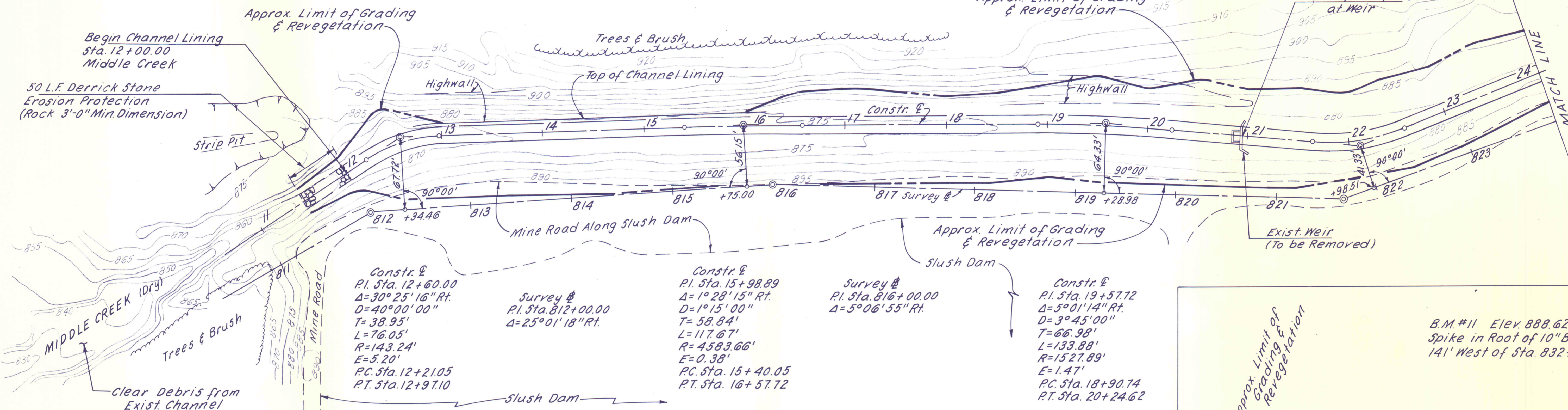


B.M.#15 Elev. 893.40
Spike in Root of 14" Oak
148' N.W. of Sta. 812+00

B.M.#13 Elev. 902.09
Spike in Base of 10" Pine
145' N.W. of Sta. 821+67.13

Constr. E
P.I. Sta. 22+11.37
 $\Delta=25^{\circ}24'14''$ Lt.
 $D=27^{\circ}30'00''$
 $T=46.96'$
 $L=92.38'$
 $R=208.35'$
 $E=5.23'$
P.C. Sta. 21+64.41
P.T. Sta. 22+56.79

Survey #
P.I. Sta. 821+67.13
 $\Delta=20^{\circ}13'07''$ Lt.



Constr. E
P.I. Sta. 12+60.00
 $\Delta=30^{\circ}25'16''$ Rt.
 $D=40^{\circ}00'00''$
 $T=38.95'$
 $L=76.05'$
 $R=143.24'$
 $E=5.20'$
P.C. Sta. 12+21.05
P.T. Sta. 12+97.10

Survey #
P.I. Sta. 812+00.00
 $\Delta=25^{\circ}01'18''$ Rt.

Constr. E
P.I. Sta. 15+98.89
 $\Delta=1^{\circ}28'15''$ Rt.
 $D=1^{\circ}15'00''$
 $T=58.84'$
 $L=117.67'$
 $R=4583.66'$
 $E=0.38'$
P.C. Sta. 15+40.05
P.T. Sta. 16+57.72

Survey #
P.I. Sta. 816+00.00
 $\Delta=5^{\circ}06'55''$ Rt.

Constr. E
P.I. Sta. 19+57.72
 $\Delta=5^{\circ}01'14''$ Rt.
 $D=3^{\circ}45'00''$
 $T=66.98'$
 $L=133.88'$
 $R=1527.89'$
 $E=1.47'$
P.C. Sta. 18+90.74
P.T. Sta. 20+24.62

B.M.#11 Elev. 888.62
Spike in Root of 10" Black Oak
141' West of Sta. 832+31.26

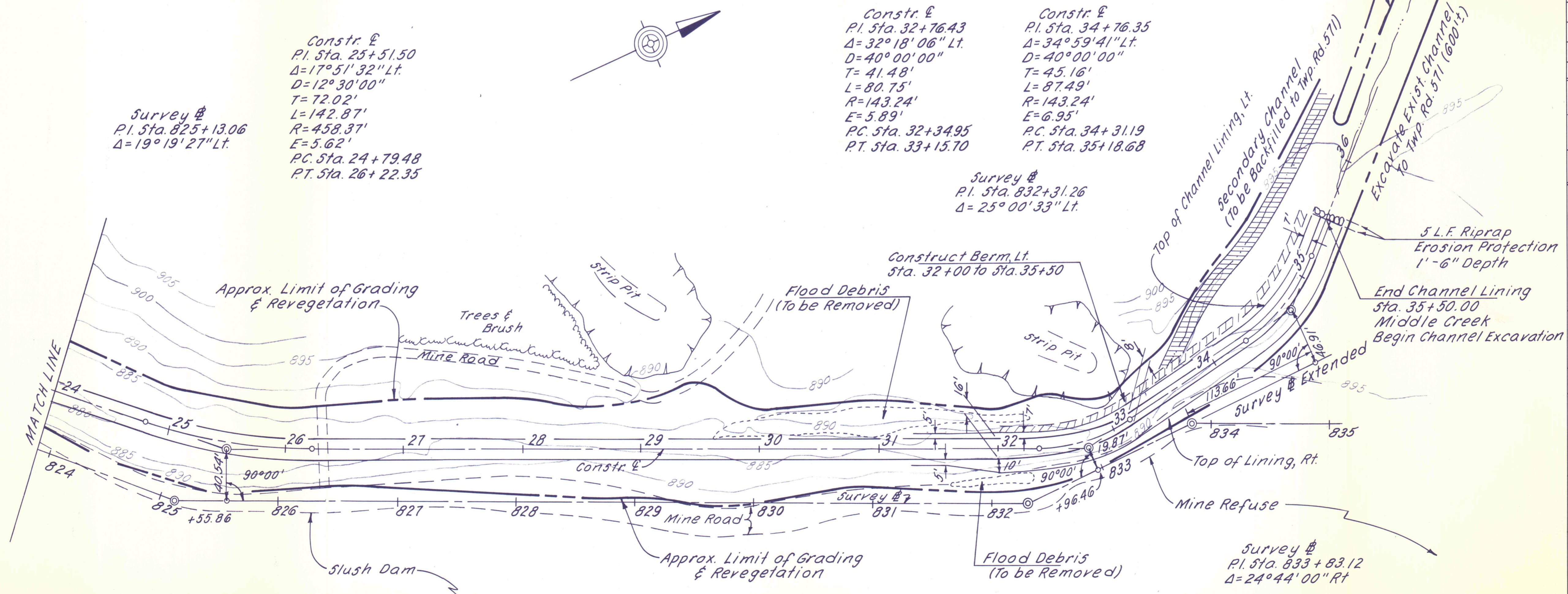
Survey #
P.I. Sta. 825+13.06
 $\Delta=19^{\circ}19'27''$ Lt.

Constr. E
P.I. Sta. 25+51.50
 $\Delta=17^{\circ}51'32''$ Lt.
 $D=12^{\circ}30'00''$
 $T=72.02'$
 $L=142.87'$
 $R=458.37'$
 $E=5.62'$
P.C. Sta. 24+79.48
P.T. Sta. 26+22.35

Constr. E
P.I. Sta. 32+76.43
 $\Delta=32^{\circ}18'06''$ Lt.
 $D=40^{\circ}00'00''$
 $T=41.48'$
 $L=80.75'$
 $R=143.24'$
 $E=5.89'$
P.C. Sta. 32+34.95
P.T. Sta. 33+15.70

Constr. E
P.I. Sta. 34+76.35
 $\Delta=34^{\circ}59'41''$ Lt.
 $D=40^{\circ}00'00''$
 $T=45.16'$
 $L=87.49'$
 $R=143.24'$
 $E=6.95'$
P.C. Sta. 34+31.19
P.T. Sta. 35+18.68

Survey #
P.I. Sta. 832+31.26
 $\Delta=25^{\circ}00'33''$ Lt.



Construct Berm Lt.
Sta. 32+00 to Sta. 35+50

5 L.F. Riprap
Erosion Protection
1'-6" Depth

End Channel Lining
Sta. 35+50.00
Middle Creek
Begin Channel Excavation

For Typical Sections See Sheet No. 40
For 1"=100' Site Plan See Sheet No. 15
For Channel Profile See Sheet No. 20

NO	DATE	REVISION	APPR.
SUBMITTED			
Norman E. Mutcher			
PROFESSIONAL			
APPROVED			
Robert C. Ranier			
CHIEF - DIVISION OF MINE DRAINAGE REHABILITATION			
APPROVED			
[Signature]			
DIRECTOR - BUREAU OF CONSULTING SERVICES			
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.			
MIDDLE CREEK CHANNEL LINING			
DRAWN BY	DATE	DRAWING NO.	
W. G.	APR. 17, 1973	16 of 43	
CHECKED BY	SCALE		
M. W.	1" = 50'		