE CROSSOVER DUMP, WHERE THEY WERE TIPPED FORWARD AND EMPTIED INTO A HOPPER (9). A RECIPROCATING FEEDER (10) AT THE BOTTOM OF THE HOPPER FED THE COAL INTO THE MAIN STORAGE BIN VIA ONE OF TWO CHUTES. IF THE BOTTOM OF THE FEEDER WAS OPEN, THE COAL POURED STRAIGHT THROUGH ONTO THE BRINK OF THE MAIN STORAGE BIN (11). IF THE BOTTOM OF THE FEEDER WAS CLOSED, THE COAL WAS DISTRIBUTED ONTO AN APRON CONVEYOR (12) THAT LOWERED THE COAL MORE GENTLY INTO THE BOTTOM OF THE BIN.

ONCE EMPTIED, THE COAL CARS MOVED FORWARD TO THE SWITCHBACK (13) AT THE FRONT OF THE HEADHOUSE AND TRANSFERRED ONTO THE "CREEPER TRACK", WHERE THE CREEPER SNAGGED THE BUFFER OF THE EMPTY CAR AND CARRIED IT BACK INTO THE MINE TO BE PICKED UP BY THE HAULAGE LOCOMOTIVE. IF A CAR WAS IN NEED OF REPAIR, IT WAS SWITCHED ONTO A TRACK THAT BYPASSED THE CREEPER TRACK AND LED INTO THE CAR REPAIR SHOP.

IN THE MEANTIME, COAL IN THE MAIN STORAGE BIN WAS BEING FED THROUGH CHUTES INTO THE MONITOR CARS FOR THE TRIP DOWN SLOPE TO THE PROCESSING PLANT AT THE TRACK LEVEL.

NOTE: NO SCALE.

EDWARD SARIAN 1984



COAL MOVEMENT IN THE MAIN SCREENING ROOM

NOTE: NO SCALE.

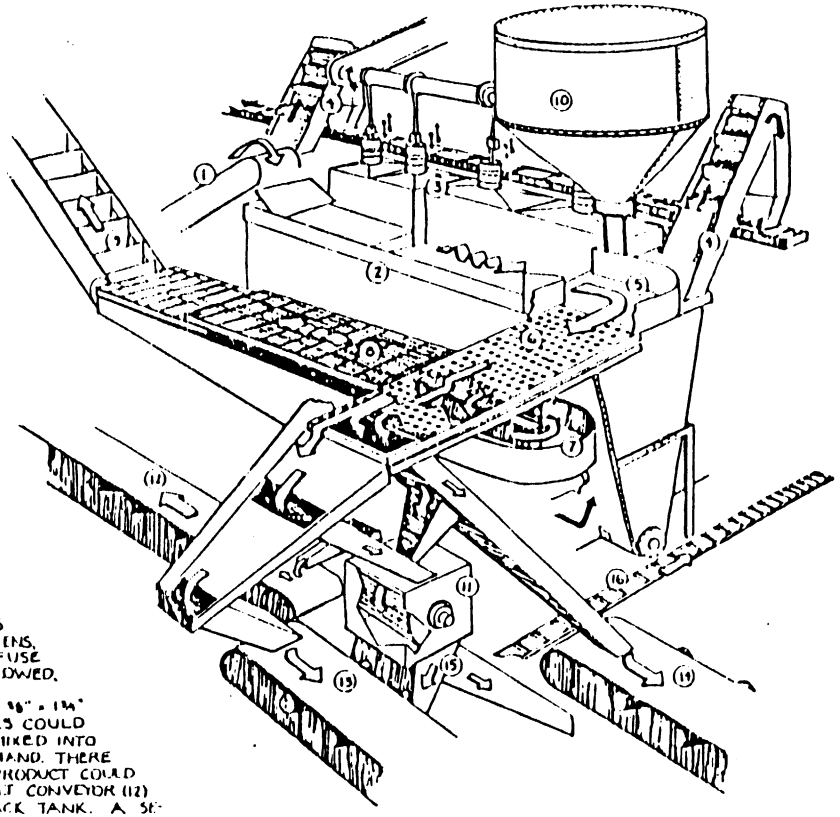
WHEN COAL FIRST ENTERED THE PROCESSING PLANT(1)(DESIGNED BY LINK BELT CO., CHICAGO), IT WAS FED ONTO A SET OF FLEXIBLE SUSPENDED MAIN SHAKING SCREENS (2). SHAKEN IN A RECIPROCATING MANNER BY WALKER ARMS MOUNTED TO ECCENTRIC DRIVES (3), THESE MAIN SCREENS SERVED AS THE PRINCIPLE DISTRIBUTION POINT, SORTING COAL INTO APPROPRIATE SIZES TO BE TRANSMITTED TO VARIOUS AREAS OF THE PROCESSING PLANT FOR BLENDING, WASHING, OR LOADING.

THE FIRST OF THESE AREAS WAS THE SLACK STORAGE TANK(4). AS COAL TRAVELED DOWN THE MAIN SHAKING SCREENS, IT PASSED OVER A SERIES OF 3/4" AND 3/8" SCREENS (5). ANY COAL THAT PASSED THROUGH THESE SMALL SCREENS (TERMED SLACK COAL) WAS FED, THROUGH A NUMBER OF CHUTES (6), ONTO A DOUBLE-STRAND FLIGHT CONVEYOR (7) THAT LED UP TO THE LARGE TANK. FROM THERE, IT COULD BE LOADED INTO RAILROAD CARS - EITHER HOPPER CARS, OR BOX CARS VIA A MANIERRE BOX CAR LOADER.

LARGER SIZES OF COAL WERE SENT ALONG ONE OF TWO ROUTES. THE MAJORITY, ROUTINELY SIZES THAT WOULD PASS THROUGH 3 1/4" SCREENS (8), WAS SENT TO THE WASHER ROOM VIA A DOUBLE-STRAND FLIGHT-CONVEYOR (9) WHICH WAS FED BY CHUTES THAT LED OFF THE MAIN SHAKING SCREEN. THIS COAL WAS WASHED AND SORTED INTO VARIOUS SIZES FOR SHIPMENT. THE SMALLEST WASHED COAL WAS RETURNED TO THE MAIN SCREENING ROOM, WHERE IT WAS CARRIED OVER THE SHAKING SCREENS AND TRANSFERRED EITHER ONTO THE SLACK CONVEYOR OR THROUGH A CHUTE (10) INTO A RAILROAD HOPPER CAR.

THE LARGEST SIZES OF COAL, THOSE THAT DID NOT FALL THROUGH THE 3 1/4" SCREENS, PASSED DIRECTLY ONTO ONE OF TWO APRON CONVEYOR LOADING BOOMS (11). SCREENS AT THE BOTTOM END OF THE MAIN SHAKING SCREEN COULD BE DISCOURAGED (12) TO SORT LARGE COAL INTO LUMP AND OTHER SIZES. AN AUXILIARY CHUTE LOCATED UNDER THESE LARGE SCREENS COLLECTED ANY SMALLER AND TRANSPORTED IT, VIA A CHAIN CONVEYOR (13), TO THE LOADING CHUTES.

COAL MOVEMENT IN THE WASH HOUSE

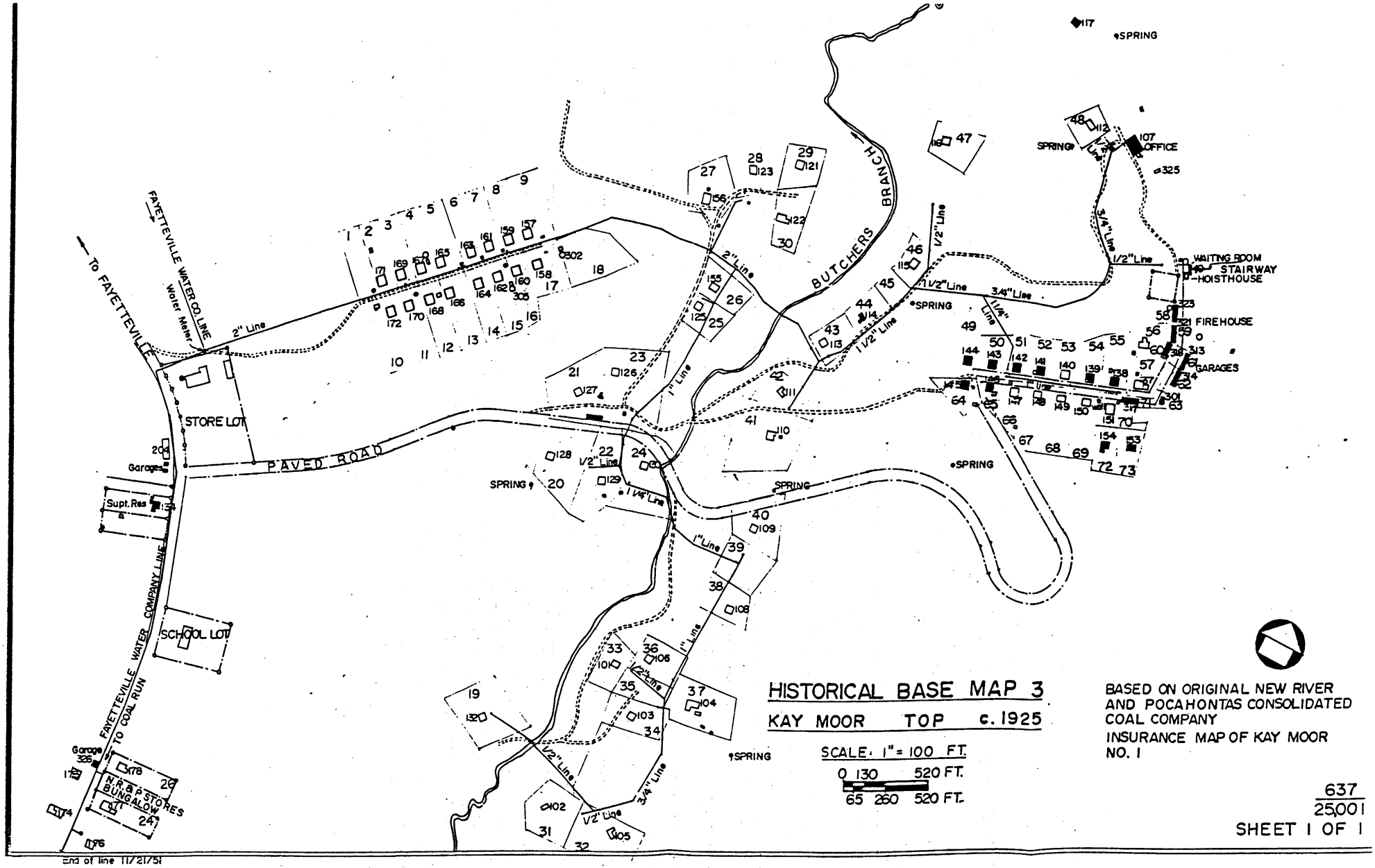


ON A ROUTINE DAY, THE SIZE OF THE COAL LEAVING THE SCREENS IN THE MAIN SHAKER SCREENING ROOM AND ENTERING THE COAL WASHING ROOM WOULD RANGE BETWEEN ⅜" AND 5½". THIS COAL WOULD PASS FROM A DOUBLE STRAND FLIGHT CONVEYOR (1) INTO THE WASH BOX OF KAYMOOR'S SIMON-CARVES BAUM JIG WASHER (2). AS IT PASSES HORIZONTALLY ACROSS THE WASH BOX, WATER PULSATIONS PRODUCED IN THE AGITATOR BY FOUR AIR PISTON JIGS (3), KEPT THE COAL SUSPENDED IN WATER WHILE HEAVIER PARTICLES OF REFUSE DROPPED TO THE BOTTOM OF THE WASHER TO BE REMOVED BY TWO DEWATERING ELEVATORS (4).

WHEN THE COAL REACHED THE FAR END OF THE WASH BOX, IT PASSED ONTO CURVED SLUICES (5) THAT CARRIED IT TO A SERIES OF SIZING SCREENS (6). EN ROUTE TO THE SIZING SCREENS, EXCESS WATER MIXED WITH FINE COAL FLOWED ONTO A LOWER SLUICE (7) THAT FED ONTO TWO DEWATERING SCREENS (8). THESE TWO SHAKER SCREENS, DRIVEN BY WOODEN CONNECTING RODS ON AN ECCENTRIC SHAFT, CONVEYED FINES AND SLACK COAL ONTO A FLIGHT CONVEYOR (9) LEADING BACK INTO THE MAIN SCREENING ROOM AND DIRECTLY INTO RAILROAD CARS OR THE SLACK STORAGE TANK. THE WATER PASSED THROUGH THE SCREENS, INTO A SUMP, AND WAS RECYCLED, ALONG WITH WATER FROM THE REFUSE DEWATERING ELEVATORS, INTO A LARGE CONICAL TANK (10), WHERE IT FLOWED, BY GRAVITY, BACK TO THE WASH BOX.

THE SIZING SCREENS SORTED THE WASHED COAL INTO ¾" x ⅜" PEA, ⅜" x 1¾" NUT, 1¾" x 5" STOVE, AND 5" x 5¾" EGG COAL. THESE VARIOUS SIZES COULD EITHER BE RUN THROUGH A CRUSHER (11), LOADED SEPERATELY, OR MIXED INTO A WIDE VARIETY OF COMBINATIONS, DEPENDING UPON CUSTOMER DEMAND. THERE WERE A SERIES OF CHUTES AND BELTS BY WHICH THE FINISHED PRODUCT COULD BE SENT TO STORAGE OR LOADED ONTO RAILROAD CARS. ONE BELT CONVEYOR (12) CARRIED COAL BACK TO THE MAIN SCREENING ROOM AND INTO THE SLACK TANK. A SECOND BELT CONVEYOR (13) LOADED COAL INTO RAILROAD CARS ON TRACK 1, WHILE A THIRD (14) LOADED RAILROAD CARS ON TRACK 2. TWO CHUTES COMING OUT OF THE CRUSHER (15) COULD LOAD COAL ONTO TRACKS ONE OR TWO. A CHAIN CONVEYOR (16) CARRIED COAL OVER TO TRACK 4 WHERE IT COULD BE MIXED WITH LARGER SIZES OF COAL COMING DIRECTLY OFF THE SCREENS IN THE MAIN SHAKER ROOM.

NOTE - NO SCALE.



HISTORICAL BASE MAP 3

KAY MOOR TOP c. 1925

SCALE: 1" = 100 FT.

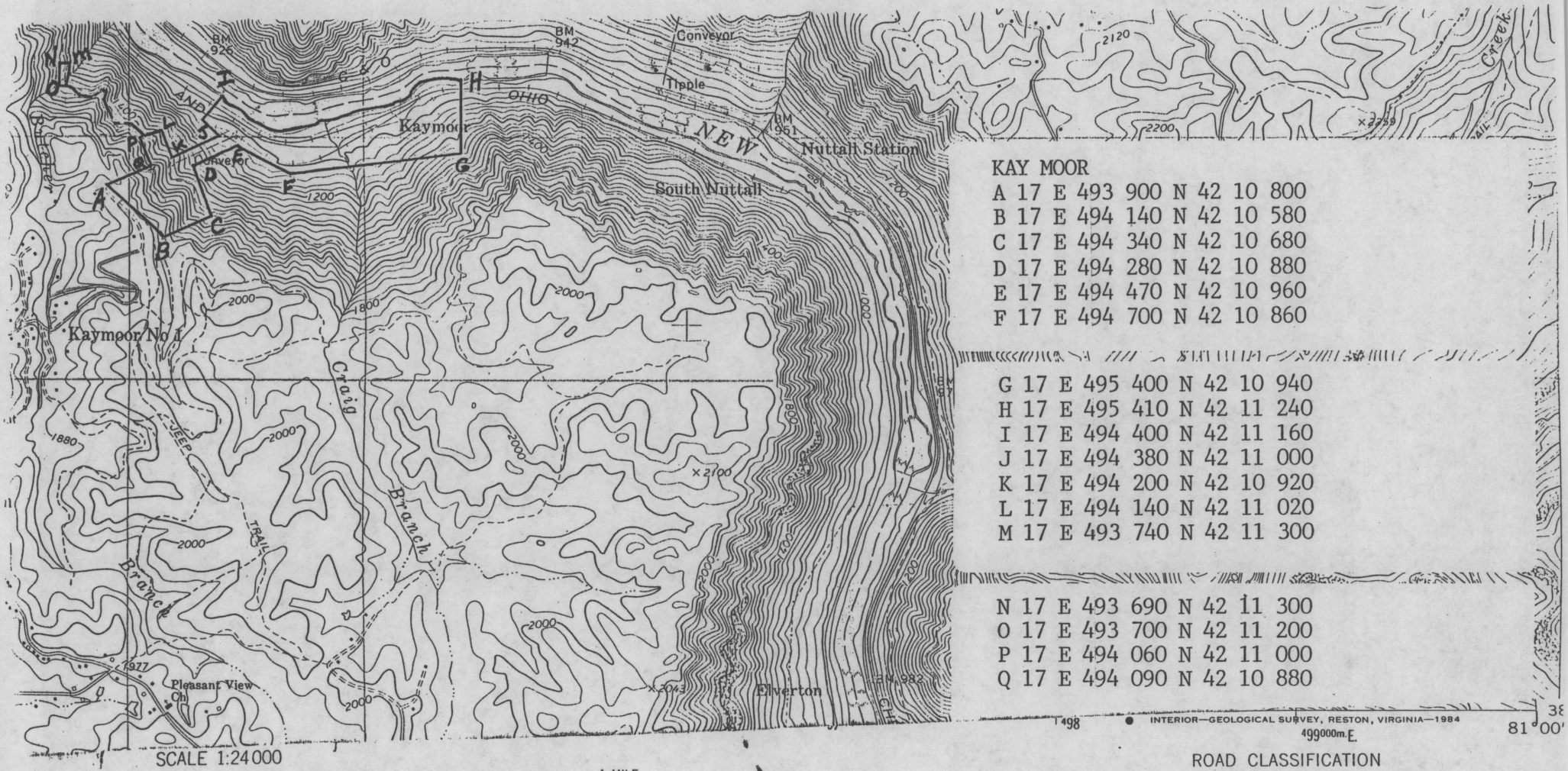
0 130 520 FT.

65 260 520 FT.

BASED ON ORIGINAL NEW RIVER AND POCAHONTAS CONSOLIDATED COAL COMPANY INSURANCE MAP OF KAY MOOR NO. 1

637
25,001

SHEET 1 OF 1



KAY MOOR

A	17	E	493	900	N	42	10	800
B	17	E	494	140	N	42	10	580
C	17	E	494	340	N	42	10	680
D	17	E	494	280	N	42	10	880
E	17	E	494	470	N	42	10	960
F	17	E	494	700	N	42	10	860
G	17	E	495	400	N	42	10	940
H	17	E	495	410	N	42	11	240
I	17	E	494	400	N	42	11	160
J	17	E	494	380	N	42	11	000
K	17	E	494	200	N	42	10	920
L	17	E	494	140	N	42	11	020
M	17	E	493	740	N	42	11	300
N	17	E	493	690	N	42	11	300
O	17	E	493	700	N	42	11	200
P	17	E	494	060	N	42	11	000
Q	17	E	494	090	N	42	10	880

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SCALE 1:24000

1/2 0 1 MILE

1000 2000 3000 4000 5000 6000 7000 FEET

.5 0 1 KILOMETER

CONTOUR INTERVAL 40 FEET

NATIONAL GEODETIC VERTICAL DATUM OF 1929

ROAD CLASSIFICATION

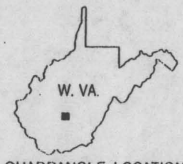
Primary highway, hard surface

Secondary highway, hard surface

Light-duty road, hard or improved surface

Unimproved road

Interstate Route U. S. Route State Route



QUADRANGLE LOCATION

MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS
SALE BY U. S. GEOLOGICAL SURVEY, RESTON, VIRGINIA 22092
ESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

FAYETTEVILLE, W. VA.

SE/4 FAYETTEVILLE 15' QUADRANGLE
N3800—W8100/7.5

1969
PHOTOREVISED 1976
AMS 4760 II SE—SERIES V854