Sumner Field Homes,
Building D-11 (Boiler Plant)
659-661 North Dupont Avenue
Minneapolis
Hennepin County
Minnesota

HABS No. MN-160-F

HABS
MINN
27-MINAP,
34F-

PHOTOGRAPHS

WRITTEN HISTORICAL AND DESCRIPTIVE DATA

Historic American Buildings Survey
United States Department of the Interior
National Park Service
Great Lakes Systems Office
1709 Jackson Street
Omaha, Nebraska 68102-2571

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HISTORIC AMERICAN BUILDINGS SURVEY

SUMNER FIELD HOMES,
BUILDING D-11

HABS No. MN-160-F

Location: 659-661 North Dupont Avenue
Minneapolis
Hennepin County, Minnesota

Quad: Minneapolis South, Minnesota

UTM: 15:477050.4981200

Present Owner: Minneapolis Public Housing Authority

Present Use: Vacant

Significance: Sumner Field Homes was Minnesota's first low-income public housing project, and the only one in the state that was built during the Great Depression. The project was an integral part of the Public Works Administration's demonstration public housing program which influenced American public housing practices for at least the next 30 years. Sumner Field Homes embodied the major characteristics of PWA Housing Division design, such as garden apartment massing, low site coverage, and the use of PWA-approved standardized unit plans.

Historians: Christine A. Curran, Jeffrey A. Hess, and Charlene K. Roise, Hess, Roise and Company, Minneapolis, Minnesota; September 1997

PART 1. HISTORICAL INFORMATION

A. Physical History:

1. **Date of erection:** 1936-1937

2. **Architects:** Edwin H. Hewitt, Robert T. Jones, Gottlieb R. Magney, and Wilbur F. Tusler

3. **Original and subsequent owners:** Housing Division of the Public Works Administration; United States Housing Authority; Minneapolis Housing and Redevelopment Authority; Minneapolis Public Housing Authority

4. **Builders, contractors, suppliers:** Foundation contractor – Johnson, Drake and Piper, Minneapolis; superstructure contractor – Butler Construction Company, St. Paul; structural engineer – Ralph Hamlin; mechanical engineer – William

Kyle Robertson; landscape architect - Hugh Vincent Feehan

5. **Original plans and construction:** Building D-11 served as the district heating plant for the Sumner Field Homes. Variegated-brick veneer sheathed the concrete and steel frame of the structure, which consisted of two flat-roofed sections: a service building and the attached boiler room. The main entrance to the plant was through the two-story service building, which fronted on North Dupont Avenue to the east. Extending from the west end of this section was the boiler room, the floor of which was below grade level. Three very large boilers filled the south side of the room, each oriented north-south, with control panels at the north end. Above the boilers, the ceiling was 29' high. To the north, the space opened up to a height of almost 60' to accommodate three vertical coal bunkers. The almost 30' difference in height between the two sections of the boiler-room roof was a distinguishing feature of the building's exterior profile. Another defining element was the 150' radial-brick smokestack, which was attached to the west exterior wall.

6. **Alterations and additions:** In 1958, a one-story, flat-roofed, brick-veneer office block was attached to the south side of the heating plant. In conjunction with this addition, two windows were cut into the east end of the service building. In addition, the central garage door on the east end of the service building has been replaced. Other alterations include an overhead garage door cut into the west end of the second-floor workshop in the service section. A driveway ramp addition extends from the door to ground level. On the west end of the coal bunker section of the boiler room, an ash chute has been filled and patched with brick. Various original window and secondary door openings throughout the building have been filled or covered.

B. Historical Context:

In the early 1980s, the original steam piping system was demolished and replaced by a hot-water heating piping system. A new steam-to-water heating convertor was installed, as well as circulating pumps and other new equipment. For additional site context, see HABS No. MN-160: Sumner Field Homes, Part I.B.

PART II. ARCHITECTURAL INFORMATION

A. General Statement:

1. **Architectural character:** The overall design of the Sumner Field Project was utilitarian and lacked architectural pretension. While the residential buildings

displayed at least a modicum of detailing, however, Building D-11 was completely unornamented. Formed around its function as the project's district steam plant, the building expressed the facility's industrial purpose in the straight-forward manner advocated by modernist architects of the 1930s.

2. **Condition of fabric:** Fair

B. **Description of Exterior:**

1. **Overall dimensions:** The original footprint of the building measures 124'-8" x 56'-0". The south-side addition is approximately 115' x 40'. The smokestack has a diameter of 15'-4" and a height of 150'.

2. **Foundations:** Poured concrete; tops of walls exposed at varying heights dependent on grade

3. **Walls:** Brick and structural clay tile, with a common-bond, variegated red-brick veneer

4. **Structural system, framing:** Concrete post and beam with steel components, and brick and structural-tile infill

5. **Porches, stoops, balconies, bulkheads:** The primary (east) entrances to Building D-11 are approached directly from the sidewalk along North Bryant Avenue.

6. **Chimneys:** There is a metal ventilator stack on the roof at the west end of the coal bunker section of the boiler room; a 150-foot, brick smokestack rises at the west end of the plant.

7. **Openings:**

a. Doorways and doors: Building D-11 originally had three entrances: a central, sliding garage door at the east end of the service building, a wood-panel door with four-light, fixed-sash glazing on the north side of the service building, and a similar door on the west end of the coal bunker section of the boiler room. The garage door opening is extant, but the original steel-panel sliding door with ribbed, wire-glass lights has been replaced with a contemporary garage door. The doorway on the north side is covered with a board, and the doorway on the west end is still in use, but has been replaced by a metal door. Additional doors include a garage door at the second-story level

of the service building on the west side, a garage door at the west end of the office addition, and two doors at the east end of the office addition, which provide the primary entrances to the plant.

b. Windows and shutters: The original sections of the heating plant exhibit several models of steel-sash windows. A ribbon of six-light, hopper-vent windows run the width of the service building at the second story on the north side and east end, and the first and second stories on the south side. Only one window remains of the first-story ribbon; it is now an interior partition between the old portion of the service building and the later addition. One-over-one, single-hung steel windows are screened at the first-story level on the north side of the service building. On the coal bunker section of the boiler room, very large windows relieve the north side at ground level. Each of the windows has four, vertically continuous awning vents set in a multi-light steel sash. These windows are currently boarded or screened. Fenestration is irregular on the west end of the plant, as four six-light, pivot-style windows illuminate the unique spaces of the coal bunker section. On the south side of the boiler room, window openings were originally filled with vertical pairs of multi-light windows with pivot-vent steel sash. At some point, the openings were refitted for use as louvered vents. Most are now covered with boards. Windows on the office addition are aluminum combination.

8. **Roof:**

a. Shape, covering: The roof is flat with built-up sheathing materials including asphalt, asbestos felt, and gravel. The roof of the coal bunker section of the boiler room is pierced by a metal ventilation stack at the west end.

b. Cornice, eaves: Stone coping tops parapet walls that rise eight inches above the roof on the original sections of the plant. The later office addition displays a wide metal fascia at the roof-wall junction.

c. Dormers, cupolas, towers: None

C. **Description of Interior:**

1. **Floor plans:** The service building was historically entered from a first-floor door on the north side, which opened into a small waiting room. The waiting room was one of several small rooms located along the north side of the service building; others included a superintendent's office, records storage, a clerk's office, and an engineer's office. A corridor ran along the west end of the

service building, connecting the offices to a toilet and locker room area in the southwest corner. The remainder of the first floor was open storage space. The second floor, accessed by concrete stairs originating in the waiting room, also contained a large, open space. A small room in the northwest corner held a water heater; the remainder of the space was used as a workshop. At the basement level, a pump room extended underneath much of the west side of the service building. The rest of the building surmounted crawl space.

The boiler room is reached from a ground-level door on its west end as well as from a door off the first-floor corridor in the service building. Stairs from the service building descend to the below-grade floor of the boiler room, which runs on an east-west axis. The first floor is open, with the ceiling along the south side at a height of 29', and the ceiling along the north side at a height of 58'-10". A narrow staircase in the northwest corner provides access to the second and third levels of the north side of the boiler room. The second-story level is a long narrow space filled with three giant coal bunkers lined up along the north side of the building. Also at this level, just south of the west-end stairwell, is a bucket elevator shaft and an ash hopper. An 8' space above the coal bunkers makes up the third level. Spanned by metal catwalks, this space originally held a coal conveyor from which the coal bunkers were filled. This level also holds a small ash machinery room and a coal machinery room.

The one-story addition along the south side of Building D-11 contains the primary entrance on the east end. An open vestibule leads to a larger open work space which offers access to the original part of the building. The remainder of the addition is given over to office spaces. There is a large garage door spanning the west end of this section.

2. **Stairways:** In the service building, a straight-run, concrete stairway ascends from the first-floor waiting room to the second-floor workshop. At the first floor the stairs are contained in a small, partition-wall stair hall, with a pipe handrail attached to a wall. At the second floor, the stairway is surrounded by a pipe railing. There are two steel staircases in the boiler room. The door to the boiler room from the first-floor, service building corridor opens onto the landing of a straight-run, open-riser staircase providing access from the floor of the boiler room to a catwalk near the ceiling. The treads and landing are steel grate, attached to a C-channel stringer. Cast-iron pipe railing provides handrails. The second steel staircase in the boiler room is located in the northwest corner of the coal bunker section. It is a very tight, 180-degree-return stairway connecting the floor of the boiler room to the top of the coal bunkers, an ascension of nearly 48'. This staircase also has steel-grate tread

and landings connected by a C-channel stringer and contained by cast-iron pipe railing.

3. **Flooring:** All the rooms in the service building, as well as the boiler room, have concrete floors.

4. **Wall and ceiling finishes:** Most rooms in the service building had plaster over common brick or structural clay tile walls. The boiler room walls were unfinished common brick.

5. **Openings:**

   a. **Doorways and doors:** Most interior doors were wood-panel with four-light glazing

   b. **Windows:** Some interior partitions were glazed with pivot-sash and fixed-sash steel windows

6. **Decorative features and trim:** None

7. **Hardware:** Unknown

8. **Mechanical Equipment:**

   a. **Heating, air conditioning, ventilation:** The boiler room holds three "American Standard" boilers. The adjacent pump room machinery includes boiler feed pumps, condensation pumps, a bilge pump, a hot-water generator, a blow-off tank, and a regulator. Huge exterior ventilators surmount the roof above the boilers. A louvered, fresh-air intake vent is located at the far southwest corner of the boiler room.

   b. **Lighting:** Industrial fluorescent fixtures illuminate the boiler room.

D. **Site:**

1. **General setting and orientation:** Building D-11 is located mid-block between North Eighth Avenue and Olson Memorial Highway. The primary entrances are on the east end of the service building, which faces North Bryant Avenue. The north side of the heating plant is bordered by a driveway, and the west end meets North Colfax Avenue as it dead-ends to form driveway and loading areas for the plant. The south side of the plant faces a row house from a later project,

across a public yard and walkway. The walkway marks the southernmost boundary of the Sumner Field Homes project in this block.

2. **Historic landscape design:** Building D-11 is surrounded by the walkways and public yards that were part of the original landscape design of Sumner Field Homes. For site information, see HABS No. MN-160: Sumner Field Homes, Part II.D.

PART III. SOURCES OF INFORMATION

A. Original architectural drawings:

For drawings citations, see HABS No. MN-160: Sumner Field Homes, Part III.A.

B. Bibliography:

For bibliography, see HABS No. MN-160: Sumner Field Homes, Part III.D.

C. Likely sources not yet investigated:

The National Archives, Washington, D.C.

Private photograph collections of former Sumner Field Homes residents.