United States Department of the Interior National Park Service

NATIONAL REGISTER OF HISTORIC PLACES REGISTRATION FORM

1. Name of Property

historic name: McMENEM LOCKMASTER HOUSES ON THE OHIO RIVER
other name/site number: OHIO RIVER LOCK & DAM # 13

2. Location

street & number: 623-625 Grant Street

not for publication: N/A

city/town: McMachen

state: WV county: Marshall code: 051 zip code: 26040

3. Classification

Ownership of Property: PUBLIC-LOCAL

Category of Property: BUILDING

Number of Resources within Property:

<table>
<thead>
<tr>
<th>Contributing</th>
<th>Noncontributing</th>
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<tbody>
<tr>
<td>3</td>
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<td>buildings</td>
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Number of contributing resources previously listed in the National Register: 0

Name of related property listing: N/A
As the designated authority under the National Historic Preservation Act of 1986, as amended, I hereby certify that this nomination 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 the National Register Criteria. __ See continuation sheet.

[Signature]

State or Federal agency and bureau

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

[Signature]

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] Date of Action
6. Function or Use

Historic: Transportation
    Domestic

Sub: Water-related
    Single Dwelling

Current: Domestic

Sub: Single Dwelling

7. Description

Architectural Classification:
LATE 19TH AND 20TH CENTURY REVIVALS
Tudor Revival

Other Description:

Materials: foundation CONCRETE
    walls BRICK/STUCCO
    roof CERAMIC TILE
    other WOOD

Describe present and historic physical appearance. X See continuation sheet.

8. Statement of Significance

Certifying official has considered the significance of this property in relation to other properties:

Applicable National Register Criteria: A

Criteria Considerations (Exceptions): N/A

Areas of Significance: TRANSPORTATION
    MARITIME HISTORY

Period(s) of Significance: 1905-1939

Significant Dates: 1910

Significant Person(s): N/A

Cultural Affiliation: N/A

Architect/Builder: UNKNOWN

State significance of property, and justify criteria, considerations, and areas and periods of significance noted above. X See continuation sheet.
9. Major Bibliographical References

See continuation sheet. X

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 # 
recorded by Historic American Engineering Record # 

Primary Location of Additional Data:

State historic preservation office
Other state agency
Federal agency
Local government
University
Other -- Specify Repository: 

10. Geographical Data

Acreage of Property: 0.987 Acres

UTM References: Zone Easting Northing Zone Easting Northing

17 52675 4426382

Verbal Boundary Description: X See continuation sheet.

Beginning at the point of intersection of the boundary line between the Ohio River Railway (now CSX) property and the property line to the north thence South 1° 31' East 250.06 feet; thence North 87° 0' East 174.9 feet; thence North 2° 52' West 250 feet; thence South 87° West

Boundary Justification: See continuation sheet.

The property within these boundaries is historically associated with the site, known as U.S. Engineers Corps Ohio River Lock and Dam #13.

11. Form Prepared By

Name/Title: Katherine M. Jourdan

Organization: WV SHPO-NRO Date: 3 August 1992

Street & Number: 1528 Market Street Telephone: (304) 238-1300

City or Town: Wheeling State: WV ZIP: 26003
The two lockmaster houses in McMechen are the remaining examples at Lock and Dam #13 of the early twentieth century efforts at canalization of the Ohio River. The minimum building plans for each site of the 1929 Lock & Dam System on the Ohio River included a single 110 x 600' lock, a wicket dam, powerhouse to open the lock doors, and at least two residences. Constructed by the Corps of Engineers in 1910, the Tudor Revival homes housed the lockmaster's family, as well as that of the engineer. This same house plan was repeated at six other known sites along the Ohio River.

The homes are located on the west side of the street, numbers 623-625 Grant, below the street level. They are reached by a flight of concrete steps that parallel a concrete and timber retaining wall running against the sidewalk. The homes rest side by side on the top of a terraced yard. A sidewalk parallels the wall and runs between the homes and across the front of the facades. Steps lead from the center walk to the lower terrace with the walk continuing straight towards the Ohio River until it reaches the access road that runs along the bank. The walk has three trees lining its length on the lower terrace and there are three maple trees on the west side of 625 Grant at the top of the terrace. A contributing garage is located directly off Grant Street south of the 625 house. The lower terrace is presently being used as a small city park and there is a wooden noncontributing picnic shelter in the center of the lawn. In the southwest corner of the property is a basketball court with a concrete slab and a metal chain fence on two sides.

The following is a description of 625 Grant Street. Since the two homes are mirror images the same description applies in reverse order to 623 Grant Street. The homes are Tudor Revival in style being two and a half stories in height, with a lower level, and having four front bays. The first floor is red brick with an aggregate stucco on the second floor having vertical wood half-timbering which is angled in the gable ends.

The front or west facade has an open porch to the right side with brick piers and railing. A window faces west off the porch and the entrance faces south with the original wood door having 9 small square lights in the upper section and three rectangular panels below. The screen door is also original. Also on the first floor are paired narrow windows, with two single windows to the far left. All the window openings on the house are 9/1 double-hung with the first floor having concrete lintels and sills. The second floor has two gable ends over the left side of house with paired windows on the second floor and decorative timbering in the gable ends. To the right end of the house the gable roof is visible. The red clay tile roof has a square pattern with finials at the peaks. The lower level has two front openings with 6 light windows.

The south facade has the front porch to the left with the door facing south. A single window is to the right. On the second floor is vertical half timbering with three openings. The center window is large with a
smaller flanking window to each side having 4/1 lights. The gable end has
the roof sloping to the first floor line on the left. In the gable peak
is angled half-timbering with a 6 light opening. The basement has one 6
light window.

The east or rear facade has a center shed porch on the first floor with
square balusters on the wood railing, and narrow vertical wood siding
under the side eaves. The door off the porch has a large light opening
and smaller windows to each side. A large single window is to the far
left. The second floor has a single short but wide 8/1 double-hung
opening and to the far right paired double-hung windows with 4/1 lights.
There is a large window under the gable end with vertical half-timbering
and a narrow eave. To the right side of the porch are winding concrete
steps leading to the basement door which is under the porch. The lower
level has a 6 light window at each end of the house.

The north facade of the home has a window at each end of the first floor
and a center exposed chimney with corbelled recessed panels decorating the
side. The second floor also has a window to each side of the chimney.
There is a small narrow window in the gable end, and there is one 6 light
basement window to the far left.

The interiors of the homes have hardwood floors with the fireplaces often
being in a diagonal corner. These openings have narrow rectangular
ceramic tile in a variety of colors. The staircase is open with spindled
railings. The front door opens into the large entry hall and staircase.
The living area is directly opposite the front door with the kitchen in
the rear, and another room to the rear of the entry. The stairs lead
upstairs to the landing with the bath immediately to the side. There are
four bedrooms of various sizes opening off the hall.

The contributing garage is one story with a lower level and is sited
directly off the sidewalk of Grant Street. The garage has vertical board
and batten siding with a rolled asphalt shed roof. The building has two
bays for cars with narrow vertical siding on the double swinging doors.
The only exposed window has 12 lights and is on the north side of the
building. The other windows are boarded over but there are openings on
the south side, and two on each level of the west facade.

The two lockmaster homes and garage are in original condition with the
building fabric intact. They are the only surviving components of the
complex at Lock & Dam #13. They are well sited on a terrace above the
flood plain near the river bank. The buildings interpret the early period
of canalization of the Ohio River.
The Lockmaster Houses in McMechen are contributing under National Register Criterion A for their association with the 1929 Lock and Dam System on the Ohio River. The canalization of the Ohio River took place from 1877 to 1929 when the U.S. Army Corps of Engineers undertook the massive project of erecting 54 locks and dams along the river to provide a minimum depth of 9 feet for navigation. The lockmaster houses in McMechen were part of Lock and Dam Site #13 erected between 1905 and 1911.

The first Inland Waterways Improvement Act in 1824, created the Army Corps of Engineers which were empowered by President Monroe to experiment with ways to cope with sandbars on the Ohio River. Until 1877, the use of cutoff dams on back channels provided the principal means of improving the navigable depth. Most of these dams were built between Pittsburgh and Cincinnati from 1826 to 1845. Without the use of dams the Ohio River had high periods after heavy rains or ice thaws when navigation was possible, or it was so low that one was capable of walking across the river bed while navigation was brought to a standstill.

Although it had been suggested as early as 1835, by Lt. George Dutton, that only the construction of locks and dams would adequately improve the river for year round use, the idea was never carried out. In 1870, the idea was revived and four years later it was recommended that 13 locks and dams be construction between Pittsburgh and Wheeling to provide a 6 foot depth for navigation. Congress appropriated $100,000 through the River and Harbor Act of 1875 toward building a movable dam (or a dam with adjustable gates) at Davis Island, located 4.7 miles south of Pittsburgh, to test the best method of improving the Ohio River and its tributaries. The construction of Dam #1 took place between 1877-1885, with the purpose of providing a pool for coalboats to assemble. Then during high water the boats could pass through the lowered gate without having to lock through each dam.

The adjustable gates were called a wicket and were invented by Chief Jacques Chanoine of the French Corps of Engineers in 1852. The Chanoine wickets are timbers bolted together at a certain spacing and mounted with a metal brace against a masonry foundation. In high water they are lowered with a maneuverboat to lie flat against the foundation and at low water are raised to form a dam. The locks at each dam were 110 x 600 feet, which became a standard dimension to fit coal boats.

A series of River and Harbor Acts from 1881 to 1906 provided recommendations and appropriations by Congress to survey and construct a number of locks and dams to insure a depth of 6 and 9 feet. In December of 1906, it was recommended that a 9 foot depth be obtained through a series of 54 locks and dams along the 981 mile length of the Ohio River. In 1910, money was appropriated for the purchase of sites for 18 additional locks and dams. The entire project took 19 years to complete instead of the projected 12 years. By 1929, the project was complete with a total of 51 wicket dams, each with a 110 x 600' lockchamber, and a navigable pass during periods of high water. There were three dam
structures which were eliminated through modification of other sites. The property for Lock and Dam #13 at McMechen, West Virginia, was acquired by the U.S. Government in April 1905 from landowner Frederick Schaffer. Construction was completed on the site in 1911, a year after the two residences and garage were erected. The powerhouse was located along the east bank of the river in front of the residences and connected to the one 110 x 600' lock and dam which was placed in operation in August 1911 at a cost of $1,222,389. Mr. George Patrick was the first lockmaster at Dam #13. He had worked for the No. 7 Dam at St. Albans, WV, as well as Lock #2 in Rochester, PA, before coming to McMechen. An expert in concrete work, Patrick was involved in construction of the lock and dam before being asked to become the lockmaster. The Patrick's occupied the Down River House (625) until he was transferred to Lock #5 on the Kanawaha River in 1923. The Up River House (623) was occupied by the engineer, Mr. Fred O'Malley who kept the power locks running.

The two residences are Tudor Revival in style, with red brick on the first floor, and an aggregate stucco on the second floor with half-timbering. The same house plans are known to have been used at Lock and Dam sites 8, 11, 12, 14, 20 and 28, and possibly 18 and 19. These plans were either drawn by the Corps of Engineers or were contracted out to other firms. The 1909 building plans of Lock and Dam #8 show elevations of the house. In separate drawings of the powerhouse there is a note that the drawings were done by W.G. Wilkins Company, and then traced and approved by the Corps.

The period of significance for the lockmaster houses in McMechen is being recognized from 1905 when the property was acquired, to 1939, ten years after the canalization of the Ohio River was completed. The lock and dam was used up until 1975 when the Hannibal Dam replaced locks 12, 13, and 14. The powerhouse, lock and dam from No. 13 were removed in 1977, and the homes were deeded to the City of McMechen.

The change to the present modern locks and dams began in 1953 and was completed in 1979. The modernization of the Ohio River dams took place because of increased navigation traffic; longer 1,000 foot tows due to economy measures, which had to be broken up with the old 600' locks; and deterioration of the structures calling for increasing maintenance costs. Today's nineteen locks and dams on the Ohio River are equipped with two locks, one measuring 110 x 600', and one 110 x 1200'. This insures at least one lock is in operation while the other can undergo maintenance, and provides for large or small crafts or tows. The dams are nonnavigable with movable radial steel gates in an arc operating on a hinge.

The lockmaster houses in McMechen represent the early history of the lock and dam system on the Ohio River and the first complete canalization of the river for navigation. Buildings from this 1929 project are a rarity now. All the wicket dams and locks have been removed and consolidated with the modern lock and dam system of the 1960's-70's. Many of the
powerhouses have also been razed although a few sites have found new uses or are privately owned. In many cases it is only the residences that remain to mark the history of the dam sites. The two residences and garage in McMehen are unaltered and reflect the building standards set up for some of the sites between Lock and Dam #8 - 28, owned by the U.S. Army Corps of Engineers.


Interview with George S. Patrick, son of first lockmaster George Patrick, by Rosemary Conti, June 1992.

Drawings, inventory and plat maps, U.S. Army Corps of Engineers, 1904-1932, located at Pittsburgh, and Huntington District Offices.

VERBAL BOUNDARY DESCRIPTION

169.06 feet to the place of beginning, containing 0.987 acres.
LOCATION: McMechen Lockmaster Houses on the Ohio River 623-625 Grant Street, McMechen Marshall County, West Virginia

PHOTO CREDIT: Katherine M. Jourdan

DATE: 7 August 1992

NEGATIVES: On file WV SHPO, The Cultural Center, Capitol Complex Charleston, WV 25305-0300

PHOTO 1 OF 9: 625 Grant - West (L) and South (R) Elevations Camera looking Northeast

PHOTO 2 OF 9: 625 Grant - West Elevation Camera looking East

PHOTO 3 OF 9: 625 (L) and 623 (R) Grant - South (L) and East (R) Elevations. Camera looking Northwest

PHOTO 4 OF 9: 625 Grant - East (L) and North (R) Elevations Camera looking South

PHOTO 5 OF 9: 623 Grant - West Elevation Camera looking East

PHOTO 6 OF 9: 623 Grant - South (L) and East (R) Elevations Camera looking North

PHOTO 7 OF 9: 623 Grant - East (L) and North (R) Elevations Camera looking Southwest

PHOTO 8 OF 9: Garage, Grant Street - South (L) and East (R) Elevations Camera looking Northwest

PHOTO 9 OF 9: Site View from Ohio River - Picnic Shelter, Basketball Court, Houses by trees. Camera looking East
McMecen, West Virginia

Sketch Map of Site Plan
Map from County Assessors Office
MCMECHEN LOCKMASTER HOUSES ON THE OHIO RIVER

PHOTO MAP

Enlarged from County Assessors Map