

**MARYLAND HISTORICAL TRUST  
DETERMINATION OF ELIGIBILITY FORM**

NR Eligible: yes \_\_\_  
no \_\_\_

Property Name: Chiller Plant (Building 34) Inventory Number: M: 35-9-17  
 Address: 9000 Rockville Pike City: Bethesda Zip Code: 20892  
 County: Montgomery USGS Topographic Map: Washington West Quadrangle DC-MD-VA (see attached map)  
 Owner: United States of America (National Institutes of Health) Is the property being evaluated a district? \_\_\_yes  
 Tax Parcel Number: \_\_\_\_\_ Tax Map Number: \_\_\_\_\_ Tax Account ID Number: \_\_\_\_\_  
 Project: NHPA Section 110 compliance Agency: US Dept. HHS/National Institutes of Health  
 Site visit by MHT Staff: X no \_\_\_yes Name: \_\_\_\_\_ Date: \_\_\_\_\_  
 Is the property located within a historic district? \_\_\_yes X no

*If the property is within a district*  
 District Inventory Number: \_\_\_\_\_  
 NR-listed district \_\_\_yes Eligible district \_\_\_yes District Name: \_\_\_\_\_  
 Preparer's Recommendation: Contributing resource \_\_\_yes \_\_\_no Non-contributing but eligible in another context \_\_\_

*If the property is not within a district (or the property is a district)*  
 Preparer's Recommendation: Eligible \_\_\_yes X no

Criteria: \_\_\_A \_\_\_B \_\_\_C \_\_\_D Considerations: \_\_\_A \_\_\_B \_\_\_C \_\_\_D \_\_\_E \_\_\_F \_\_\_G \_\_\_None

Documentation on the property/district is presented in: Maryland Historical Trust, MIHP Form M: 35-9-17

**Description of Property and Eligibility Determination:** *(Use continuation sheet if necessary and attach map and photo)*

The Chiller Plant (also known as Building 34), built in 1968 and located on the Bethesda campus of the National Institutes of Health (NIH) has associations with the NIH's expansion of research facilities circa 1970, but it remains essentially a service structure in support of, but not critical to the scientific research mission of the NIH. Over the years it has been subject to alteration—notably a significant addition that nearly doubled the size of the facility—and periods of disuse. Its utilitarian architectural design, though efficient, is otherwise unremarkable and undistinguished. When evaluated against the National Register criteria for eligibility, there are in fact neither truly unique architectural features nor known historical events associated with its occupancy. Therefore, the Chiller Plant, also known of as Building 34, is determined not to be eligible for listing in the National Register of Historic Places (see: <http://www.nps.gov/nr/publications/bulletins/nrb15.pdf>).

Prepared by: *Philip W. Neuberg* Date Prepared: *22 July 2014*  
Philip W. Neuberg, AIA, NIH FHPO

<b>MARYLAND HISTORICAL TRUST REVIEW</b>	
Eligibility recommended ___	Eligibility not recommended <u>X</u>
Criteria: ___A ___B ___C ___D	Considerations: ___A ___B ___C ___D ___E ___F ___G ___None
Comments: _____	
<u><i>Jonathan Sayer</i></u>	<u><i>8/11/14</i></u>
Reviewer, Office of Preservation Services	Date
<u><i>NA</i></u>	
Reviewer, NR Program	Date

*201403828*

**Chiller Plant**  
**National Institutes of Health Bethesda Campus, Bethesda, MD**  
**Montgomery County**  
**Approximate date of construction: 1968**  
**Public access, with restrictions.**

MIHP Inventory No. M: 35-9-17

The Chiller Plant at the National Institutes of Health Bethesda Campus was constructed in 1968 to serve as an extension to the master utilities provided by the Building 12 plant 100 yards to the east. The facility is occupied primarily by chillers, cooling towers and miscellaneous HVAC equipment. The flat-roofed building is a two-story rectangular mass constructed of masonry with precast concrete louvers but no windows. The predominant exterior wall finish is red brick veneer. Each elevation is divided into four major bays by vertical precast concrete elements. The current appearance of the building reflects considerable alteration, notably an addition to the south doubling the size of the plant, and the insertion of additional louvers into the original building.

The Chiller Plant has associations with the NIH's expansion of research facilities circa 1970, but it remains essentially a service structure in support of, but not critical to the scientific research mission of the NIH. Its utilitarian architectural design is unremarkable and undistinguished, and has been considerably altered since 1968. When evaluated against the criteria for a National Register property determination for eligibility, there are in fact neither truly unique architectural features nor known historical events associated with its occupancy. Therefore, the building does not meet the intent or the criteria for inclusion in the National Register of Historic Places.

# Maryland Historical Trust Maryland Inventory of Historic Properties Form

Inventory No. M:35-9-17

## 1. Name of Property (indicate preferred name)

historic Chiller Plant

other NIH Building 34

## 2. Location

street and number 9000 Rockville Pike \_\_ not for publication

city, town Bethesda \_\_ vicinity

county Montgomery County

## 3. Owner of Property (give names and mailing addresses of all owners)

name United States of America (National Institutes of Health)

street and number 9000 Rockville Pike telephone 301-443-7154

city, town Bethesda state MD zip code 20892

## 4. Location of Legal Description

courthouse, registry of deeds, etc. Montgomery County Courthouse liber folio

city, town Rockville tax map tax parcel tax ID number

## 5. Primary Location of Additional Data

- Contributing Resource in National Register District
- Contributing Resource in Local Historic District
- Determined Eligible for the National Register/Maryland Register
- Determined Ineligible for the National Register/Maryland Register
- Recorded by HABS/HAER
- Historic Structure Report or Research Report at MHT
- Other: \_\_\_\_\_

## 6. Classification

Category	Ownership	Current Function	Resource Count	
<input type="checkbox"/> district	<input checked="" type="checkbox"/> public	<input type="checkbox"/> agriculture	<input type="checkbox"/> landscape	Contributing
<input checked="" type="checkbox"/> building(s)	<input type="checkbox"/> private	<input type="checkbox"/> commerce/trade	<input type="checkbox"/> recreation/culture	Noncontributing
<input type="checkbox"/> structure	<input type="checkbox"/> both	<input type="checkbox"/> defense	<input type="checkbox"/> religion	_____ buildings
<input type="checkbox"/> site		<input type="checkbox"/> domestic	<input type="checkbox"/> social	_____ sites
<input type="checkbox"/> object		<input type="checkbox"/> education	<input type="checkbox"/> transportation	_____ structures
		<input type="checkbox"/> funerary	<input type="checkbox"/> work in progress	_____ objects
		<input checked="" type="checkbox"/> government	<input type="checkbox"/> unknown	_____ Total
		<input type="checkbox"/> health care	<input type="checkbox"/> vacant/not in use	
		<input type="checkbox"/> industry	<input type="checkbox"/> other:	
				<b>Number of Contributing Resources previously listed in the Inventory</b>
				_____

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## 7. Description

Inventory No. M: 35-9-17

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### Condition

excellent     deteriorated  
 good         ruins  
 fair          altered

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Prepare both a one paragraph summary and a comprehensive description of the resource and its various elements as it exists today.

Building 34 or the Chiller Plant, was constructed in 1968 to serve as an extension to the master utilities provided by the Building 12 power plant 100 yards to the east. This facility is occupied primarily by chillers, cooling towers, miscellaneous HVAC equipment and associated electrical service. The building is essentially a large rectangular mass of masonry constructed to screen the above noted equipment.

It measures 132' x 101', plus an additional one-story 59'-0" x 29'-6" loading dock appended to the north. The heights of the original building walls are approximately 65' from the ground floor level to the top of coping. The flat roof or catwalk that makes possible access to the six large cooling towers is now protected by a concrete paver on membrane assembly that is terminated at the perimeter by a masonry parapet wall of nearly 46 feet in height. Below the catwalk are the mechanical levels, electrical vaults and the chiller equipment and pumps. The predominant wall finish is red range clay brick applied as veneer with cast-in-place concrete back-up. The exterior fenestration is limited to pedestrian access and vehicle access doors. There is a poured-in-place concrete band at the one-third point which corresponds to the cooling tower catwalk slab. Other accents are the precast concrete coping and vertical bay divisions. On the long (east and west) elevations, there are four major bays with the southernmost bay being half the size of the others and having full-height vertical concrete louvers. The direction of these louvers was changed at the request of neighbors to correct an original design error that allowed for a direct sightline into the Cooling Tower equipment. The three large bays are subdivided by minor vertical concrete bands. The north and south are divided into four bays with the two outer bays being narrower than the two inner bays. All exterior doors are hollow metal or metal rolling. Pedestrian walkways include cast in place concrete slab-on-grade paving, stairs and retaining walls.

Interior partitions are generally concrete masonry unit at the stairwells, storage areas and equipment rooms. Interior doors are hollow metal. Interior finishes are typically painted wall and ceiling surfaces and sealed concrete floors. The main machinery room has direct applied acoustic tile wall finishes.

A significant addition (Building 34A) was constructed on the south end in 1981. This addition is slightly shorter in height but almost equal in size to Building 34 and employs a matching material palette but added a 10' high band of vertical concrete louvers at the second floor on the east and west elevations. Similar bands of vertical louvers appear to also have been added to the original Building 34 with this addition. All louvers face away from the adjacent neighborhood.

The building has seen various periods of disuse and is in deteriorated condition. This is evident by concrete which has crumbled to expose reinforcement in some locations.

*See attached photographs and photograph list.*

## 8. Significance

Inventory No. M: 35-9-17

Period	Areas of Significance	Check and justify below		
<input type="checkbox"/> 1600-1699	<input type="checkbox"/> agriculture	<input type="checkbox"/> economics	<input type="checkbox"/> health/medicine	<input type="checkbox"/> performing arts
<input type="checkbox"/> 1700-1799	<input type="checkbox"/> archeology	<input type="checkbox"/> education	<input type="checkbox"/> industry	<input type="checkbox"/> philosophy
<input type="checkbox"/> 1800-1899	<input type="checkbox"/> architecture	<input type="checkbox"/> engineering	<input type="checkbox"/> invention	<input type="checkbox"/> politics/government
<input checked="" type="checkbox"/> 1900-1999	<input type="checkbox"/> art	<input type="checkbox"/> entertainment/ recreation	<input type="checkbox"/> landscape architecture	<input type="checkbox"/> religion
<input type="checkbox"/> 2000-	<input type="checkbox"/> commerce	<input type="checkbox"/> ethnic heritage	<input type="checkbox"/> law	<input type="checkbox"/> science
	<input type="checkbox"/> communications	<input type="checkbox"/> exploration/ settlement	<input type="checkbox"/> literature	<input type="checkbox"/> social history
	<input type="checkbox"/> community planning		<input type="checkbox"/> maritime history	<input type="checkbox"/> transportation
	<input type="checkbox"/> conservation		<input type="checkbox"/> military	<input type="checkbox"/> other: _____

**Specific dates**

**Architect/Builder**

H.D. Nottingham & Associates, Inc.  
(engineers and architects)

**Construction dates** 1968 (Building 34 addition dated 1981)

Evaluation for:

National Register

Maryland Register

not evaluated

Prepare a one-paragraph summary statement of significance addressing applicable criteria, followed by a narrative discussion of the history of the resource and its context. (For compliance projects, complete evaluation on a DOE Form – see manual.)

### Summary Statement of Significance

#### INTEGRITY:

The National Register defines seven aspects of integrity that have been considered in analyzing whether the Chiller Plant (Building 34) conveys its historical significance or qualities that, in various combinations, define integrity. The retention of specific aspects of integrity is paramount for a property to convey its significance. Building 34 has the potential to meet many but not all the aspects of integrity, as discussed below:

#### Location

Location is the place where the historic property was constructed or the place where the historic event occurred.

The Chiller Plant Building is in its original location. The subsequent construction of adjoining building 34A does not appear to detract from the authenticity of its setting.

#### Design

Design is the combination of elements that create the form, plan, space, structure, and style of a property.

The architect's original exterior design and as well as the original rectilinear form of the building remains clearly evident, and was indeed mimicked in the design of the addition to the south (Building 34A).

#### Setting

Setting is the physical environment of a historic property

The original setting has changed over 50 years with the addition to the south and the consequent rerouting of the roadway to the south. To the south low, one story structures have been added and to the west a multistory parking structure has been added, confining what had been an open site and thus compromising the setting.

#### Materials

Materials are the physical elements that were combined or deposited during a particular period of time and in a particular pattern or configuration to form a historic property

Primary character defining original exterior materials, red brick running bond walls, large pre-cast louvers and concrete accents, all remain, but have deteriorated significantly, spalling in numerous locations and exposing reinforcing bars. Thus the integrity of the materials have been severely compromised.

# Maryland Historical Trust

## Maryland Inventory of Historic Properties Form

Inventory No. M: 35-9-17

Name  
**Continuation Sheet**

Number 8 Page 1

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### **Workmanship**

Workmanship is the physical evidence of the crafts of a particular culture or people during any given period in history or prehistory. The exterior workmanship was altered at the time of the additional bays to the south. At that time more louvered were added to the original structure and the direction of the louver vanes were changed.

### **Feeling**

Feeling is a property's expression of the aesthetic or historic sense of a particular period of time.

The utilitarian, economical feeling of the building's design is still evident despite the addition to the south so that the Building's feeling remains largely unchanged.

### **Association**

Association is the direct link between an important historic event or person and a historic property.

Intensity of use of this facility has varied over the years and now Building 11 is the primary source for campus chilled water and cooling. Presently Building 34 has been abandoned, so its association with production of campus refrigeration is minimal.

The identity of the property although not well preserved, appears arguably today much as it did upon opening, even with the addition to the south. Thus, its architectural integrity, although of no real significance or uniqueness and compromised by lack of use and alterations, remains largely intact.

Research to date, however, suggests that the Chiller Plant, also known of as Building 34, does not meet the intent of any of the four criteria for inclusion in the National Register of Historic Places. NIH's significance to the history of modern scientific research and advancement is evident in its array of laboratories and associated facilities that directly support the scientific mission. By contrast, base operations property types such as motor pools, power plants, and administrative support buildings have not been resource types that would normally be considered significant under a nation-wide research science theme since they were built as part of the everyday operations of the NIH and were not directly associated with basic research or scientific advancement in a strategic or tactical sense.

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## 9. Major Bibliographical References

Inventory No. M: 35-9-17

NIH Master Util. Ext; architectural drawings dated 9/12/1966, original design furnished to NIH through the Public Buildings Service of the General Services Administration, with H.D. Nottingham & Associates, Inc. of Arlington, VA as engineers and architects. Original blueprints on file in the NIH, Office of Research Facilities Plan Room.

ADDITION to REFRIGERATION PLANT BUILDING 34 dated 3/31/1977, original design furnished to NIH through the Department of Health Education and Welfare, Office of Facilities Engineering and Property Management, with Dubin Mindell Bloome and Golde, Thornton, and LaBau Architects of West Hartford, CT as engineers and architects Original blueprints on file in the NIH, Office of Research Facilities Plan Room.

Facility Condition Reassessment Final Report: National Institutes of Health Bethesda Campus Building 34, dated April 2011. VFA, Inc. On file with the Division of Facilities Stewardship, Office of Research Facilities, NIH.

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## 10. Geographical Data

Acreage of surveyed property \_\_\_\_\_  
Acreage of historical setting \_\_\_\_\_  
Quadrangle name Washington West, DC-MD-VA Quadrangle scale: 1:24,000 (7.5-minute)

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### Verbal boundary description and justification

Building 34 is located at the National Institutes of Health Bethesda Campus (NIHBC). For USGS coordinates please see the attached USGS map section.

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## 11. Form Prepared by

name/title	Phillip W. Neuberg, AIA / NIH Federal Historic Preservation Officer		
organization	National Institutes of Health, Office of Research Facilities	date	July 2014
street & number	Division of Facilities Planning, Building 13, Room 1325	telephone	301-443-7154
city or town	Bethesda	state	MD

The Maryland Inventory of Historic Properties was officially created by an Act of the Maryland Legislature to be found in the Annotated Code of Maryland, Article 41, Section 181 KA, 1974 supplement.

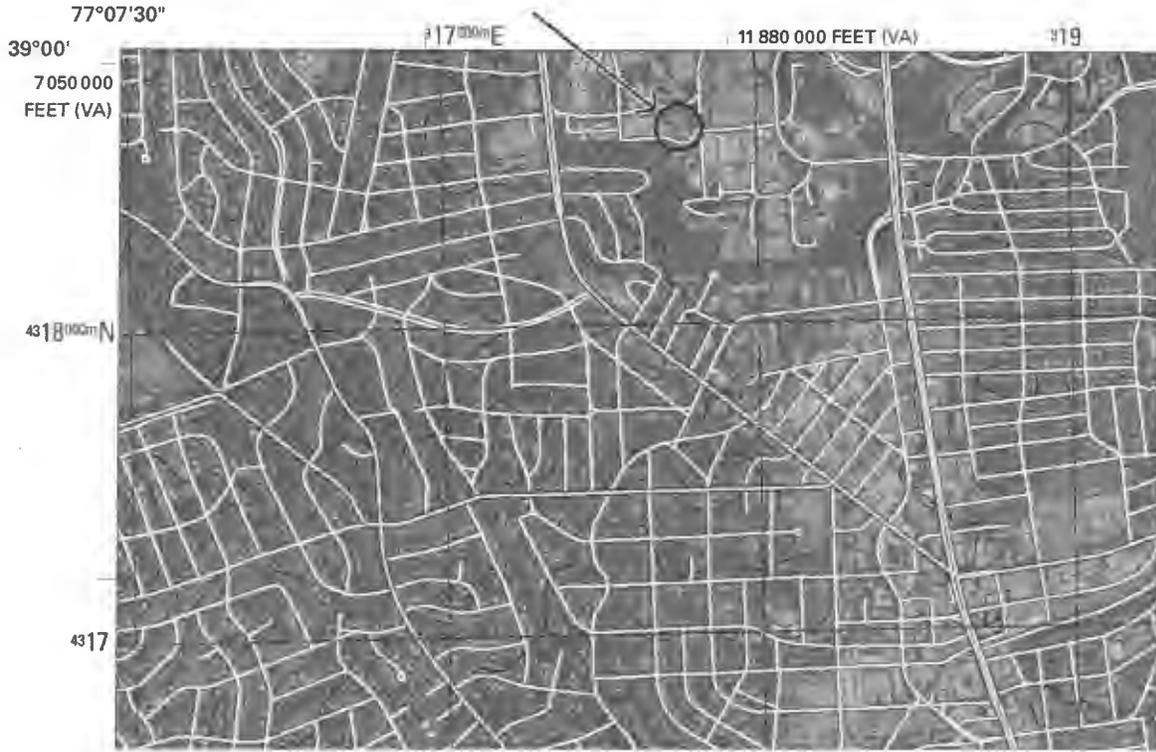
The survey and inventory are being prepared for information and record purposes only and do not constitute any infringement of individual property rights.

return to: Maryland Historical Trust  
Maryland Department of Planning  
100 Community Place  
Crownsville, MD 21032-2023  
410-514-7600

MIHP Inventory No. M: 35-9-17  
 Chiller Plant (Building 34)  
 Bethesda, MD  
 Montgomery County  
 Washington West Quadrangle, DC-MD-VA 2011 (38.998, -77.104)



U.S. DEPARTMENT OF THE INTERIOR  
 U. S. GEOLOGICAL SURVEY



Produced by the United States Geological Survey  
 North American Datum of 1983 (NAD83)  
 World Geodetic System of 1984 (WGS84). Projection and  
 1 000-meter grid: Universal Transverse Mercator, Zone 18S  
 10 000-foot ticks: Maryland Coordinate System of 1983,  
 Virginia Coordinate System of 1983 (north zone)

Imagery.....NAIP, June 2009  
 Roads.....©2006-2010 Tele Atlas  
 Names.....GNIS, 2010  
 Hydrography.....National Hydrography Dataset, 2009  
 Contours.....National Elevation Dataset, 2008  
 Boundaries.....Census, IBWC, IBC, USGS, 1972 - 2010



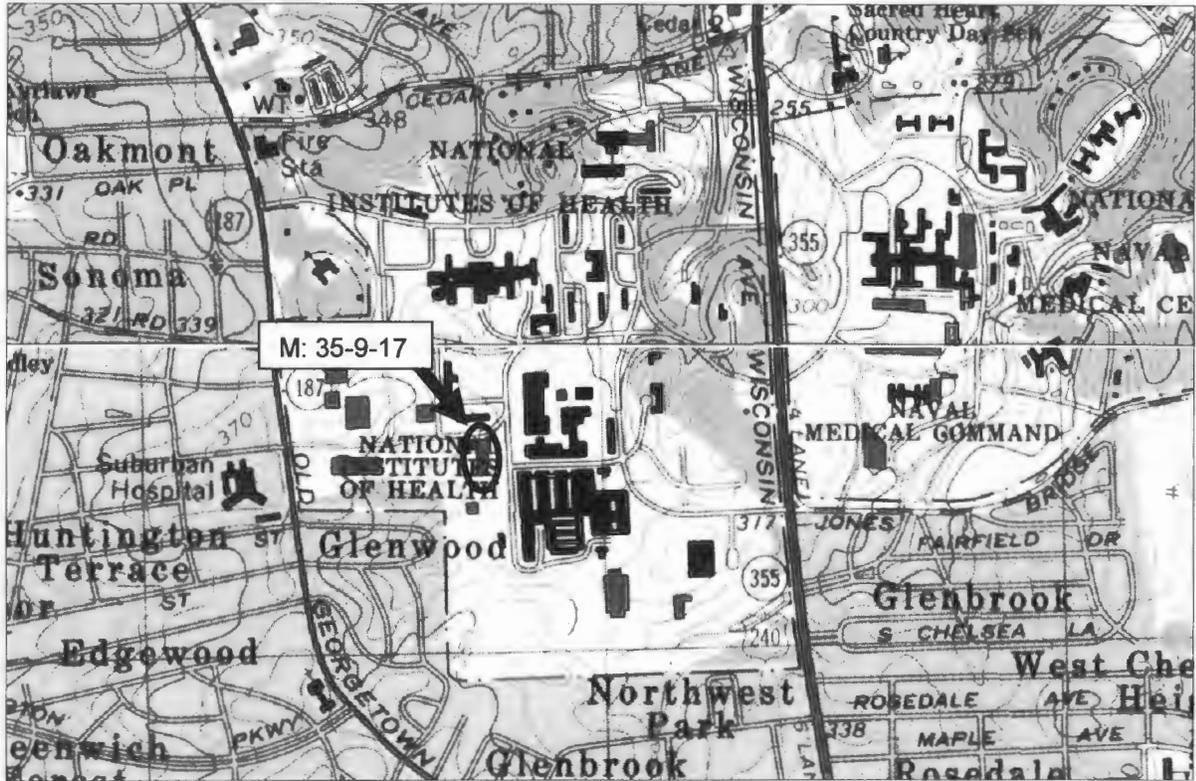
UTM GRID AND 2011 MAGNETIC NORTH  
 DECLINATION AT CENTER OF SHEET

U.S. National Grid
100,000-m Square ID
UU
Grid Zone Designation
18S

M: 35-9-17

Chiller Plant (NIH Building 34)

Washington West quadrangle 1965, Photorevised 1983, Bathymetry added 1982



National Web Map Service 6" Orthophoto Map, c. 2011-13



JKC 3/16/2015

Photo Log  
Chiller Plant (Building 34)  
Montgomery County, MD

MHP Inventory No. M: 35-9-17

Number	Description	Photographer	Photo Date	Filename
1	East elevation.	David A. Derenick	6/27/2014	M; 35-9-17_2014-06-27_01.tif
2	Oblique view of northwest corner.	David A. Derenick	6/27/2014	M; 35-9-17_2014-06-27_02.tif
3	West elevation.	David A. Derenick	6/27/2014	M; 35-9-17_2014-06-27_03.tif
4	Oblique view of southwest corner.	David A. Derenick	6/27/2014	M; 35-9-17_2014-06-27_04.tif



M: 35-9-17

CHILLER PLANT (BUILDING 34)

MONTGOMERY COUNTY, MD

PHOTOGRAPHER: DAVID A. DERENICK

6/27/2014

5954760. N 35 9 17\_2014 06 27\_01\_005

FILE AT MD SHPO

"EAST ELEVATION"

1/4

(ILFORD). (Proven Type B&W). 07/11/14



SERVICE ROAD SOUTH

LINDEN

M: 35-9-17

CHILLER PLANT (BUILDING 34)

MONTGOMERY COUNTY, MD

PHOTOGRAPHER: DAVID A. DERENICK

6/27/2014

5964765; N. 35-9-17\_2014-06-27\_02\_006

FILE AT MD SHPD

"OBLIQUE VIEW OF NORTHWEST CORNER"

2/4

FILED BY: [unclear] DATE: 07/11/14



M: 35-9-17

CHILLER PLANT (BUILDING 34)

MONTGOMERY COUNTY, MD

PHOTOGRAPHER: DAVID A. DERENICK

6/27/2014

5954766. N 35 9 17\_2014 06-27\_83\_887

FILE AT MD SHPO

"WEST ELEVATION"

3/4

CALFORD - PHOTODUPLICATION - 07/11/14



NO PARKING  
FIRE LANE

Grinnell BE SAFE.  
Company  
grinnell.com  
GRINNELL, IA  
515-325-2222

TR-310

M:35-9-17

CHILLER PLANT (BUILDING 34)

MONTGOMERY COUNTY, MD

PHOTOGRAPHER: DAVID A. DERENICK

6/27/2014

50547697\_11\_35-9-17\_2014-06-27\_04\_008

FILE AT MD SHPO

"OBLIQUE VIEW OF SOUTHWEST CORNER"

414

<ILFORD> <From: Tree ERD> 07/11/14