

**Willow Creek Mine**  
**Plateau Mining Corporation**  
**C/007/038**

**Phase I Bond Release Application**  
**Gravel Canyon**

April 2005

File in:  
 Confidential  
 Shelf  
 Expandable  
Refer to Record No. 9011 Date 04/29/05  
In C 0070038 Plateau Mining  
For additional information

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Diversion GCD-1 conveys the runoff from an undisturbed area (7.81 acres). The peak discharge, based on a 10-year 6-hour storm event, is 2.01 cfs. The design discharge will flow at a maximum depth of approximately 0.6 feet along the flatter reaches of the diversion, and at a velocity of approximately 6.3 feet per second along the steepest reach of the diversion. The existing diversion has adequate freeboard provided above the design flow depth.

Diversion GCD-2, along the south side of ancillary road A-1, collects runoff from both disturbed and undisturbed areas and channels it to the ditch along US Highway 6. This diversion also prevents runoff from crossing road A-1. The peak design flow from the 9.6 acre watershed is 2.66 cfs. The geometry of the diversion is summarized in Table 3.6-2 (Exhibit 19).

Berm ACB-1 is constructed along the north side of road A-1 to contain the storm runoff that falls on the road. For simplicity of design, the berm was designed to contain the runoff from all of watershed GCWS-D1. The minimum berm geometry is summarized in Table 3.6-3 (Exhibit 19).

### **3.6-3(2) Alternative Sediment Controls**

There are no sediment ponds in Gravel Canyon. Currently the area is revegetated and thus no alternative sediment control structures are necessary.

### **3.6-4 Reclamation Plan**

The site was reclaimed in the Fall of 2004. All details regarding as-built reclamation of the site can be found in Appendix 3.6D. As-built topography, cross-sections, channel profile and treatment area can be seen on Exhibit 3.6-5AB.

The reclamation work in Gravel Canyon will be done contemporaneously with the disturbance of the site. After material is taken from an area within the site, the area will be graded for overland flow and the site revegetated. The site will not be ready for final

**GRAVEL CANYON AS-BUILT RECLAMATION  
CASTLE GATE MINE**

**CASTLE GATE COAL MINE  
Carbon County, Utah**

Prepared by  
**EARTHFAX ENGINEERING, INC.**  
Midvale, Utah

April, 2005

**APPENDIX 3.6D**  
**GRAVEL CANYON AS-BUILT RECLAMATION**

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### **3.6-4AB Reclamation Plan**

The reclamation work in Gravel Canyon was completed in conjunction with the removal of topsoil stored at the site. The soil removed from the site was used to reclaim the Willow Creek Mine Refuse Pile, Preparation Plant area and Willow Creek Mine Highwall area. The excavation of soil and reclamation of the site began in the spring of 2004 and was completed by fall of the same year. The site has been graded to drain to the constructed reclamation channel. Approximately 65,000 cubic yards of resoiling material was removed from the site prior to final grading.

The land use for this area is wildlife habitat.

### **3.6-4(1)AB Reclamation Work**

The reclamation work consisted of the following:

**Demolition:** No structures on the site required demolition. A historic stone retaining wall and some established trees along US Highway 6 and 50 were left in place because the soil was not needed and proper drainage could be achieved without destroying the trees and historic structure.

**Grading:** Site grading established proper drainage and allowed removal of the needed volume of material. Access road A-1 was removed. The disturbed areas were graded to approximate the original contours by blending spoil into the surrounding area which created a landform which complements and resembles the surrounding terrain. There are no cut slopes or highwalls within the disturbed area boundary. Cut slopes on the south side of the site are outside the disturbed area boundary and have not been reclaimed.

**Resoiling:** The approximately 5.75 acres within the disturbed area boundary were disturbed prior to SMCRA. No topsoil was salvaged from the site. The existing soils at the site were used for resoiling material. The resoiling material was analyzed for the following parameters: Ph, electrical conductivity, sodium absorption ratio, texture, nitrate-N, available phosphorous and extractable potassium. Two composite samples of the regraded surface were taken. Analyses are presented in Appendix 3.4M.

**Seeding and Mulching:** The Upland Seed Mixture (Table 5.3-2b, Section 5.3, Willow Creek Permit) was used in Gravel Canyon. Prior to application of the reclamation seed mix, hay was incorporated into the growth media at a rate of 2 tons per acre. This was done to improve soil structure for aeration purposes, increase micropore space, and improve the water holding capacity of the soil. Incorporation of the mulch occurred during deep gouging. No fertilizer was used during the reseeding activities.

Following seeding, an additional 1.0 to 1.5 tons per acre of certified noxious weed free straw mulch was spread over the seeded growth media mostly by mechanical blowers with occasional hand spreading. The straw mulch was then sprayed with a tackifier and mulch mixture at about 500 lbs per acre following spreading to retain the straw mulch on the reseeded slopes. The tackifier and mulch technique provide a better means of retaining the straw mulch on the reseeded areas than does crimping. Of the approximately 5.75 acres within the disturbed area boundary approximately 4.3 acres were regraded, mulched and seeded. The remaining 1.45 acres is well vegetated and does not require any reclamation.

### **3.6-4(2)AB Reclamation Hydrology**

**Reclamation Channel Design:** The reclamation channel (CGRD-1) was constructed with side slopes 1.95:1 or flatter with a minimum bottom width of 4.5 feet and minimum depth of 1.7 feet. In Attachment 1 of this appendix the capacity and stability of the reclamation channel was verified.

The natural streambed that exists upstream of the disturbed area in Gravel Canyon can be considered ephemeral since it carries water only in direct response to a precipitation event, or the melting of snow and ice, and is above the local water table. Ephemeral streams are classified as carrying miscellaneous flows, per R645-301-742.330, which requires that permanent diversions be sized for the 10-year 6-hour storm event. Thus, the reclamation channel has been verified to be able to transport the peak discharge of a 10-year 6-hour precipitation event of 1.4 inches (Miller et. al, 1973). The D50 = 12 inch riprap was also verified to be stable for the peak discharge rate from the 10-year 6-hour precipitation event. A description of the methods used to determine the peak discharge rate is presented in the as-built hydrology calculations found in Attachment 1 of this appendix.

The reclamation channel drainage areas for Gravel Canyon are presented on Figure 1 in Attachment 1 of this appendix.

A description of the methods used to verify the channel's capacity and stability can be found in Attachment 1 of this appendix.

A summary of the reclamation channel dimensions are presented in Table 3.6-4AB of this appendix.

The reclamation channel (CGRD-1) was verified to pass the peak discharge with a minimum freeboard of 1.31 feet. It should be noted that this channel has adequate channel capacity to contain the 100-year 6-hour peak discharge. A channel cross-section can be found in Attachment 1 of this appendix. The channel profile can be found on Exhibit 3.6-5AB.

The filter blanket consists of a 9-inch thick layer of D50 = 1" gravel. A synthetic fabric was not used. Approximately 25,311 cubic feet of riprap and 12,878 cubic feet of filter material was used to construct the reclamation channel.

**3.6-4(3)AB Alternative Sediment Control Measures**

The area within the disturbed area boundary of Gravel Canyon was regraded to allow storm runoff to overland flow to the permanent reclamation channel. The following alternate sediment control measures were used at the site to control erosion and limit sediment runoff:

1. Placement/Redistribution of growth media,
2. Incorporation of hay mulch into growth media,
3. Deep gouging of the growth media,
4. Seeding the prepared soil,
5. Addition of more mulch following seeding, and
6. Chemically anchoring the final mulch layer.

These methods have been very successful at other recently reclaimed sites and are expected to work well at this site.

Appendix 3.6C presents calculations that quantify the sediment yield that could be expected annually under pre-mining conditions, immediately after reclamation, and after vegetation establishment, as 24.2 tons/acre/year, 0.14 tons/acre/year, and 20.7 tons/acre/year, respectively. These calculations were performed to compare the sediment yield during each of the time periods to demonstrate that the reclaimed surface will produce less sediment than the same area under undisturbed conditions. The cumulative implementation of each sediment control measure substantially reduces the amount of sediment eroded from the reclaimed areas, to the point that the mulch and roughening theoretically inhibits soil loss more effectively than the undisturbed ground cover. Since the undisturbed areas contributing sediment to the stream channels are larger than the reclaimed areas, most of the sediment erosion will occur from the undisturbed areas. As long as the depressions from surface roughening are in place, the sediment yield from up gradient areas will be prevented from reaching any stream channels.

The reclaimed area will be inspected quarterly to evaluate the effectiveness of the ADCMs. Corrections to any weaknesses in the implementation of the sediment control plan will be remedied immediately to prevent future silt runoff into the main stream channel. Corrective action will be taken when a gully greater than nine inches in depth is created due to lack of vegetation establishment, or when the mulch and seed have been transported by wind or overland flow. Corrective action will consist of regrading the ground surface only as necessary to fill in nine inch gullies caused by erosion, and reseeding and mulching, as warranted, to reestablish vegetation.

### **3.6-5 Reclamation Timeline**

Stockpiled topsoil at the site began to be removed in the spring of 2004. Final reclamation of the site was completed in the fall of 2004. Monitoring of the site will continue until Phase III bond release.

TABLE 3.6-4AB

GRAVEL CANYON  
AS-BUILT RECLAMATION CHANNEL SUMMARY

Reclamation Channel	Minimum Bottom Width (FT) <sup>(a)</sup>	Side Slopes (H:V)	Minimum Channel Depth (FT)	Minimum Bottom Slope (%)	Maximum Flow Depth (FT)	Freeboard (FT)	Maximum Bottom Slope (%)	Maximum Velocity (FT/S)	Riprap D <sub>50</sub> (IN)
GCRD-1 <sup>(b)(c)</sup>	4.5	1.95:1	1.7	5.9	0.39	1.31	14.5	4.94	12

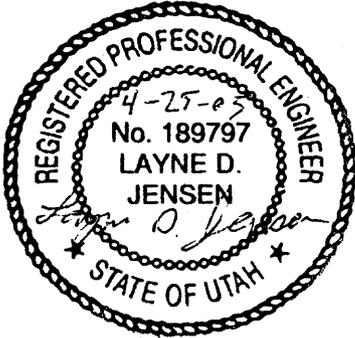
<sup>(a)</sup> Minimum bottom width measured at minimum depth from top of channel.

<sup>(b)</sup> Design based on 10-year 6-hour storm (Permanent structure for ephemeral drainage).

<sup>(c)</sup> The above channel dimensions represent the minimum cross-sectional flow area. The majority of the channel has a greater cross-sectional flow area.

ATTACHMENT 1

AS-BUILT RECLAMATION  
HYDROLOGY CALCULATIONS



## As-Build Hydrology Calculations Gravel Canyon

The purpose of these calculations is to demonstrate that the constructed reclamation channel can handle the peak flow generated by the 10-year 6-hour design storm event. The channel will be shown to be capable of safely handling the design event.

To minimize confusion and ease review the channel is labeled in the same manner as found in the design calculations in Appendix 3.6B.

### Methodology

- Curve Number techniques of the U.S. SCS (1972)
- Triangular Unit Hydrograph approach of the U.S. SCS (1972) as programed by Hawkins and Marshall (1979)
- Drainage areas, slopes and hydraulic lengths determined from as-built aerial topography. See Exhibit 3.5-3A for watershed location.

### Rainfall Depths

10-year 6-hour	1.4 inches
10-year 24-hour	1.8 inches

### Reclamation Curve Numbers

The curve number for each watershed is determined by an area weighted average between undisturbed and reclaimed areas.

A curve number of 75 will be used for the undisturbed areas as stated in Section 3.5-3(2) of the M&RP. This section is for the Adit No. 1 area. However the vegetation and soil types for the two canyons are very similar.

A curve number of 80 will be used for reclaimed areas. This is a conservative estimate considering that the site has already revegetated well and the deep gouges will retain moisture on the slopes. Thus, not allowing runoff from the reclaimed area.

**GRAVEL CANYON AS-BUILT  
CURVE NUMBER SUMMARY**

Watershed No.	Total Area (ac)	Undisturbed		Disturbed		Weighted CN
		Area (ac)	CN	Area (ac)	CN	
GCRWS-1	102.8	97.14	75	5.66	80	76

A summary of watershed characteristics can be found on the following pages.

### Summary of Watershed Data

Watershed Area	Drainage Area (ac)	Curve Number	S (in)	Y (%)	I (ft)	L (hr)	Time of Conc. (hr)	Peak Flow (cfs)
CGRWS-1	102.8	76	3.158	88.7	3280	0.098	0.164	7.4

#### Notes

Watershed location can be found on page 5

$S = 1000/CN - 10$

$Y = \text{average watershed slope} = (\text{length of contour lines})(\text{contour interval})/(\text{watershed area})$

$I = \text{hydraulic length}$

$L = \text{watershed lag} = (I^{0.8}(S+1)^{0.7}) / (1900(Y)^{0.5})$

Time of Concentration + 1.67L

Peak Flow is based on a 10-yr 6-hr storm event

Triangular Hydrograph Calculations using

SCSHYDRO Program

Watershed I.D.:  
GCRWS-1

INPUT SUMMARY

-----  
STORM :                    WATERSHED :  
Dist.= SCS Type `b'      Area = 102.80 acres  
Depth = 1.40 inches      CN = 76.00  
Duration = 6.0 hrs        Time conc.= 0.16 hrs  
-----

OUTPUT SUMMARY

-----  
Runoff depth: 0.150 inches  
Initial abstr: 0.632 inches  
Peak flow: 7.40 cfs ( 0.071 iph )  
at time: 2.602 hrs  
-----

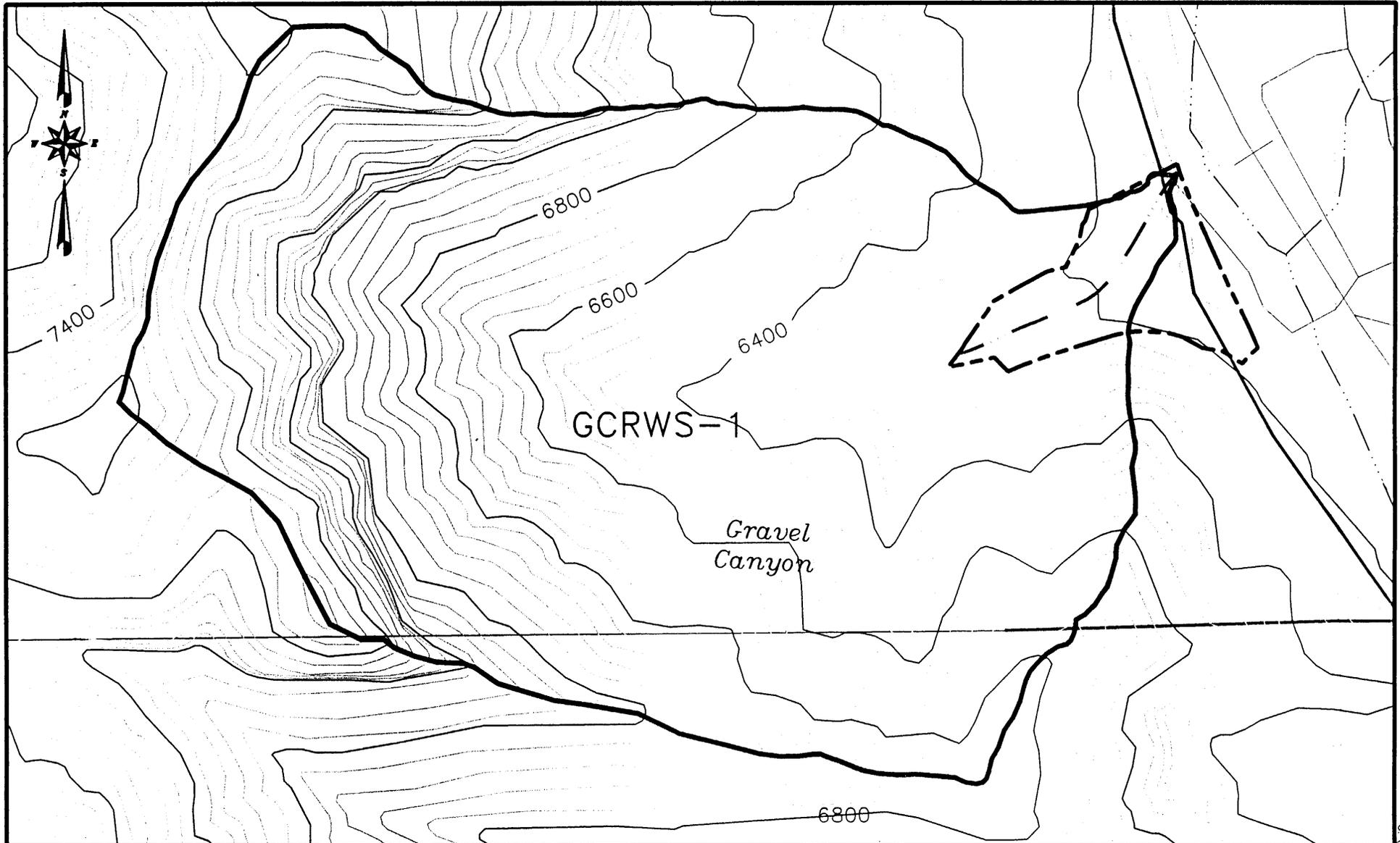


FIGURE 1. WATERSHED MAP



## Channel Verification

### Assumptions

1. All ditches verified for the 10-yr 6-hr storm event,
2. When determining the adequacy of the riprap the method presented by Searcy, (1967) will be used,
3. Riprap thickness is twice the  $D_{50}$ ,
4. Verification of riprap sizing will be based on the 10-year 6-hour storm event and the maximum slope,
5. Verification of channel capacity will be based on the 10-year 6-hour storm event and the minimum slope,
6. A Mannings n for riprap channels will be determined using the method presented by Abt, S.R., et. al. (1987)

$$n = 0.0456(D_{50} \times \text{Slope})^{0.159}$$

Where:         $D_{50}$  = median riprap size (inches)  
                 Slope = (ft\ft)

The channels were measured in fall of 2004. The channels were measured at the location of the minimum flow area. Thus, the channels typically have a greater capacity than indicated in this calculation.

The channel cross-section for the GCRD-1 can be found on page 10. The channel profile can be found on Exhibit 3.6-4.

GCRD-1

Contributing Watershed is 100% of GCRWS-1

Peak Flow = 7.40 cfs

Minimum Slope = 5.9%

Maximum Slope = 14.5%

Trapizoidal Ditch

Side slopes = 1.95:1

Depth = 1.7 ft

Bottom Width = 4.5 ft

Riprap = 12 inch

Maximum Velocity = 4.94 fps

Maximum Depth = 0.39 ft

Freeboard = 1.31 ft

See pages 8 and 9 for calculation sheets

8

## GCRD-1 Minimum Slope Worksheet for Trapezoidal Channel

Project Description	
Worksheet	Gravel Canyon
Flow Element	Trapezoidal Cha
Method	Manning's Form
Solve For	Channel Depth

Input Data	
Mannings Coeffic	0.043
Slope	0.059000 ft/ft
Left Side Slope	1.95 V : H
Right Side Slope	1.95 V : H
Bottom Width	4.50 ft
Discharge	7.40 cfs

Results	
Depth	0.39 ft
Flow Area	1.8 ft <sup>2</sup>
Wetted Perim	5.37 ft
Top Width	4.90 ft
Critical Depth	0.43 ft
Critical Slope	0.041457 ft/ft
Velocity	4.07 ft/s
Velocity Head	0.26 ft
Specific Energ	0.64 ft
Froude Numb	1.18
Flow Type	Supercritical

*0.39 ft < 1.7 ft ∴ ok freeboard = 1.31 ft*

# GCRD-1 Maximum Slope Worksheet for Trapezoidal Channel

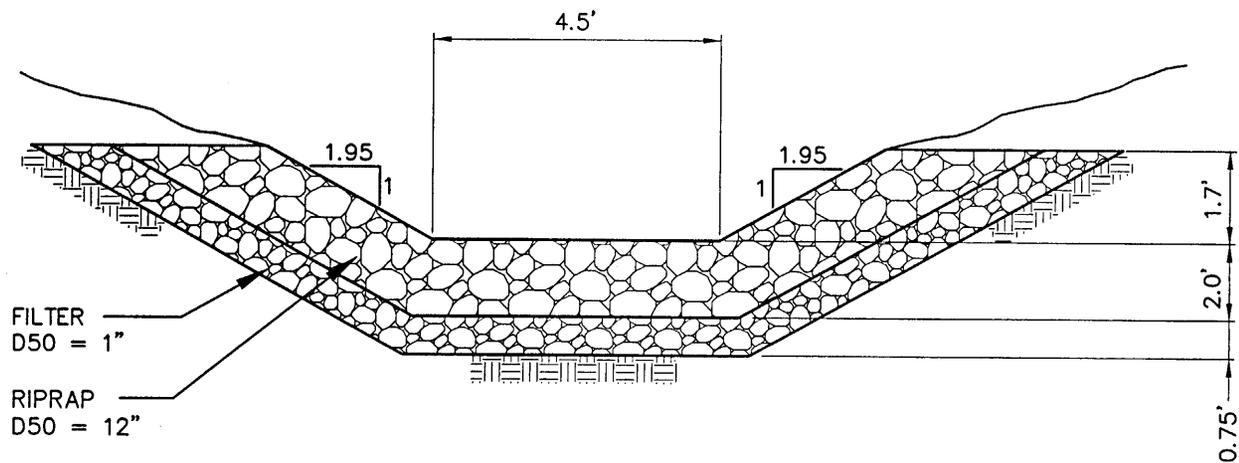
Project Description	
Worksheet	Gravel Canyon
Flow Element	Trapezoidal Cha
Method	Manning's Form
Solve For	Channel Depth

Input Data	
Mannings Coeffic	0.050
Slope	0.145000 ft/ft
Left Side Slope	1.95 V : H
Right Side Slope	1.95 V : H
Bottom Width	4.50 ft
Discharge	7.40 cfs

$$n = 0.0456 (12'' \times 0.145)^{0.159} = 0.05$$

Results	
Depth	0.32 ft
Flow Area	1.5 ft <sup>2</sup>
Wetted Perim	5.22 ft
Top Width	4.83 ft
Critical Depth	0.43 ft
Critical Slope	0.055606 ft/ft
Velocity	4.94 ft/s
Velocity Head	0.38 ft
Specific Energ	0.70 ft
Froude Numb	1.56
Flow Type	supercritical

< 10.6 f/s ∴ OK



NO SCALE

CGRD-1



## References

- Abt, S.R., M.S. Khatlak, J.D. Nelson, J.F. Ruff, A. Shaikh, R.J. Whittler, D.W. Lee, and N.E. Hinkle. 1987. Development of Riprap Design Criteria by Riprap Test Flumes: Phase 1. NUREGLCR-4651. U.S. Nuclear Regulatory Commission. Washington D.C.
- Barfiel, B.J., C.T. Haan, and J.C. Hayes. 1994. Design Hydrology and Sedimentology for Small Catchments. Academic Press. San Diego, California.
- Hawkins, R.H. and K.A. Marshall. 1979. Storm Hydrograph Program. Final Report to the Utah Division of Oil, Gas, and Mining. Utah State University Foundation, Logan, Utah.
- Herr, L.A. and H.G. Bossy, 1965. Hydraulic Charts for the Selection of Highway Culverts. Hydraulic Engineering Circular No. 5. U.S. DOT. Washington D.C.
- Miller J.F, R.H. Fredrick, and R.J. Tracey. 1973. Precipitation - Frequency Atlas of the Western United States, Volume VI - Utah. NOAA. National Weather Service. Silver Springs, Maryland.
- Searcy, J.K. 1967. Use of Riprap for Bank Protection. Hydraulic Engineering Circular No. 11. U.S. DOT Washington D.C.
- U.S. SCS. 1972. National Engineering Handbook: Section 4 - Hydrology, Washington, D.C.

Plateau Mining Corporation  
Willow Creek Permit  
C/007/038

Phase I Bond Release on 5 acres of disturbed lands associated with Gravel Canyon in the  
along US Highway 6, west of the Castle Gate area.

I hereby certify to the best of my information and belief that all applicable reclamation activities  
have been accomplished in accordance with the requirements of the Act, the regulatory program,  
and the approved reclamation plan.

Dennis N. Ware  
Print Name  
[Signature] Controller & Admin. Mgr.  
Sign Name, Position, Date  
05-03-2005

Subscribed and sworn to before me this 3rd day of May, 2005

[Signature]  
Notary Public

My Commission Expires: 6-4, 2005 }  
Attest: State of Utah } ss:  
County of Emery



**Public Notice**

**Application for Phase I Bond Release  
Gravel Canyon  
Plateau Mining Corporation  
Willow Creek Mine  
Permit C/007/038, Approved 04/24/2001  
Carbon County, Utah**

Plateau Mining Corporation, , P.O. Box 30, 847 Northwest Highway 191, Helper, UT 84526, a subsidiary of Foundation Coal Company , 999 Corporate Blvd., Linthicum Heights, MD 21090, has completed Phase I of the approved reclamation plan for the approximately 5.75 acres of land in the Gravel Canyon area of the Willow Creek Mine. This is based on meeting the backfilling and grading and drainage control requirements for Phase I reclamation in accordance with the approved reclamation plan. All earthwork, drainage control, and revegetation were completed in the fall of 2004.

In accordance with the provisions of R645-301-880, of the State of Utah R645-Coal Mining Rules, notice is hereby given to the general public that Plateau Mining Corporation is applying for partial release of the performance bond posted for this operation.

The surety bond posted for the Willow Creek Mine is \$7,866,000 of which \$159,000 is designated for the Gravel Canyon reclamation. Plateau Mining Corporation is seeking release of \$95,400 from the Gravel Canyon portion of the bond.

Gravel Canyon is located on the Helper, Utah, U.S. Geological Survey 7.5 minute quadrangle map. The mine site is located in Sowbelly Gulch, approximately 3.5 miles north of Helper, Utah on the following described lands:

Township 12 South, Range 9 East, SLB&M, Utah  
Section 35: SE1/4 SE1/4

The Utah Division of Oil, Gas and Mining will now evaluate the proposal to determine whether it meets all the criteria of the Permanent Program Performance Standards according to the requirements of the Utah Coal Mining Rules.

Written comments, objections and requests for public hearing or information conference on this proposal may be addressed to:

Utah Coal Program  
Utah Division of Oil, Gas and Mining  
1594 West North Temple, Suite 1210  
P.O. Box 145801  
Salt Lake City, Utah 84114-5801

Closing date for submission of such comments, objections and requests for public hearing or information conference on this proposal must be submitted by Month Date, 2005.

Published in the Sun Advocate – Month Date, Date, Date, Date, 2005

# Plateau Mining Corporation

Willow Creek Mine  
P.O. Box 30  
847 NW HWY 191  
Helper, Utah 84526  
(435)472-4737  
Fax: (435)472-4782

April 29, 2005

Mr Gary Harwood  
Helper City  
P.O. Box 221  
Helper, Utah 84526

Re: Notification of Application for Phase I Bond Release, Gravel Canyon, Plateau Mining Corporation, Willow Creek Mine, C/007/038, Carbon County, Utah

Dear Mr. Harwood:

Plateau Mining Corporation, , P.O. Box 30, 847 Northwest Highway 191, Helper, UT 84526, a subsidiary of Foundation Coal Company , 999 Corporate Blvd., Linthicum Heights, MD 21090, has completed Phase I of the approved reclamation plan for the approximately 5.75 acres of land in the Gravel Canyon area of the Willow Creek Mine. This is based on meeting the backfilling and grading and drainage control requirements for Phase I reclamation in accordance with the approved reclamation plan. All earthwork, drainage control, and revegetation were completed in the fall of 2004.

In accordance with the provisions of R645-301-880, of the State of Utah R645-Coal Mining Rules, this letter will serve as notification that Plateau Mining Corporation intends to file an application with the Utah Division of Oil, Gas and Mining for partial release of the performance bond posted for this operation.

The surety bond posted for the Willow Creek Mine is \$7,866,000 of which \$159,000 is designated for the Gravel Canyon reclamation. Plateau Mining Corporation is seeking release of \$95,400 from the Gravel Canyon portion of the bond.

Gravel Canyon is located on the Helper, Utah, U.S. Geological Survey 7.5 minute quadrangle map. The mine site is located in Sowbelly Gulch, approximately 3.5 miles north of Helper, Utah on the following described lands:

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Comments concerning Phase I bond release from the legal or equitable owner of record of the surface areas to be affected and from the Federal, Utah and local government agencies which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation should be mailed to: Plateau Mining Corporation, Attention: Dennis N. Ware, P.O. Box 30, Helper, Utah 84526.

If you have any questions or need additional information, please me at (435) 472-4737.

Sincerely,



Dennis N. Ware  
Controller and Administrative Manager

# Plateau Mining Corporation

Willow Creek Mine  
P.O. Box 30  
847 NW HWY 191  
Helper, Utah 84526  
(435)472-4737  
Fax: (435)472-4782

April 29, 2005

Carbon County Commissioners  
120 East Main Street  
Price, Utah 84501

Re: **Notification of Application for Phase I Bond Release, Gravel Canyon, Plateau Mining Corporation, Willow Creek Mine, C/007/038, Carbon County, Utah**

Dear Commissioners:

Plateau Mining Corporation, , P.O. Box 30, 847 Northwest Highway 191, Helper, UT 84526, a subsidiary of Foundation Coal Company , 999 Corporate Blvd., Linthicum Heights, MD 21090, has completed Phase I of the approved reclamation plan for the approximately 5.75 acres of land in the Gravel Canyon area of the Willow Creek Mine. This is based on meeting the backfilling and grading and drainage control requirements for Phase I reclamation in accordance with the approved reclamation plan. All earthwork, drainage control, and revegetation were completed in the fall of 2004.

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Comments concerning Phase I bond release from the legal or equitable owner of record of the surface areas to be affected and from the Federal, Utah and local government agencies which would have to initiate, implement, approve, or authorize the proposed use of the land following reclamation should be mailed to: Plateau Mining Corporation, Attention: Dennis N. Ware, P.O. Box 30, Helper, Utah 84526.

If you have any questions or need additional information, please me at (435) 472-4737.

Sincerely,



Dennis N. Ware  
Controller and Administrative Manager

# Plateau Mining Corporation

Willow Creek Mine  
P.O. Box 30  
847 NW HWY 191  
Helper, Utah 84526  
(435)472-4737  
Fax: (435)472-4782

April 29, 2005

Mr. Dave Levanger  
Carbon County Planning and Zoning  
120 East Main Street  
Price, Utah 84501

Re: **Notification of Application for Phase I Bond Release, Gravel Canyon, Plateau Mining Corporation, Willow Creek Mine, C/007/038, Carbon County, Utah**

Dear Mr. Levanger:

Plateau Mining Corporation, , P.O. Box 30, 847 Northwest Highway 191, Helper, UT 84526, a subsidiary of Foundation Coal Company , 999 Corporate Blvd., Linthicum Heights, MD 21090, has completed Phase I of the approved reclamation plan for the approximately 5.75 acres of land in the Gravel Canyon area of the Willow Creek Mine. This is based on meeting the backfilling and grading and drainage control requirements for Phase I reclamation in accordance with the approved reclamation plan. All earthwork, drainage control, and revegetation were completed in the fall of 2004.

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Township 12 South, Range 9 East, SLB&M, Utah  
Section 35: SE1/4 SE1/4

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Sincerely,



Dennis N. Ware  
Controller and Administrative Manager

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Willow Creek Mine  
P.O. Box 30  
847 NW HWY 191  
Helper, Utah 84526  
(435)472-4737  
Fax: (435)472-4782

April 29, 2005

Mr. Harold Cunningham  
Utah Power and Light – Carbon Plant  
Helper, Utah 84526

Re: **Notification of Application for Phase I Bond Release, Gravel Canyon, Plateau Mining Corporation, Willow Creek Mine, C/007/038, Carbon County, Utah**

Dear Mr. Cunningham:

Plateau Mining Corporation, , P.O. Box 30, 847 Northwest Highway 191, Helper, UT 84526, a subsidiary of Foundation Coal Company , 999 Corporate Blvd., Linthicum Heights, MD 21090, has completed Phase I of the approved reclamation plan for the approximately 5.75 acres of land in the Gravel Canyon area of the Willow Creek Mine. This is based on meeting the backfilling and grading and drainage control requirements for Phase I reclamation in accordance with the approved reclamation plan. All earthwork, drainage control, and revegetation were completed in the fall of 2004.

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Controller and Administrative Manager

# Plateau Mining Corporation

Willow Creek Mine  
P.O. Box 30  
847 NW HWY 191  
Helper, Utah 84526  
(435)472-4737  
Fax: (435)472-4782

April 29, 2005

Mr. Roger Wheeler  
Director Land Management  
American Electric Power  
700 Morrison Road  
Gahanna, Ohio 43230-6642

Re: Notification of Application for Phase I Bond Release, Gravel Canyon, Plateau Mining Corporation, Willow Creek Mine, C/007/038, Carbon County, Utah

Dear Mr. Wheeler:

Plateau Mining Corporation, , P.O. Box 30, 847 Northwest Highway 191, Helper, UT 84526, a subsidiary of Foundation Coal Company, 999 Corporate Blvd., Linthicum Heights, MD 21090, has completed Phase I of the approved reclamation plan for the approximately 5.75 acres of land in the Gravel Canyon area of the Willow Creek Mine. This is based on meeting the backfilling and grading and drainage control requirements for Phase I reclamation in accordance with the approved reclamation plan. All earthwork, drainage control, and revegetation were completed in the fall of 2004.

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Dennis N. Ware  
Controller and Administrative Manager

## Plateau Mining Corporation

Willow Creek Mine  
P.O. Box 30  
847 NW HWY 191  
Helper, Utah 84526  
(435)472-4737  
Fax: (435)472-4782

April 29, 2005

Mr. Phil Palmer  
Price River Water Improvement District  
P.O. 903  
265 South Fairgrounds Road  
Price, Utah 84501

**Re: Notification of Application for Phase I Bond Release, Gravel Canyon, Plateau Mining Corporation, Willow Creek Mine, C/007/038, Carbon County, Utah**

Dear Mr. Palmer:

Plateau Mining Corporation, , P.O. Box 30, 847 Northwest Highway 191, Helper, UT 84526, a subsidiary of Foundation Coal Company, 999 Corporate Blvd., Linthicum Heights, MD 21090, has completed Phase I of the approved reclamation plan for the approximately 5.75 acres of land in the Gravel Canyon area of the Willow Creek Mine. This is based on meeting the backfilling and grading and drainage control requirements for Phase I reclamation in accordance with the approved reclamation plan. All earthwork, drainage control, and revegetation were completed in the fall of 2004.

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Dennis N. Ware  
Controller and Administrative Manager

# Plateau Mining Corporation

Willow Creek Mine  
P.O. Box 30  
847 NW HWY 191  
Helper, Utah 84526  
(435)472-4737  
Fax: (435)472-4782

April 29, 2005

Mr. Patrick Gubbins  
Bureau of Land Management  
125 South 600 West  
Price, Utah 84501

Re: **Notification of Application for Phase I Bond Release, Gravel Canyon, Plateau Mining Corporation, Willow Creek Mine, C/007/038, Carbon County, Utah**

Dear Mr. Gubbins:

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Willow Creek Mine  
P.O. Box 30  
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Fax: (435)472-4782

April 29, 2005

Mr. Kevin S. Carter  
Director  
School and Institutional Trust Lands Administration  
675 East 500 South, Suite 500  
Salt Lake City, Utah 84102-2818

Re: **Notification of Application for Phase I Bond Release, Gravel Canyon, Plateau Mining Corporation, Willow Creek Mine, C/007/038, Carbon County, Utah**

Dear Mr. Carter:

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Controller and Administrative Manager

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Willow Creek Mine  
P.O. Box 30  
847 NW HWY 191  
Helper, Utah 84526  
(435)472-4737  
Fax: (435)472-4782

April 29, 2005

Mr. Hugh Kirkham  
State of Utah  
Department of Transportation  
940 South Carbon Avenue  
Price, Utah 84501

Re: **Notification of Application for Phase I Bond Release, Gravel Canyon, Plateau Mining Corporation, Willow Creek Mine, C/007/038, Carbon County, Utah**

Dear Mr. Kirkham:

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Dennis N. Ware  
Controller and Administrative Manager

**Willow Creek Mine**  
**Plateau Mining Corporation**  
**C/007/038**

**Phase I Bond Release Application**  
**Gravel Canyon**

April 2005