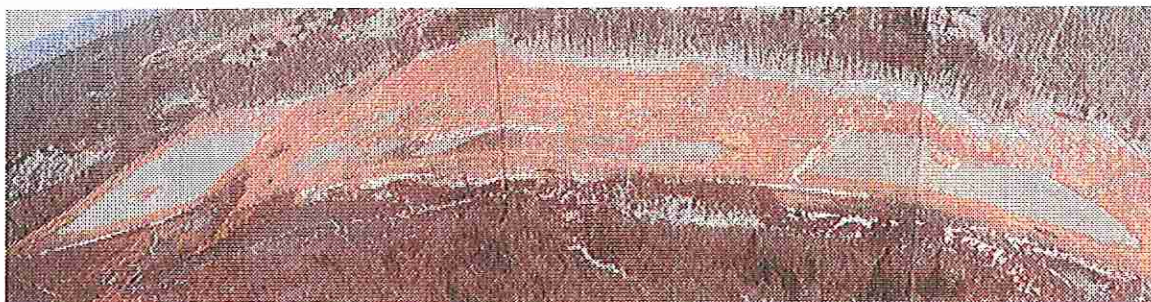


20th Anniversary  
1977 TO 1997

National Abandoned Mine Land Reclamation Award  
Nomination

# UPPER LEHIGH RECLAMATION PROJECT



Photographed the week of Final Inspection

Submitted by

Commonwealth of Pennsylvania

Department of Environmental Protection  
Bureau of Abandoned Mine Reclamation  
Wilkes-Barre District Office



**NOMINATION  
OF THE  
UPPER LEHIGH  
BACKFILLING STRIP PITS  
OSM 40(3222)101.1  
ABANDONED MINE RECLAMATION PROJECT**

**FOR THE  
UNITED STATES DEPARTMENT OF THE INTERIOR  
OFFICE OF SURFACE MINING  
RECLAMATION AND ENFORCEMENT**

**20th ANNIVERSARY  
(1977 to 1997)  
NATIONAL ABANDONED MINE LAND  
RECLAMATION AWARD**

*SUBMITTED BY*

*COMMONWEALTH OF PENNSYLVANIA  
DEPARTMENT OF ENVIRONMENTAL PROTECTION  
BUREAU OF ABANDONED MINE RECLAMATION  
WILKES-BARRE DISTRICT OFFICE*

**1997 NATIONAL ABANDONED MINE LAND  
RECLAMATION AWARD  
NOMINATION**

**Project Name:**

Backfilling Strip Pits  
Upper Lehigh  
Foster Township  
Luzerne County, Pennsylvania  
Contract No. OSM 40(3222)101.1

**Project Location:**

See Attached Map

**Nomination Team:**

Sandra Holoman	Design Engineer
David Greenfield	Engineer Supervisor
Stephen Hedish	Engineer Technician
Gary Greenfield	Planning Manager

Pennsylvania Department of Environmental Protection  
Bureau of Abandoned Mine Reclamation  
Wilkes-Barre District Office  
2 Public Square Fifth Floor  
Wilkes-Barre, Pennsylvania 18711-0790  
Telephone (717) 826-2371

**Project Data:**

Start Date:	May 30, 1996
Completion Date:	March 10, 1997

Payment to Contractor:	\$710,000.00
PennDOT Reimbursement:	- \$ 50,000.00
Final Cost to Department:	\$660,000.00

Reclamation Contractor:	Falls Creek Energy Co., Inc., and Maud Mining Company, A Joint Venture R. D. 6, Box 231 Kittanning, PA 16201
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**Date Submitted:**

April 25, 1997

## *Narrative Description of Work*

### **A: HISTORY / BACKGROUND**

The Upper Lehigh Abandoned Mine Reclamation Project is located in Foster Township, Luzerne County, and has a roadway, State Route 2049, that winds along the eastern side of the problem area. Residences in nearby Freeland Borough are within six hundred (600) feet of hazardous abandoned mine land features which are easily accessible from numerous dirt haul roads and foot paths that extend from the borough and the highway.

The site consisted of abandoned deep mined and surface mined lands. The mining was conducted by the Upper Lehigh Coal Company beginning in the late 1800's. Deep mining ceased in 1938 and surface mining ended in 1964.

The site was frequented by nearby residents for the use of ATV's, four wheeling, and partying. Others used the area for illegal dumping. Laboratory tests revealed that the water in the strip pits was polluted.

On September 5, 1992, a young boy from Freeland drowned after falling into one of the abandoned water filled strip pits. According to newspaper accounts, the boy was looking for fish when he lost his footing and fell from the highwall into the water. The steepness of the embankment prevented him from climbing out and he drowned before help could arrive.

This project eliminated twelve (12) abandoned strip pits with 3,015 linear feet of dangerous highwall, seven of the strip pits had dangerous water bodies; sealed one entry to the deep mines; and reclaimed three (3) large mine spoil banks.

The design was completed in early 1996. The grading quantity for this sixty-four (64) acre site was estimated to be 592,000 cubic yards. The Engineers Estimate for the entire reclamation effort was \$ 1,114,135.00

Bids for the Upper Lehigh reclamation project were publicly opened and read on March 28, 1996. Five bids were received; the bids range from a low of \$ 811,926.00 to high of \$ 1,171,725.76. The low bidder was Falls Creek Energy Co./ Maude Mining Co., a joint venture. The contract was executed on May 1, 1996, and the Notice to Proceed was acknowledged on May 30, 1996.

The Contractor proceeded expediently and skillfully; and on March 10, 1997, the final construction inspection was held at the site. The project was accepted and final quantities established. The final numbers were sixty-four (64) acres of vegetated reclamation and 603,808 cubic yards of grading. The final cost paid to the Contractor for all items of work was \$ 710,000. The final cost to the Department will be \$660,000 after PennDOT reimburses the Department for the work in their roadway.

## **B: THE SOLUTIONS/ THE OBSTACLES**

**Why did this scope of the project address more than just the health and safety hazards at the site?**

A *Watershed Approach* to reclamation was selected because the site is located near a highly populated area and in a critical position within the watershed. We needed to understand how the entire watershed functioned so that we would not create one problem while fixing another.

All of the problems within the watershed were studied and all of the resources at our disposal were identified.

At that point we set out to design a project that would eliminate all of the health and safety hazards and address all other concerns within the watershed. It was also important that the final product be functional, usable, and aesthetically pleasing.

**What obstacles had to be overcome to implement the *Watershed Approach*?**

- 1.) The strip pits were being utilized for effective storm water retention for the Borough of Freeland, the Village of Upper Lehigh, a PennDOT highway, and many adjacent land owners. Consequently, the design had to serve the needs of the surrounding communities for storm water retention and sediment storage.
- 2.) A PennDOT culvert within the project area was determined to be drastically undersized.
- 3.) A major water supply line and a proposed location for a replacement water supply line were situated within the proposed grading limits. Consequently, the final design grade had to incorporate the water supply needs for the Borough of Freeland.
- 4.) A limited supply of on site borrow material was available. To keep project costs down it was deemed essential not to use off-site material or blast any rock. Consequently, the grading plan had to be innovative to eliminate the hazards, produce a gently sloping land resource, provide for storm water detention and sediment storage, and accommodate for the location of the water supply lines.
- 6.) Multiple approvals were required. Needed were: Two (2) stream encroachment permits, a highway occupancy permit, a draw down permit, a National Pollutant Discharge Elimination System permit and an E & S plan.
- 5.) Finally, the cooperation of the property owners had to be secured. Pagnotti Enterprises was the primary land owner and historically one of the largest mine operators in the Anthracite Region of Pennsylvania. They wanted assurance that their adjacent reserves of marketable culm material would not be used to backfill the pits. We agreed to this stipulation and incorporated berms into our design that would prevent this valuable culm from further erosion.

## **C: THE RESULTS**

### **Why is the Upper Lehigh Site being nominated for a National Abandoned Mine Reclamation Award?**

- 1.) Lives were surely saved by the elimination of severe hazards utilizing conventional low cost construction methods.
- 2.) Sixty-four (64) acres of land were restored to gently sloping terrain and vegetated.
- 3.) Nine hundred and ninety-five (995) acres of surface water runoff now runs through the project site instead of entering the deep mines and becoming polluted.
- 4.) Twenty-five (25) acres of wetlands were constructed to retain storm water, store sediment, provide wildlife habitat, and to be utilized as a safe recreational area.
- 5.) Water quality at the site has dramatically improved. The PH of the water in the constructed wetlands is now 6.2 compared to readings as low as 4.1 in the water filled strip pits before construction. Metals have also been reduced from moderate levels to trace amounts.

## **D: DESIGN TECHNIQUES AND INNOVATIONS**

### **1.) Hydrologic/ Hydraulic/ Sedimentation Computer Modeling**

The entire watershed was computer modeled to allow the designer to run storms of varying intensity and duration through the watershed and to study the effects on the nine hundred and ninety-five (995) acre watershed, the two (2) small streams that flowed into the strip pits, the existing storm water structures, and the proposed reclamation effort.

Many scenarios were considered and the data analyzed. The design that was chosen achieved the following objectives:

- 1.) Controlling runoff from a 100 year storm event.
- 2.) Preventing on-site soil erosion.
- 3.) Establishing sediment storage capacity.
- 4.) Creating functional high quality wildlife habitat.
- 5.) Providing an area safe for recreational activities.

The design consisted of the following components:

- 1.) Three (3) constructed wetlands (A,B,C) of +/- eight (8) acres each complete with rock lined emergency spillways.
  - Wetlands A & C are fed by streams that enter the site and are controlled at a constant water elevation. Also, islands were constructed within the wetlands to provide for a variety of water depths and habitat.
  - Wetland B was designed to be only seasonally inundated to provide for additional habitat diversity at the site.
- 2.) Eight (8) ditches were constructed to convey stream flow and runoff flow throughout the site and to prevent soil erosion.
- 3.) A state highway culvert was replaced through a memorandum of understanding (MOU) between the DEP and the Pennsylvania Department of Transportation (PennDOT).

## **2.) MOU with PennDOT**

The Bureau contacted PennDOT during the early stages of design to raise concern over a clogged and deteriorating 48 inch corrugated metal pipe that was vastly undersized to convey almost any storm event that occurred in the watershed above it.

After much dialog and meetings between designers, it was agreed the reclamation project would be designed in such a manner that surface water would be retained on the site at a rate that would allow for a 25 year storm to pass through three (3) 38 in. X 60 in. elliptical pipes installed under the highway.

The alternative design, without providing for significant storm water detention on site, would have required a relatively expensive bridge to be constructed.

PennDOT agreed to reimburse the Department for all costs associated with the installation of the pipes. Also, the Department worked with PennDOT and the local municipalities to agree upon a traffic control plan.

## **3.) Site Adjustment**

As earth moving began a large supply of topsoil rich in organic matter was uncovered, which is very rare in the strip mined areas of the Anthracite Region. The design had called for topsoil to be manufactured on site using organics and the placed in the wetlands.

An adjustment to the contract was negotiated with the contractor where he would use the available on site topsoil and not be required to make the topsoil. This resulted in the savings to the contractor of labor and material and a savings to the Department of nearly \$60,000.

#### 4.) Habitat Creation and Research

The following are innovative reclamation techniques employed at the site:

- 1.) Brush Pile Construction - Trees and brush cleared at the site were stock piled and placed to provide habitat for small mammals and birds along the transition areas from woods to pasture.
- 2.) Direct Seeding -A seeding plan was developed for the entire site to provide immediate cover of the area and to provide for habitat diversity. The wetland areas were seeded with a wetland seed mixture consisting of predominately rice cut grass. An eight (8) acre parcel was seeded with a mixture of native North American grasses for small mammal and game bird habitat. The remaining portions were seeded with a mixture consisting of orchard grass, quick cover grains, and a variety of clovers.
- 3.) Wetland Planting - The wetland areas are planned to be used as a "Research Laboratory" to study the results of plantings and processes of natural selection and succession. Much of the wetlands will be allowed to evolve naturally and the results will be documented. Selected areas will be planted by Bureau Personnel using nursery stock and cuttings from adjacent existing wetlands. The following is a list of completed efforts to date:
  - 1.) The islands of Wetlands A&C were planted with bareroot cuttings of arrowhead, bulrush, and burreed; and buttonbush plants. These were considered good locations to attempt plantings because the open water will protect the seedlings from predators.
  - 2.) An existing wetland was identified adjacent to the site with a plentiful community of speckled alders, mountain alders, and pussy willows. Cuttings were taken from these shrubs and planted onto the islands and shorelines of Wetlands A, B, & C.
  - 3.) Portions of the open water areas were seeded with wild rice and an area within Wetland B was seeded with smartweed.
  - 4.) Bareroot cuttings left over from the island plantings were planted along sections of shoreline and their survival rate will be monitored to assess the effects of predation.
- 4.) Nesting Boxes - Waterfowl and bluebird nesting boxes were constructed and erected throughout the project site by Bureau personnel. The nesting boxes were fabricated by recycling core sample containers from completed drilling projects.



## ***E:* BENEFITS**

The following is a list of some of the accomplishments that are already benefiting many people:

- 1.) The elimination of sixteen (16) abandoned mine land hazards and a highly frequented location for illegal garbage dumping.
- 2.) The reclamation of sixty-four (64) acres of land resource.
- 3.) The collection of , control of, and beneficial use of storm water runoff for wetland hydrology from a nine hundred ninety-five (995) acre watershed.
- 4.) The prevention of hundreds of millions of gallons of surface water runoff per year from entering the deep mines.
- 5.) The creation of twenty-five (25) acres of wetlands and many habitat enhancements.
- 6.) The creation of recreational habitat for human activities such as fishing, hiking, biking, cross country skiing, and ice skating.
- 7.) The improvements to water quality.
- 8.) The detention/ retention of storm water and sediment control.
- 9.) The construction of berms to control sediment and to protect a valuable resource for the property owner.
- 10.) The cost savings by using on site materials, implementing low cost construction techniques, negotiating with PennDOT to pay for the improvements to their roadway, and the site adjustment to use topsoil from site instead of manufacturing topsoil. This money saved will be used to reclaim another site.

**Generations will profit from the Upper Lehigh reclamation effort. The site's proximity to the local municipalities and it's visibility to passersby has already peaked local interest and has improved community esteem. The local Rotary Club has contacted us to learn what permissions are required for the residents to make use of the site.**

**Much positive feedback has been received for this reclamation project from residents of Freeland and Upper Lehigh. Most of whom are surprised to learn that this is just one of many completed projects in their area. The Bureau of Abandoned Mine Reclamation has to date reclaimed over nine hundred (900) surface acres in Luzerne County, Pennsylvania alone.**

**For many, this site will be a daily reminder of the ongoing efforts of the AML Program.**

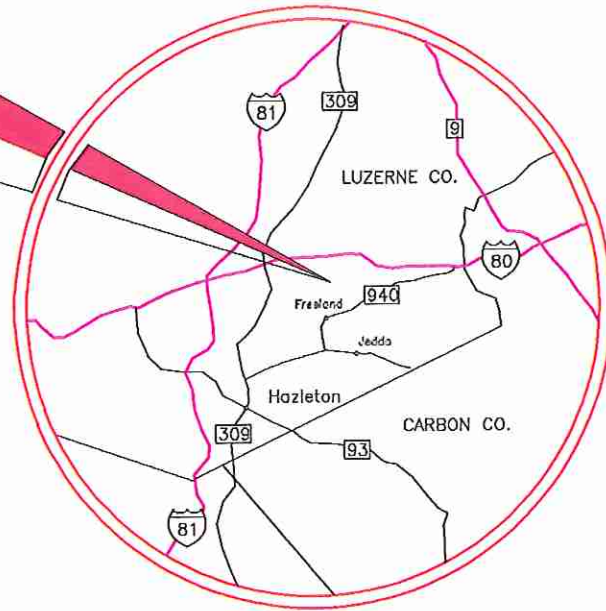
*PHOTOGRAPHIC*

*DOCUMENTATION*

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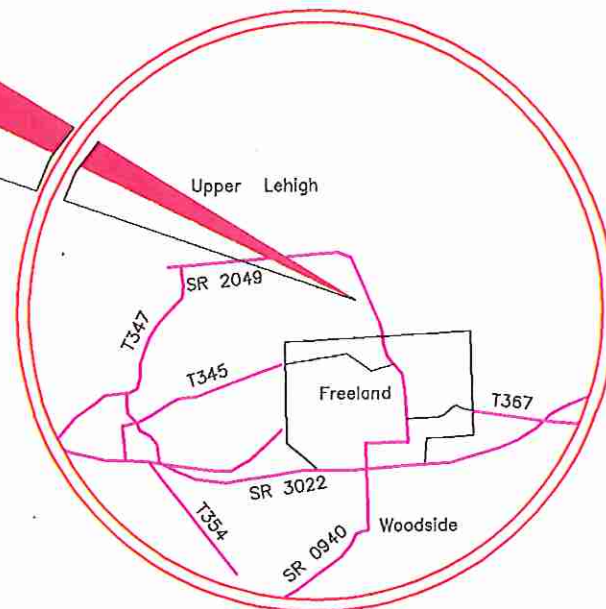
PROJECT



## LOCATION MAP

SCALE: 1 in. = 9 mi.

PROJECT



## VICINITY MAP

SCALE: 1 in. = 1 mi.

**1997 NATIONAL ABANDONED MINE LAND  
RECLAMATION AWARD  
NOMINATION**

**BACKFILLING STRIP PITS  
UPPER LEHIGH**

**PHOTOGRAPHY DESCRIPTIONS**

**Photograph Nos. 1 and 2:**

**Date: February 4, 1993**

These photographs depict preconstruction conditions at the site. The features and landmarks are identified on the photos. The physical descriptions of the numbered features as they existed prior to construction are as follows:

AMLF 1 (DH,HWB): This pit is located 75' west of heavily traveled State Route 2049 (Birkbeck Street) and 800' north of the Cherone Trailer Park off Schwabe Street in Freeland. This flooded strip pit is approximately 700' long x 150' wide x 30' deep. A dangerous highwall exists along the western end measuring 150' long x 30' high with a 40 degree slope to the water's edge. The perimeter of the pit consists of unconsolidated spoil material at slopes of up to 35 degrees. Access is via footpaths from S.R. 2049.

AMLF 2 (DH, HWB): This feature is located 250' south of AMLF 1, 600' north of the Cherone Trailer Park in Freeland, and 50' west of S.R. 2049. It is a partially flooded pit approximately 300' long x 250' wide x 30' deep. The water body measures 200' x 125' x unknown depth. There is nearly vertical highwall along the south side measuring 100' long and 30' high. Large amounts of discarded tires are located on the south side. Access is via a haul road along the northern side to the edge of the pit and a foot path leads to the pit from S.R. 2049.

AMLF 3 (DH, HWB): This feature is to the west and is a continuation of the pit which is AMLF 2. It is a partially flooded pit approximately 200' long x 100' wide x 50' deep. The water body measures 170' x 80' x unknown depth. There is dangerous highwall along the western and northern sides measuring 300' long and 50' high having a slope greater than 35 degrees consisting of unconsolidated spoil material. Large amounts of discarded tires are along the east and south sides and in the pit's center. Access is via haul roads located along the north, west, and south sides. The haul road is within 15' of the edge of the pit at the western and northern ends.

AMLF 4 (DH): This feature consists of 2 small adjacent pits. The pits measure about 150' in diameter and 50' deep and 200' x 100' x 30' deep containing about 500' of highwall. They are located 150' southwest of AMLF #3 and 300-400' north of the trailer park. Dangerous highwall having slopes of up to 50 degrees exists along the perimeter of both pits. Access is via a haul road located along 3 sides of the northernmost pit and along the east and west sides of the southernmost pit

## PHOTOGRAPHY DESCRIPTIONS

AMLF 5 (DH): This feature is located 350' northwest of the trailer park in Freeland and 80' west of AMLF 4 with a haul road between the two features. The pit measures 400' long, 250' wide, and 50' deep. Dangerous highwall exists on the south (200' x 50') side of the pit. Access is via a haul road located on the east and north sides of the pits. The haul roads are within 30' of the pit's edges.

AMLF 6 (DH, HWB): This water-filled pit is located 1200' southwest of AMLF 1 and along the same vein. The pit measures 430' long, 150' wide, and 40' deep to the water surface. The water body measures 170' x 30' x unknown depth. Dangerous highwalls having a slope of 35 degrees exist along the northern, eastern, and southern sides measuring 450' long and 30-40' deep. Garbage dumping is occurring in the eastern and western ends of the pit. The area is easily accessed by a haul road 15' to the south, east, and west sides. The haul road to the west divides this pit from AMLF 7.

AMLF 7 (DH, HWB): This feature is located 100' west of AMLF 6 and 800' north of residences in Freeland. It is approximately 600' long, 150' wide, and 40' deep to the water surface, which measures 470' x 40' x 25' deep. The south highwall measures 470' and consists of fractured bedrock at a near vertical angle dropping to the water surface. The north highwall is about 470' long and consists of loose, unconsolidated material at a 35-50 degree slope to the water surface. Visitation is evident by the extensive amounts of residential garbage along the northern and eastern sides of the pit and within the water body. Access is via a haul road within 15-25' along the entire north side. Spoil piles are along the south side.

AMLF 8 : This non-priority feature is a spoil pile which lies along the entire northern side of AMLF 1. The spoil pile covers an area of about 700' x 150' with individual piles ranging to 25' high.

AMLF 9 : This non-priority feature is a spoil area situated between AMLF 1 and the pit which contains AMLF 2 and AMLF 3. Spoil along the entire south side of AMLF 1 ranges to 25' in height.

AMLF 10 : This non-priority feature is a highly disturbed spoil area along the western sides of AMLF 5 and AMLF 6, and encircling AMLF 7. Individual spoil piles range from 15' to 35' high.

AMLF 11 (P): This feature is located along the north side of residences in Freeland and 400' of a residence located at 1141 Schwabe Street. This portal is located at the bottom of a concrete slope which measures 40' long x 7' high and extends at a 20 degree slope. The slope ends in a partial blockage of the portal at which point a 2' x 3' opening extends into the slope, which is 5' x 10' x unknown length. The slope continues in a northerly direction for an unknown distance. Well worn footpaths and garbage at the opening were present on the day of investigation. The area is 80% revegetated. The area around the opening is subsiding into the opening and is large enough for someone to fall into and become trapped. The portal and subsided area surrounding it is periodically flooded, as observed during several site visitations.

### PHOTOGRAPHY DESCRIPTIONS

AMLF 12 (DH, HWB): This feature is located 300' west of AMLF 7 and measures 300' in diameter and 35' deep to the water's edge. There is dangerous highwall along the north side of the pit consisting of loose spoil material with a 35-50 degree slope and measuring 200' long and 35' high. The water body measures about 130' in diameter with an unknown depth. Access to the pit is by a haul road 40' to the north of the pit.

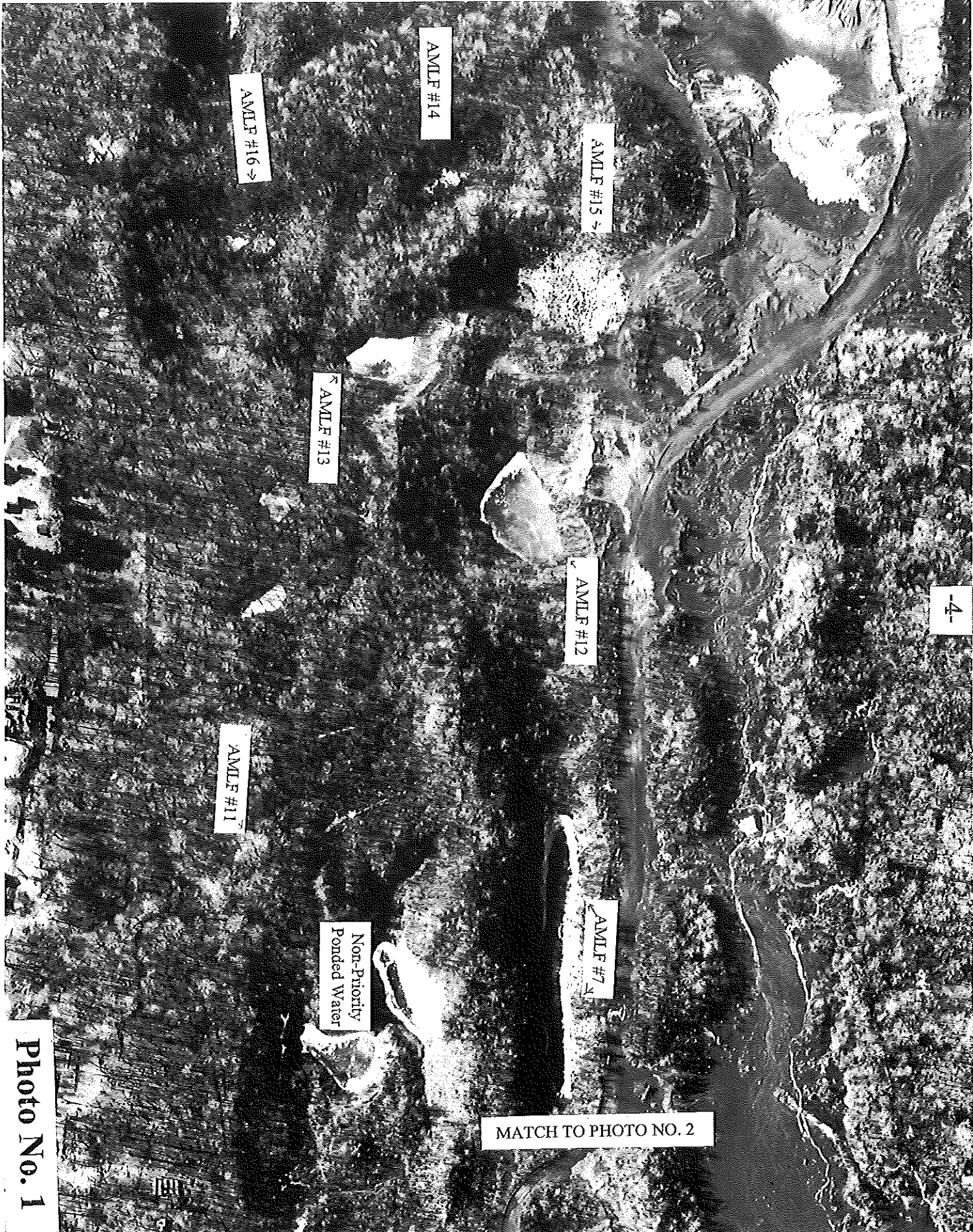
AMLF 13 (HWB): This feature is located 50' southwest of AMLF 12 and measures 150' in diameter and 25' deep to the water's edge. The pit is surrounded by spoil material. This feature is separated from AMLF 12 by a 30' spoil pile. The water body measures about 80' in diameter with an unknown depth. A footpath runs along the southern edge of the pit.

AMLF 14 (DH): This feature is located 120' west of AMLF 13 with a 30' spoil pile between the two features. The L-shaped pit measures 200' x 100' x 40' deep. Several footpaths traverse the area surrounding the pit. The sides of the pit consist of unconsolidated spoil at slopes greater than 35 degrees. The dangerous highwall measures 100' long x 40' high. There is a large rock outcrop near the bottom of the pit. A 40' spoil pile lies about 20' north of the pit.

AMLF 15 (IRW): This feature is located 50' west of AMLF 12 and 20' northeast of AMLF 14. A haul road runs along the northern rim of the pit. A large amount of garbage has been dumped along the north slope and into the bottom of the pit. The pit measures 225' in diameter with side slopes consisting of loose spoil material.

AMLF 16 (DH): This feature is located 140' southwest of AMLF 13. The oval-shaped pit measures 150' wide and 250' long. There is dangerous vertical highwall consisting of fractured rock 75' long x 25-30' high in a U-shape around the northern and western sides of the pit. A small stream runs into the pit at the southern end. There are footpaths along the northern and western sides of the pit.





AMLF #14

AMLF #15

AMLF #16

AMLF #13

AMLF #12

AMLF #11

AMLF #7

Non-Priority  
Pondered Water

MATCH TO PHOTO NO. 2

Photo No. 1



MATCH TO PHOTO NO. 1

AMLF #10

AMLF #6

AMLF #5

-5-

AMLF #1

AMLF #8

AMLF #4

AMLF #3

AMLF #9

CHERONE TRAILER PARK

AMLF #2

STATE HIGHWAY

Photo No. 2



## PHOTOGRAPHY DESCRIPTIONS

### Photograph Nos. 3, 4, and 5:

These photos depict specific hazardous features in their preconstruction state.

#### Photo No. 3:

Date: September 1993

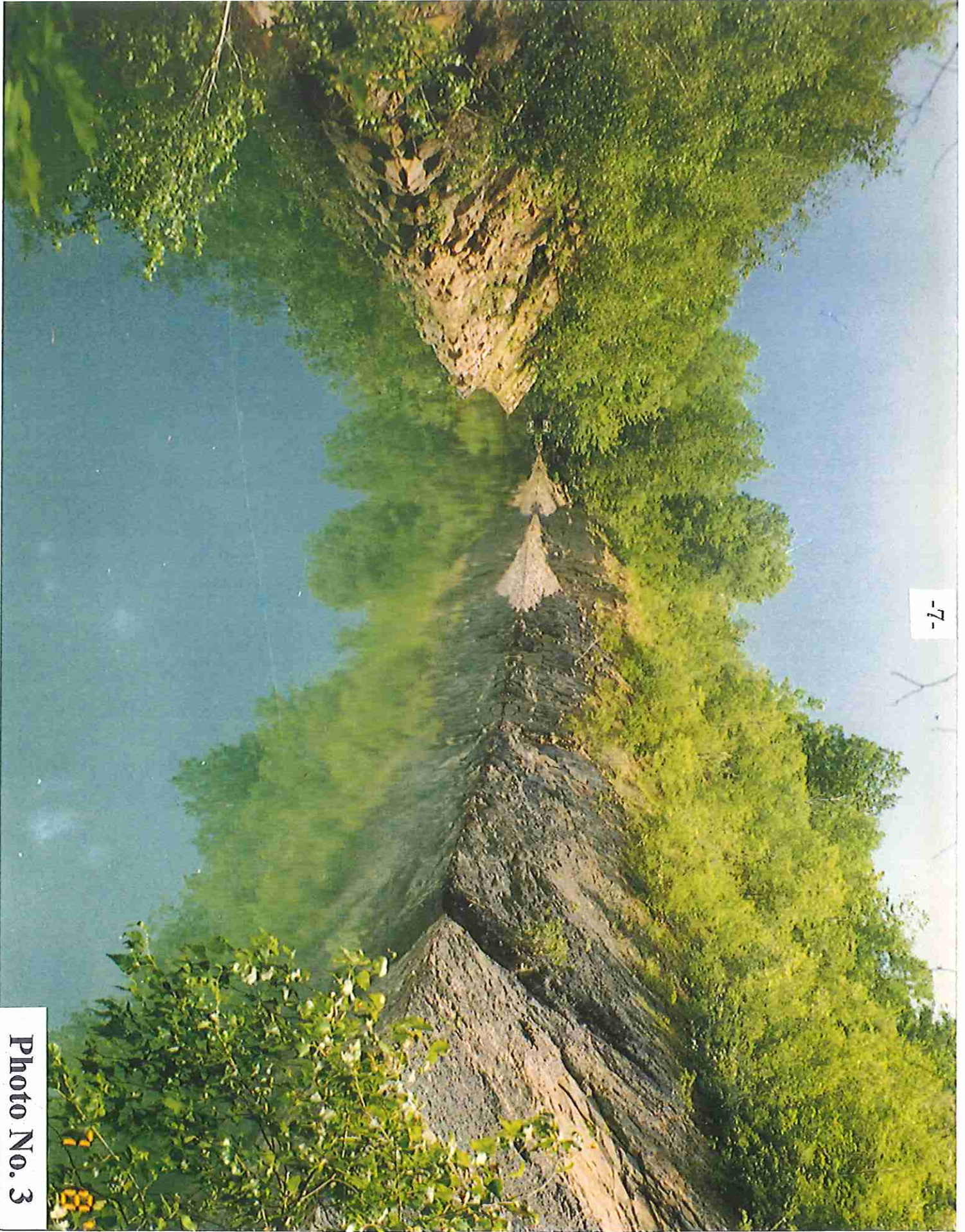
This is AMLF 7, where 8-year old Derrick Hittinger drowned on September 5, 1992. The accident occurred at the same time of year as this picture was taken. During that fateful summer afternoon Derrick and his cousin rode their bikes to a point where they could look over the highwall to see if there were any fish in the water filled pit. Derrick lost his footing and slid down the steep rock highwall into the water, where he struggled to climb out and drowned before help could reach him. The ironic ending to the story is that the water quality in the pit was so poor that it is doubtful any fish could have survived in it.

#### Photos No. 4 and 5

Date: March 1996

These photos were taken during construction just prior to earthmoving activity. They depict typical conditions that existed in this problem area such as: dangerous highwalls, hazardous water bodies, and garbage dumping.

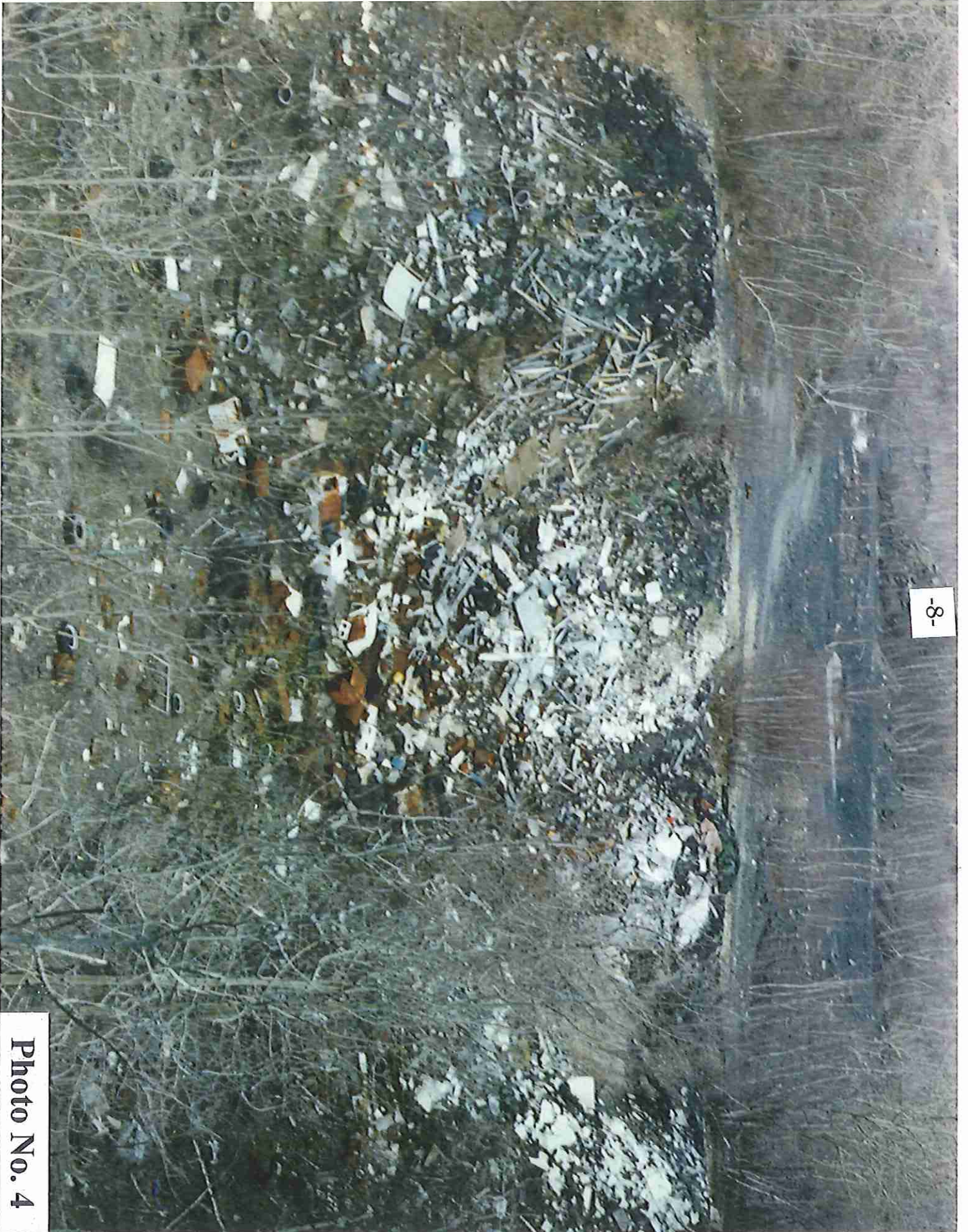




-7-

Photo No. 3





-8-

Photo No. 4





Photo No. 5

## PHOTOGRAPHY DESCRIPTIONS

### Photograph Nos. 6, 7, 8, and 9

These photos to show some of the activity during construction of a successful reclamation project.

**Photo No. 6:**

**Date: Summer of 1996**

The picture shows the construction of a rock lined channel that is now conveying the flow from a small stream into Wetland A.

**Photo No. 7:**

**Date: October 1996**

This photograph is of freshly graded Wetland B just before it is seeded and before its source of hydrology is introduced. The field office trailer can be seen in the background.

**Photo No. 8:**

**Date: Summer of 1996**

This a picture a newly constucted riprap channel that will carry storm water flows into the constructed wetlands.

**Photo No. 9:**

**Date: October 1996**

The photograph depicts the culvert constructed under this contract that PennDOT agreed to pay for. This structure was designed to convey the portion of the 25 year storm that is not detained by the storm water storage capacity of wetlands. On the top of the picture one can see a rock lined channel that now carries storm water from the Borough of Freeland.



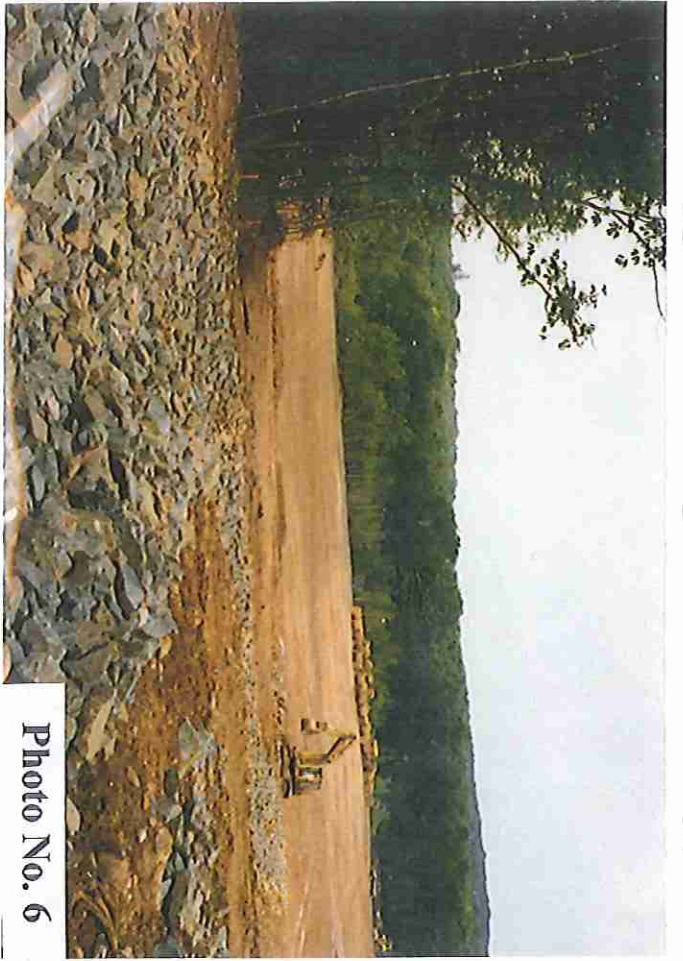


Photo No. 6

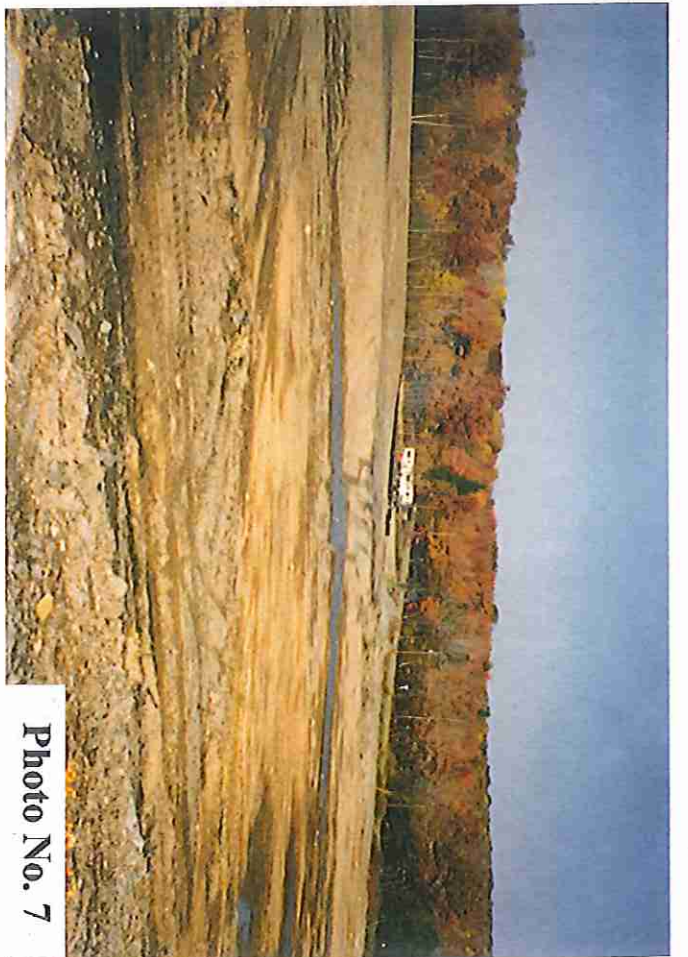


Photo No. 7

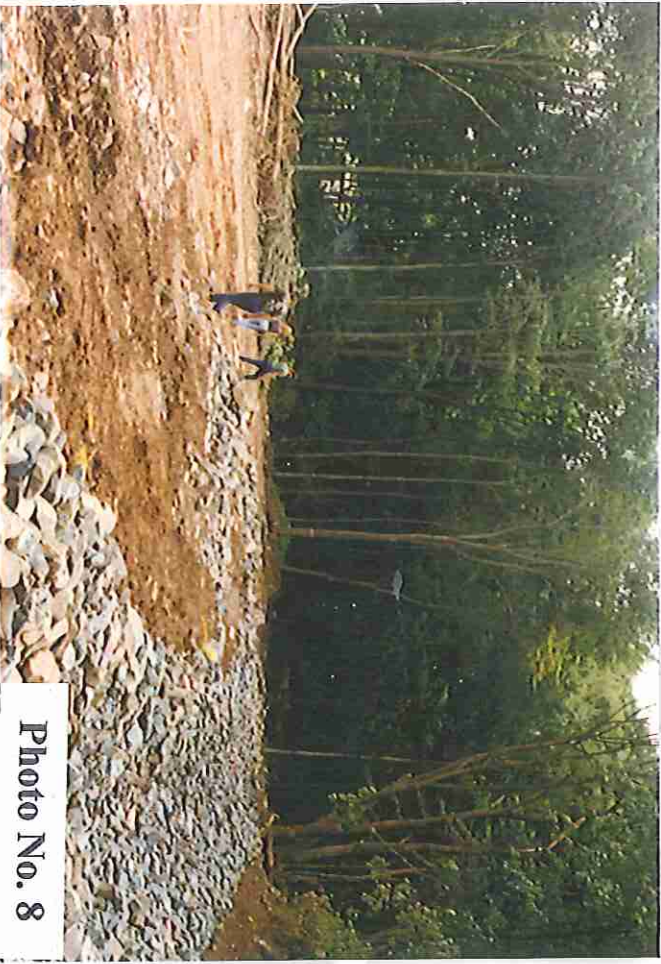


Photo No. 8

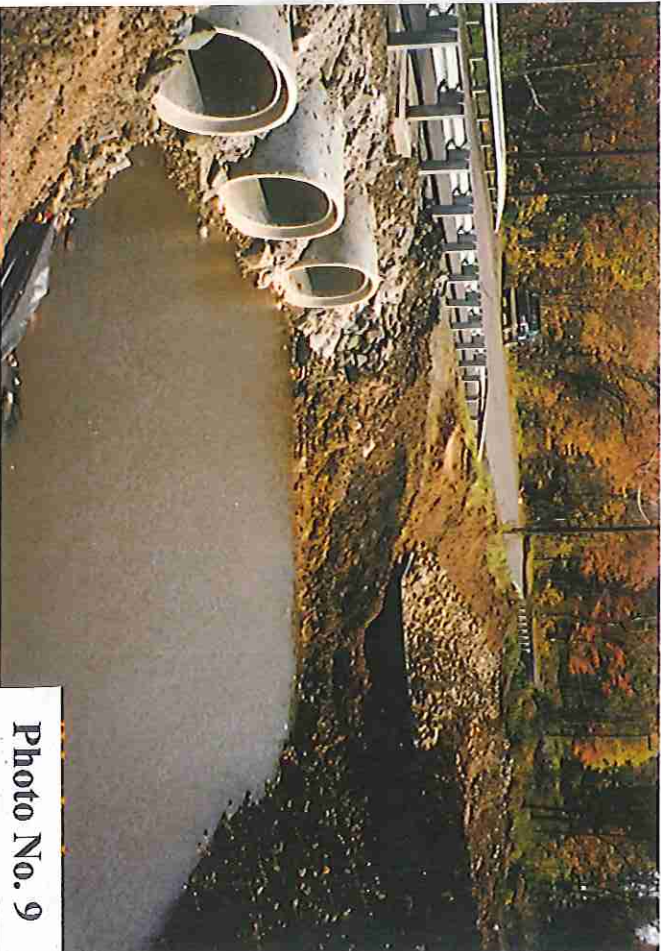


Photo No. 9

**PHOTOGRAPHY DESCRIPTIONS**

**Photograph Nos. 10 and 11**

These two (2) photos exhibit panoramic views of Wetlands A & C.

**Photo No. 10:**

**Date: October 1996**

This photograph is of Wetland A as a flow is introduced into it. In the background one can notice that a constructed channel is conveying water into the wetland.

**Photos No. 11**

**Date: March 1997**

This picture was taken from the State Highway on the day of final inspection. The photo is of Wetland C and displays the portion of the reclamation motorists will see as they drive by the Upper Lehigh site.



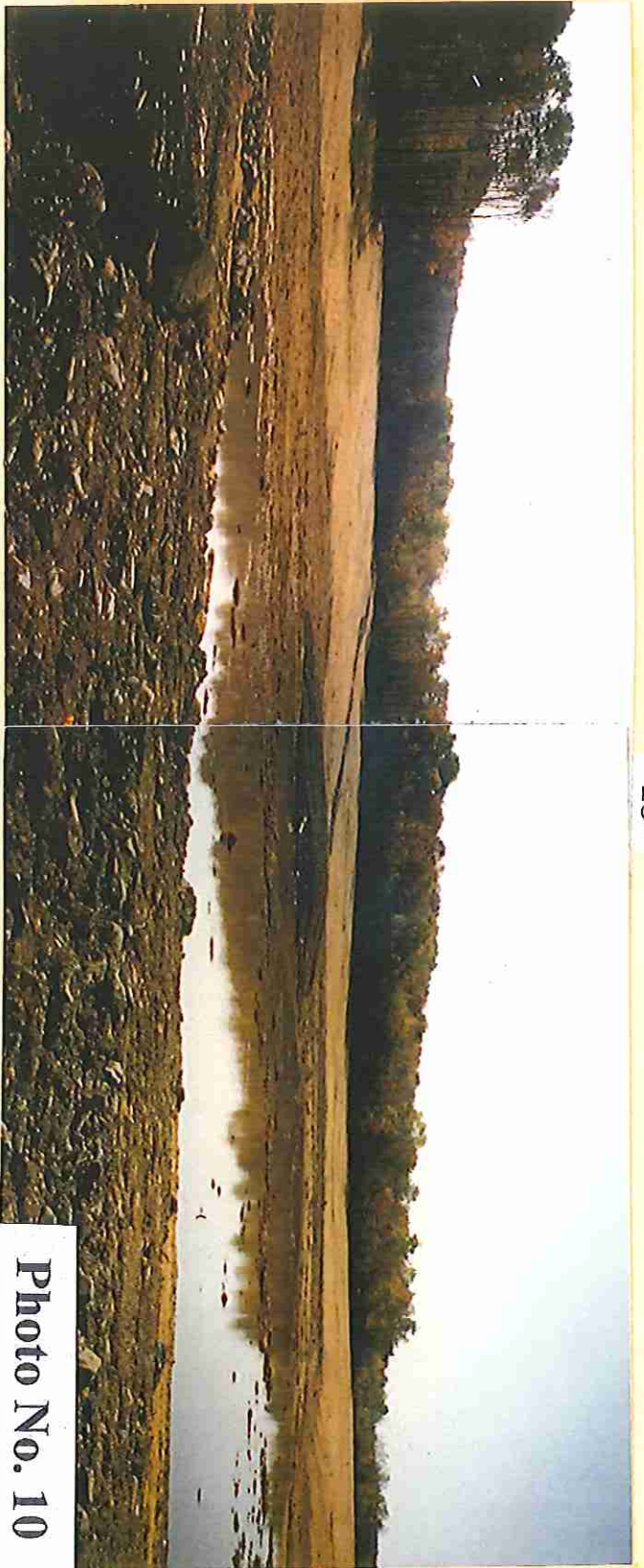


Photo No. 10

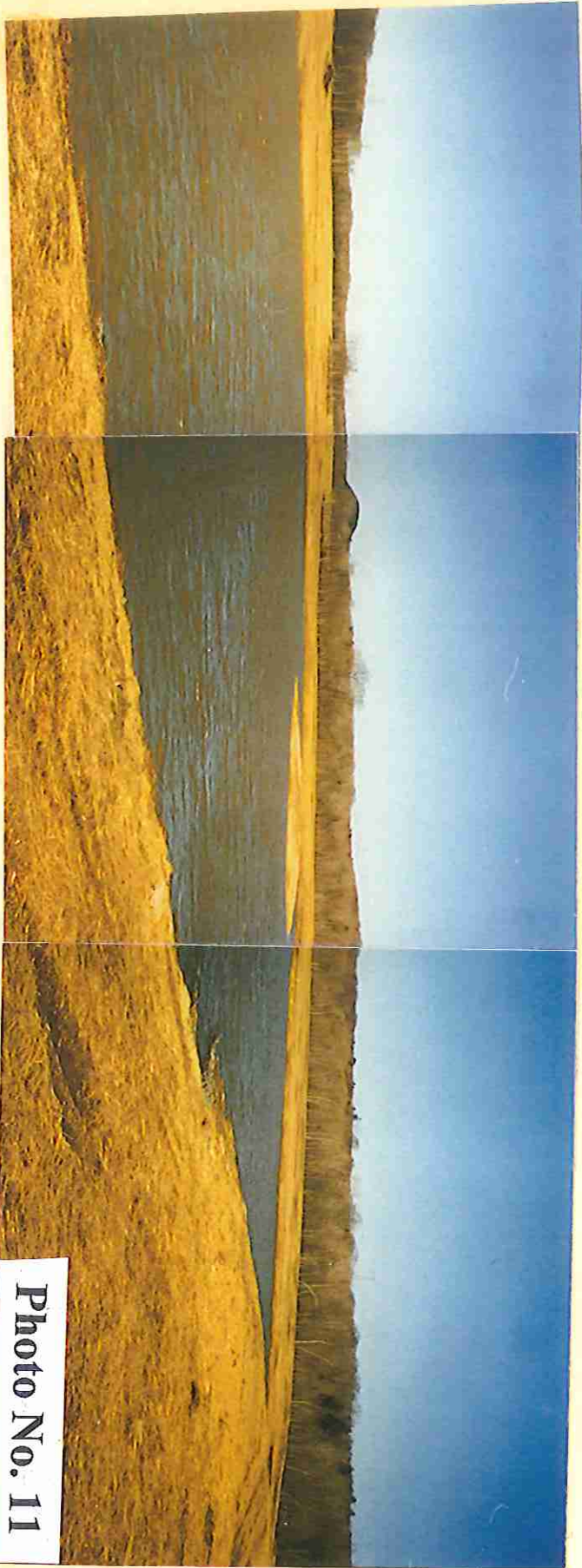


Photo No. 11

## PHOTOGRAPHY DESCRIPTIONS

### Photograph Nos. 12 and 13

These photographs were captured from a helicopter during the week of our final inspection of the site. The photographer was Mike Soloski, Mine Inspector, Bureau of Mining and Reclamation.

#### Photo No. 12

Date: March 1997

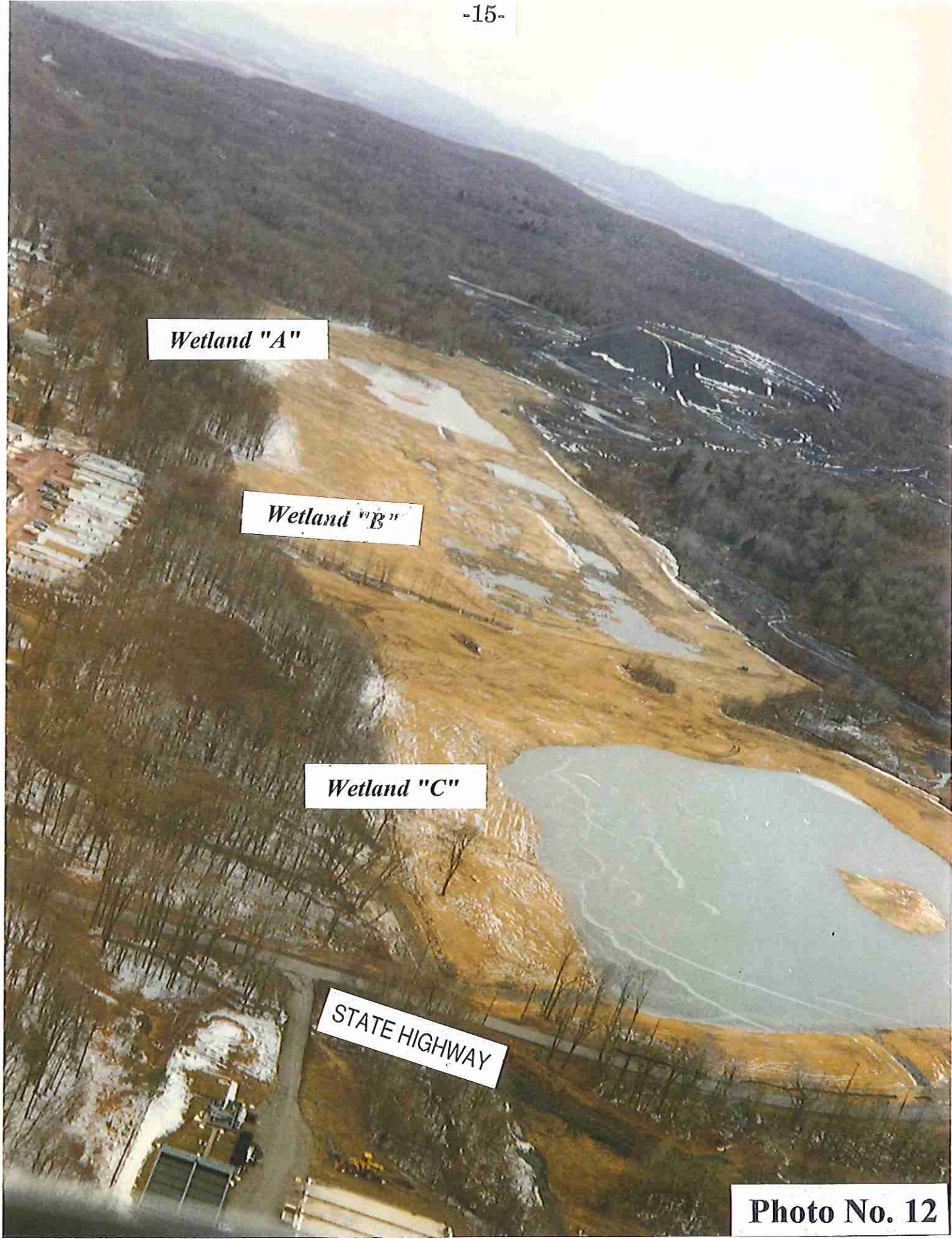
Photo No. 12 represents an aerial view of the Upper Lehigh reclamation project.

#### Photos No. 13

Date: March 1997

This view illustrates how so many people will benefit greatly from the reclamation effort because of the site's proximity to the Borough of Freeland and the Village of Upper Lehigh.





*Wetland "A"*

*Wetland "B"*

*Wetland "C"*

STATE HIGHWAY

**Photo No. 12**



Upper Lehigh

Wetland "B"

Wetland "C"

STATE HIGHWAY

FREELAND

Photo No. 13





## PHOTOGRAPHY DESCRIPTIONS

### Photo No.14

This photograph is the one that appears on the cover. It is a mosaic of pictures taken from a helicopter and depicts a panoramic view of the completed reclamation project.

Note: The hydrologic design is already functioning well. Wetlands A & C are holding water and Wetland B is detaining storm water.



Photo No. 14

NEWSPAPER ARTICLE APPEARED IN THE HAZLETON STANDARD SPEAKER  
SEPTEMBER 8, 1992

# Freeland boy drowns in

By EMERSON HEFFNER  
and JOE FALATKO  
Standard-Speaker Staff Writers

As 8-year-old Derrick Hittinger's body was pulled from a water-filled stripping hole, youngsters on bikes, motorcycles and all-terrain vehicles played nearby.

Hittinger, who lived in the Cherone Trailer Court off Schwabe Street in Freeland, drowned Saturday afternoon after falling into an old strip-mining pit in Foster Township, a half-mile north of the borough.

He had ridden his bicycle to the stripping hole with his cousin, and Hittinger looked

down the hole's steep rock wall to see if there were fish in the water.

He slipped, fell into the water and drowned after he couldn't stay afloat.

The accident happened just after 2 o'clock, and a half-hour later youngsters continued to play around the stripping pit.

"There are no fences or trespassing signs . . . there's nothing to warn the kids of the danger," said June Thaller, one of Hittinger's neighbors. "There are too many kids in the neighborhood for a stripping to be that close. That's no place for them to play."

Trailer court resident Gary Charette, who

helped pull Hittinger from the water and whose son is about the same age as Hittinger, said neighborhood children often wander into the woods to play around the stripping holes when a nearby swimming pool closes.

"A lot of kids play down there. It's a relatively active area," Charette said. "These holes ought to be filled in. All that property's being wasted down there."

Much of the mining land around Freeland is owned by Pagnotti Enterprises of West Pittston, but Louis J. Pagnotti III said Monday night that he doesn't know if the property where the accident happened is

## stripping pit

owned by his company.

He said Pagnotti land is heavily posted with signs warning that there are abandoned stripping pits nearby, and that the company's property is patrolled by guards.

Hittinger, a Freeland Elementary School third-grader, and his cousin, Chris Blanyar, also 8, were out on their bicycles Saturday looking for a key for one of their all-terrain vehicles that they had lost while riding in the area the day before.

They were accompanied by Chris' parents and Hittinger's uncle and aunt, Tom



Derrick E. Hittinger

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# Boy, 8, drowns in watery stripping

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and Louise Blanyar. They were walking, and the boys were ahead of them on their bikes.

Hittinger, according to the account by family members, got off his bike near the stripping pit and stepped to the edge to look for fish. He took one step and fell down the steep embankment into the deep water.

He dog-paddled to stay afloat for a while and struggled to climb out of the water, but the bank was too steep and he sank.

Chris ran back to his parents. His mother ran back to the trailer court to call for help while her husband ran to the stripping pit. He took a step and slid into the water, then dived for his nephew but could not find him.

Charette heard of the rescue attempt and went to help. He threw pebbles at dark spots in the water to show Blanyar where to dive, and they finally located the boy.

Blanyar dived and brought him to the surface, but because it was impossible to climb the bank out of the water at the spot, he began swimming with the boy in tow across the stripping pit to the north side.

But Blanyar tired in the water before reaching the far shore, so Charette jumped in and pulled both of them out of the water.

Rescuers said the boy landed on a ledge in the water, otherwise he would have sunk much deeper. Water in the stripping hole is reportedly at least 80 feet deep.

Emergency workers tried to revive Hittinger next to the stripping hole. They then drove him in an ambulance to the MMI ballfield where a helicopter landed and took him to Geisinger Medical Center in Danville.

He was pronounced dead in the hospital's emergency room at 4:38 p.m. Montour County Coroner Scott Lynn ruled the death accidental and attributed it to drowning.

Freeland Elementary Principal Raymond Schneider said at least

two counselors from First Hospital Wyoming Valley will be at the school today to talk with teachers and students.

"He was a very, very nice boy," Schneider said. "It was a real tragedy. We're all upset about it."

The counselors will be at the school before classes start to talk with teachers, and will then be available all day, Schneider said. Their work will depend on how much help the school's 670 children need, he said.

Some of Hittinger's classmates started helping themselves and his family Sunday by raising money at pee-wee and midget football games and wearing black arm bands on their jerseys.

Hittinger was five days shy of being old enough to play for the Whippet pee-wee team, so he served as the team's water boy, head coach Henry Kopczynskie said.

"He was very enthusiastic. He didn't miss a day of practice," Kopczynskie said. "He had the potential of being a good player. When I heard about this Saturday night I didn't know what to do."

Hittinger's friends dedicated the games in his honor Sunday. They also raised money for the family through a collection and a fund-raiser at the games, and Kopczynskie is trying to schedule a scrimmage for this weekend so all proceeds can be donated to Hittinger's family.

Freeland-area residents have also been sending money to the family. The address is: Mrs. R. Hittinger, 807 Schwabe St., Lot 15, Freeland, 18224.

Hittinger was born in Wilkes-Barre on Aug. 12, 1984. He was the son of Robert Hittinger of R.R. 2 Weatherly and Rose

(Blanyar) Hittinger, who he lived with.

He was a member of Salem United Church of Christ, Weatherly, and started third grade at Freeland Elementary last week.

Surviving in addition to his parents are sisters, Sheanna, Janine and Bobby Jo, all at home; half-brothers, Jeremy Hoffman of Freeland and Glenn Hoffman Jr. of R.R. 2 Weatherly; half-sister, April Hoffman of R.R. 2 Weatherly; maternal grandparents, Michael Blanyar Sr. of Driffton and Elizabeth Blanyar of Freeland; and paternal grandparents, Mr. and Mrs. Eugene Hittinger of R.R. 2 Weatherly.

Funeral services will be held Wednesday at 11 a.m. from the Philip J. Jeffries Funeral Home, Weatherly.

Friends may call today from 7 to 9 p.m.

Memorial donations may be made to the Salem United Church of Christ, Weatherly.

*Standard-Speaker night editor Ed Socha contributed to this story.*