



0084

Public Notice

US Army Corps
of Engineers

Sacramento District
1325 J Street
Sacramento, CA 95814-2922

Public Notice No.

199450397

Date:

February 14, 1996

In Reply Refer to the
above Public Notice No.

Comments Due:

March 4, 1996

#21

TO WHOM IT MAY CONCERN:

*Copy Given: PAM
File PRO/007/038
#2*

SUBJECT: Application for a Department of the Army permit under authority of Section 404 of the Clean Water Act to excavate and place fill in Willow Creek to install a culvert and to relocate two sections of the creek to accommodate the proposed Willow Creek Mine facilities, as shown in the attached drawings.

APPLICANT : Cyprus Plateau Mining Corporation, P. O. Box PMC, Price, Utah 84501.

LOCATION: The project is located 10 miles north of Price, Utah in the lower portion of Willow Creek adjacent to State Highway 191 in Section 6, Township 13 South, Range 10 East and Section 1, Township 13 South, Range 9 East in Carbon County, Utah.

PURPOSE: Cyprus Plateau Mining Corporation (CPMC) proposes to develop and operate a new underground coal mine, the Willow Creek Mine. The new mine, to be located in the vicinity of the old Castle Gate Mine, would be developed to replace CPMC's Star Point Mine, located southwest of Price. Facilities would include the underground mine and surface coal handling, preparation and support activities and associated buildings. It is anticipated that the new mine will be in operation for approximately 20-40 years. CPMC believes it is necessary to relocate two segments of lower Willow Creek and replace an existing unsafe culvert crossing to provide a safe vehicular access road from Highway 191 to the mine, for construction of required drainage and sediment control structures, to address existing erosion problems and to minimize impacts from mining and related operations on the stream.

PROJECT DESCRIPTION: The mine development construction within Department of the Army jurisdiction has three components:

1) Upper Stream Realignment - The existing access road from the western end of the project area will be modified to become the main access road to the mine's surface facilities. After crossing the creek via a culvert (see following "Lower Stream Crossing" description), the road runs parallel to Willow Creek on the north side of the creek. In the narrow area where the creek runs immediately adjacent to the existing road, the road outslope, which is also the north bank of Willow Creek, is

421
February 14, 1996

relatively high and steep. In this area, the creek is continually undercutting the bank, resulting in ongoing erosion and sloughing of the bank and road outslope.

Approximately 340 feet of stream channel would be permanently relocated to accommodate installation of a coal conveyor system along the north side of the road, provide a stable road outslope, address ongoing bank erosion and accommodate required drainage ditches. The channel would shift approximately 70 feet to the south and east. The affected channel/floodplain area, estimated using a maximum width of 20 feet, is approximately 0.156 acres. The replacement channel would be approximately 335 feet long and the associated channel and floodplain area would be approximately 30 feet wide, resulting in a new total channel/floodplain area of approximately 0.231 acres. The new channel section would therefore be approximately 5 feet shorter than the old section and the channel/floodplain area would be approximately 0.075 acres larger.

2) Lower Stream Crossing - The existing deteriorated large-diameter 40-foot-long culvert would be replaced with a 190 ft-long and wider (8 ft.-diameter) culvert on a different alignment. The new culvert alignment and size are needed to accommodate the realignment and reconstruction of the existing road to serve as the main mine access road and to conform with changes in the downstream channel configuration. The new culvert would be riprapped at both the inlet and downstream ends and would contain two 36-inch fish "skylights".

3) Lower Stream Realignment - The realignment involves the permanent relocation of 900 feet of stream channel approximately 200 feet to the south in order to minimize operational impacts on the stream from mining activities, accommodate construction of required drainage and sediment control structures, including a sedimentation pond and to prevent mining-related impacts to downstream water quality. Assuming a maximum channel and floodplain width of approximately 20 feet, the affected channel/floodplain area is approximately 0.395 acres. The replacement channel/floodplain area is approximately 925 feet long and 30 feet wide. Adjusting for the loss due to the increased culvert length results in a net loss of 125 feet of channel (due primarily to the longer culvert) and a net gain of approximately 0.111 acres of channel/floodplain area.

Within the project area Willow Creek is a narrow, high-gradient stream with an entrenched, laterally confined channel and little floodplain. There is some herbaceous vegetation in the channel, but stream canopy cover is limited. The channel in the area of

#21
February 14, 1996

the proposed realignment sections has been altered in the past in conjunction with previous historic mining operations.

Stream flows fluctuate significantly, with very low flows during the late summer/early fall and high flows in response to spring snowmelt runoff and high-intensity, short-duration summer thunderstorms. The overall quality of aquatic habitat, occurrence of aquatic vegetation and both quantity and diversity of aquatic macroinvertebrates are limited because of channel configuration, erosion, siltation and relatively low flows during most months. Fish surveys in 1994 and 1995 found low populations of trout, speckled dace, redbreast shiner, mountain sucker and bluehead sucker. Willow Creek does not appear to provide favorable conditions for either a year-round fishery or fish spawning and present use appears limited to fish migration to and from more suitable upstream habitat.

The new channel segments have been designed to pass both normal low flows and peak flows resulting from the 100-year, 6-hour storm event and have been designed with the intent of assuring long-term geomorphic stability of both the realigned segments and adjacent upstream and downstream channel reaches. The new channel designs include specific features to eliminate existing barriers to fish movements and enhance aquatic habitat fisheries potential and riparian habitat values. These features include replacement of the silty/clay substrate with a rock-and-gravel substrate; selective placement of larger rocks to provide fish resting and feeding habitat; design of the replacement culvert to limit flow gradient and resulting flow velocities during normal fish migration periods to a maximum of 3.5 feet per second and to provide supplemental natural lighting within the culvert (36-inch "skylights"); design of the low and bank-full channel configuration to expand the potential wetted area and associated riparian zone; reduction of streambank heights and sideslope gradients; and revegetation seeding and plantings to increase the density and variety of vegetation along the streambanks. Areas within and adjacent to the bank-full channel limits will be revegetated with a riparian seed mixture and riparian transplants while the drier, elevated floodplain areas will be seeded with an upland seed mixture.

AREA DESCRIPTION: The project area is located on the western Colorado Plateau, in the northern Book Cliffs region. Coal mining historically has been a major source of employment in the area, although many small mines in Carbon County are now closed. The nearby former town of Castle Gate was the center of the coal mining industry in Utah for almost 100 years.

February 14, 1996

H 2.1

ALTERNATIVES:

1) "No Action" alternative. If no Department of the Army permit is issued for any portion of the work, it may not be possible to develop the mine site. If the stream relocations are avoided, the culvert on Willow Creek would still need replacement and possibly realignment, work that would be within Department of the Army jurisdiction.

2) Shift mine facilities north instead of shifting the lower section of the creek south. This option would require blasting or cutting away the high rock slopes on the north side of the creek and would destroy cultural resources in the area.

3) Shift the conveyor system planned for the north side of Willow Creek further south rather than move the upper stream segment south. This option would necessitate crossing the creek 2-4 times, depending upon the conveyor alignment chosen. According to the applicant's analysis, this option would be considerably more expensive than the preferred alternative, would difficult to maintain, build and access, would require an additional road crossing and would result in an ongoing potential for adverse impacts from coal dust entering the stream.

ADDITIONAL INFORMATION:

The new mine site would encompass a portion of the closed workings of the Castle Gate Mine, once one of the largest coal producers in Utah. In March 1924, an explosion in the Castle Gate Mine No. 2 killed 172 miners. It was the second worst mine disaster in the west.

The Utah State Historic Preservation Office has reviewed a Cultural Resources Evaluation Report prepared for the proposed mine site as well as other materials submitted by the applicant. It has concluded (October 24, 1995 letter) that a determination of No Adverse Effect can be reached in regard to impacts to the Castle Gate Mine if sensitive treatment of the mine property is considered during the opening of the mine. The focus of the office's concern is the Castle Gate explosion; it recommends that areas directly related to the explosion, such as the old Castle Gate mine portals and the Castle Gate cemetery, not be reused. Additional cultural resources potentially eligible for inclusion of the National Register of Historic Places are located in the project area, but would not be affected by the plans as now proposed.

The District Engineer has made a determination, based on information provided by the applicant and on the Corps'

February 14, 1996

#21

preliminary investigation, that this activity would not affect any threatened or endangered species or their critical habitat.

Certification that the proposed work, if permitted, will not violate applicable water quality standards has been requested from the Utah Division of Water Quality.

Interested parties are invited to submit written comments on or before **March 4, 1996**. Any person may request, in writing, within the comment period specified in this notice that a public hearing be held to consider this application. Requests for public hearings shall state, with particularity, the reasons for holding a public hearing.

The decision whether to issue a permit will be based on an evaluation of the probable impact, including cumulative impacts, of the proposed activity on the public interest. That decision will reflect the national concern for both protection and utilization of important resources. The benefit which reasonably may be expected to accrue from the proposal must be balanced against its reasonably foreseeable detriments. All factors which may be relevant to the proposal will be considered including the cumulative effects thereof. Among those are conservation, economics, aesthetics, general environmental concerns, wetlands, cultural values, fish and wildlife values, flood hazards, flood plain values, land use, navigation, shoreline erosion and accretion, recreation, water supply and conservation, water quality, energy needs, safety, food and fiber production, mineral needs, consideration of property ownership, and in general, the needs and welfare of the people.

For activities involving 404 discharges, a permit will be denied if the discharge does not comply with the Environmental Protection Agency's 404(b)(1) guidelines. Subject to the preceding sentence and any other applicable guidelines or criteria, a permit will be granted unless the District Engineer determines it would be contrary to the public interest.

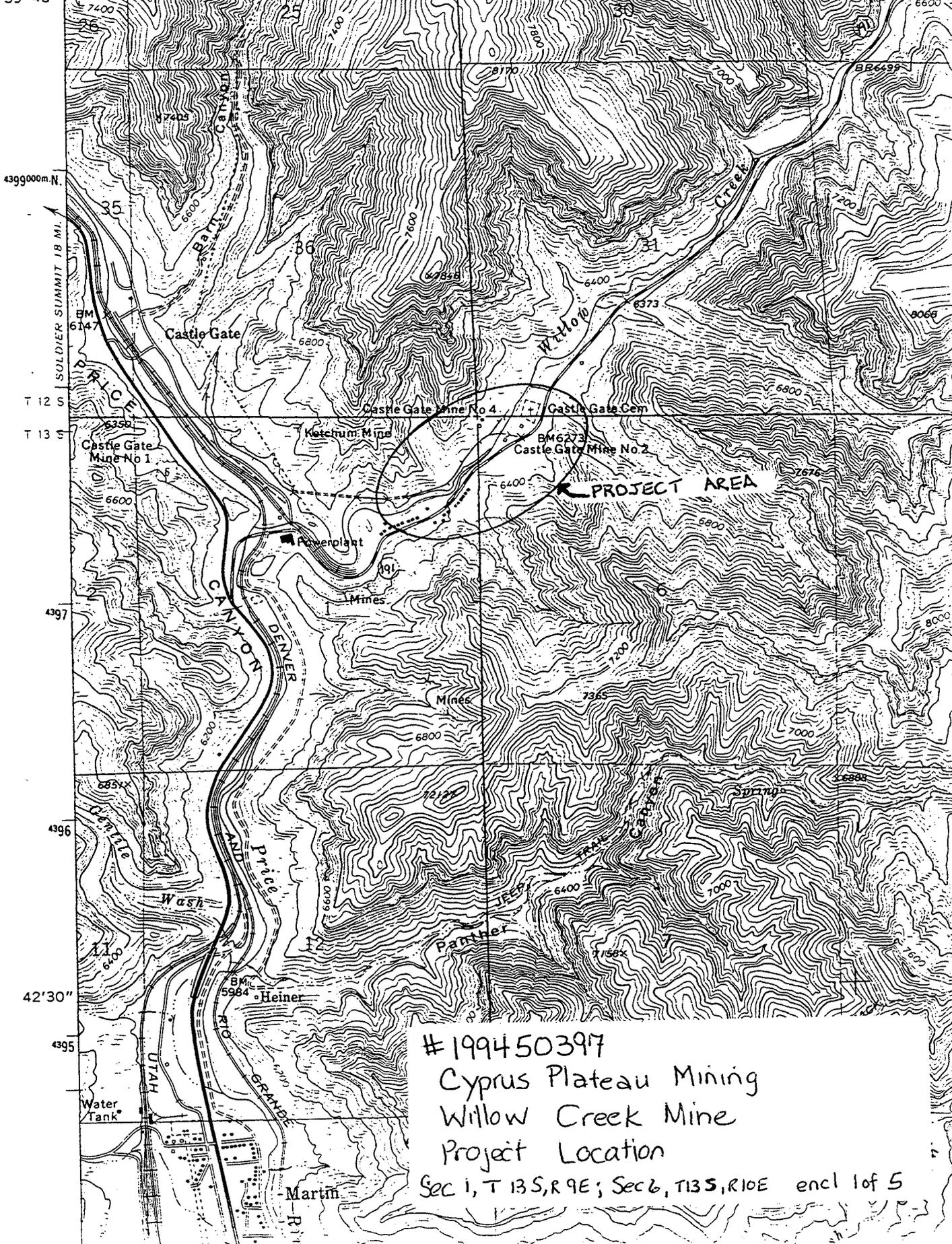
The Corps of Engineers is soliciting comments from the public; Federal, state, and local agencies and officials; Indian Tribes; and other interested parties in order to consider and evaluate the impacts of this proposed activity. Any comments received will be considered by the Corps of Engineers to determine whether to issue, modify, condition or deny a permit for this proposal. To make this decision, comments are used to assess impacts on endangered species, historic properties, water quality, general environmental effects, and the other public interest factors listed above. Comments are used in the preparation of an

3863 N SW
TKYUNE

#21

UNITED STATES
DEPARTMENT OF THE INTERIOR
GEOLOGICAL SURVEY

110° 52' 30" 511000m E 912 R 9 E R 10 E 913 514 50'



#199450397
 Cyprus Plateau Mining
 Willow Creek Mine
 Project Location
 Sec 1, T 13S, R 9E; Sec 6, T 13S, R 10E encl 1 of 5

#11

3863 /
(KVL)

CESPK-CO-R
PUBLIC NOTICE NO. 199450397

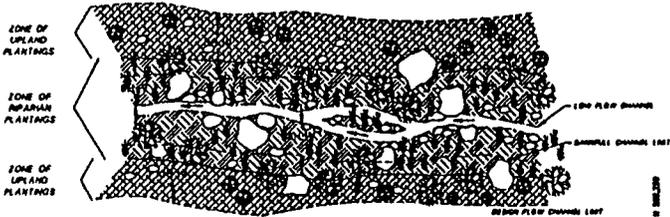
February 14, 1996

Environmental Assessment and/or an Environmental Impact Statement pursuant to the National Environmental Policy Act. Comments are also used to determine the need for a public hearing and to determine the overall public interest of the proposed activity.

If additional information is required, please contact Ms. Michele Waltz, 1403 South 600 West, Suite A, Bountiful, UT, 84010, telephone (801)295-8380.

John N. Reese
Colonel, Corps of Engineers
District Engineer

Enclosures: 5 Drawings



- 12-18 Fremont and Navaroneal
- Coliformed per 100 ft. of Channel
- 16-20 Upland Woody Species per
100 ft. of Channel (See Table A-4-1
for species)
- 80 Willow per 100 ft. of Channel
- Large Diameter Boulders (4-8')
- Exposed D₅₀ Riprap

NOTE:
1. UPLAND WILD MEADOWS AS SHOWN ON
TABLE A-4-1 AND THE WETLANDS WERE
MAPPING IN 2005. IN 2010, THE
ACTUAL LOCATION OF WETLANDS
WAS DETERMINED AND WETLANDS
WERE RECLASSIFIED TO FRESHWATER
WETLANDS. UPLAND WILD MEADOWS
WAS RECLASSIFIED TO FRESHWATER
WETLANDS. PLANTING AND PLANNING
WILL OCCUR WITHIN WETLAND ZONE
AND LIMIT OF DISTURBANCE.

LOCATION OF PROPOSED
SEMENTATION POND #61

ACCESS ROAD

POND #61 EMERGENCY SHELTER

WILLOW CREEK DESIGN FLOW CHANNEL (100%)

UTAH HIGHWAY 191

PROPOSED ALIGNMENT OF
REALIGNMENT CULVERT #108

PROPOSED WARE
ACCESS ROAD

- LEGEND**
- P - Pool Basin
 - R - Rip 80% Basin
 - - Approximate Low Flow Channel
 - - Approximate Bank-Full Flow Channel
 - - Approximate Deep Flow Channel
 - - Riparian Planting Zone
 - - Upland Planting Zone

**PROPOSED LOWER WILLOW CREEK REALIGNMENT SEGMENT
PLAN VIEW**

SCALE: 1" = 100'



CERTIFICATION	
PROFESSIONAL ENGINEER'S STATEMENT I, Patrick B. Carver, hereby certify that this map was prepared under my supervision and of the information provided herein is true and correct to the best of my knowledge and information. July 19, 2010 Patrick B. Carver, EIT 11, 2445	
REFERENCE DRAWINGS	
DRG. NO.	TITLE
APPROVALS	
DEPT. DATE	SIGNATURE/TITLE

#19450397
- LOWER CHANNEL
ALIGNMENT
- CULVERT CROSSING
FACI. 3 OF 5

1121

1214

E 2,410,000

E 2,420,000

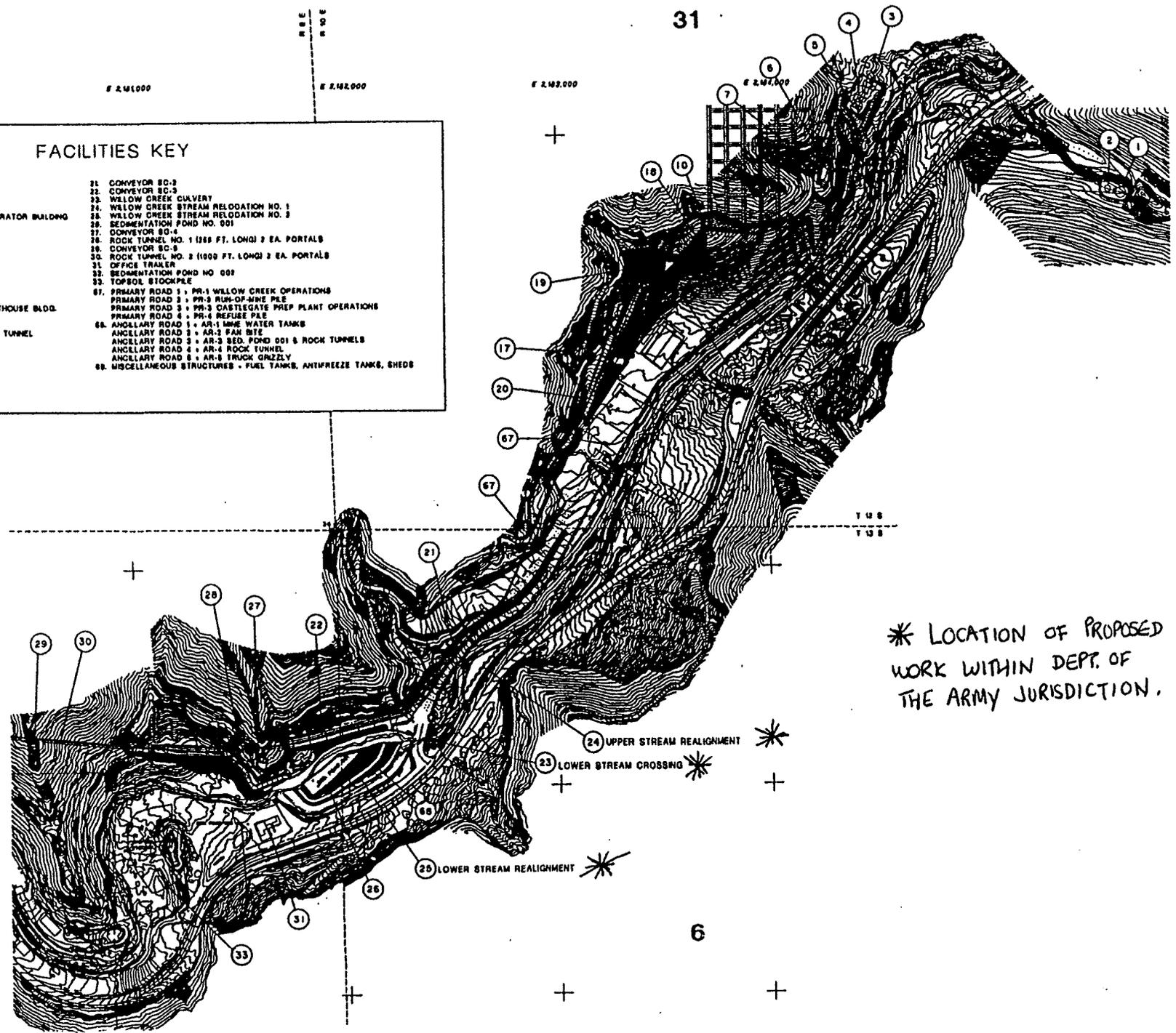
E 2,430,000

E 2,440,000

FACILITIES KEY

- | | |
|--|--|
| 1. FIRE WATER TANK - 800,000 GALS. | 31. CONVEYOR SC-3 |
| 2. MINE WATER TANK - 200,000 GALS. | 32. CONVEYOR SC-3 |
| 3. PROPANE TANKS - FAN HEATERS | 33. WILLOW CREEK CULVERT |
| 4. MINE VENTILATION FAN SUBSTATION | 34. WILLOW CREEK STREAM RELOCATION NO. 1 |
| 5. MINE VENTILATION FAN EMERGENCY GENERATOR BUILDING | 35. WILLOW CREEK STREAM RELOCATION NO. 2 |
| 6. MINE VENTILATION FAN SET | 36. SEDIMENTATION POND NO. 001 |
| 7. MINE VENTILATION SHAFT | 37. CONVEYOR SC-4 |
| 8. MAIN SUBSTATION | 38. ROCK TUNNEL NO. 1 (1288 FT. LONG) 2 EA. PORTALS |
| 9. PORTAL AREA SEDIMENT TRAP | 39. CONVEYOR SC-5 |
| 10. MINE PORTALS (S EAS) | 40. ROCK TUNNEL NO. 2 (1600 FT. LONG) 2 EA. PORTALS |
| 11. SHOP BUILDING | 41. OFFICE TRAILER |
| 12. WAREHOUSE BUILDING | 42. SEDIMENTATION POND NO. 002 |
| 13. TIRE/OIL STORAGE SHED | 43. TOPSOIL STOCKPILE |
| 14. ADMINISTRATION & BATHHOUSE BUILDING | 44. PRIMARY ROAD 1 - PR-1 WILLOW CREEK OPERATIONS |
| 15. WILLOW CREEK BRIDGE | 45. PRIMARY ROAD 2 - PR-2 RUN-OF-MINE PLE |
| 16. PROPANE TANKS - ADMINISTRATION/BATHHOUSE BLDG. | 46. PRIMARY ROAD 3 - PR-3 CARTLEGATE PREP PLANT OPERATIONS |
| 17. POTABLE WATER TANK - 40,000 GALS. | 47. PRIMARY ROAD 4 - PR-4 REFUGEE PLE |
| 18. CONVEYOR SC-1 | 48. ANCILLARY ROAD 1 - AR-1 MINE WATER TANKS |
| 19. RUN-OF-MINE STACKING TUBE & RECLAIM TUNNEL | 49. ANCILLARY ROAD 2 - AR-2 FAN SITE |
| 20. CONVEYOR SC-1 | 50. ANCILLARY ROAD 3 - AR-3 SED. POND 001 & ROCK TUNNELS |
| | 51. ANCILLARY ROAD 4 - AR-4 ROCK TUNNEL |
| | 52. ANCILLARY ROAD 5 - AR-5 TRUCK GRIZZLY |
| | 53. MISCELLANEOUS STRUCTURES - FUEL TANKS, ANTIFREEZE TANKS, SHEDS |

31



* LOCATION OF PROPOSED WORK WITHIN DEPT. OF THE ARMY JURISDICTION.

199450397
PROPOSED WILLOW CREEK
MINE - SURFACE
DISTURBANCE AREA

ENCL 2 OF 5

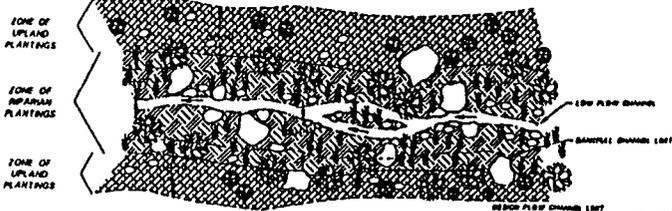
N 8120,000

N 8120,000

N 8080,000

100
100

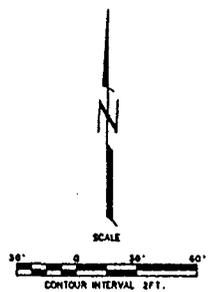
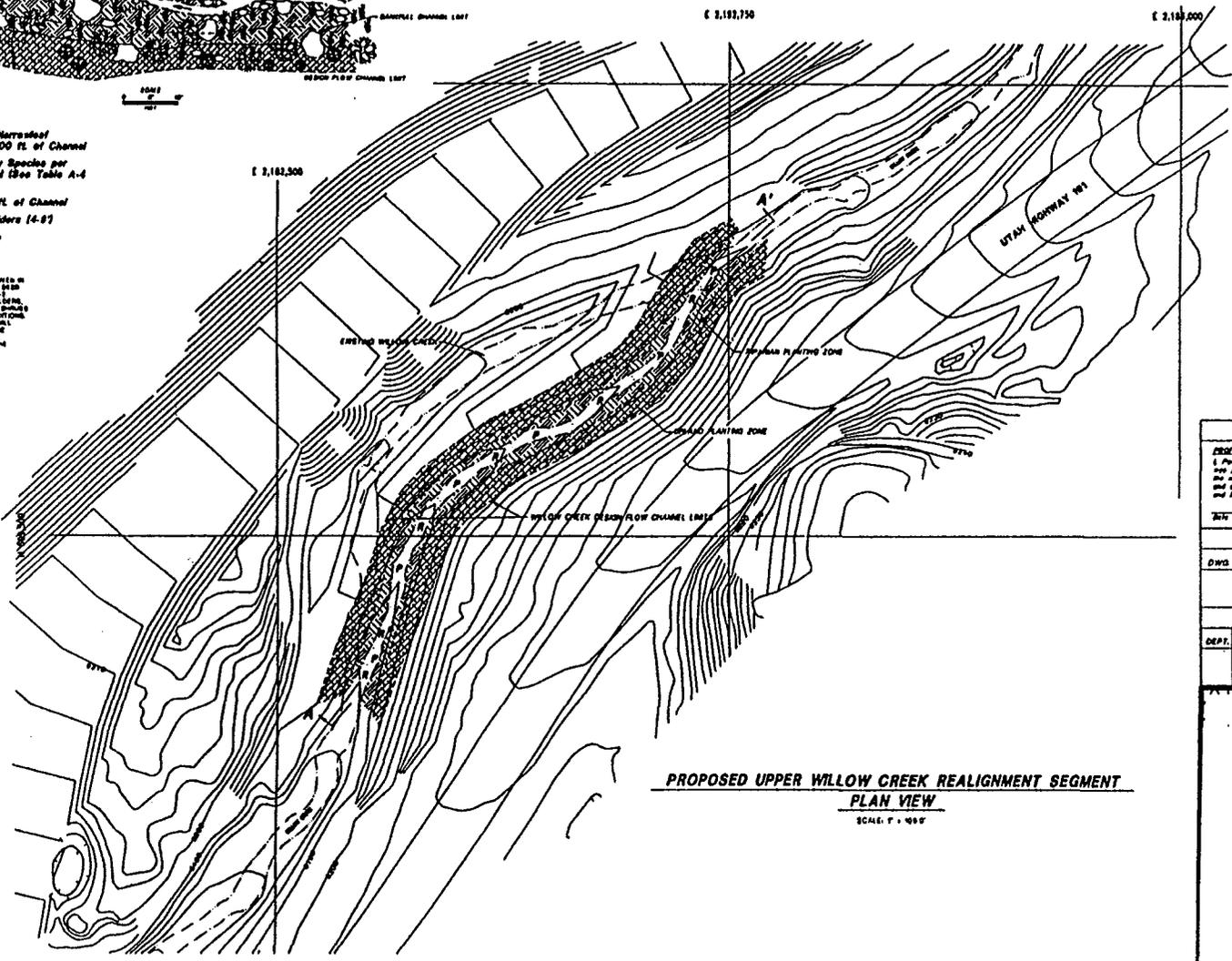
6



- LEGEND**
- P - Pool Beach
 - R - Step Baffle Beach
 - Approximate Low Flow Channel
 - Approximate Bank-Full Flow Channel
 - Approximate Design Flow Channel
 - Riparian Planting Zone
 - Upland Wood Shrub

- 12-36 Fremont and Nutcracker Cottonwood per 100 ft. of Channel
- 16-20 Upland Woody Species per 100 ft. of Channel (See Table A-4 for species)
- 80 NGs per 100 ft. of Channel
- Large Diameter Boulders (4-6')
- Exposed D₅₀ Riprap

NOTE:
 1. UPLAND WOOD SETTING IS SHOWN IN TABLE A-4 AND THE RIPARIAN WOOD SETTING IS SHOWN IN TABLE A-5. THE ACTUAL LOCATION OF BOWLING, TRAIL, UTILITY AND POWER LINES MAY VARY DUE TO FIELD CONDITIONS. A UPLAND WOOD SETTING WILL BE SHOWN WITH THE RIPARIAN ZONE IF SETTING AND PLANTING WILL OCCUR IN THE RIPARIAN ZONE AND NOT IN THE UPLAND ZONE.



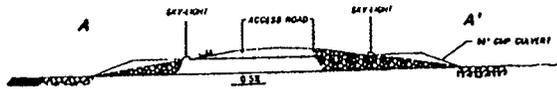
CERTIFICATION	
PROFESSIONAL ENGINEER'S STATEMENT I, Patrick B. Carver, state that this map was prepared under my supervision and all the information presented herein is true and correct to the best of my knowledge and information.	
	
Date: March 8, 2007	
REFERENCE DRAWINGS	
DWG. NO.	TITLE
APPROVALS	
DEPT. DATE	SIGNATURE/TITLE

PROPOSED UPPER WILLOW CREEK REALIGNMENT SEGMENT
PLAN VIEW
 SCALE: 1" = 60 FT.

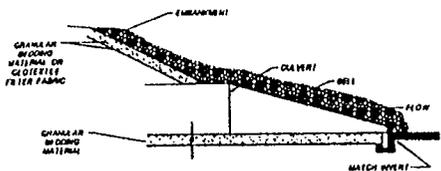
199450397
 - Upper Stream
 Realignment
 encls of 5

H21

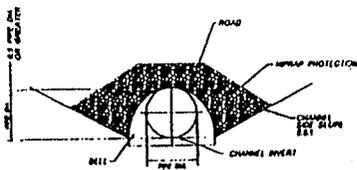
124



CULVERT CROSS-SECTION A-A'

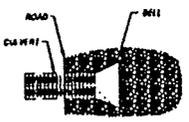


SECTION A-A' INLET
Not to Scale

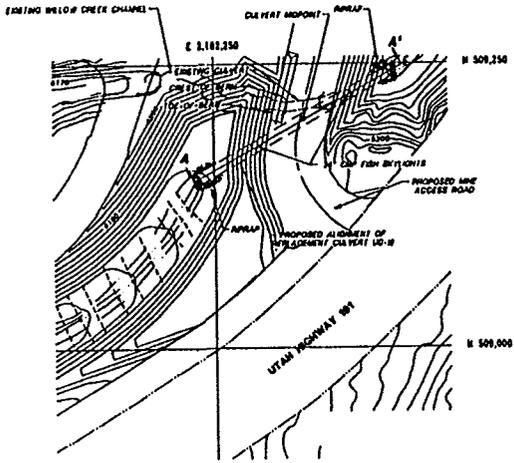


INLET FRONT VIEW
Not to Scale

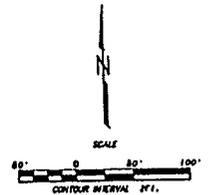
CULVERT RPRAP AND BEDDING GRADATION		
	3 Smaller than prev size by amount	Intermediate Rock Size Analysis
RPRAP D ₅₀	70 - 100	40
	50 - 70	30
	30 - 50	20
	10 - 30	10
GRANULAR BEDDING	50 - 100	3
	20 - 50	2 1/2
	0 - 20	No. 20
	0 - 2	No. 100



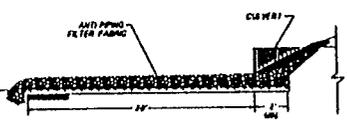
INLET PLAN VIEW
Not to Scale



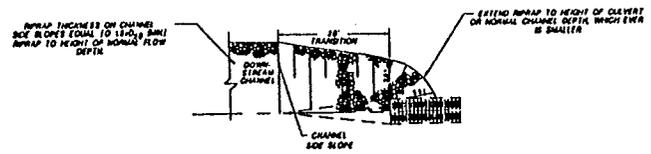
**LOWER STREAM CROSSING
PLAN VIEW**



CERTIFICATION	
PROFESSIONAL ENGINEER'S STATEMENT I, Paul E. Gorman, Esq. , certify that this map has been prepared under my supervision and all the information presented herein is true and correct to the best of my knowledge and information.	
Date: March 8, 2000, 10 P.M. 2000	
REFERENCE DRAWINGS	
DWG NO.	TITLE
APPROVALS	
DEP. DATE	SIGNATURE/TITLE



SECTION A-A' OUTLET
Not to Scale



OUTLET PLAN VIEW
Not to Scale

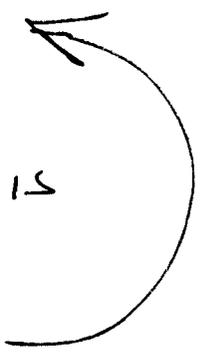
#199450397
CULVERT CROSSING
-PLAN VIEW, CROSS-SECTIONS
ENCL 4 of 5

LEB 1 5 887

EX 12

OLD FIG 2

WE HAVE NEW FIG 1 WHICH IS
NOW STA LOC. MAP SAME AS



MAPS

- 1
- 2
- 4
- 6

- 12
- 13A
- 13B
- 13C
- 13D

- 15
- 16
- 17

- 18A
- 18B
- 20
- 21A
- 21B
- 22
- 23A
- ↓
- 23F
- 24
- 26
- 28a
- 28b
- 29b