B.M. #7 Elev. 983.20
72' East of Survey ℄ Sta. 403+00
Spike in Base of P.P.&L. Pole # H-Cl-2

For 1" = 100' Plan See Sheet No. 7
For Channel Profile See Sheet No. 21
For Typical Sections See Sheet No. 40

B.M. #8 Elev. 1058.31
17' N.W. of Survey ℄ Sta. 417+42
Spike in Base of 30" White Oak

Constr. ℄
P.I. Sta. 8+52.67
Δ = 44°00'00"
T = 52.52'
L = 99.83'
R = 130.00'
E = 10.21'
P.C. Sta. 8+00.17
P.T. Sta. 9+00.00

Begin Channel Cleaning
Sta. 7+35.00

P.P.&L. # H-Cl-1

90 L.F. Derrick Stone Erosion Protection

Begin Channel Lining
Sta. 9+90.00
Upper Middle Creek

Approx. Limit of Grading & Revegetation

Exist. Earth Mine Road

56 L.F. 36" B.C.C.G.M. Pipe Class 1, Type C

Constr. ℄
P.I. Sta. 14+64.15
Δ = 18°00'00" Lt.
D = 6°00'00"
T = 151.25'
L = 300.00'
R = 954.93'
E = 11.90'
P.C. Sta. 13+12.90
P.T. Sta. 16+12.90

Survey ℄
P.I. Sta. 412+37.28
Δ = 11°06'48" Lt.

Constr. ℄
P.I. Sta. 21+17.65
Δ = 17°30'00" Lt.
D = 10°00'00"
T = 88.19'
L = 175.00'
R = 572.96'
E = 6.75'
P.C. Sta. 20+83.46
P.T. Sta. 22+58.46

Sta. 418+08.00 Bk. =
Sta. 419+37.00 Ahd
Reference ℄ E

P.P.&L. # H-Cl-7

End Channel Lining
Sta. 23+50.00
Upper Middle Creek

Approx. Limit of Grading & Revegetation

56 L.F. 24" B.C.C.G.M. Pipe Class 1, Type C

Exist. channel 418

Exist. Channel

100 L.F. Derrick Stone Slope Protection

Earth Mine Road

Approx. Limit of Grading & Revegetation

Survey ℄
P.I. Sta. 405+98.17
Δ = 17°51'35" Rt.

36" Bit. Fiber Flume

Survey ℄
P.I. Sta. 403+00.00
Δ = 5°51'00" Lt.

Constr. ℄
P.I. Sta. 10+84.86
Δ = 33°00'00" Rt.
D = 20°00'00"
T = 84.86'
L = 165.00'
R = 286.48'
E = 12.31'
P.C. Sta. 10+00.00
P.T. Sta. 11+65.00

Typical Spacing for Energy Dissipating Units, place entire length of Channel (See Detail Sheet No. 40)

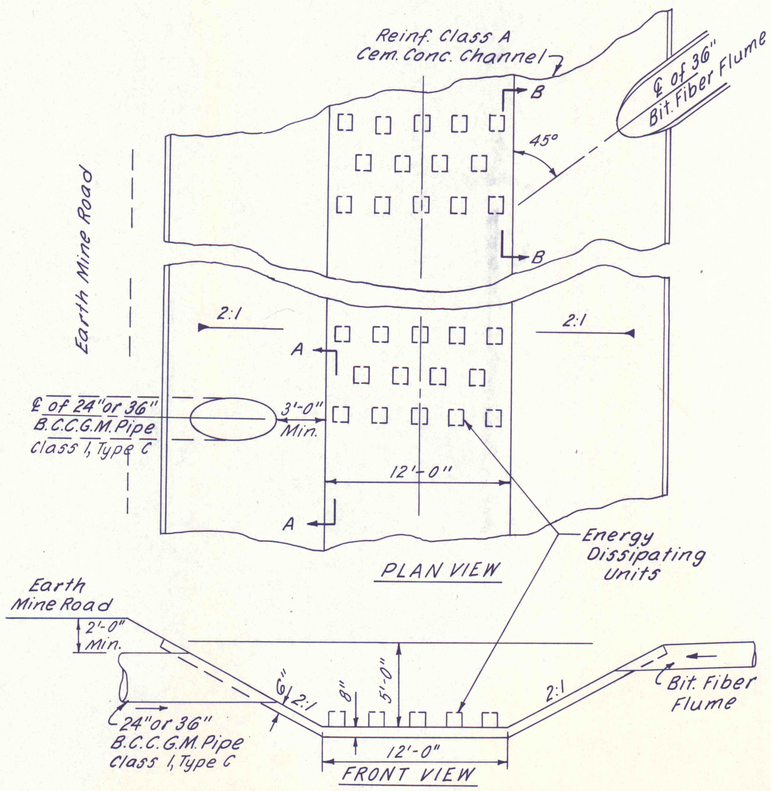
23 KV Line

P.P.&L. # H-Cl-2
P.P.&L. # H-Cl-3
P.P.&L. # H-Cl-6
P.P.&L. # H-Cl-6A

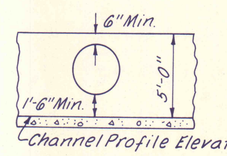
2' Bot. Ditch

10 L.F. Riprap Erosion Protection

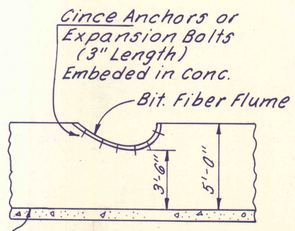
Survey ℄
P.I. Sta. 417+42.51
Δ = 18°38'13" Rt.



TYPICAL DETAIL FOR PIPE & FLUME CONNECTION TO CHANNEL LINING
No Scale



Channel Profile Elevation
SECTION A-A



Channel Profile Elevation
SECTION B-B

NO	DATE	REVISION	APPR.

SUBMITTED Norman E. Mutchler
PROFESSIONAL

APPROVED Albert A. Romani
CHIEF - DIVISION OF MINE DRAINAGE REHABILITATION

APPROVED A.W. Perrazo
DIRECTOR - BUREAU OF CONSULTING SERVICES

COMMONWEALTH OF PENNSYLVANIA
REGISTERED PROFESSIONAL
NORMAN E. MUTCHLER
ENGINEER
No. 35334E
PENNSYLVANIA

COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
OFFICE OF ENGINEERING AND CONSTRUCTION

PROJECT NO. SL-126-2-7

MINE DRAINAGE
POLLUTION ABATEMENT
SWATARA CREEK WATERSHED
SCHUYLKILL COUNTY

BERGER ASSOCIATES, INC.
Consulting Engineers
P.O. Box 1943 Harrisburg, Penna.

UPPER MIDDLE CREEK CHANNEL LINING

DRAWN BY	DATE	DRAWING NO.
W. G.	APR. 17, 1973	17 of 43
CHECKED BY	SCALE	
M. W.	1" = 50'	