

# DATA SHEET

Form 10-300  
(Rev. 6-72)

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

## NATIONAL REGISTER OF HISTORIC PLACES INVENTORY - NOMINATION FORM

(Type all entries - complete applicable sections)

STATE: <b>Pennsylvania</b>
COUNTY: <b>Allegheny</b>
FOR NPS USE ONLY
ENTRY DATE <b>MAR 4 1975</b>

### 1. NAME

COMMON:  
**Duquesne Incline**

AND/OR HISTORIC:

### 2. LOCATION

STREET AND NUMBER:  
**1220 Grandview Avenue**

CITY OR TOWN:  
**Pittsburgh**

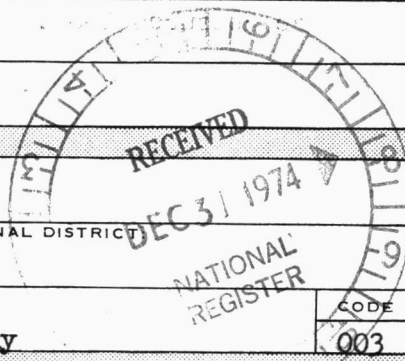
STATE:  
**Pennsylvania**

CONGRESSIONAL DISTRICT:  
**14th**

CODE: **42**

COUNTY:  
**Allegheny**

CODE: **003**



### 3. CLASSIFICATION

CATEGORY (Check One)	OWNERSHIP	STATUS	ACCESSIBLE TO THE PUBLIC
<input type="checkbox"/> District <input type="checkbox"/> Building <input type="checkbox"/> Site <input checked="" type="checkbox"/> Structure <input type="checkbox"/> Object	<input checked="" type="checkbox"/> Public <input type="checkbox"/> Private <input type="checkbox"/> Both	Public Acquisition: <input type="checkbox"/> In Process <input type="checkbox"/> Being Considered	Yes: <input checked="" type="checkbox"/> Restricted <input type="checkbox"/> Unrestricted <input type="checkbox"/> No
PRESENT USE (Check One or More as Appropriate)			
<input type="checkbox"/> Agricultural <input type="checkbox"/> Commercial <input type="checkbox"/> Educational <input type="checkbox"/> Entertainment	<input type="checkbox"/> Government <input type="checkbox"/> Industrial <input type="checkbox"/> Military <input checked="" type="checkbox"/> Museum	<input type="checkbox"/> Park <input type="checkbox"/> Private Residence <input type="checkbox"/> Religious <input type="checkbox"/> Scientific	<input checked="" type="checkbox"/> Transportation <input checked="" type="checkbox"/> Other (Specify) <u>preserved as an historic property</u>

### 4. OWNER OF PROPERTY

OWNER'S NAME:  
**Port Authority of Allegheny County**

STREET AND NUMBER:  
**Beaver and Island Avenues**

CITY OR TOWN:  
**Pittsburgh**

STATE:  
**Pennsylvania**

CODE:  
**42**

### 5. LOCATION OF LEGAL DESCRIPTION

COURTHOUSE, REGISTRY OF DEEDS, ETC.:  
**Allegheny County Courthouse**

STREET AND NUMBER:  
**414 Grant Street**

CITY OR TOWN:  
**Pittsburgh**

STATE:  
**Pennsylvania**

CODE:  
**42**

### 6. REPRESENTATION IN EXISTING SURVEYS

TITLE OF SURVEY:  
**Landmark Architecture of Allegheny County**

DATE OF SURVEY: **1967**     Federal     State     County     Local

DEPOSITORY FOR SURVEY RECORDS:  
**Pittsburgh History and Landmark Foundation**

STREET AND NUMBER:  
**Old Post Office, Allegheny Square West**

CITY OR TOWN:  
**Pittsburgh**

STATE:  
**Pennsylvania**

CODE:  
**42**

SEE INSTRUCTIONS

STATE:

COUNTY:

ENTRY NUMBER

DATE

FOR NPS USE ONLY

7. DESCRIPTION

CONDITION	(Check One)					
	<input type="checkbox"/> Excellent	<input checked="" type="checkbox"/> Good	<input type="checkbox"/> Fair	<input type="checkbox"/> Deteriorated	<input type="checkbox"/> Ruins	<input type="checkbox"/> Unexposed
	(Check One)			(Check One)		
	<input checked="" type="checkbox"/> Altered	<input type="checkbox"/> Unaltered	<input type="checkbox"/> Moved	<input checked="" type="checkbox"/> Original Site		

DESCRIBE THE PRESENT AND ORIGINAL (if known) PHYSICAL APPEARANCE

The original structure was constructed of both wood and iron upon its opening in 1877. In 1888, it was rebuilt entirely in iron. The Duquesne Incline measures 400 feet in height, 793 feet in length, with an angle of 30½ degrees. The roadway comprises a double track, one car ascending while the other car descends.

The motive power consisted of a double engine of 70 horsepower located at the top of the incline. Motion was communicated to the cars by means of a large drum carrying steel wire cables of ¼ inch diameter. A supplementary or safety cable was also in use. The cables were 900 feet in length and capable of sustaining a perpendicular strain of 50 tons; the actual working strain was about 1/10 that amount.

The rails are of the T pattern, 40 pounds to the foot, a five foot gauge, the double trackway being twenty feet wide, allowing three feet between the cars at the passing point. Rollers of locust and "gum" wood are located at regular distances between the rails.

The mechanical operation consists of a large steel drum with grooved surface mounted on a rotating shaft connected by a set of reduction gears to two 200 horsepower 600 volt direct current motors, with controller and contractors for governing the speed of the motors. Each car is attached to the cable drum by a flexible steel rope called the pull cable which is supported on grooved sheave wheels over the entire length of the track. The pull cable is attached to the undercarriage of the West car, then makes three loops around the driving sheaves, and is then attached to the undercarriage of the East car. The sheave wheels are spaced approximately 30 feet apart. When the cable drum is rotated, one pull cable winds on the drum while the other winds off, giving the uphill motion to one car and downhill motion to the other.

Magnetic type brakes, automatically operated, are attached to each drive motor, their purpose being to hold the cars in a stop position at any point of their travel. In addition, two systems of air operated mechanical brakes are installed, one on the cable drum and one on the safety cable sheaves. A manual geared hoist is operable in case of power failure.

The cars are original to the construction of the incline. The cars' original handcarved cherry panels were recently renewed with birdseye maple trim, amber glass transom, and old hardware. The exterior of the cars are painted red with yellow trim.

The upper and lower level stations have been altered numerous times. Originally both structures were built of wood. The upper station was two-stories with two three-story towers. The lower station was three-bays wide two-stories high, and had an irregularly-shaped steep shed roof to allow for the incline car. A verandah stretched across the entire front facade.

The present upper level station is a simple two-story structure. The lower station is probably the original with various alterations. The station has a rock face masonry foundation and is constructed of brick with stone lintels. The building originally had a centre gable intersecting a pitched roof. A mansard roof was since added. The waiting rooms have also been preserved.

In 1963, extensive repair work was performed on the structure.

SEE INSTRUCTIONS

**8. SIGNIFICANCE**

PERIOD (Check One or More as Appropriate)

- |  |                                       |  |                                       |
|--|---------------------------------------|--|---------------------------------------|
| <input type="checkbox"/> Pre-Columbian | <input type="checkbox"/> 16th Century | <input type="checkbox"/> 18th Century            | <input type="checkbox"/> 20th Century |
| <input type="checkbox"/> 15th Century  | <input type="checkbox"/> 17th Century | <input checked="" type="checkbox"/> 19th Century |                                       |

SPECIFIC DATE(S) (If Applicable and Known) **1877, 1888**

AREAS OF SIGNIFICANCE (Check One or More as Appropriate)

- |   |   |  |  |
|---|---|--|--|
| <input type="checkbox"/> Aboriginal     | <input type="checkbox"/> Education              | <input type="checkbox"/> Political                 | <input type="checkbox"/> Urban Planning        |
| <input type="checkbox"/> Prehistoric    | <input checked="" type="checkbox"/> Engineering | <input type="checkbox"/> Religion/Philosophy       | <input type="checkbox"/> Other (Specify) _____ |
| <input type="checkbox"/> Historic       | <input type="checkbox"/> Industry               | <input type="checkbox"/> Science                   | _____  |
| <input type="checkbox"/> Agriculture    | <input type="checkbox"/> Invention              | <input type="checkbox"/> Sculpture                 | _____  |
| <input type="checkbox"/> Architecture   | <input type="checkbox"/> Landscape Architecture | <input type="checkbox"/> Social/Humanitarian       | _____  |
| <input type="checkbox"/> Art            | <input type="checkbox"/> Literature             | <input type="checkbox"/> Theater                   | _____  |
| <input type="checkbox"/> Commerce       | <input type="checkbox"/> Military               | <input checked="" type="checkbox"/> Transportation | _____  |
| <input type="checkbox"/> Communications | <input type="checkbox"/> Music                  |  | _____  |
| <input type="checkbox"/> Conservation   |   |  | _____  |

STATEMENT OF SIGNIFICANCE

Inclines played an inherent role in the growth patterns of Pittsburgh. Because mills and factories were located along the river beds, there was little available land for housing, and homes were built on the surrounding hills. Inclines, or "Steilbahns" as they were called by the German immigrants living on Coal Hill (Mt. Washington), facilitated the housing development and offered a unique mode of rapid transit to hilltop residents. By the end of 1890, 17 passenger-carrying inclines were in operation in the Pittsburgh area serving over twenty million people a year. The Duquesne Incline was the fourth such structure built in the city with a cost of \$47,000.

The Duquesne Incline was designed and built by Samuel Diescher of Mt. Washington. Diescher built or rebuilt ten of the seventeen local planes. He is also known for other planes in both Pennsylvania and other states as well as South America.

By 1962, the Duquesne Incline Company could not afford to make necessary repairs and in 1963, the Incline was taken over by the Port Authority of Allegheny County. The Incline was leased back to the Society for the Preservation of the Duquesne Heights Incline which raised the necessary funds for repair and restoration.

At the present time, nearly one-half million commuters and tourists ride the Duquesne Incline every year and are afforded a spectacular view of the Golden Triangle where the Monongahela and Allegheny Rivers join to form the Ohio in the heart of downtown Pittsburgh. Of the seventeen inclines once in existence in the Pittsburgh area, the Duquesne Incline is one of only two which remain.



SEE INSTRUCTIONS

**9. MAJOR BIBLIOGRAPHICAL REFERENCES**

"Modern Hill Climbing," Scientific American, Vol. XLIII, No. 12, September 18, 1880.

Ohler, Samuel R., Pittsburgh's Inclines, 1970.

Van Trump, James D., and Arthur P. Ziegler, Jr., Landmark Architecture of Allegheny County, Pittsburgh: Pittsburgh History and Landmarks Foundation, 1967.

(17)  
583 290  
4476750  
HA

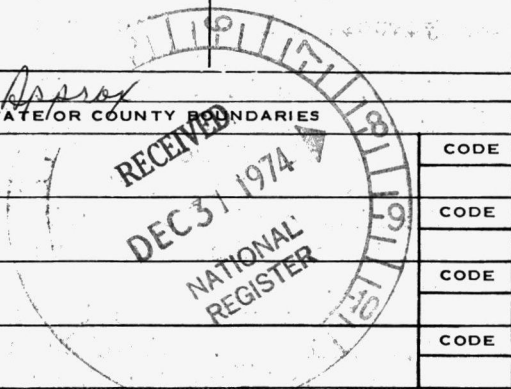
**10. GEOGRAPHICAL DATA**

LATITUDE AND LONGITUDE COORDINATES DEFINING A RECTANGLE LOCATING THE PROPERTY			OR	LATITUDE AND LONGITUDE COORDINATES DEFINING THE CENTER POINT OF A PROPERTY OF LESS THAN TEN ACRES		
CORNER	LATITUDE	LONGITUDE		LATITUDE	LONGITUDE	
	Degrees Minutes Seconds	Degrees Minutes Seconds		Degrees	Minutes	Seconds
NW	° ' "	° ' "		40	26	20
NE	° ' "	° ' "		80	01	06
SE	° ' "	° ' "				
SW	° ' "	° ' "				

APPROXIMATE ACREAGE OF NOMINATED PROPERTY: 5 Acres Approx

LIST ALL STATES AND COUNTIES FOR PROPERTIES OVERLAPPING STATE OR COUNTY BOUNDARIES

STATE:	CODE	COUNTY	CODE



SEE INSTRUCTIONS

**11. FORM PREPARED BY**

NAME AND TITLE:  
**James D. Van Trump, Research Director/David M. Berman, Curator**

ORGANIZATION: **Pittsburgh History & Landmarks Fdn/Pa Hist & Museum Comm**      DATE: **1973/1974**

STREET AND NUMBER:  
**Old Post Office, Allegheny Square West/Wm Penn Memorial Museum**

CITY OR TOWN: **Pittsburgh/Harrisburg**      STATE: **Pennsylvania**      CODE: **42**

**12. STATE LIAISON OFFICER CERTIFICATION**

**NATIONAL REGISTER VERIFICATION**

As the designated State Liaison Officer for the National Historic Preservation Act of 1966 (Public Law 89-665), I hereby nominate this property for inclusion in the National Register and certify that it has been evaluated according to the criteria and procedures set forth by the National Park Service. The recommended level of significance of this nomination is:

National     State     Local

Name *William J. Wewer*  
**WILLIAM J. WEWER**

Title Executive Director  
**Pa. Historical & Museum Commission**

Date 12/20/74

I hereby certify that this property is included in the National Register.

*A. P. ...*  
Director, Office of Archeology and Historic Preservation

Date 3/4/75

ATTEST:

*Charles ...*  
Keeper of The National Register

Date 2-25-75

Property Duquesne Incline

REV # 75001609

State Pa.

Working Number 12.31.74. 2233

Allegheny

**TECHNICAL**

#10 increase

Photos 2  
Maps 1

at the moment

OK

**CONTROL**

cm  
1.8.75

**HISTORIAN**

Accept  
Shorman  
1-15-75

**ARCHITECTURAL HISTORIAN**

Do WE NEED  
ACREAGE?

ACCEPT  
LEBOVICH  
1-13-75

**ARCHEOLOGIST**

**OTHER**

Photographs could be better. How about HAER  
one of one the cario interior?

Inventory SBA 1/9/75

Review Accept Eudt  
1/10/75

**REVIEW UNIT CHIEF**

Accept  
Cole  
2-11-75

**BRANCH CHIEF**

accept **KEEPER**  
Ferris  
for Montoya  
2.25.75

National Register Write-up \_\_\_\_\_  
Federal Register Entry 5-6-75

Send-back \_\_\_\_\_  
Re-submit \_\_\_\_\_

Entered MAR 4 1975

INT:2106-74



Pittsburgh Outdoor Adv

**TRUST  
THRIFT  
DRUG**



**70 MILLION  
PRESCRIPTIONS!**

**JESSE C.  
STEWART  
CO.  
RED  
LETTER**



**FEED**

**DUQUESNE  
INCLINE**  
←

DUQUESNE INCLINE

Duquesne Incline

Form No. 10-301a  
(7/72)

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

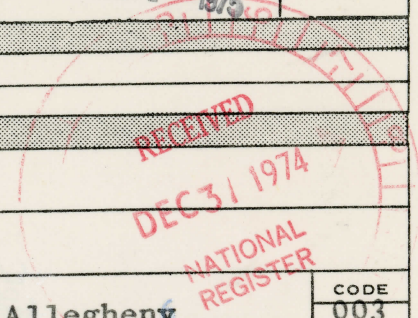
NATIONAL REGISTER OF HISTORIC PLACES  
PROPERTY PHOTOGRAPH FORM

(Type all entries - attach to or enclose with photograph)

STATE Pennsylvania	
COUNTY Allegheny	
FOR NPS USE ONLY	
ENTRY NUMBER MAR 4 1975	DATE

SEE INSTRUCTIONS

1. NAME			
COMMON:	Duquesne Incline		
AND/OR HISTORIC:			
2. LOCATION			
STREET AND NUMBER: 1220 Grandview Avenue			
CITY OR TOWN: Pittsburgh			
STATE:	Pennsylvania	CODE 42	COUNTY: Allegheny
			CODE 003
3. PHOTO REFERENCE			
PHOTO CREDIT:	Pittsburgh History & Landmarks Foundation		
DATE OF PHOTO:	1973		
NEGATIVE FILED AT:	Pittsburgh History & Landmarks Foundation		
4. IDENTIFICATION			
DESCRIBE VIEW, DIRECTION, ETC.  View of lower station from the east.  #192			



U.S. GOVERNMENT PRINTING OFFICE: 876-167

PROPERTY OF THE NATIONAL REGISTER

#192



PA 5-9

Form No. 10-301a  
(7/72)

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE

STATE <b>Pennsylvania</b>	
COUNTY <b>Allegheny</b>	
FOR NPS USE ONLY	
ENTRY NUMBER MAR 4	DATE 1975

**NATIONAL REGISTER OF HISTORIC PLACES  
PROPERTY PHOTOGRAPH FORM**

(Type all entries - attach to or enclose with photograph)

SEE INSTRUCTIONS

<b>1. NAME</b>			
COMMON:		<b>Duquesne Incline</b>	
AND/OR HISTORIC:			
<b>2. LOCATION</b>			
STREET AND NUMBER:			
<b>1220 Grandview Avenue</b>			
CITY OR TOWN:			
<b>Pittsburgh</b>			
STATE:	CODE	COUNTY:	CODE
<b>Pennsylvania</b>	<b>42</b>	<b>Allegheny</b>	<b>003</b>
<b>3. PHOTO REFERENCE</b>			
PHOTO CREDIT:		<b>Pittsburgh History &amp; Landmarks Foundation</b>	
DATE OF PHOTO:		<b>1973</b>	
NEGATIVE FILED AT:		<b>Pittsburgh History &amp; Landmarks Foundation</b>	
<b>4. IDENTIFICATION</b>			
DESCRIBE VIEW, DIRECTION, ETC.			
<b>View of the track from the Northeast.</b>			
<b>#2022</b>			

U.S. GOVERNMENT PRINTING OFFICE: 876-167

PROPERTY OF THE NATIONAL REGISTER

#2022

Duquesne Incline

#2

2

UNITED STATES DEPARTMENT OF THE INTERIOR  
NATIONAL PARK SERVICE  
**NATIONAL REGISTER OF HISTORIC PLACES**  
**PROPERTY MAP FORM**  
(Type all entries - attach to or enclose with map)

1. NAME

COMMON

Duquesne Incline

AND/OR HISTORIC

NUMERIC CODE (Assigned by NPS)

2. LOCATION

STATE

Penna

COUNTY

Allegheny

TOWN

Pgh

STREET AND NUMBER

1220 Grandview Ave.

3. MAP REFERENCE

SOURCE

USGS 7½ minute series  
Pittsburgh West, Pa.

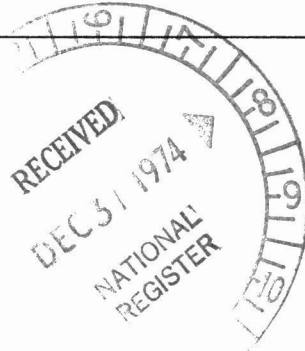
DATE

1948-60

SCALE

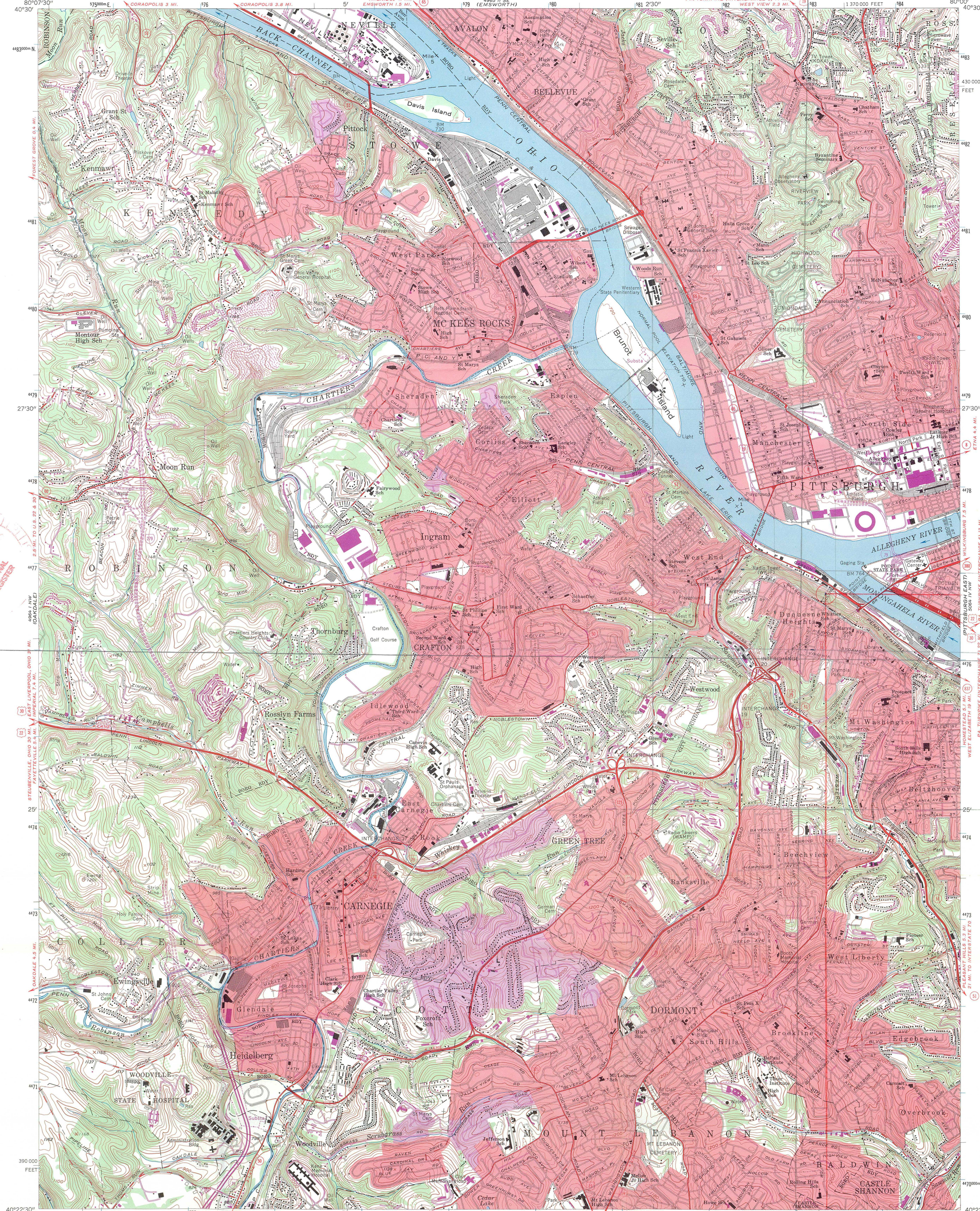
1" = 24000'

REQUIREMENTS: PROPERTY BOUNDARIES, WHERE REQUIRED, AND NORTH ARROW.

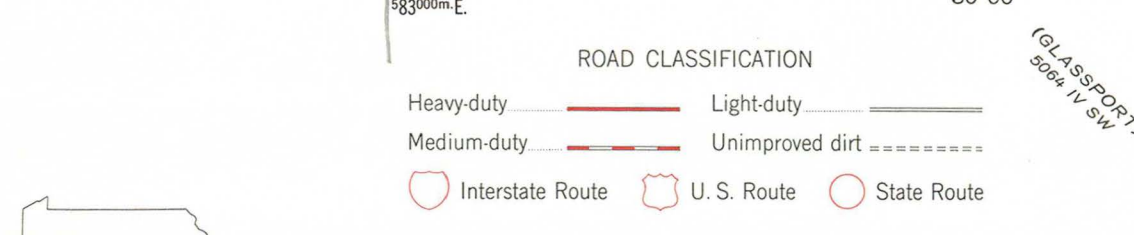
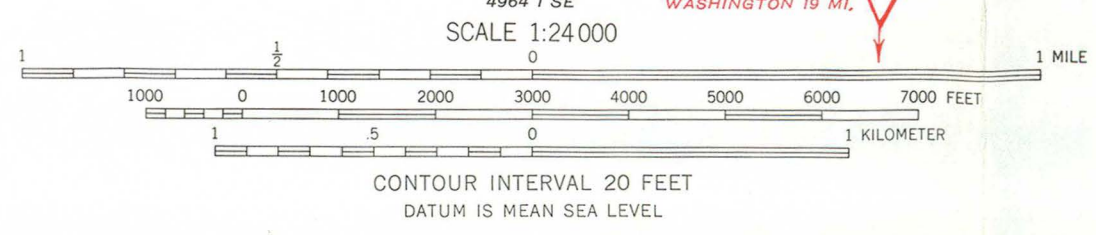
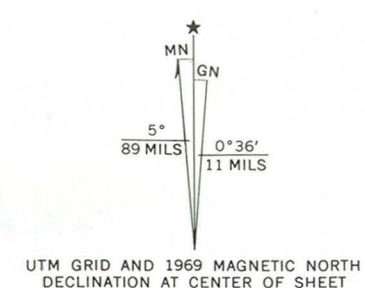


Duquesne Incline  
40° 26' 20" 80° 01' 06"

17  
58290  
4476760  
1A



Mapped, edited, and published by the Geological Survey  
Control by USGS, US&GS, USCE, and the City of Pittsburgh  
Topography by planetable surveys 1925-1941, and 1948  
Revised 1960  
Polyconic projection, 1927 North American datum  
10,000-foot grid based on Pennsylvania coordinate system, south zone  
1000-meter Universal Transverse Mercator grid ticks,  
zone 17, shown in blue  
Red tint indicates areas in which only landmark buildings are shown  
Revisions shown in purple compiled from aerial  
photographs taken 1969. This information not  
field checked  
Purple tint indicates extension of urban areas



THIS MAP COMPLIES WITH NATIONAL MAP ACCURACY STANDARDS  
FOR SALE BY U.S. GEOLOGICAL SURVEY, WASHINGTON, D. C. 20242  
A FOLDER DESCRIBING TOPOGRAPHIC MAPS AND SYMBOLS IS AVAILABLE ON REQUEST

UTM: 17, 58290, 4476760

PITTSBURGH WEST, PA.  
NE/4 CARNEGIE 15' QUADRANGLE  
N4022.5-W8007.7.5  
1960  
PHOTOREVISED 1969  
AMS 4964 1 NE—SERIES 8531

ENTRIES IN THE NATIONAL REGISTER

STATE PENNSYLVANIA

Date Entered MAR 4 1975

<u>Name</u>	<u>Location</u>
Duquesne Incline	Pittsburgh Allegheny County

Also Notified

Hon. Richard S. Schweiker  
Hon. Hugh Scott  
Hon. William S. Moorhead

Regional Director, Mid Atlantic  
Region

State Historic Preservation Officer  
Mr. William J. Wewer, Executive Director  
Pennsylvania Historical and Museum  
Commission  
Box 1026  
Harrisburg, Pennsylvania 17120

PR

MMott/cha

3-6-75

# NATIONAL REGISTER DATA SHEET

1 NAME as it appears on federal register: Duquesne Incline 2 OTHER NAMES: \_\_\_\_\_ 3 date of entry: 3-4-75 4 county code: 3

5 LOCATION street & number: 1200 Grandview Ave. city / town: Pittsburgh vicinity of: \_\_\_\_\_ state: PA county: Allegheny 6 NPS REGION: Mid Atlantic

7 OWNER  PRIVATE  STATE  MUNICIPAL  COUNTY  MULTIPLE  FEDERAL (agency name) 8 ADMINISTRATOR: \_\_\_\_\_

9 EXISTING SURVEYS  HABS  HAER  NHL 10 FUNDED?  YES  NO 11 CONGRESS. DISTRICT: 14 12 SOURCE OF NOMINATION  STATE  FEDERAL 13 WITHIN NATIONAL REGISTER HISTORIC DISTRICT?  YES, NAME: \_\_\_\_\_  NO 14 WITHIN NATIONAL HISTORIC LANDMARK?  YES, NAME: \_\_\_\_\_  NO 15 ACREAGE: 5 state who prepared form? PA Hist. + Museum Comm  LOCAL  PRIVATE ORGANIZATION

16 CONDITION  deteriorated  altered  original site  excellent  ruins  unaltered  moved  good  unexposed  reconstructed  unknown  fair  unexcavated  excavated

17 features: INTERIOR  SUBSTANTIALLY INTACT-1  NOT INTACT-0  UNKNOWN-4  NOT APPLICABLE-7 EXTERIOR  SUBSTANTIALLY INTACT-2  NOT INTACT-0  UNKNOWN-5  NOT APPLICABLE-8 ENVIRONMENTAL  SUBSTANTIALLY INTACT-3  NOT INTACT-0  UNKNOWN-6  NOT APPLICABLE-9

18 ACCESS  YES - Restricted  YES - Unrestricted  No Access  Unknown 19 ADAPTIVE USE  YES  NO 20 SAVED?  YES  NO IS PROPERTY A HISTORIC DISTRICT?  yes  no

21 AREAS OF SIGNIFICANCE:  ENGINEERING-11  LANDSCAPE ARCH.-15  POLITICS / GOVT.-21  RECREATION-28  ARCHEOLOGY-prehistoric-2  COMMERCE-6  ENTERTAINMENT-26  LAW-16  RELIGION-22  SETTLEMENT-29  ARCHEOLOGY-historic-1  COMMUNICATIONS-7  EXPLORATION-12  LITERATURE-17  SCIENCE-23  URBAN PLANNING-31  AGRICULTURE-3  CONSERVATION-8  HEALTH-27  MILITARY-18  SOCIAL / HUMANITARIAN-24  OTHER (SPECIFY) \_\_\_\_\_  ARCHITECTURE-4  ECONOMICS-9  INDUSTRY-13  MUSIC-19  SOCIAL / CULTURAL-30  TRANSPORTATION-25  ART-5  EDUCATION-10  INVENTION-14  PHILOSOPHY-20

22 CLAIMS: explain 'first'  'oldest'  'only'

23 functions WHEN HISTORICALLY SIGNIFICANT: inclined CURRENTLY: same 24 dates of initial construction: 1877, 1888 major alterations: \_\_\_\_\_ historic events: \_\_\_\_\_ 25 ETHNIC GROUP ASSOCIATION: \_\_\_\_\_

26 architectural style(s): \_\_\_\_\_ 27 architect: \_\_\_\_\_ 28 master builder: \_\_\_\_\_ 29 engineer: Samuel Diescher

30 landscape architect / garden designer: \_\_\_\_\_ 31 interior decorator: \_\_\_\_\_ 32 artist: \_\_\_\_\_ 33 artisan: \_\_\_\_\_ 34 builder / contractor: \_\_\_\_\_

35 NAMES give role & date PERSONAL: \_\_\_\_\_ EVENTS: \_\_\_\_\_ INSTITUTIONAL: \_\_\_\_\_

36 NATIONAL REGISTER WRITE-UP  
Iron double-track incline - 793' long, 400' high, 30 1/2° angle; powered by a derrick engine of 70 h.p. at top of the incline, upper and lower stations; extensively repaired, 1963.  
~~original wood and iron structure built replacing all wooden elements, 1888;~~  
One of the many important inclines built in Pittsburgh, facilitating the transport of people from their hilltop homes and work places along the city's river beds.