NOTE: See O-2 Attachment for Additional Sediment Channel Cross-Sections
that are 1"=60 feet Horizontal and Vertical

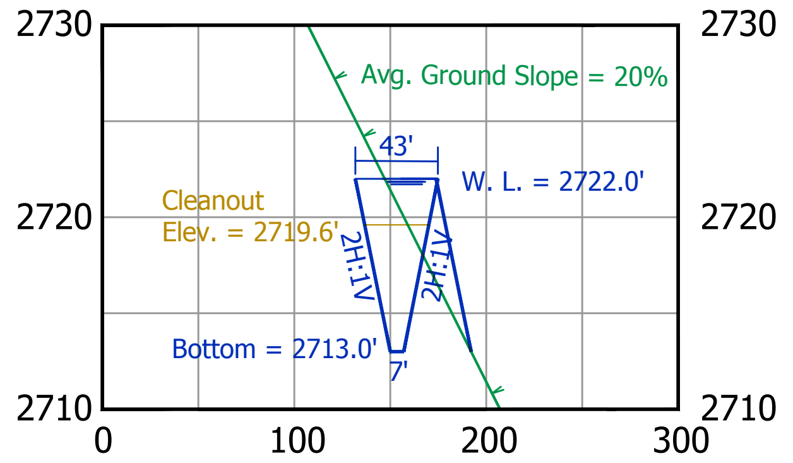
GENERAL NOTES ON SEDIMENT CHANNEL

1. Elevations were referenced to Aerial Mapping provided by Carter Roag Coal Co.
2. The Sediment Channel is designed for full factor storage at 0.125 ac-ft per disturbed acre.
3. The Water Depth is 9 feet and the Freeboard is 3 feet.
4. The required volume is 3.238 acre-feet or 141,026 cubic feet.
5. The 25-year storm runoff through the spillway is 376.75 cfs and 24.1 cfs through the 36" Pipe Spillway.

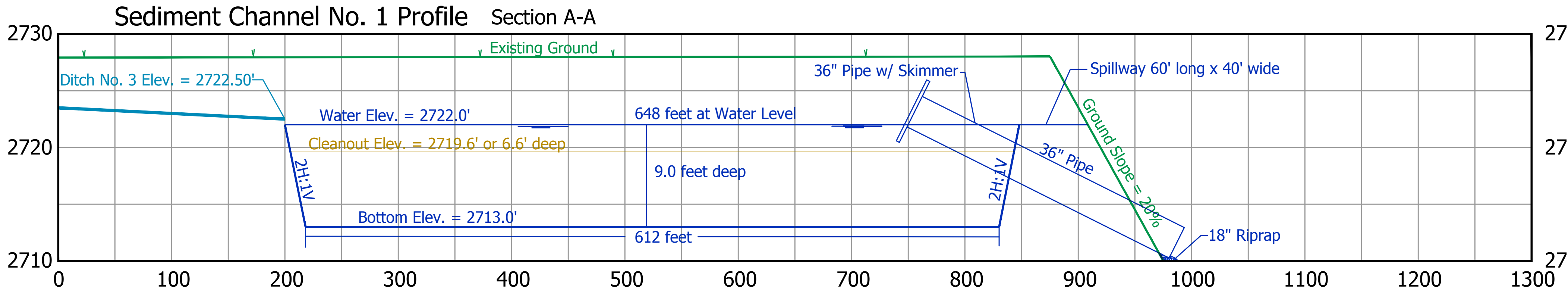
Sediment Channel Details

1 inch = 100 feet Horizontal
1 inch = 10 feet Vertical

Sediment Channel No. 1
Cross-Section Section B-B

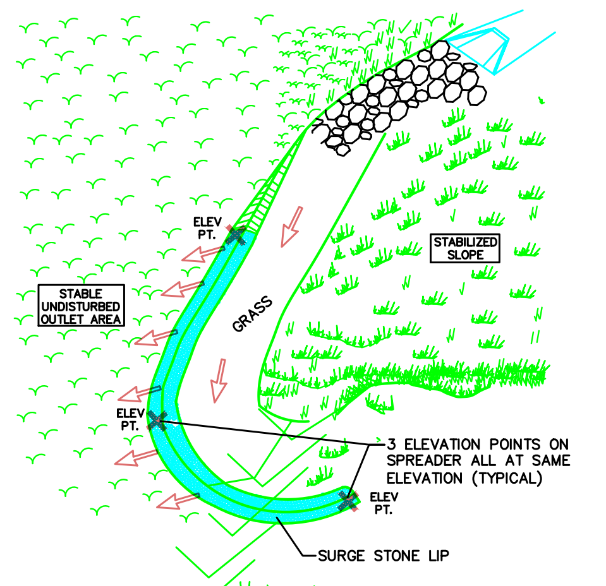


Sediment Channel No. 1 Profile Section A-A



CONSTRUCTION SPECIFICATIONS

1. THE MATTING SHOULD BE A MINIMUM OF 4 FEET WIDE EXTENDING 6 INCHES OVER THE LIP AND BURIED 6 INCHES DEEP IN A VERTICAL TRENCH ON THE LOWER EDGE. THE UPPER EDGE SHOULD BUTT AGAINST SMOOTHLY CUT SOD AND BE SECURELY HELD IN PLACE WITH CLOSELY SPACED HEAVY DUTY WIRE STAPLES AT LEAST 12 INCHES LONG.
2. ENSURE THAT THE SPREADER IS LEVEL, FOR UNIFORM SPREADING OF STORM RUNOFF.
3. CONSTRUCT THE LEVEL SPREADER ON UNDISTURBED SOIL. (NOT ON FILL)
4. CONSTRUCT A 20 FOOT TRANSITION SECTION FROM THE DIVERSION CHANNEL TO BLEND SMOOTHLY WITH THE WIDTH AND DEPTH OF THE LEVEL SPREADER.
5. DISPERSE RUNOFF FROM THE SPREADER ACROSS A PROPERLY STABILIZED SLOPE, NOT TO EXCEED 10%, MAKE SURE THAT THE SLOPE IS SUFFICIENTLY SMOOTH TO KEEP THE FLOW FROM CONCENTRATING.
6. IMMEDIATELY AFTER IT'S CONSTRUCTION, APPROPRIATELY SEED AND MULCH THE ENTIRE DISTURBED AREA OF THE LEVEL SPREADER.

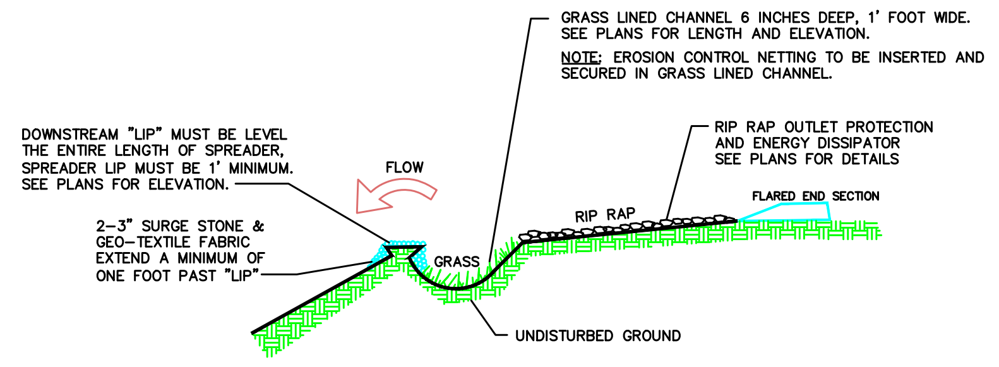


SPREADER LIP– CONSTRUCT THE LEVEL LIP ON UNDISTURBED SOIL TO UNIFORM HEIGHT AND ZERO GRADE OVER THE LENGTH OF THE SPREADER. PROTECT IT WITH AN EROSION RESISTANT MATERIAL SUCH AS SURGE STONE TO PREVENT EROSION, TO BECOME ESTABLISHED.

OUTLET AREA– THE OUTLET DISPOSAL AREA MUST BE GENERALLY SMOOTH AND WELL VEGETATED WITH A MAXIMUM SLOPE OF 10%.

VEGETATE ALL DISTURBED AREAS

Level Spreader - Top View

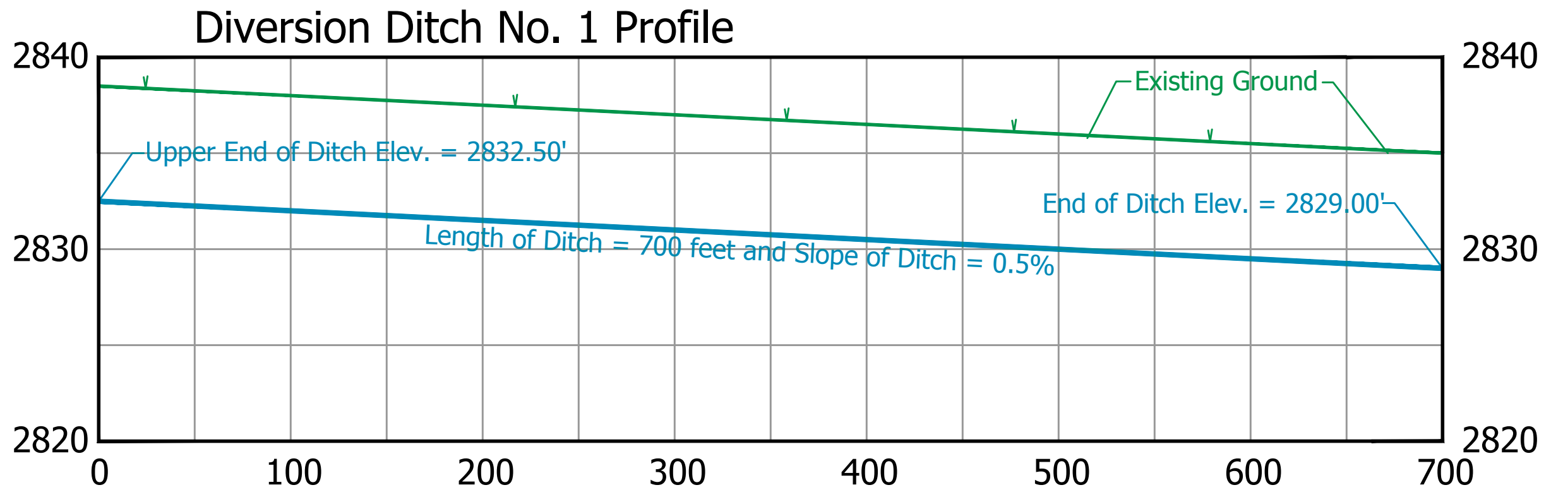


MAINTENANCE

INSPECT THE LEVEL SPREADER AFTER EVERY RAINFALL UNTIL VEGETATION IS ESTABLISHED AND PROPERLY MAKE ANY NEEDED REPAIRS. AFTER THE AREA HAS BEEN STABILIZED, MAKE PERIODIC INSPECTIONS AND KEEP VEGETATION IN A HEALTHY, VIGOROUS CONDITION.

Level Spreader Cross-Section

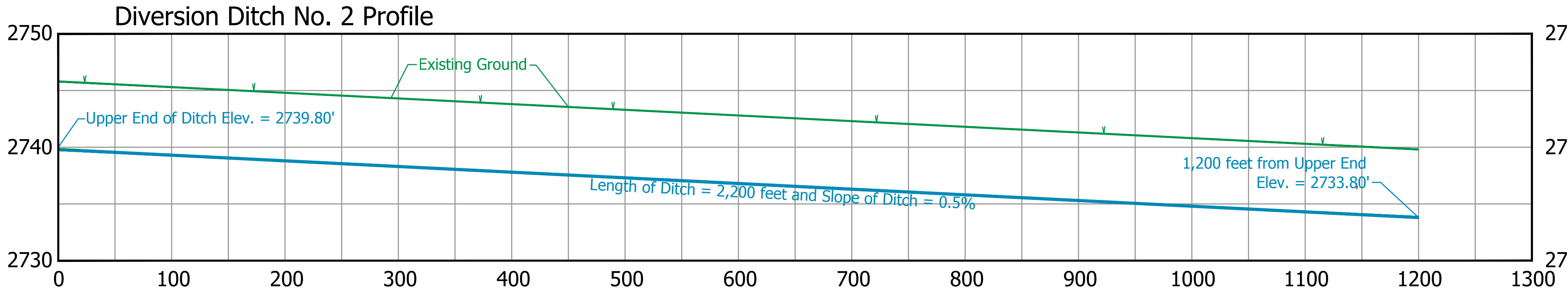
Diversion Ditch No. 1 Profile



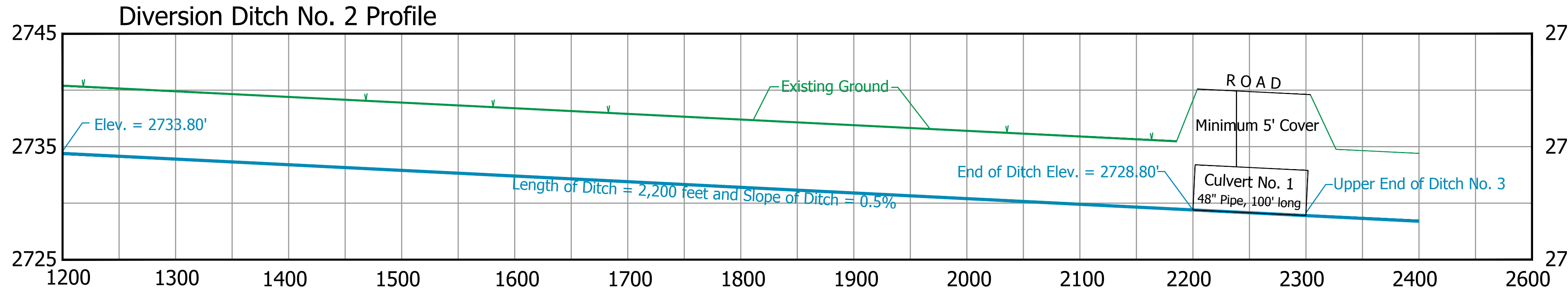
Diversion Ditch Profiles

1 inch = 100 feet Horizontal
1 inch = 10 feet Vertical

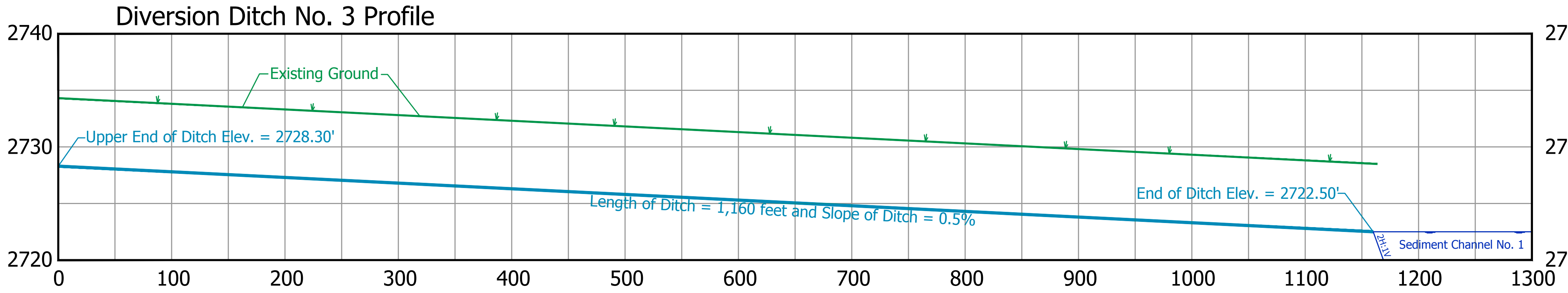
Diversion Ditch No. 2 Profile



Diversion Ditch No. 2 Profile



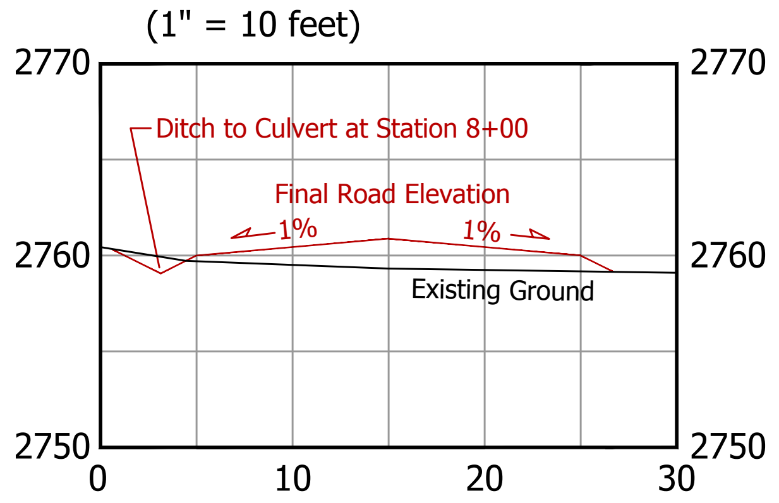
Diversion Ditch No. 3 Profile



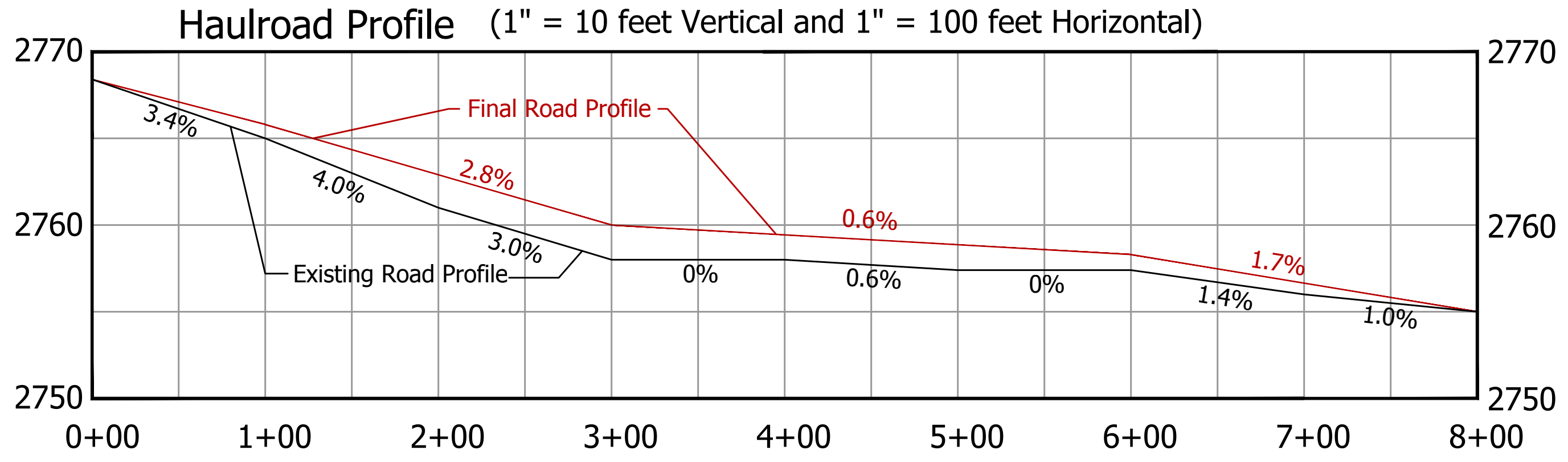
LEGEND

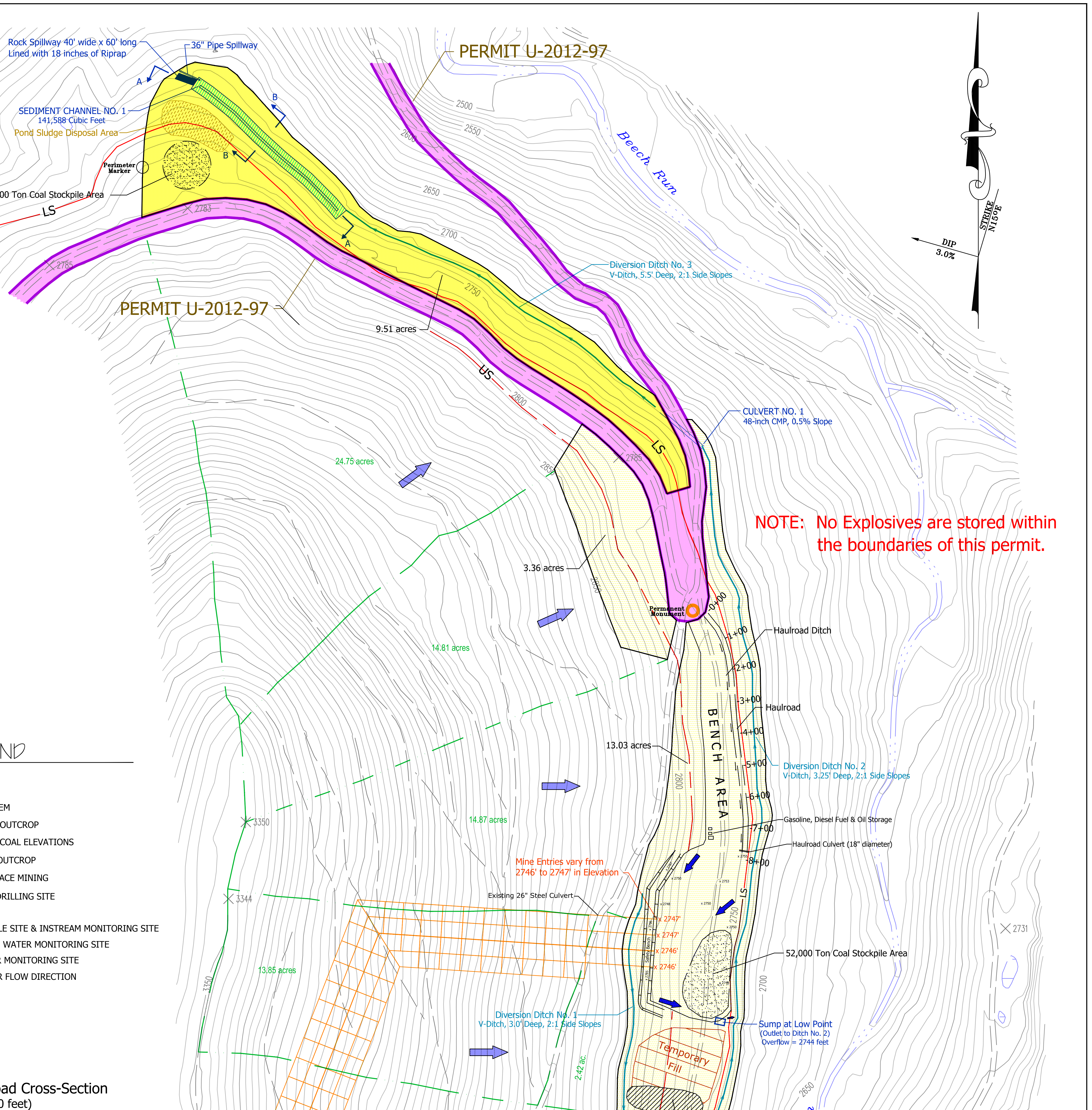
🟨	PERMIT AREA
🟨	SUPPORT AREA
— —▨	DRAINAGE SYSTEM
—LS—	LOWER SEWELL OUTCROP
	LOWER SEWELL COAL ELEVATIONS
—US—	UPPER SEWELL OUTCROP
🟪	ADJACENT SURFACE MINING
⊗	EXPLORATORY DRILLING SITE
⊕	BWQ SITE
⬢	BASELINE SAMPLE SITE & INSTREAM MONITORING SITE
△ 001	NPDES SURFACE WATER MONITORING SITE
△ Seep #4	GROUND WATER MONITORING SITE
➡	SURFACE WATER FLOW DIRECTION

Haulroad Cross-Section
(1" = 10 feet)



Haulroad Profile (1" = 10 feet Vertical and 1" = 100 feet Horizontal)





NOTE: No Explosives are stored within the boundaries of this permit.

MINE SITE

1 INCH = 200 FEET

Carter Roag Coal Company
HC 58, Box 200
Mill Creek, West Virginia 26280

Green Engineering Inc.
Route 2, Box 106–D
Philippi, West Virginia 26416
Telephone No. 304–457–3441

BEECH MOUNTAIN DEEP MINE NO. 1
MINE SITE PLAN
DRAINAGE STRUCTURE DETAILS

LAST REVISION DATE	JUNE 7, 2010	FIELD SURVEY BY MG AND NC	DRAWN BY AC	SCALE OF MAP AS NOTED
OCT. 31, 2008		PLOTTED BY HP	CHECKED BY MG	PROJECT NUMBER 2008-RN20
NOV. 20, 2008				
SEPT. 22, 2009		DATE OF MAP JULY, 2008	FINAL APPROVAL BY WVDEP	SHEET 1 OF 1