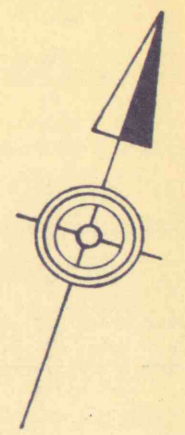
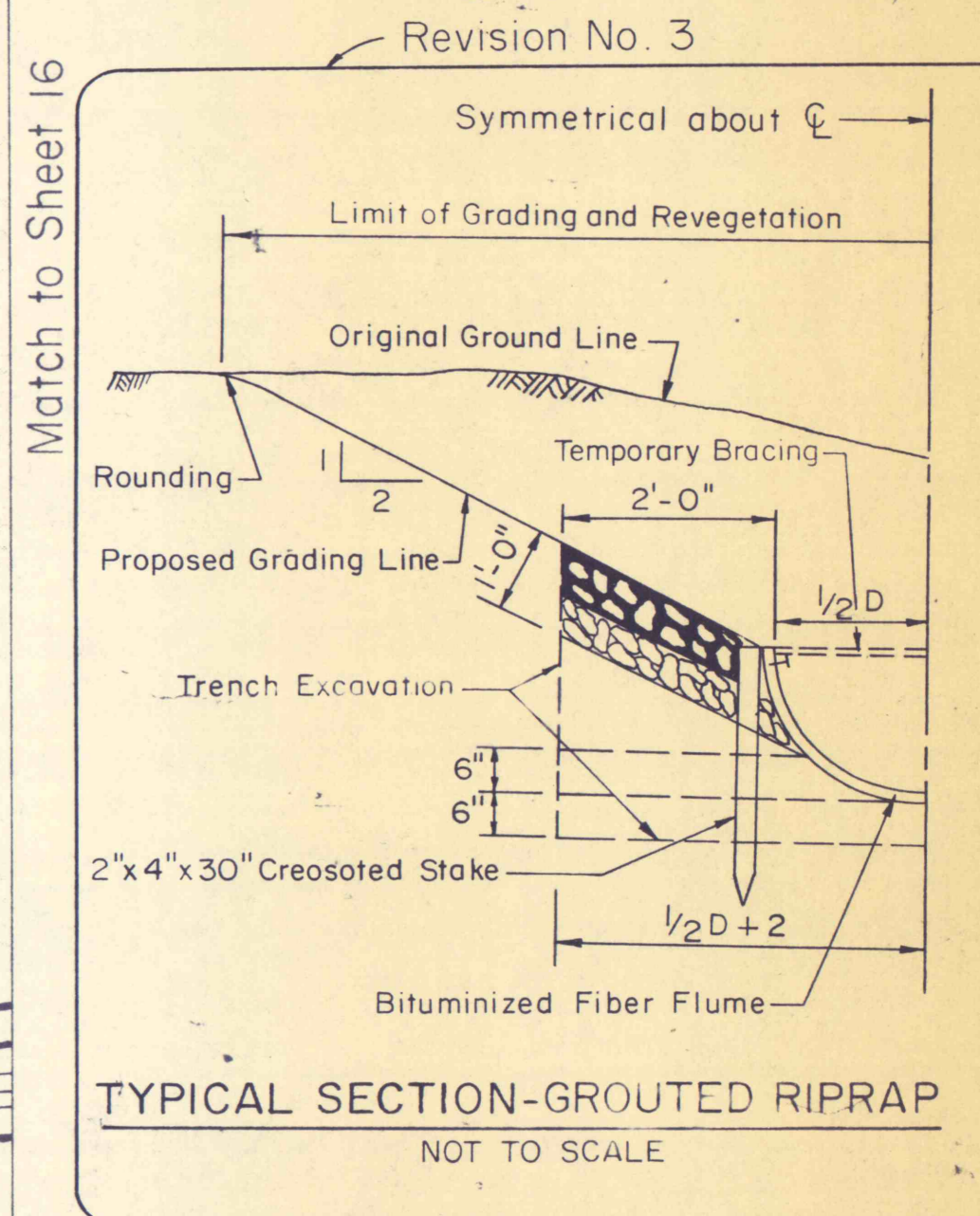
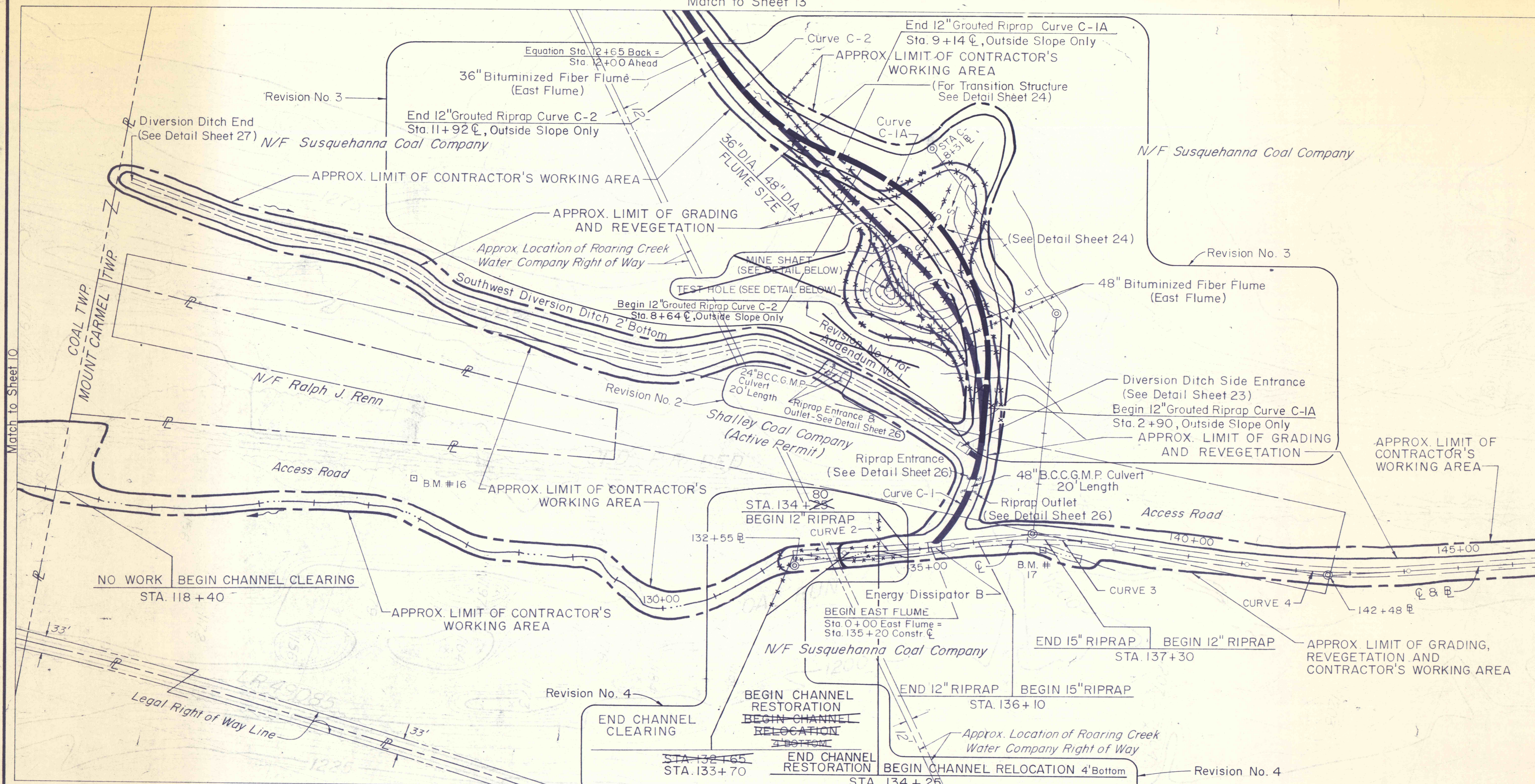


Match to Sheet 13



B.M. # 16 Elevation 1189.70
Spike & Washers in top of 6" Oak Stump

B.M. # 17 Elevation 1213.53
Spike & Washers in top of 10" Oak Stump

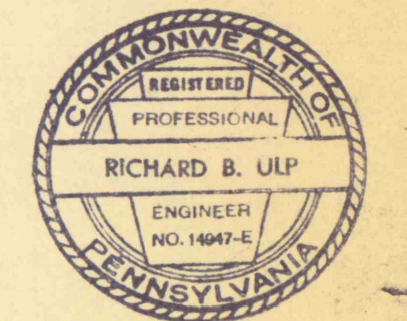


| NO | DATE | REVISION | APPR |
|----|----------|---|------|
| 1 | 5-29-75 | Added Details & Indicated Locations of Mine & Test Hole; Changed Grading & Revegetation Limits & Limit of Contractor's Working Area | RHC |
| 2 | 10-6-75 | Added 24" B.C.C.G.M.P. Culvert in Southwest Diversion Ditch | RHC |
| 3 | 11-10-75 | Added Typical Section - Grouted Riprap Delete Revision No. 1 - Riprap Flume, Sta. 2+20 to 11+92 | RHC |
| 4 | 3-1-76 | Changed to Channel Clearing Sta. 132+65 to 133+70 Changed to Channel Restoration Sta. 133+70 to 134+25 | RHC |

APPROVED: *Richard B. Ulp*
PROFESSIONAL ENGINEER

APPROVED: *Robert A. Ramani*
CHIEF - DIVISION OF MINE RECLAMATION

APPROVED: *John Longo*
DIRECTOR - BUREAU OF DESIGN



COMMONWEALTH OF PENNSYLVANIA
DEPARTMENT OF ENVIRONMENTAL RESOURCES
OFFICE OF RESOURCES MANAGEMENT

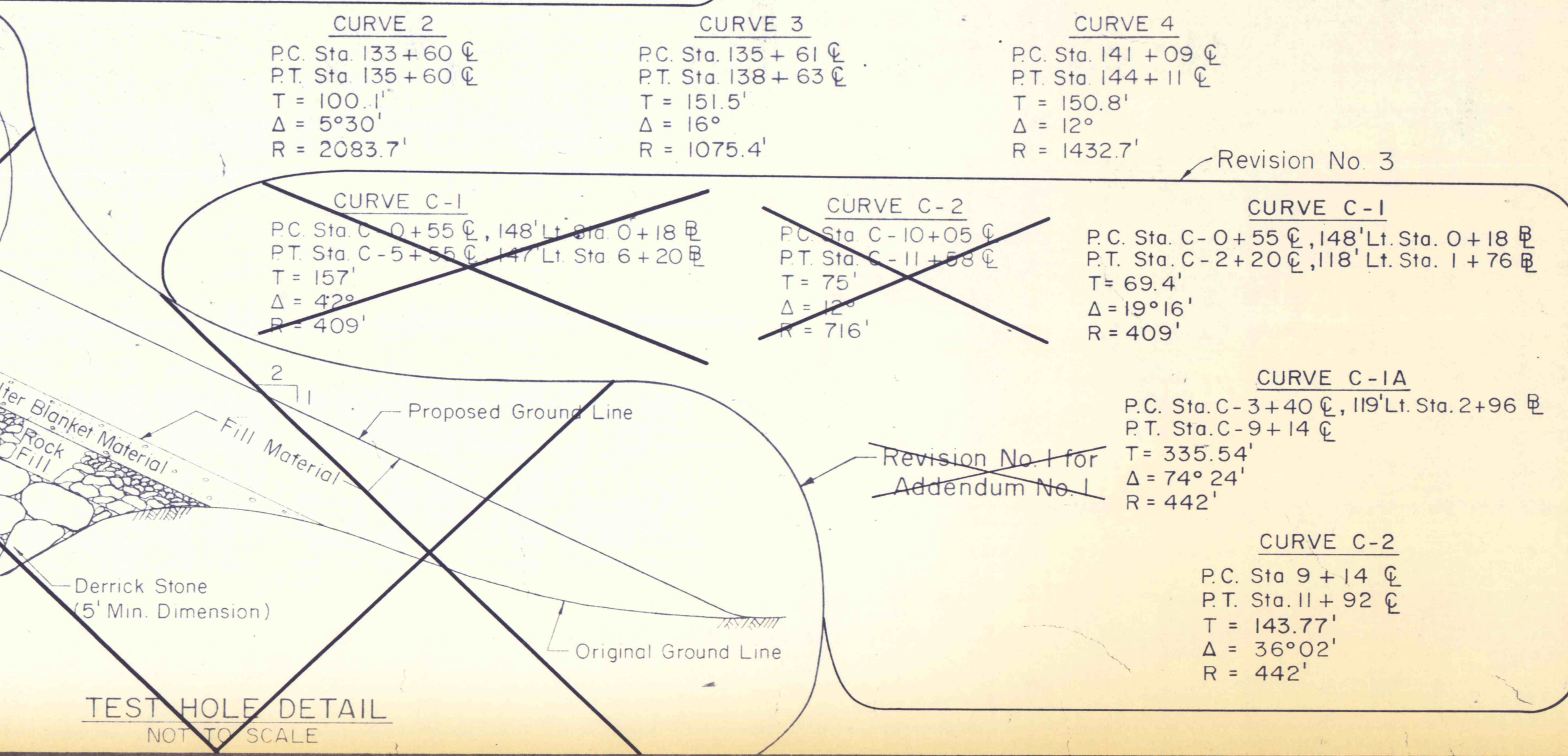
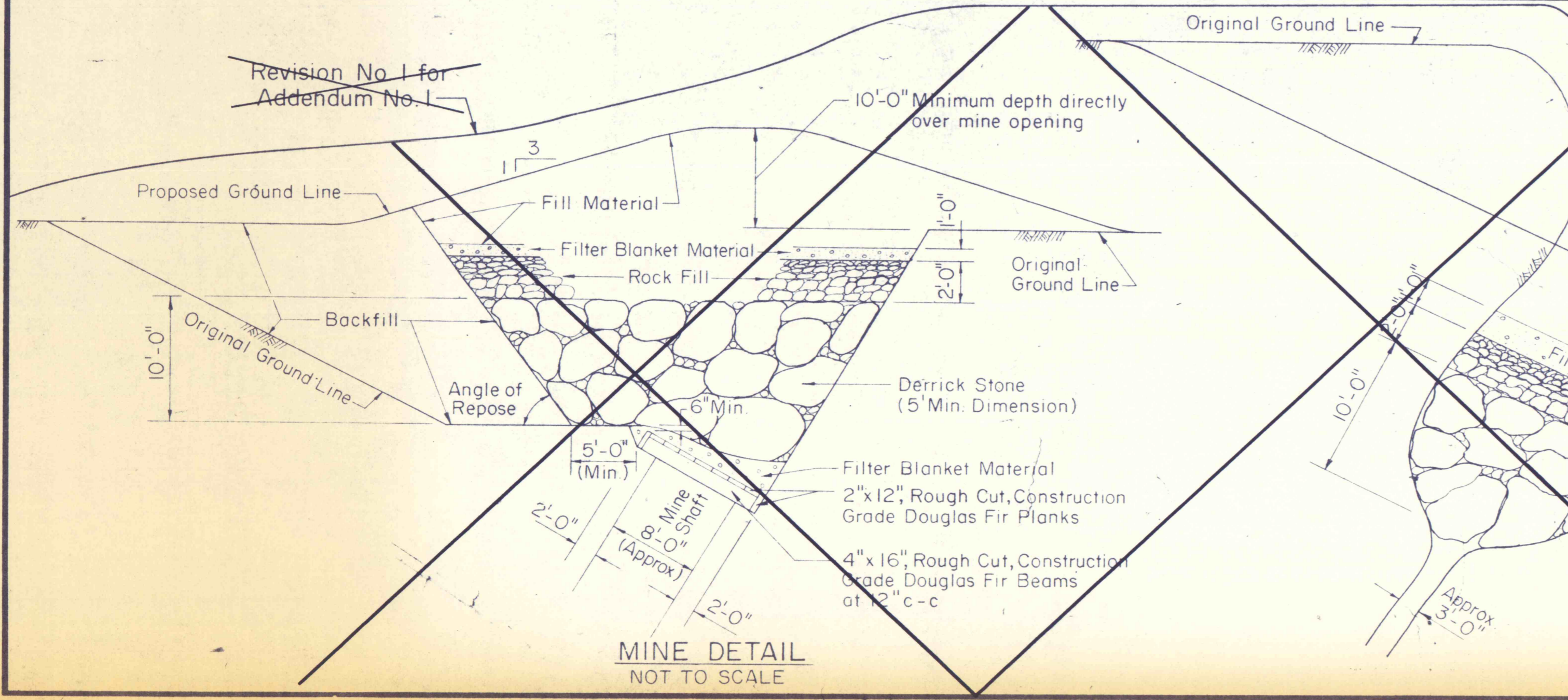
PROJECT NO. SL 113-5-1

MINE DRAINAGE POLLUTION ABATEMENT
COAL RUN
SHAMOKIN CREEK WATERSHED
NORTHUMBERLAND COUNTY, PA.

ERDMAN, ANTHONY, ASSOCIATES
Consulting Engineers
Camp Hill, Pa. Rochester, N.Y.

PLAN

| | | |
|------------|-----------|-------------|
| DRAWN BY | DATE | DRAWING NO. |
| GMS | 5-9-75 | 11 of 28 |
| CHECKED BY | SCALE | |
| DHC | 1" = 100' | |



| CURVE 2 | CURVE 3 | CURVE 4 |
|----------------|----------------|----------------|
| PC Sta. 133+60 | PC Sta. 135+61 | PC Sta. 141+09 |
| PT Sta. 135+60 | PT Sta. 138+63 | PT Sta. 144+11 |
| T = 100.1' | T = 151.5' | T = 150.8' |
| Δ = 5°30' | Δ = 16° | Δ = 12° |
| R = 2083.7' | R = 1075.4' | R = 1432.7' |

| CURVE C-1 | CURVE C-2 | CURVE C-1A |
|----------------|-----------------|----------------|
| PC Sta. C-0+55 | PC Sta. C-10+05 | PC Sta. C-0+55 |
| PT Sta. C-5+55 | PT Sta. C-11+53 | PT Sta. C-2+20 |
| T = 157' | T = 75' | T = 69.4' |
| Δ = 42° | Δ = 12° | Δ = 19°16' |
| R = 409' | R = 716' | R = 409' |

| CURVE C-1 | CURVE C-2 |
|-----------------|----------------|
| PC Sta. C-0+55 | PC Sta. C-3+40 |
| PT Sta. C-11+53 | PT Sta. C-9+14 |
| T = 157' | T = 335.54' |
| Δ = 42° | Δ = 74°24' |
| R = 409' | R = 442' |