

**Third Street Dam Project  
Borough of Media  
Delaware County, Pennsylvania**

**SECTION 2002 EVALUATION**

**Borough of Media  
Pennsylvania Department of Transportation**

Third Street Dam Project  
Borough of Media  
Delaware County, Pennsylvania

## **SECTION 2002 EVALUATION**

by

Mary S. Alfson

*Cultural Heritage Research Services, Inc.*  
North Wales, Pennsylvania

Borough of Media  
Pennsylvania Department of Transportation

March 2004

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## **A. INTRODUCTION/DESCRIPTION OF PROPOSED ACTION**

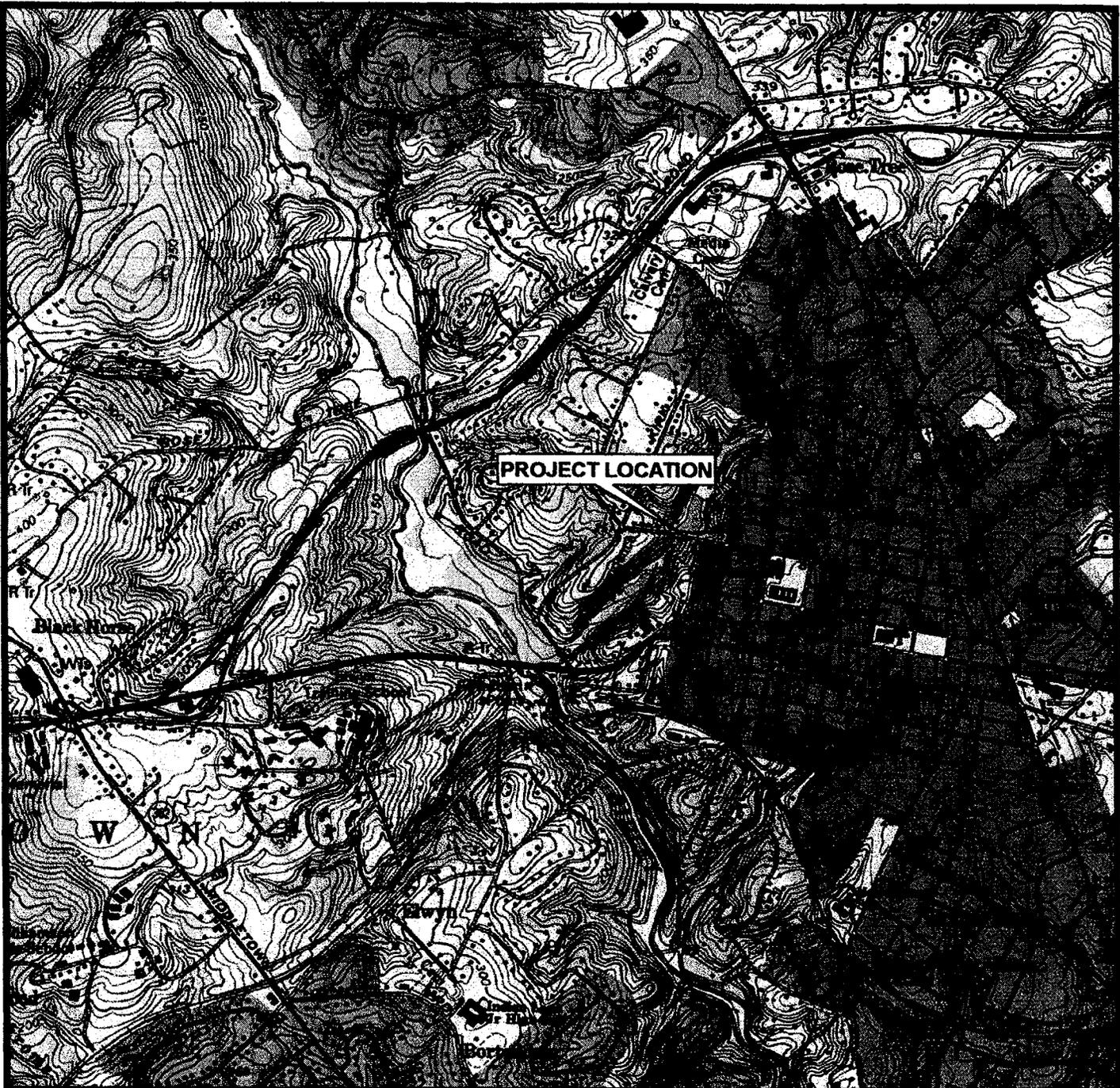
The Pennsylvania Department of Transportation (PENNDOT) proposes a bridge replacement for the Third Street Bridge in Media, Delaware County, Pennsylvania. The proposed project entails the replacement of the Third Street Bridge over the Third Street Dam, which serves as the spillway for Broomall's Lake (Figure 1; USGS 1994). The project involves the replacement of the entire bridge and dam structure. The improvement project is subject to a Section 2002 Evaluation due to the use of land within the boundary of the Glen Providence Park, a resource eligible for listing in the National Register of Historic Places. This resource is protected by the Commonwealth of Pennsylvania Act 120, Section 2002 (15). Act 120, Section 2002 (15) which states:

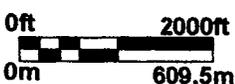
No highway, transit line, highway interchange, airport, or other transportation corridor or facility, shall be built or expanded in such a way as to use any land from any recreation area, wildlife and/or waterfowl refuge, historic site, State forest land, State game land, wilderness area, or public park unless: (i) there is no feasible and prudent alternative to the use of such land, and (ii) such corridor or facility is planned and constructed so as to minimize harm to such recreation area, wildlife and/or waterfowl refuge, historic site, State forest land, State game land, wilderness area, or public park.

A historic resources survey was conducted in connection with proposed bridge and dam replacement resulting in the submission of *Pennsylvania Historic Resource Survey Forms* (Alfson 2001) for the Glen Providence Park, the Media Swimming and Rowing Club, and the Third Street Dam. One historic property, the Glen Providence Park, was determined to be National Register-eligible. The effect of the project on this property was evaluated in a *Determination of Effect Report* (Alfson 2003). The *Determination of Effect Report* resulted in a finding of *No Adverse Effect* to the Glen Providence Park. The proposed improvements require the use of land from only one National Register-eligible resource, the Glen Providence Park, which is also a publicly owned and used park. No impacts to National Register-eligible archaeological sites, wildlife or waterfowl refuge, State forest lands, or State game lands were identified in the project area. This Section 2002 Evaluation includes a narrative of project purpose and need, a description of the Glen Providence Park, alternatives analysis, and information about project coordination.

## **B. PROJECT PURPOSE AND NEED**

The Third Street Dam Bridge project was initiated to upgrade the dam and bridge so that it will meet current requirements for spillway capacity and for traffic needs. Around 1996, a section of the stone masonry wall at the downstream edge of the bridge crest failed due to undermining. The failure was related to concentrated stormwater runoff flowing through the openings in the bridge crest wall. The Borough of Media closed the bridge and road after the failure. The spillway capacity of the dam/bridge has been previously reported as seriously inadequate and in an unsafe, non-emergency condition. The Third Street Dam Bridge Project proposes to upgrade the spillway capacity, create a safe and efficient vehicular and pedestrian route using Third Street and to accommodate projected future traffic volumes.



QUADRANGLE LOCATION	SCALE	SOURCE
 <p>PENNSYLVANIA</p> 	 <p>0ft 2000ft 0m 609.5m Prepared by CHRS, Inc.</p>	<p>USGS 1994 MEDIA, PA</p>

**PROJECT LOCATION MAP**

**THIRD STREET DAM PROJECT - SECTION 2002 EVALUATION**

**FIGURE 1**

## **C. IDENTIFICATION AND DESCRIPTION OF THE SECTION 2002 RESOURCE**

### Glen Providence Park

The Glen Providence Park, located in the Borough of Media and the Township of Upper Providence, Delaware County, Pennsylvania was determined eligible for listing in the National Register of Historic Places on June 25, 2002 (Appendix B).

Glen Providence Park is located partly in the Borough of Media (approximately 12.22 hectares [30.2 acres]) and partly in Upper Providence Township (approximately 2.5 hectares [6.17 acres]), Delaware County. The park is a good example of a community park, as it retains its historic setting, layout, and structures. The general layout of the park remains consistent with the layout of the park since its inception in 1933. The structures created by the WPA (including the trails, guardhouse, man-made lake, and bridges) remain extant and in good condition. The park is a good example of a community park, created from donated land, and then improved upon by the WPA. The park embodies the characteristics of an early twentieth-century community park. Composed of land which was donated by local residents, the park remains unaltered since the 1930s. The physical elements of the park (the guardhouse, amphitheater, bridges, etc.) have not been significantly altered since the early twentieth century, when they were constructed by the WPA. All of these structures are good examples of the work that was done by the WPA during this time period. In addition to the cohesiveness of these structures, the man-made lake and trails are also still extant and in good condition.

The National Register Boundary for Glen Providence Park consists of an area defined by its existing tax parcel boundary. This is both the historic boundary of the park as well as the current boundary. The total area enclosed by the proposed National Register Boundary is 14.72 hectares (36.37 acres). The park is bounded on the north by the edge of pavement of Third Street, on the northwest by the edge of pavement of Kirk Lane, and on the south by privately-owned properties fronting on North Ridley Creek Road, West Baltimore Avenue, and State Street. A finger of the park extends southeast, past privately-owned land to allow for access via State Street.

## **D. ALTERNATIVES ANALYSIS**

The Media Dam Bridge Project has been initiated to upgrade the dam and bridge so that it will meet current requirements for spillway capacity and for traffic needs. The following alternatives are considered in this Section 2002 Evaluation:

- Alternative 1 (No Action)
- Alternative 2 (Construct a new secondary spillway and culvert alongside existing)
- Alternative 3 (Abandon existing system and replace entirely with drop inlet and culvert)
- Alternative 4 (Abandon existing system and replace with new spillway)

## 1. Identification and Evaluation of Alternatives that Totally Avoid All Section 2002 Properties

**Alternative 1 (No Action):** This alternative would consist of maintaining the dam in its present condition. This alternative would result in no improvements to the dam or road. The bridge would remain closed to both vehicular and pedestrian traffic and the dam would continue to deteriorate. This alternative results in an inadequate spillway capacity and an unstable slope and roadway. The No Action Alternative does not meet the project need because the road would remain closed and neither the dam or bridge safety would be improved upon. This alternative does not meet the project need and does not appear to be prudent.

## 2. Identification and Evaluation of Other Alternatives Considered

**Alternative 2 (Construct a new secondary spillway and culvert alongside existing):** This alternative would maintain the existing masonry culvert spillway beneath the roadway, and construct a new secondary drop-inlet spillway and culvert alongside of the existing spillway, at the location of the three existing corrugated metal pipes. In addition to the replacement of the culvert, bridge, and dam, other minor improvements will be done. This includes the removal of all trees on the banks, and the flattening of the downstream slope of the bridge embankment to provide safety margins for slope stability.

Based on a HEC-1 computer model, Alternative 2 would result in lake levels on Broomall Lake that are lower than those computed for the spillway system. The alternative would therefore result in less frequent impacts to the structures surrounding the lake. This alternative requires the removal of the existing timber walkway, as well as the removal of a portion of the downstream crest walls (dam) and the removal of three pipes. This alternative also would require the construction of a diversion channel that would extend downstream. This would allow for construction of a new drop inlet adjacent to the existing masonry culvert. Additional areas would need to be excavated as part of this alternative.

In addition, this alternative retains the existing masonry culvert that runs beneath the roadway. The retention of this culvert will require ongoing maintenance and continued deterioration. There is the possibility of a future need to replace the existing culvert as conditions deteriorate. This alternative was determined not to satisfy the project needs and is therefore not prudent.

**Alternative 3 (Abandon existing system and replace entirely with drop inlet and culvert):** This alternative would abandon the existing masonry culvert, remove the CMP pipes, and replace the entire system with a new drop inlet and culvert system. In addition to the replacement of the culvert, bridge, and dam, other minor improvements will be done. This includes the removal of all trees on the banks, and the flattening of the downstream slope of the bridge embankment to provide safety margins for slope stability.

Based on a HEC-1 computer model, Alternative 3 would result in lake levels on Broomall Lake that are lower than those computed for the spillway system. The alternative would therefore result in less frequent impacts to the structures surrounding the lake. This alternative requires the removal of

the existing timber walkway, as well as the removal of a portion of the downstream crest walls (dam) and the removal of three pipes. In addition, a filter drain will be installed to aid with the run-off.

This alternative calls for the replacement of the existing masonry culvert as well as the construction of a new drop inlet. Due to the replacement of the existing culvert structure, the maintenance needs will be minimal. This alternative was determined to satisfy the project needs.

**Alternative 4** (Abandon existing system and replace with new spillway): This alternative would consist of construction of a straight concrete spillway and terminal energy dissipater, with spillway length as needed for passing the design flood. This alternative assumes the existing culverts, roadway, and utilities would be abandoned. The abandonment of the existing roadway does not meet the project need to improve vehicular and pedestrian safety and to provide a working access route along Third Street. In addition, this alternative would not meet the requirement to provide for future traffic needs. This alternative was determined not to satisfy the project needs and is therefore not prudent.

### 3. Assessment of Least Harm for the Glen Providence Park

**Alternative 3** (Abandon existing system and replace entirely with drop inlet and culvert): This is the only alternative that meets the project needs and is considered prudent.

#### a. Shifts/Design Modifications to Avoid or Minimize Use of Section 2002 Resources

The Glen Providence Park is large, encompassing 14.72 hectares (36.37 acres) of land on the west side of the dam. The work required for the replacement project is minor, requiring only 0.01 hectares (0.03 acres). All possible shifts and design modifications were taken into account during the alternatives analysis phase of the project.

#### b. Measures to Minimize Harm to Section 2002 Resources

The project will necessitate the removal of scattered trees and vegetation located along the east side of the park. The slopes of the bridge will need to be regraded, which will necessitate filling in small portion of the hillside. In addition, a riprap channel will be added to the existing south side of the park, leading from the parking area along Third Street downhill to the creek. A temporary stream crossing may also be required in order to complete the proposed bridge and dam replacement. The replacement project is well-removed from the historic WPA section of the park, and contains no built features. The removal of the trees and brush is required by PADEP, as the vegetation creates a potential hazard to the stability of the bridge and dam.

#### c. Determination of Which Alternative Results in Least Harm

**Alternative 3** (Abandon existing system and replace entirely with drop inlet and culvert): This is the only alternative that meets the project needs and is considered prudent. One section 2002 resource will be impacted by this alternative (Glen Providence Park). All possible shifts and design

modifications were taken into account during the alternatives analysis phase of the project to minimize harm to the Glen Providence Park.

## **E. COORDINATION WITH AGENCIES WITH JURISDICTION OVER THE SECTION 2002 RESOURCES**

In accordance with Pennsylvania Act 120, Section 2002, the Secretary of Transportation has identified historic properties and parks within the Area of Potential Effect of the proposed project, and has consulted with the Pennsylvania State Historic Preservation Office (PHMC) concerning the significance of the identified properties and their historic resource boundaries. Information regarding the project was disseminated at the regularly held Media Borough Meetings.

## **F. CONCLUSIONS**

Based on a detailed alternatives analysis, there is no feasible and prudent alternative that avoids Section 2002 resources. A “least harms” analysis was conducted to determine which of the alternatives met the project need and had the least harm to the one Section 2002 resource (Glen Providence Park). Alternative 3 (Abandon existing system and replace entirely with drop inlet and culvert) is the only alternative that meets the project needs and is considered prudent.

## REFERENCES CITED

Alfson, Mary

2001 *Pennsylvania Historic Resources Survey Forms*, "Glen Providence Park, Media Borough, Delaware County, Pennsylvania." Report prepared for the Borough of Media in conjunction with the Pennsylvania Department of Transportation. Report prepared by Cultural Heritage Research Services, Inc., North Wales, PA.

2003 *Third Street Dam Project, Borough of Media, Delaware County, Pennsylvania, Determination of Effect Report*. Report prepared for the Borough of Media in conjunction with the Pennsylvania Department of Transportation. Report prepared by Cultural Heritage Research Services, Inc., North Wales, PA.

United States Geological Survey

1994 *Media, PA Quadrangle, 7.5 minute series*. Survey Taken 1943, Revised from Aerial Photos 1965, Field Checked 1966, Revised 1994. Reston, Virginia.

APPENDIX A

QUALIFICATIONS OF RESEARCHERS

## QUALIFICATIONS OF RESEARCHERS

Principal Investigator:	Kenneth J. Basalik
Professional Experience:	26 years
Education:	Ph.D. Anthropology, Temple University M.A. Anthropology, Temple University B.A. Anthropology, University of Pennsylvania
Project Responsibility:	Administration and review
Project Administrator:	Nadine Miller Peterson
Professional Experience:	13 years
Education:	M.S. Historic Preservation, University of Vermont B.A. Art History, Tulane University
Project Responsibility:	Administration and review
Project Manager:	Mary S. Alfson
Professional Experience:	5 years
Education:	M.S. History, Historic Preservation, University of Pennsylvania B.A. Anthropology, Albion College
Project Responsibility:	Analysis, report writing, and graphics
Editor:	Kevin Quigg
Professional Experience:	8 years
Education:	M.A. English, Beaver College B.A. Communications, Temple University
Project Responsibility:	Report editing
Assistant Editor:	Jessica L. Kohn
Professional Experience:	2 years
Education:	B.A. English, West Chester University
Project Responsibility:	Report editing

APPENDIX B

CORRESPONDENCE/PUBLIC INVOLVEMENT  
AND COORDINATION

**PUBLIC COORDINATION LIST FOR  
the Third Street Dam Project**

**Media, Delaware County, Pennsylvania**

<b>Contact Person</b>	<b>Affiliation</b>	<b>Address/Phone Number</b>
Jeff Smith	Media Borough	Media Borough; 301 N. Jackson Street, Media, PA 19063
N/A	Delaware County Courthouse	Media, PA 19063; (610) 891-4000
N/A	Delaware County Historical Society	c/o Delaware Community College - Malin Road Campus 85 North Malin Broomall, PA 19008-1928; (610) 359-1148
N/A	Media Borough Historic Archives, Media and Upper Providence Free Library	Media-Upper Providence Library Media, PA
N/A	Pennsylvania Historical and Museum Commission, Bureau for Historic Preservation	P.O. Box 1026, Harrisburg, PA 17108; (717) 783-8946



Commonwealth of Pennsylvania  
Pennsylvania Historical and Museum Commission  
Bureau for Historic Preservation  
Commonwealth Keystone Building, 2nd Floor  
400 North Street  
Harrisburg, PA 17120-0093  
www.phmc.state.pa.us

RECEIVED

JUN 25 2002

ENVIRONMENTAL QUALITY

June 25, 2002

Dean A. Schreiber, P.E.  
Pennsylvania Department of Transportation  
Bureau of Design  
P O Box 3790  
Harrisburg, PA 17105-3790

TO EXPEDITE REVIEW USE  
PHP REFERENCE NUMBER

Re: ER 02-8034-045-A  
Delaware County, Borough of Media and Upper Providence Township  
Third Street Dam Rehabilitation

Dear Mr. Schreiber:

The Bureau for Historic Preservation has reviewed the above named project under the authority of the Environmental Rights amendment, Article 1, Section 27 of the Pennsylvania Constitution and the Pennsylvania History Code, 37 Pa. Cons. Stat. Section 500 et seq. (1988). This review includes comments on the project's potential effect on both historic and archaeological resources.

We concur with the findings of the agency that the following property is eligible for the National Register of Historic Places.

1. Glen Providence Park, Media, Delaware County: We concur with the boundary selected for this resource.

We concur with the findings of the agency that the following properties are not eligible for the National Register of Historic Places. They are not historically or architecturally significant.

2. Third Street Dam, Media, Delaware County
3. Media Swimming and Rowing Club, Media, Delaware County

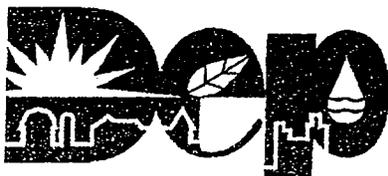
Page 2  
D. Schreiber  
June 25, 2002

If you need further information in this matter please consult Susan Zacher at (717) 783-9920.

Sincerely,

  
Jean H. Cutler, Director

cc: D. Stewart, PDOT, BOD  
K. Russell, PDOT, BOD, EQAD  
R. Keller, M. Harrower, T. Boccuto, PDOT, Dist. 6-0  
JHC/snz



Pennsylvania Department of Environmental Protection

Rachel Carson State Office Building

P.O. Box 8554

Harrisburg, PA 17105-8554

February 3, 2003

Bureau of Waterways Engineering

Telephone: 717-787-8568

Telecopier: 717-772-0409

John P. Harrison, P.E.  
Schnabel Engineering Associates, Inc.  
510 East Gay Street  
West Chester, PA 19380

Re: 3rd Street Dam  
Borough of Media, Delaware County  
DEP File No. D23-009

Dear Mr. Harrison:

Reference is made to your recent e-mail request for clarification of the Division of Dam Safety's position on acceptable vegetative cover on the slopes of earthen dam embankments. The enclosed Department Fact Sheet entitled *Vegetation and Erosion Control on Dams* discusses the problems that are created when trees and brush are allowed to establish themselves on a dam embankment and further discusses the importance of establishing and maintaining grass cover on a dam embankment. Unless it can be demonstrated that ferns were included in the design, approval and construction of the historic 3rd Street Dam and that there are no alternative areas in the County Park that can sustain a viable stand of ferns, DEP will not approve them on the dam now.

Furthermore, all Dam Permits issued by this office for the construction, modification, operation and maintenance of dams in Pennsylvania include the following standard permit condition, "The permittee agrees to operate and maintain any earthen dam embankment, upstream and downstream groin areas, and upstream and downstream toe areas free of all trees, shrubs and woody vines. These areas shall be maintained with a perennial sod forming ground cover. The Department must approve vegetative cover seed mixes. The permittee further agrees to operate and maintain any spillway approach channels, control sections and outlet channels free of all trees, shrubs and woody vines and to remove debris that may accumulate after runoff events." The Dam Permit to be issued for the rehabilitation of the 3rd Street Dam will include this standard permit condition.

If you have any further questions or comments relative to this issue, I will be happy to discuss them with you.

Sincerely,

Donald Martino, P.E.  
Chief  
Division of Dam Safety

Enclosure: DEP Fact Sheet, *Vegetation and Erosion Control on Dams*

cc: Ms. Eileen Mulvena, NDI Engineering (with enclosure)



# Fact Sheet

Commonwealth of Pennsylvania • Department of Environmental Protection  
BUREAU OF WATERWAYS ENGINEERING

## VEGETATION AND EROSION CONTROL ON DAMS

### Problems with Trees and Brush Near Dams

Trees and brush on a dam's earthen embankment, as well as 10 to 20 feet along the downstream edge of the embankment, can hide developing structural problems and also create potential new problems. Sudden uprooting of trees by strong winds can result in the displacement of a relatively large amount of embankment material. This in turn can lower the crest of the dam, reduce the effective width of the dam and enhance seepage. Falling trees also can cause structural damage to concrete, steel, stone or timber structures.

The root systems of trees can be a potential hazard by allowing seepage pathways to develop through a dam. Trees eventually die and their roots decay and rot. A network of channels is formed by decaying roots that increases seepage within the dam's embankment or foundation. This seepage can develop into serious piping (internal erosion) that removes the soil particles from the embankment of the foundation, which can ultimately lead to the failure of the dam.

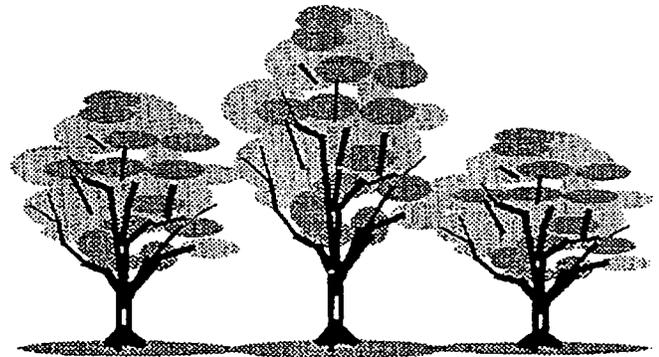
Brush and woody vegetation can hinder the visual inspection of dam surfaces. Sinkholes, animal burrows, seeps and other irregularities can be obscured by trees and brush. Woody vegetation can cause excessive shade that can hinder the growth of a sturdy, dense grass coverage. These affected areas are more prone to surface erosion.

### Erosion Control

Grass cover is a very effective and inexpensive way to prevent the erosion of embankment surfaces. The stems and root systems of grasses tend to trap fine particles of soil, thus inhibiting the migration of these particles. A good grass cover provides an excellent means against erosion due to runoff caused by rains, and can protect the embankment during limited overtopping.

### Maintenance

Grass cover should be routinely cut to provide a surface that can be easily inspected. **Trees and brush should never be allowed to grow on or very near a dam!** Many older dams have very large trees growing on or near them. Removal of trees, roots and brush should be done under the direction of a qualified professional engineer knowledgeable in dam safety and maintenance.



For more information contact:

Department of Environmental Protection  
Bureau of Waterways Engineering  
Division of Dam Safety  
P.O. Box 8554  
Harrisburg, PA 17105-8554  
(717) 787-8568



Commonwealth of Pennsylvania  
Pennsylvania Historical and Museum Commission  
Bureau for Historic Preservation  
Commonwealth Keystone Building, 2nd Floor  
400 North Street  
Harrisburg, PA 17120-0093

October 15, 2003

Department of Transportation  
Attn: R. Scott Christie, P.E., Acting Director  
Bureau of Design  
P.O. Box 2966  
Harrisburg, PA 17105

RE: ER# 02-8034-045-B  
Phase I Report, Third Street Dam Project  
S.R. 47147, Section 3RD, Borough of Media,  
Delaware County

Dear Mr. Christie:

The Bureau for Historic Preservation (the State Historic Preservation Office) has reviewed the above named report in accordance with Section 106 of the National Historic Preservation Act of 1966, as amended in 1980 and 1992, and the regulations (36 CFR Part 800) of the Advisory Council on Historic Preservation as revised in 1999. Our comments are as follows:

Given the results of this investigation, we agree with the recommendation that no further archaeological work is necessary for this project.

This report suggests that the historic and modern artifacts collected through this survey are re-deposited. Given this, the appropriate arrangements should be made with the State Museum to curate these materials as non-site artifacts.

Please provide two additional copies of this report (one copy unbound and both copies containing original black and white photographs) for our files and for distribution to the other report repositories. A separate bound copy of the report should be submitted to the State Museum along with all associated project documentation and the artifact collection.

If you have any questions or comments concerning our review of this report, please contact Mark Shaffer at (717) 783-9900.

Sincerely,

A handwritten signature in black ink, appearing to read "Kurt W. Carr".

Kurt W. Carr, Chief  
Division of Archaeology & Protection

cc: Catherine Spohn, PennDOT District 6-0  
Steve Warfel, State Museum  
Janet Johnson, State Museum

APPENDIX C

PENNSYLVANIA HISTORIC RESOURCE  
SURVEY FORM

**PENNSYLVANIA HISTORIC RESOURCE SURVEY FORM - PHOTO/SITE PLAN SHEET**

Pennsylvania Historical and Museum Commission

Bureau of Historic Preservation

BOX 1026, Harrisburg, PA 17108-1026

89A

Survey Code/Tax Parcel/Other No.: 35-00-00809; 26-00-01793-01

County: Delaware County

Municipality: Media Borough

Address: within the borough of Media and the Township of Upper Providence

Historic Name/Other Name: Glen Providence Park

SITE PLAN

PHOTO INFORMATION

Attach Photo Here



See attached

Number	Description of View	Direction of Camera
1	View of the park from the top of the guardhouse. Note the plaque commemorating the park, as well as the small amphitheater, located on the right-hand side of the photo.	NE
Photographer Name:	Brad E. Bauman	November 2001
Negative Location:	CHRS Inc.	

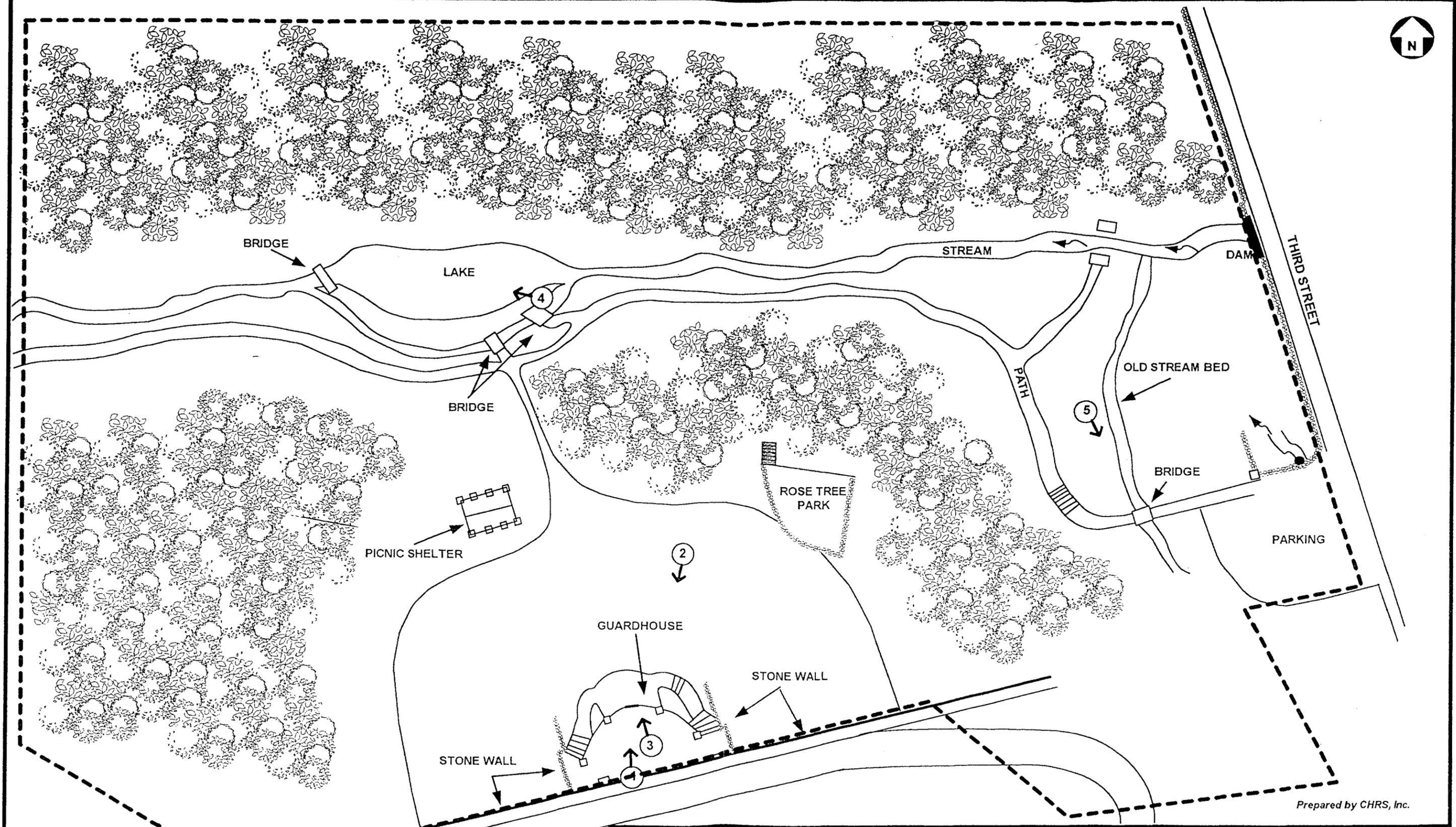


PHOTO LOCATION  
NOT TO SCALE

<b>GLEN PROVIDENCE PARK - SITE PLAN</b>	
- - - - - PROPOSED NATIONAL REGISTER BOUNDARY - NOT TO SCALE	<b>THIRD STREET DAM PROJECT</b>

Prepared by CHRS, Inc.

**PENNSYLVANIA HISTORIC RESOURCE FORM - DATA SHEET 89B**  
 Pennsylvania Historical and Museum Commission, Bureau for Historic Preservation

**IDENTIFICATION AND LOCATION**

Survey Code: \_\_\_\_\_ Tax Parcel/Other No.: 35-00-00809-00; 26-00-01793-01

County: 1. Delaware 0 4 5 2. \_\_\_\_\_

Municipality: 1. Media Borough \_\_\_\_\_ 2. \_\_\_\_\_

Address: within the Borough of Media and the Township of Upper Providence

Historic Name: Glen Providence Park

Other Name: \_\_\_\_\_

Owner Name/Address: Delaware County

Owner Category: \_\_\_\_\_ Private  Public-local \_\_\_\_\_ Public-state \_\_\_\_\_ Public-federal \_\_\_\_\_

Resource Category: \_\_\_\_\_ Building \_\_\_\_\_ District  Site \_\_\_\_\_ Structure \_\_\_\_\_ Object \_\_\_\_\_

Number/Approximate Number of Resources Covered by This Form: 7

USGS Quad: 1. Media, PA 2. \_\_\_\_\_

UTM A. zone 18 E: 0465568 N: 4418657 C. zone 18 E: 0465716 N: 4418484

References: B. zone 18 E: 0465866 N: 4418919 D. zone 18 E: 0466098 N: 4418895

**HISTORIC AND CURRENT FUNCTIONS**

Historic Function Category:	Subcategory:	Code:			
A. <u>Recreation and Culture</u>	<u>Outdoor Recreation</u>	<u>0</u>	<u>8</u>	<u>F</u>	
B. <u>Recreation and Culture</u>	<u>Outdoor Recreation</u>	<u>0</u>	<u>8</u>	<u>F</u>	
C. <u>Recreation and Culture</u>	<u>Outdoor Recreation</u>	<u>0</u>	<u>8</u>	<u>F</u>	
D. <u>Landscape</u>	<u>Park</u>	<u>1</u>	<u>5</u>	<u>B</u>	

Particular Type: A. Park

B. Guardhouse

C. Amphitheater

D. Lake

Current Function Category:	Subcategory:	Code:			
A. <u>Recreation and Culture</u>	<u>Outdoor Recreation</u>	<u>0</u>	<u>8</u>	<u>F</u>	
B. <u>Recreation and Culture</u>	<u>Outdoor Recreation</u>	<u>0</u>	<u>8</u>	<u>F</u>	
C. <u>Recreation and Culture</u>	<u>Outdoor Recreation</u>	<u>0</u>	<u>8</u>	<u>F</u>	
D. <u>Landscape</u>	<u>Park</u>	<u>1</u>	<u>5</u>	<u>B</u>	

**PHYSICAL DESCRIPTION**

Architectural Classification: A: NA

B. \_\_\_\_\_ C. \_\_\_\_\_

D. \_\_\_\_\_ Other: \_\_\_\_\_

Exterior Materials: Foundation NA Roof NA

Walls NA Walls \_\_\_\_\_

Other \_\_\_\_\_ Other \_\_\_\_\_

Structural System: 1. NA 2. \_\_\_\_\_

Width: NA Depth: NA Stories/Height: NA

## HISTORICAL INFORMATION

Year Built: x C. 1930 to \_\_\_ C. \_\_\_ Additions/Alterations Dates: X C. 1940 ; \_\_\_ C. \_\_\_  
Basis for Dating: X Documentary X Physical  
Explain: Based on historic maps, historic aerial photographs, primary documents, secondary sources, and an examination of the resource.

Cultural/Ethnic Affiliation:	1.	<u>N/A</u>	2.	_____
Associated Individuals:	1.	<u>N/A</u>	2.	_____
Associated Events:	1.	<u>N/A</u>	2.	_____
Architects/Engineers:	1.	<u>N/A</u>	2.	_____
Builders:	1.	<u>N/A</u>	2.	_____

## MAJOR BIBLIOGRAPHICAL REFERENCES

see Continuation sheet

## PREVIOUS SURVEY, DETERMINATIONS

None

## EVALUATION (Survey Director/Consultants Only)

Individual NR Potential: X Yes \_\_\_\_\_ No \_\_\_\_\_ Context(s): \_\_\_\_\_  
Contributes to Potential District \_\_\_\_\_ Yes X No \_\_\_\_\_ District Name/Status: \_\_\_\_\_

Explain: Glen Providence Park appears to meet criteria for listing in the National Register under Criterion A for recreation. The park is a good example of a community park, as it retains its historic setting, layout, and structures. The general layout of the park remains consistent with the layout of the park since its inception in 1933. The structures created by the WPA (including the trails, guardhouse, man made lake, and bridges) remain extant and in good condition. The park is a good example of a community park, created from donated land, and then improved upon by the WPA. Glen Providence Park was also evaluated for its eligibility under Criterion C. Glen Providence Park embodies the characteristics of an early twentieth-century community park. Composed of land which was donated by local residents, the park remains unaltered since the 1930s. The physical elements of the park (the guardhouse, amphitheater, bridges, etc...) have not been significantly altered since the early twentieth century, when they were constructed by the WPA. All of these structures are good examples of the work that was done by the WPA during this time period. In addition to the cohesiveness of these structures, the man made lake and trails are also still extant and in good condition. The park has retained its integrity of design, and is recommended eligible for listing in the National Register under Criterion C.

## THREATS

Threats: 2 1. None 2. Public Development 3. Private Development 4. Neglect 5. Other  
Explain: This property may be affected by proposed road improvements as part of the Third Street Dam Project, Media, Delaware County, Pennsylvania.

## SURVEYOR INFORMATION

Surveyor Name/Title: Mary S. Alfson/Project Manager Date: November 15, 2001  
Project Name: Third Street Dam Project  
Organization: Cultural Heritage Research Services, Inc. Telephone: 215-699-8006  
Street and No.: 403 E. Walnut St.  
City State: North Wales, PA Zip Code: 19454  
Additional Survey Documentation: Site plan, photographs and property location map appended.  
Associated Survey Codes: \_\_\_\_\_

**PENNSYLVANIA HISTORIC RESOURCE SURVEY FORM - NARRATIVE SHEET 89C**  
**Pennsylvania Historical and Museum Commission, Bureau for Historic Preservation**

Survey Code: \_\_\_\_\_ Tax Parcel/Other No.: 35-00-00809-00; 26-00-01793-01  
County: Delaware Municipality: Media Borough  
Address: within the Borough of Media and the Township of Upper Providence  
Historic/Other Name: Glen Providence Park Sheet 1 of 5

**PHYSICAL DESCRIPTION:**

This resource is located within the Borough of Media and the Township of Upper Providence, Delaware County, Pennsylvania. This property occupies tax parcels 35-00-00809-00 and 26-00-01793-01. The property is owned by Delaware County. The property includes a historic park, a historic stone guardhouse, and a small historic amphitheater. A historic man made lake, numerous historic bridges and trails, and a modern picnic shelter are also located within the park.

Glen Providence Park is located partly in the Borough of Media (approximately 12.22 hectares [30.2 acres]) and partly in Upper Providence Township (approximately 2.5 hectares [6.17 acres]), Delaware County. The park's northern boundary is defined by West Third Street, and its northwestern border is defined by Kirk Lane. To the southwest, south, and southeast, the park is bounded by privately-owned properties fronting on North Ridley Creek Road, West Baltimore Avenue, and State Street. A finger of the park extends southeastward past privately-owned land to allow for access via State Street. An unnamed tributary of Ridley Creeks flows southwestward through the eastern and southern portions of the park, toward a confluence with Ridley Creek approximately 300 meters (984.2 feet) southwest of the park's southern boundary.

The main entrance to the park is located along State Street. The entrance to the park consists of a historic stone guardhouse, which was constructed in the 1930s. Stone walls extend from the guardhouse along the sidewalk on either side of the park. Stone columns are located at regular intervals along the wall, running the entire length of the park. The guardhouse is banked into the side of a hill, with the roof on the same level as the adjacent roadway. The roof, which has been paved, serves as a platform overlooking the park. A low stone wall runs along the length of the roof, matching the wall running along the length of the park. A plaque, commemorating the park, is located in the center of the stone wall. It reads:

GLEN PROVIDENCE PARK  
1936  
THIS LAND WAS LARGELY DONATED  
TO THE COUNTY OF DELAWARE BY  
MR. AND MRS. GEORGE T. BUTLER  
ADDITIONAL AREAS BY  
JAMES J. SKEELY AND  
MEDIA SWIMMING AND ROWING CLUB.  
IMPROVEMENTS WERE FINANCED BY  
THE COUNTY AND FEDERAL W.P.A. AID.  
DEVELOPED AS AN ARBORETUM AND  
BIRD SANCTUARY BY  
DELAWARE CO. PARK BOARD/  
SAMUEL L. SMEDLY PRESIDENT  
"A GIFT OF LAND IS A GIFT ETERNAL"

**PHYSICAL DESCRIPTION (CONT):**

Stone stairs, leading down into the park, are located on either side of the building. The front façade of the guardhouse consists of four historic windows and two modern doors. The windows are twenty-five pane fixed historic windows, featuring stone keystone lintels. The doors are modern metal panel doors, which are also framed by stone keystone lintels. A stone deck is located in front of the doors.

An open field extends from the guardhouse northwest towards the stream, which runs southwest through the park, leading from the Third Street Dam towards an unknown termination point. The field features scattered trees throughout, and gently slopes downhill. A small historic stage is located to the north of the guardhouse, along the side of the park boundary. Called "Rose Tree Park," this small stage features a paved deck which is lined by a stone wall. Stone stairs lead up to the stage. Park benches and overhead lighting line the edges of this stage. This small stage area is surrounded on three sides by trees and bushes, sheltering it from the overall park.

Continuing north from the guardhouse and Rose Tree Park, the ground begins to slope steeply downhill. A modern picnic shelter, constructed of wood resting and resting on stone pillars, is located just south of the creek. A path leads up from the stream to the picnic shelter. The path leading up to the picnic shelter intersects with a second path which runs the length of the park from north to south. This second path also parallels the stream. A small man made lake is located across the stream from the picnic shelter. The lake was created by diverting the stream into a man made depression. Three small historic bridges are located around the lake, providing access to the areas surrounding the lake. The bridges are all constructed of wood planks with either metal or wood railings.

The stream and the path lead farther northeast through the park until they intersect with Third Street. The area surrounding the stream is heavily wooded and steeply sloped on either side. As the stream and the path approach Third Street, the path deviates to the southeast, while the stream continues on its original northeast course. The stream ends at the Third Street Dam, which controls the flow of water from Broomall Lake into the stream. A second stream historically intersected the first at this point in the park; however, the stream bed is completely dry and is now partially overgrown.

The path, which had been following the stream, turns to the southeast, leading uphill to a small parking lot on Third Street. The path is partially constructed of stone, and features shallow stone stairs leading up the side of the hill. The path splits part way up the hill, with one section continuing to the parking lot, and the other turning north towards the stream. The path leading to the stream leads to a pair of stone abutments, which once supported a bridge over the stream. The bridge is no longer extant.

**HISTORICAL NARRATIVE:**

In the latter half of the nineteenth century, the land constituting present-day Glen Providence Park was owned by John M. Broomall, a Delaware County judge, Civil War-era Congressman, and friend of Abraham Lincoln. After Broomall's death in 1894, his extensive real estate holdings were sold off (Janco 1994:MD1). A parcel of Broomall's land lying on the south side of Broomall's Lake was acquired first by John B. Townsend, and then, in 1905, by attorney George T. Butler and his wife (Wheelock 1944:n.p.). The son of William Butler who sat on the bench in both Chester and Delaware counties, George Butler, had been admitted to the Delaware County Bar in 1893, and he would practice in that capacity for more than a half-century (Wheelock 1944:n.p.).

**HISTORICAL NARRATIVE (CONT):**

There were no public parks in Delaware County in 1933, when a Delaware County Park Board was organized. A prime mover in this park-building initiative was long-time Delaware County resident and nature-lover Samuel L. Smedley, whose namesake uncle had helped lay out Philadelphia's Fairmount Park (Wheelock n.d.:n.p.). Smedley served as the Delaware County Park Board's first President. Under his leadership, the Board created its first park in 1936, on approximately 10.11 hectares (25 acres) of land donated by George Butler and his wife for the purpose of providing the community with an arboretum and bird sanctuary. Mrs. Butler named the new park "Glen Providence" (Votaw 1949:n.p.; Anonymous n.d.:n.p.). A plaque mounted at the main entrance to the park indicates that additional land for the park was acquired from James J. Skelly and the Media Swimming and Rowing Club.

According to a visiting reporter, at the time of its creation Glen Providence Park was already endowed with a variety of ferns, shrubs, flowers, berry bushes, vines, grasses, and trees. To make it even more attractive to both animals and men, laborers under the Works Progress Administration excavated a pond near the center of the park, and ringed it with a network of paths (Anonymous n.d.:n.p.). In the coming years, this pond—sometimes referred to as "Mirror Lake"—was stocked with perch, bass, and sunfish, and additional varieties of trees were introduced to the park by individual donors and organizations such as the Back to Nature Club of Philadelphia, the Girls Club of Upper Providence, and the Field and Stream Club (Votaw 1949:n.p.; Wheelock 1944:n.p.).

By mid-1944, a guard house had been erected near a stone plaza marking the main entrance to the park, which had become known as a "bird haven" (Wheelock 1944:n.p.). In a newspaper article published in October 1949 the park was described as "one of the scenic spots in Delaware County." Among its appointments at that time were a number of bridges, lighting fixtures around the lake (which facilitated night-time ice skating), and a cabin where first aid could be administered (Votaw 1949:n.p.). The addition of an amphitheater to the grounds in the early 1940s literally set the stage for outdoor concerts and community gatherings such as Easter sunrise services.

Glen Providence Park is a good example of a small, historic, county park, which was established to serve as a local arboretum and bird sanctuary. Land was donated by private citizens, and work on the park was done as part of the Works Progress Administration (WPA) in the late 1930s and early 1940s. Created during the 1930s, the WPA engaged in a wide variety of projects, aimed at creating jobs for the large number of unemployed. The goal of the WPA was to provide short term, low cost jobs which would employ a large number of people (Cutler 1985: 6-7). The WPA was responsible for the majority of the improvements at Glen Providence Park, including laying trails, building the bridges and the lake, and constructing the guardhouse (Anonymous n.d.:n.p.). The park has served as a local community recreational area since its creation in 1933. The structures constructed as part of the WPA project are still extant and are in good condition. The park is still used extensively by local residents and is maintained by the County Parks Administration.

**NATIONAL REGISTER EVALUATION:**

Glen Providence Park was evaluated according to criteria set forth in *National Register Bulletin 15: "How to Apply the National Register Criteria for Evaluation"* (National Park Service 1991). Glen Providence Park is recommended eligible for listing in the National Register under Criterion A for recreation. The park is a good example of a community park, as it retains its historic setting, layout, and structures. The general layout of the park remains consistent with the layout of the park since its inception in 1933. The structures created by the WPA (including the trails, guardhouse, man made lake, and bridges) remain extant and in good condition. The park is a good example of a community park, created from donated land, and then improved upon by the WPA. Glen Providence Park is recommended eligible for listing in the National Register of Historic Places under Criterion A.

**NATIONAL REGISTER EVALUATION (CONT):**

Glen Providence Park is not associated with any significant individual or events, and is not recommended eligible under Criterion B. Glen Providence Park was also evaluated for its eligibility under Criterion C. Glen Providence Park embodies the characteristics of an early twentieth-century community park. Composed of land which was donated by local residents, the park remains unaltered since the 1930s. The physical elements of the park (the guardhouse, amphitheater, bridges, etc.) have not been significantly altered since the early twentieth century, when they were constructed by the WPA. All of these structures are good examples of the work that was done by the WPA during this time period. In addition to the cohesiveness of these structures, the man made lake and trails are also still extant and in good condition. The park has retained its integrity of design, and is recommended eligible for listing in the National Register under Criterion C. Eligibility under Criterion D cannot be fully addressed at this time since no archaeological testing has been performed to date.

**NATIONAL REGISTER BOUNDARY DESCRIPTION AND JUSTIFICATION:**

The National Register boundary for Glen Providence Park consists of an area defined by its existing tax parcel boundary. This is both the historic boundary of the park as well as the current boundary. The total area enclosed by the proposed National Register Boundary is 14.72 hectares (36.37 acres). The park is bounded on the north by the edge of pavement of West Third Street, on the northwest by the edge of pavement of Kirk Lane, and on the south by privately-owned properties fronting on North Ridley Creek Road, West Baltimore Avenue, and State Street. A finger of the park extends southeast, past privately-owned land to allow for access via State Street.

The period of significance for the property is 1933 until 1951. This time period includes the original inception date of the property and extends to include the WPA work that was undertaken in the late 1930s. The date extends past the period of the WPA work to reflect the parks continued use as a recreational facility. This amount of land is sufficient to retain the feeling, association, and setting to convey the property's significance under both Criteria A and C. The proposed boundary includes those features historically associated with the property, including the guardhouse, amphitheater, trails, man made lake, and the geographical features of the terrain. This boundary was prepared in accordance with guidelines set forth in the *National Register Bulletin*: "Defining Boundaries for National Register Properties" (Seifert et al. 1997).

**REFERENCES CITED:**

## Anonymous

- n.d. "New Park Rich in Trees, Birds." Undated newspaper clipping in the "General 1931-1950" vertical file of the Media Borough Historic Archives, Media and Upper Providence Free Library, Media, PA.

## Cutler, Phoebe

- 1985 *The Public Landscape of the New Deal*. New Haven, Connecticut: Yale University Press.

## Janco, Mary Ann

- 1994 "A Quiet Setting Belies an Eventful Past." Article in *The Philadelphia Inquirer*, edition of January 16, 1994. Clipping is archived in the "Broomall's Lake" box at the Media Borough Historic Archives, Media and Upper Providence Free Library, Media, PA.

## REFERENCES CITED (CONT):

## National Park Service

- 1991 *National Register Bulletin Number 15*. "How to Apply the National Register Criteria for Evaluation." Washington, D.C.: National Park Service, U.S. Government Printing Office.

## Seifert, Donna, Barbara J. Little, Beth L. Savage, and John H. Sprinkle, Jr.

- 1997 *National Register Bulletin*, "Defining Boundaries for National Register Properties." U.S. Department of the Interior, National Park Service, National Register of Historic Places, 1995, Revised 1997.

## United States Geological Survey

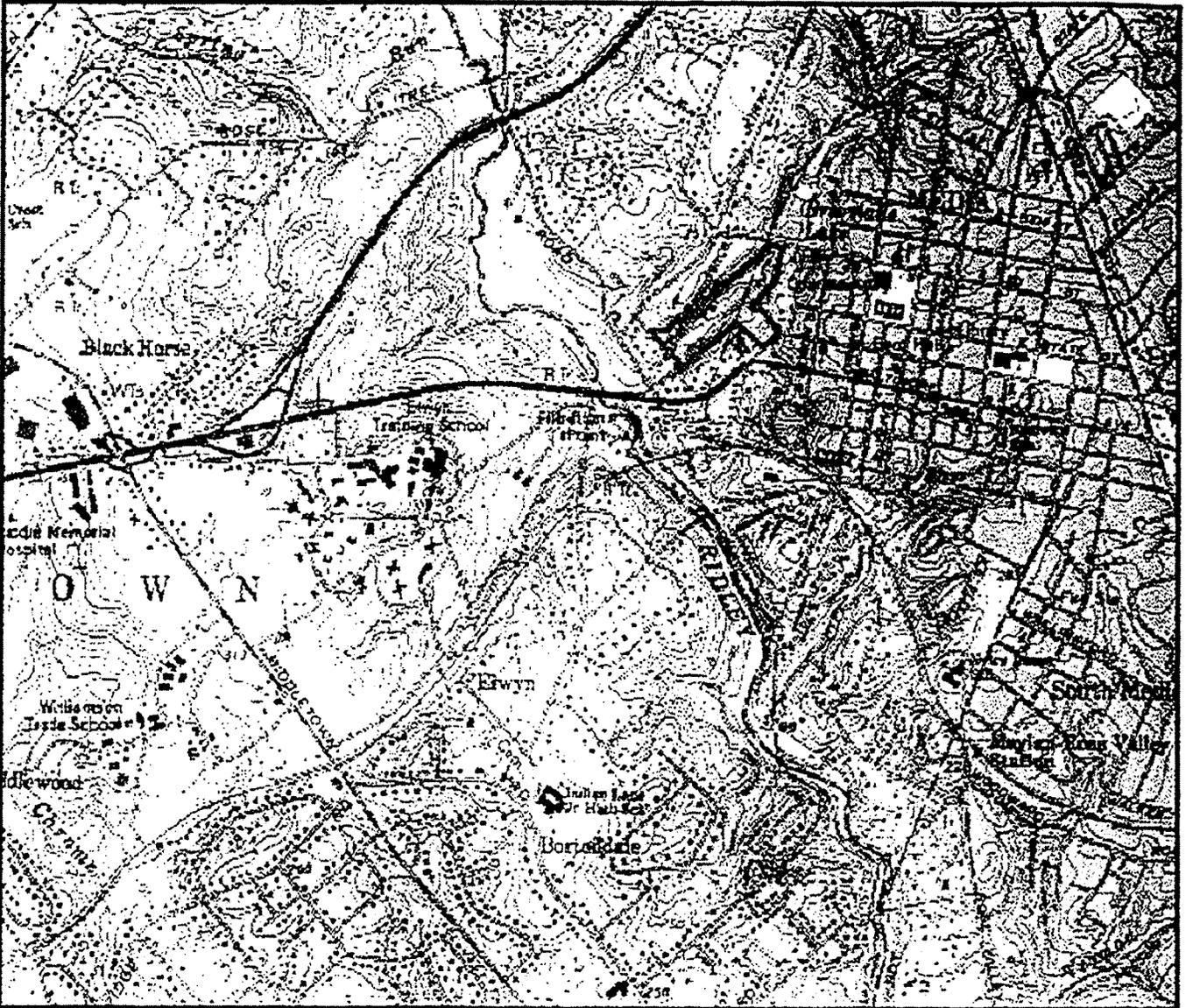
- 1994 *Media, PA, Quadrangle, 7.5 minute series*. Aerial photographs taken 1943. Photorevised 1965. Field checked 1966. Revised 1994. Reston, Virginia.

## Votaw, Galja Barish

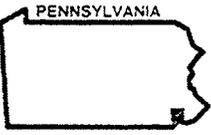
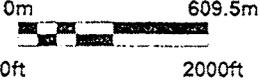
- 1949 "Glen Providence Park One of Scenic Spots in County." In the *Chester Times*, edition of October 21, 1949. Newspaper clipping in the "General 1931-1950" vertical file of the Media Borough Historic Archives, Media and Upper Providence Free Library, Media, PA.

## Wheelock, Billie

- n.d. "Smedley Park has largest Hemlock Grove in County." Undated newspaper clipping in the "General 1931-1950" vertical file of the Media Borough Historic Archives, Media and Upper Providence Free Library, Media, PA.
- 1944 "Glen Providence, on Edge of Media is bird haven." Undated newspaper clipping in the "General 1931-1950" vertical file of the Media Borough Historic Archives, Media and Upper Providence Free Library, Media, PA.



**PROPOSED NATIONAL REGISTER BOUNDARY - GLEN PROVIDENCE PARK**

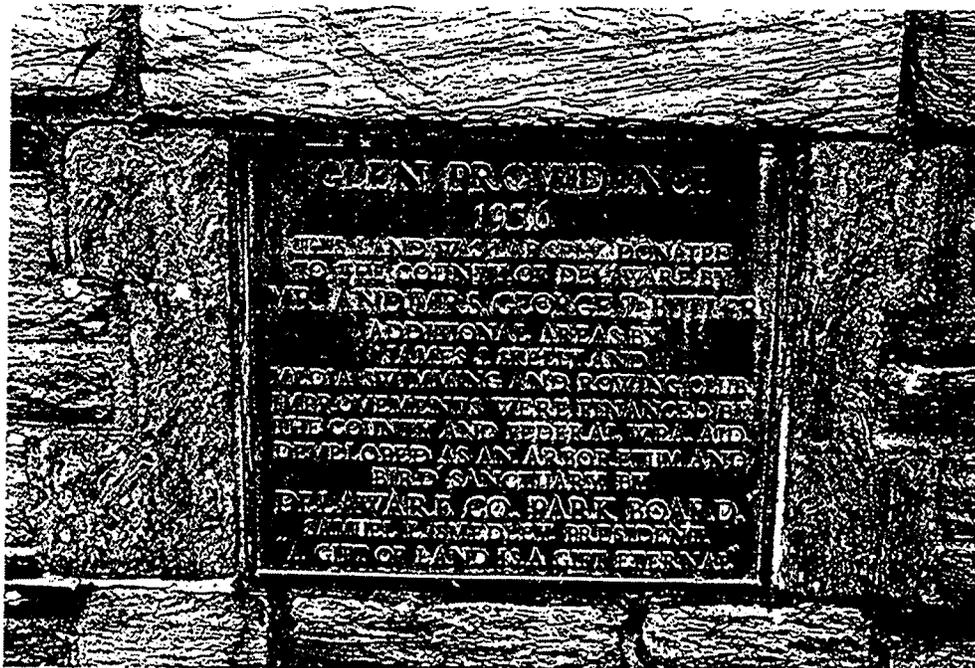
QUADRANGLE LOCATION	SCALE	SOURCE
		<p>USGS, 1994 MEDIA, PA</p>
	<p><i>Prepared by CHRS, Inc.</i></p>	

**RESOURCE LOCATION MAP - GLEN PROVIDENCE PARK**

**THIRD STREET DAM PROJECT**



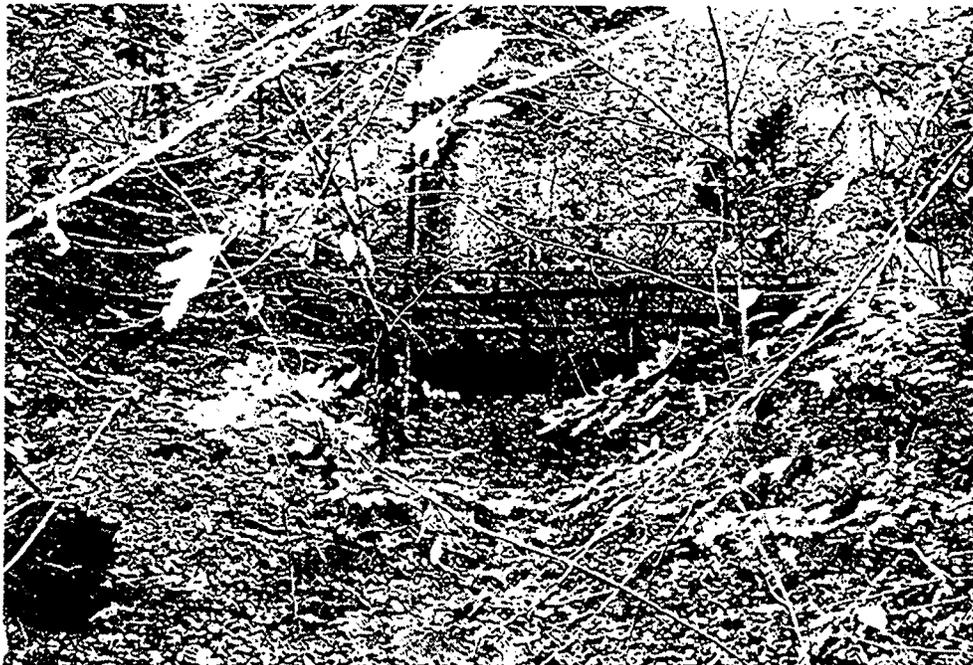
Glen Providence Park: Photograph 2 – View facing south of the historic stone guardhouse. Note the historic construction materials and the historic twenty-five pane fixed windows.



Glen Providence Park: Photograph 3 – View facing northwest of the historic plaque commemorating the park.



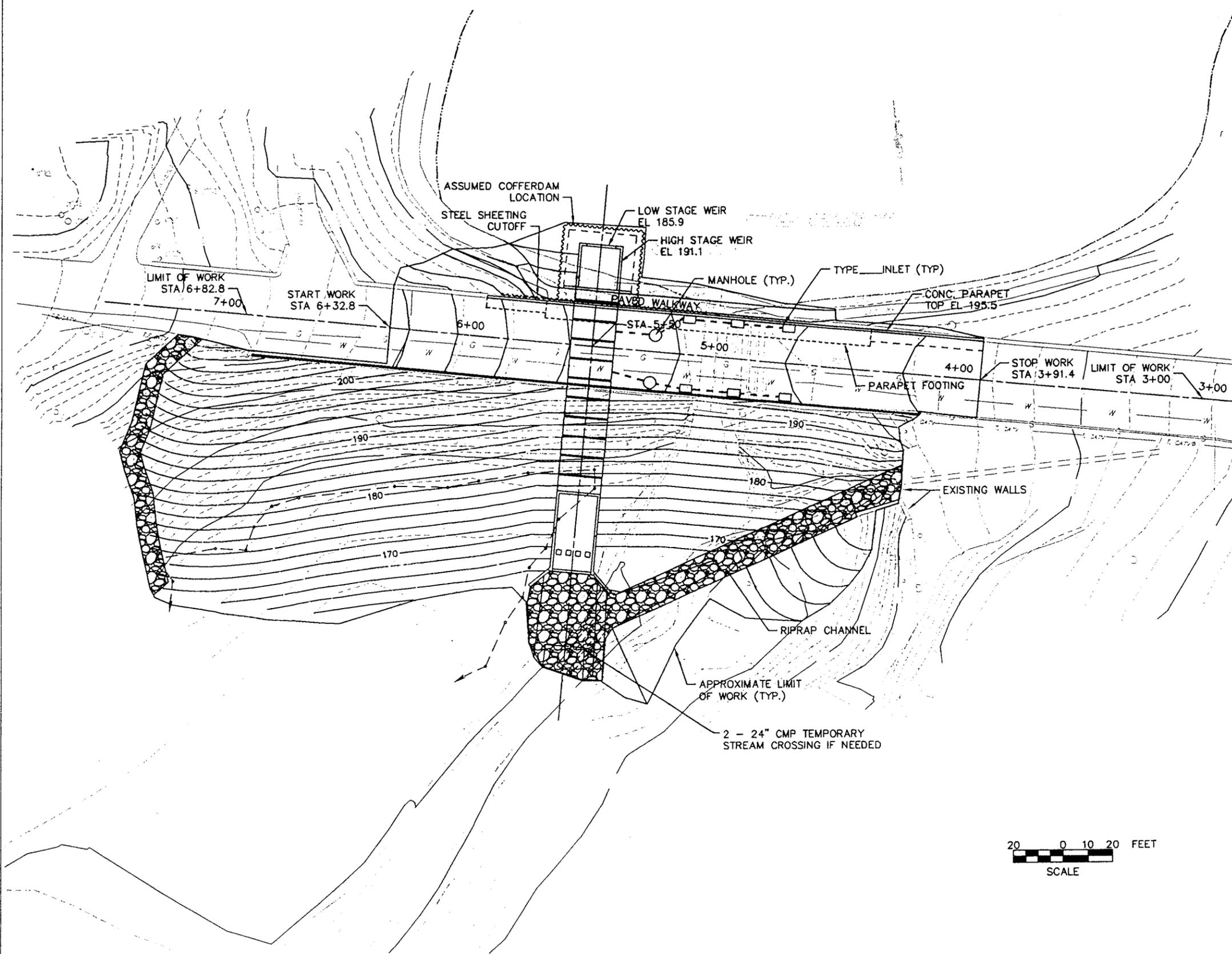
Glen Providence Park: Photograph 4 – View facing west overlooking the man made lake. Note the historic bridge at the far end of the lake.



Glen Providence Park: Photograph 5 – View facing southeast of a historic bridge located at the Third Street end of the park. Note the wood railings and the general setting of the bridge.

APPENDIX D

PROJECT ENGINEERING



Proposed Construction Consists of:

1. Removal of the existing pavement within the limits of work.
2. Removal of the existing concrete walls as necessary for excavation.
3. Removal of concrete top of existing box culvert.
4. Placement of Concrete and Select Fill/Earthfill within the exist box culvert.
5. Removal or grouting of the three (3) existing Corrugated Metal Pipes through the embankment.
6. Excavation for the proposed spillway.
7. Construction of the new spillway consisting of:  
Cast-in-place concrete box-inlet drop weir  
Precast concrete box culvert, post-tensioned  
Cast-in-place concrete stilling basin.
8. Construction of the cast-in-place concrete parapet (upstream)
9. Construction of the cast-in-place concrete curb (downstream)
10. New paving within the limits of work.
11. Clearing, grubbing, and stripping of the downstream embankment slope.
12. Placement of earthfill to flatten the downstream slope to 2.5:1 as shown. Additional grading as shown.
13. Placement of riprap erosion protection as shown.
14. Permanent turf establishment in disturbed areas.

NOTE:

1. No ROW information was found during file search.
2. Design of roadway drainage to be based on proposed improvements at 3rd and West Streets.



**T,S, & L SUBMISSION.  
NOT FOR CONSTRUCTION**

PROJECT: UPGRADING OF THIRD STREET  
BOROUGH OF MEDIA  
DELAWARE COUNTY, PENNSYLV.

REV.	DESCRIPTION	DATE

DESIGNED BY: GSP	DRAWN BY: HSF	CHECKED BY: JPH
JOHN P. HARRISON		
DATE:		
PA PROFESSIONAL ENGINEER NUMBER 048270-E		

SHEET TITLE: GENERAL PLAN		
Schnabel Engineering 510 East Gay Street West Chester, PA 19380 Phone: 610-696-6066		
SCALE: SHOWN	DATE: 11-07-01	JOB NO.: 00151134

**GENERAL NOTES:**

PROVIDE MATERIALS AND WORKMANSHIP IN ACCORDANCE WITH SPECIFICATIONS PUBLICATION 408, LATEST ADDITION.

**DESIGN SPECIFICATIONS**  
DESIGN DIVISION I OF AASHTO, STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SIXTEENTH EDITION, 1996 (INCLUDING INTERIM SPECIFICATIONS) AND AS SUPPLEMENTED BY DESIGN MANUAL PART 4, STRUCTURES, AUGUST 1993 EDITION (INCLUDING REVISIONS).

DESIGN IS IN ACCORDANCE WITH THE STRENGTH DESIGN METHOD (LOAD AND RESISTANCE FACTOR DESIGN).

**DESIGN LIVE LOADS**  
PHL-93 LOADING OR 125 PERCENT OF THE ALTERNATE MILITARY LOADING, OR P-82 (204K PERMIT LOAD) WITH THE AASHTO GROUP 1B LOADING.

DEAD LOADS  
UNIT WEIGHT OF SOIL = 125 PCF

FOR BOX CULVERT, USE A MAXIMUM ALLOWABLE FOUNDATION PRESSURE OF \_\_\_\_\_ PSF.

**GENERAL**

PROVIDE 2½-INCH CONCRETE COVER ON REINFORCEMENT BARS EXCEPT AS NOTED.

USE CLASS AA CEMENT CONCRETE FOR ALL CAST-IN-PLACE CONCRETE.

PROVIDE GRADE 60 REINFORCING BARS THAT MEET THE REQUIREMENTS OF DEFORMED BILLET-STEEL BARS (ASTM A615). DO NOT WELD GRADE 60 REINFORCING STEEL BARS UNLESS SPECIFIED.

PROVIDE MINIMUM LAP AND EMBEDMENT LENGTH OF REINFORCEMENT IN ACCORDANCE WITH LRFD SPECIFICATIONS (SEE BC-736).

CHAMFER EXPOSED CONCRETE EDGES 1 IN. X 1 IN. EXCEPT AS NOTED.

RAKE FINISH ALL HORIZONTAL CONSTRUCTION JOINTS EXCEPT AS INDICATED.

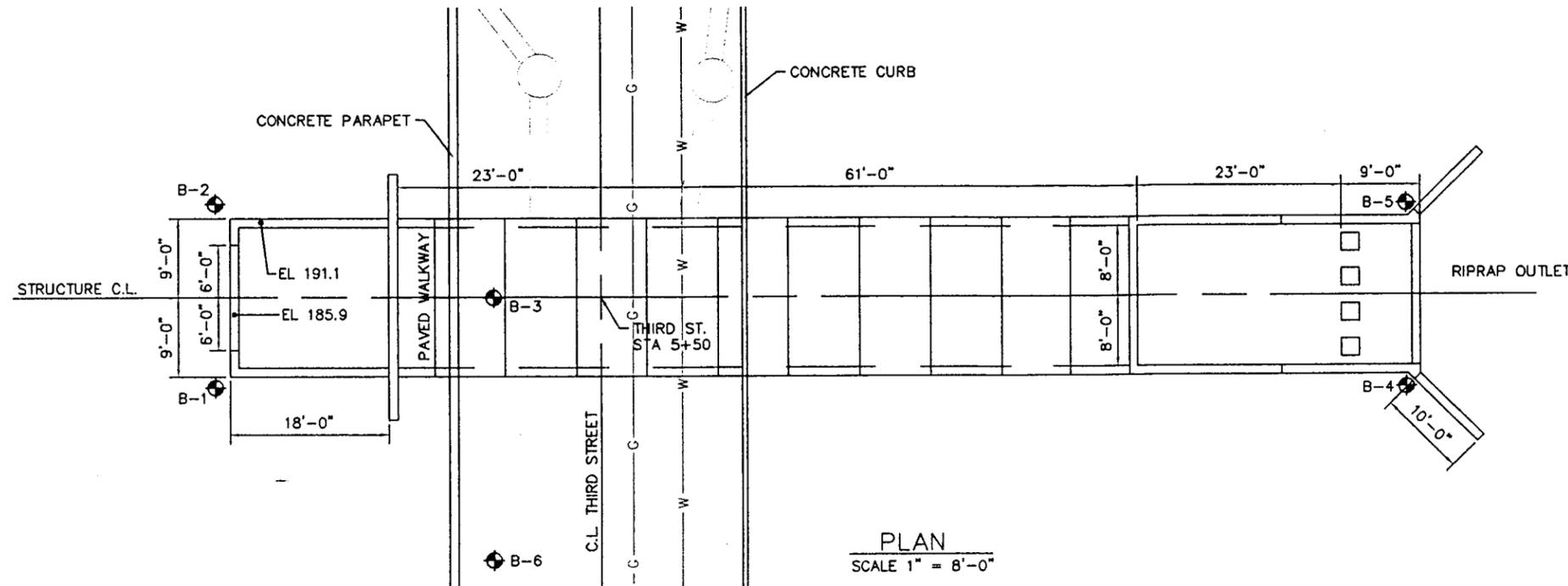
APPLY TWO COAT PAINTED WATERPROOFING TO TOP AND BACK SIDES OF PRECAST BOX, BELOW EL 185.9 OF DROP INLET EXTERIOR, AND TO REAR FACE (FILL SIDE) OF STILLING BASIN AND WNG WALLS 0.5 FT TO 1.0 FT BELOW FINISHED GRADE.

PROVIDE 2 FT WTH WATERPROOFING MEMBRANE PER SECTION 680.3, ALONG THE SIDE JOINTS AND JOINTS IN TOP OF BOX.

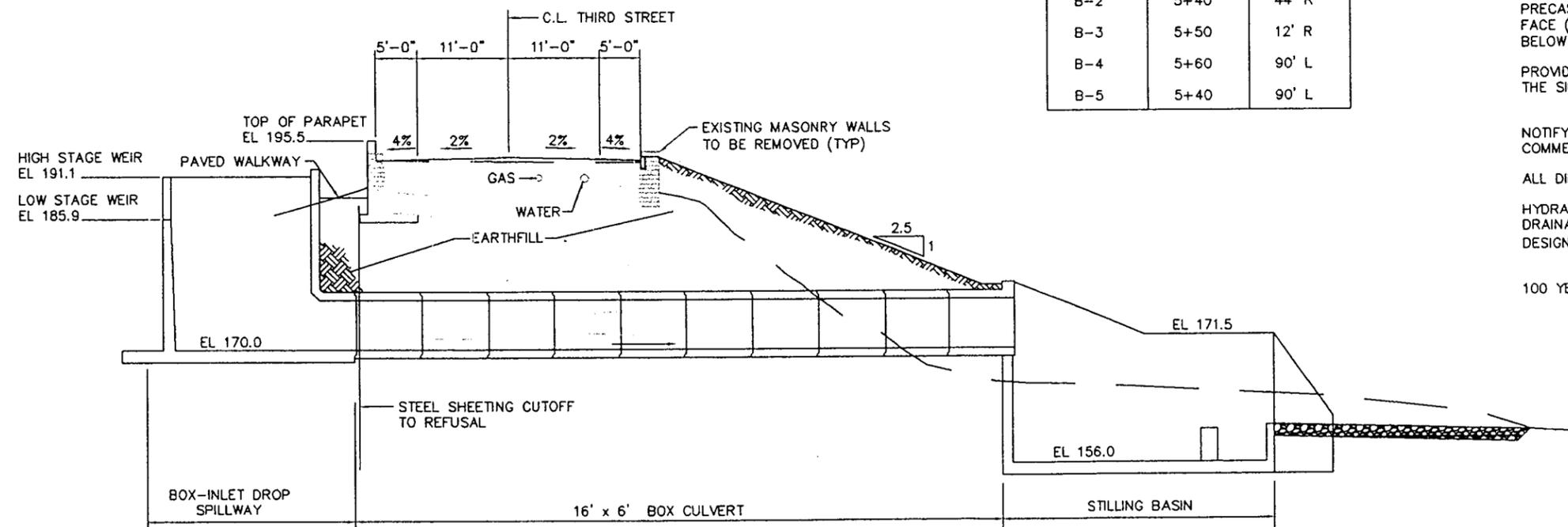
NOTIFY THE REGIONAL HEADQUARTERS OF THE FISH COMMISSION PRIOR TO COMMENCING WORK.

ALL DIMENSIONS ARE HORIZONTAL EXCEPT AS NOTED.

HYDRAULIC DATA:  
DRAINAGE AREA = 0.55 mi<sup>2</sup>  
DESIGN FLOOD (½ PMF)  
MAGNITUDE = 2200 cfs  
W.S. EL = 195.2  
100 YEAR FLOOD  
MAGNITUDE = 1362 cfs  
W.S. EL = 193.5



BORING	STATION	OFFSET
B-1	5+60	44' R
B-2	5+40	44' R
B-3	5+50	12' R
B-4	5+60	90' L
B-5	5+40	90' L



**T,S, & L SUBMISSION  
NOT FOR CONSTRUCTION**

PROJECT: UPGRADING OF THIRD STREET D, BOROUGH OF MEDIA DELAWARE COUNTY, PENNSYLVANIA

SHEET TITLE: SPILLWAY, PLAN AND SECTION

DESIGNED BY: GSP  
DRAWN BY: NSF  
CHECKED BY: JPH

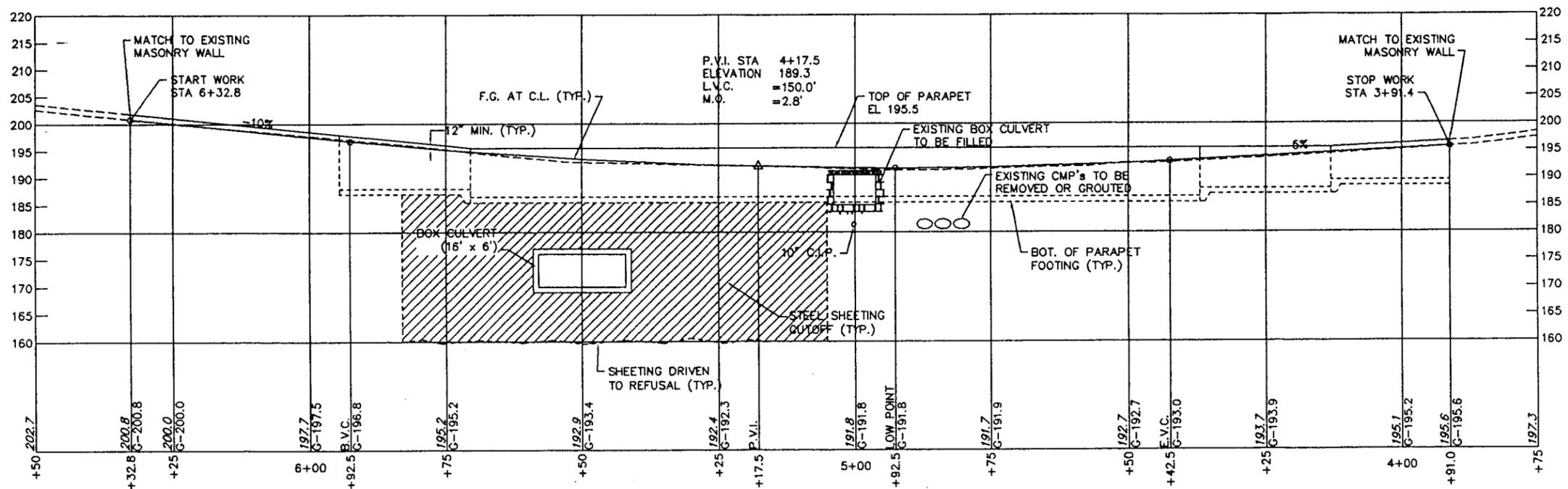
JOHN P. HARRISON

Schnabel Engineering  
510 East Gay Street  
West Chester, PA 19380  
Phone: 610-696-6066

DATE: \_\_\_\_\_  
PA PROFESSIONAL ENGINEER NUMBER 048270-E

SCALE: SHOWN DATE: 11-07-01 JOB NO.: 00151134 SHE

REV.	DESCRIPTION	DATE



PROFILE (LOOKING UPSTREAM)



T,S, & L SUBMISSION  
NOT FOR CONSTRUCTION

PROJECT: UPGRADING OF THIRD STREET DAM  
BOROUGH OF MEDIA  
DELAWARE COUNTY, PENNSYLVANIA

REV.	DESCRIPTION	DATE

DESIGNED BY: GSP  
DRAWN BY: MSF  
CHECKED BY: JPH  
**JOHN P. HARRISON**  
DATE: \_\_\_\_\_  
PA PROFESSIONAL ENGINEER NUMBER 048270-E

SHEET TITLE: PROFILE  
**Schnobel Engineering**  
510 East Gay Street  
West Chester, PA 19380  
Phone: 610-696-6066  
SCALE: SHOWN DATE: 11-07-01 JOB NO.: 0013134 SHEET: 3 OF 3



