



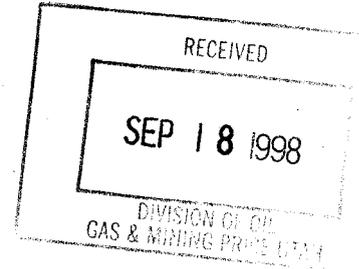
State of Utah  
DEPARTMENT OF NATURAL RESOURCES  
DIVISION OF WATER RIGHTS

Michael O. Leavitt  
Governor  
Ted Stewart  
Executive Director  
Robert L. Morgan  
State Engineer

1594 West North Temple, Suite 220  
Box 146300  
Salt Lake City, Utah 84114-6300  
801-538-7240  
801-538-7467 (Fax)

September 8, 1998

Louis Amodt, Randy Harden  
Division of Oil, Gas, and Mining  
Building Mail



RE: Grassy Creek Relocation Proposal

Gentlemen:

Thank you for your recent correspondence regarding this project. While this office sees the necessity in moving this channel, the present design does not incorporate enough vegetation or mimic a natural stream profile, typically, this type of channel forms a step/pool profile. The stream should be constructed in this fashion, modeling the profile after a stable profile in an existing stable channel reach in the immediate vicinity.

We understand that in any project such as this, minor modifications may be done in the field, depending on exact site conditions; however, the typical cross section and profile submitted shows a simple, totally riprapped channel with no riparian vegetation. Please provide a modified plan which addresses these concerns. I have enclosed a list of factors that need to be addressed.

If you have any questions, I will be happy to discuss this with you. I can be reached at 538-7375.

Sincerely,

Greg Mladenka  
Stream Alteration Specialist

GCM/

Enclosure

pc: Mark Page, Regional Engineer  
Pete Hess, UDOGM - Price



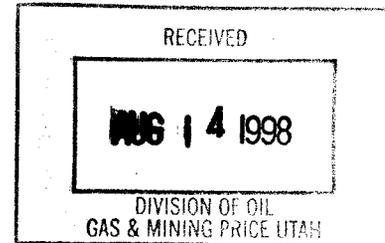
State of Utah  
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1594 West North Temple, Suite 220  
Box 146300  
Salt Lake City, Utah 84114-6300  
801-538-7240  
801-538-7467 (Fax)

July 30, 1998

Louis Amodt  
Division of Oil, Gas, and Mining  
Building Mail



Re: Grassy Creek Relocation Proposal

Dear Mr. Amodt:

This office is in the process of reviewing your application to relocate a section of Grassy Trail Creek. Regional Engineer Mark Page and I had the opportunity to visit the site with Pete Hess.

It appears the primary reason for relocating the channel is the proximity of the county road and slope problems on the east roadway embankment. These problems appear to be caused by general slope instability and roadway runoff, rather than undercutting by the stream. While we are not diametrically opposed to the relocation of this reach, the proposal is not acceptable in its present form as it fails to adequately address restoration of the natural stream environment.

Although the stream is ephemeral through this area, there is a significant riparian environment associated with the stream. The typical cross section that was submitted shows a simple, totally riprapped channel with no riparian vegetation or features such as step/pools that are appropriate for this type of stream. We will consider a modified proposal which adequately addresses these issues.

If you have any questions, please call me at 538-7375.

Sincerely,

Greg Mladenka  
Stream Alteration Specialist

GCM/jm

pc: Mark Page, Regional Engineer  
Pete Hess, UDOGM - Price

# SUNNYSIDE MINE RECLAMATION, CARBON COUNTY, UTAH

## April 1998

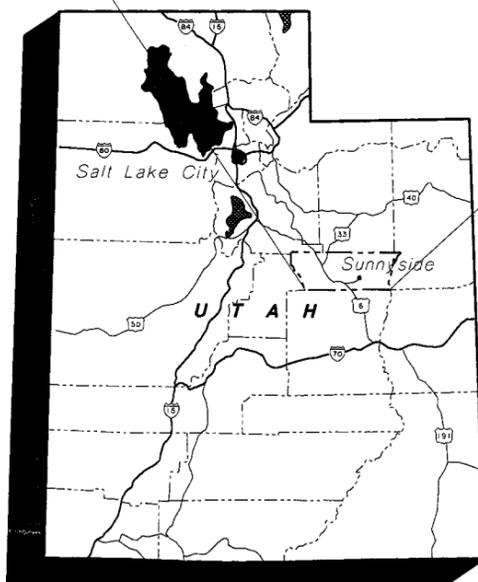
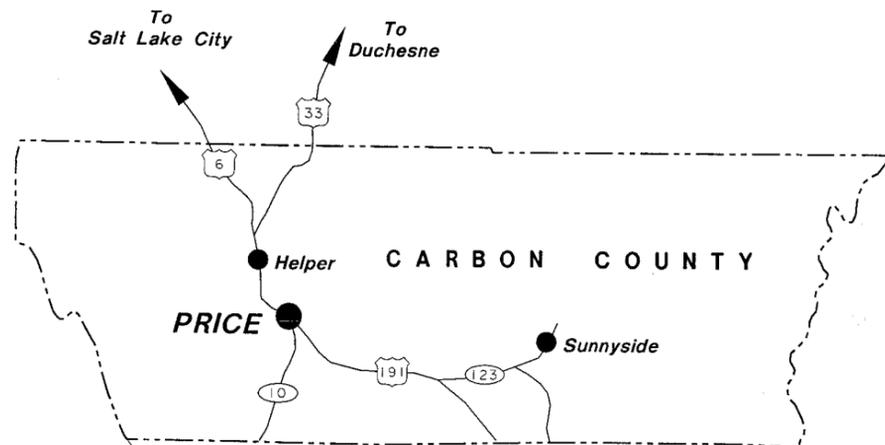
### LIST OF SHEETS

SHEET NO.    SHEET TITLE

- G-1    TITLE SHEET
- G-2    GENERAL LOCATION MAP
- F-1    FACILITIES - AREA 1 - OUTCROP FAN
- F-2    FACILITIES - AREA 2 - WHITMORE FAN/POLE CANYON (1 OF 4)
- F-3    FACILITIES - AREA 2 - WHITMORE FAN/POLE CANYON (2 OF 4)
- F-4    FACILITIES - AREA 2 - WHITMORE FAN/POLE CANYON (3 OF 4)
- F-5    FACILITIES - AREA 2 - WHITMORE FAN/POLE CANYON (4 OF 4)
- F-6    FACILITIES - AREA 3 - MANSHAFT/TWINSHAFT (1 OF 3)
- F-7    FACILITIES - AREA 3 - MANSHAFT/TWINSHAFT (2 OF 3)
- F-8    FACILITIES - AREA 3 - MANSHAFT/TWINSHAFT (3 OF 3)
- F-9    FACILITIES - AREA 4 - MAIN FACILITY (1 OF 11)
- F-10    FACILITIES - AREA 4 - MAIN FACILITY (2 OF 11)
- F-11    FACILITIES - AREA 4 - MAIN FACILITY (3 OF 11)
- F-12    FACILITIES - AREA 4 - MAIN FACILITY (4 OF 11)
- F-13    FACILITIES - AREA 4 - MAIN FACILITY (5 OF 11)
- F-14    FACILITIES - AREA 4 - MAIN FACILITY (6 OF 11)
- F-15    FACILITIES - AREA 4 - MAIN FACILITY (7 OF 11)
- F-16    FACILITIES - AREA 4 - MAIN FACILITY (8 OF 11)
- F-17    FACILITIES - AREA 4 - MAIN FACILITY (9 OF 11)
- F-18    FACILITIES - AREA 4 - MAIN FACILITY (10 OF 11)
- F-19    FACILITIES - AREA 4 - MAIN FACILITY (11 OF 11)
- F-20    PORTAL CLOSURE SCHEDULE
- F-21    SHAFT CLOSURE SCHEDULE
- F-22    DEMOLITION SCHEDULE (1 OF 6)
- F-23    DEMOLITION SCHEDULE (2 OF 6)
- F-24    DEMOLITION SCHEDULE (3 OF 6)
- F-25    DEMOLITION SCHEDULE (4 OF 6)
- F-26    DEMOLITION SCHEDULE (5 OF 6)
- F-27    DEMOLITION SCHEDULE (6 OF 6)

SHEET NO.    SHEET TITLE

- C-1    REGRADING - AREA 1 - OUTCROP FAN
- C-2    REGRADING - AREA 2 - WHITMORE FAN/POLE CANYON (1 OF 4)
- C-3    REGRADING - AREA 2 - WHITMORE FAN/POLE CANYON (2 OF 4)
- C-4    REGRADING - AREA 2 - WHITMORE FAN/POLE CANYON (3 OF 4)
- C-5    REGRADING - AREA 2 - WHITMORE FAN/POLE CANYON (4 OF 4)
- C-6    REGRADING - AREA 3 - MANSHAFT/TWINSHAFT (1 OF 3)
- C-7    REGRADING - AREA 3 - MANSHAFT/TWINSHAFT (2 OF 3)
- C-8    REGRADING - AREA 3 - MANSHAFT/TWINSHAFT (3 OF 3)
- C-9    REGRADING - AREA 4 - MAIN FACILITY (1 OF 10)
- C-10    REGRADING - AREA 4 - MAIN FACILITY (2 OF 10)
- C-11    (NOT USED)
- C-12    REGRADING - AREA 4 - MAIN FACILITY (3 OF 10)
- C-13    REGRADING - AREA 4 - MAIN FACILITY (4 OF 10)
- C-13A    REGRADING - AREA 4 - MAIN FACILITY, OPTION A (4 OF 10)
- C-14    REGRADING - AREA 4 - MAIN FACILITY (5 OF 10)
- C-14A    REGRADING - AREA 4 - MAIN FACILITY, OPTION A (5 OF 10)
- C-15    REGRADING - AREA 4 - MAIN FACILITY (6 OF 10)
- C-15A    REGRADING - AREA 4 - MAIN FACILITY, OPTION A (6 OF 10)
- C-16    REGRADING - AREA 4 - MAIN FACILITY (7 OF 10)
- C-17    REGRADING - AREA 4 - MAIN FACILITY (8 OF 10)
- C-18    REGRADING - AREA 4 - MAIN FACILITY (9 OF 10)
- C-19    REGRADING - AREA 4 - MAIN FACILITY (10 OF 10)
- C-20    REGRADING - NO. 2 CANYON/SHAFT S2 AREA
- C-21    OUTCROP FAN ACCESS ROAD (1 OF 4)
- C-22    OUTCROP FAN ACCESS ROAD (2 OF 4)
- C-23    OUTCROP FAN ACCESS ROAD (3 OF 4)
- C-24    OUTCROP FAN ACCESS ROAD (4 OF 4)
- C-25    CHANNEL DESIGNS (1 OF 2)
- C-26    CHANNEL DESIGNS (2 OF 2)
- C-27    CROSS-SECTIONS (1 OF 2)
- C-28    CROSS-SECTIONS (2 OF 2)
- C-29    DETAILS AND TEST PIT LOGS
- S-1    MINE SHAFT COVERS



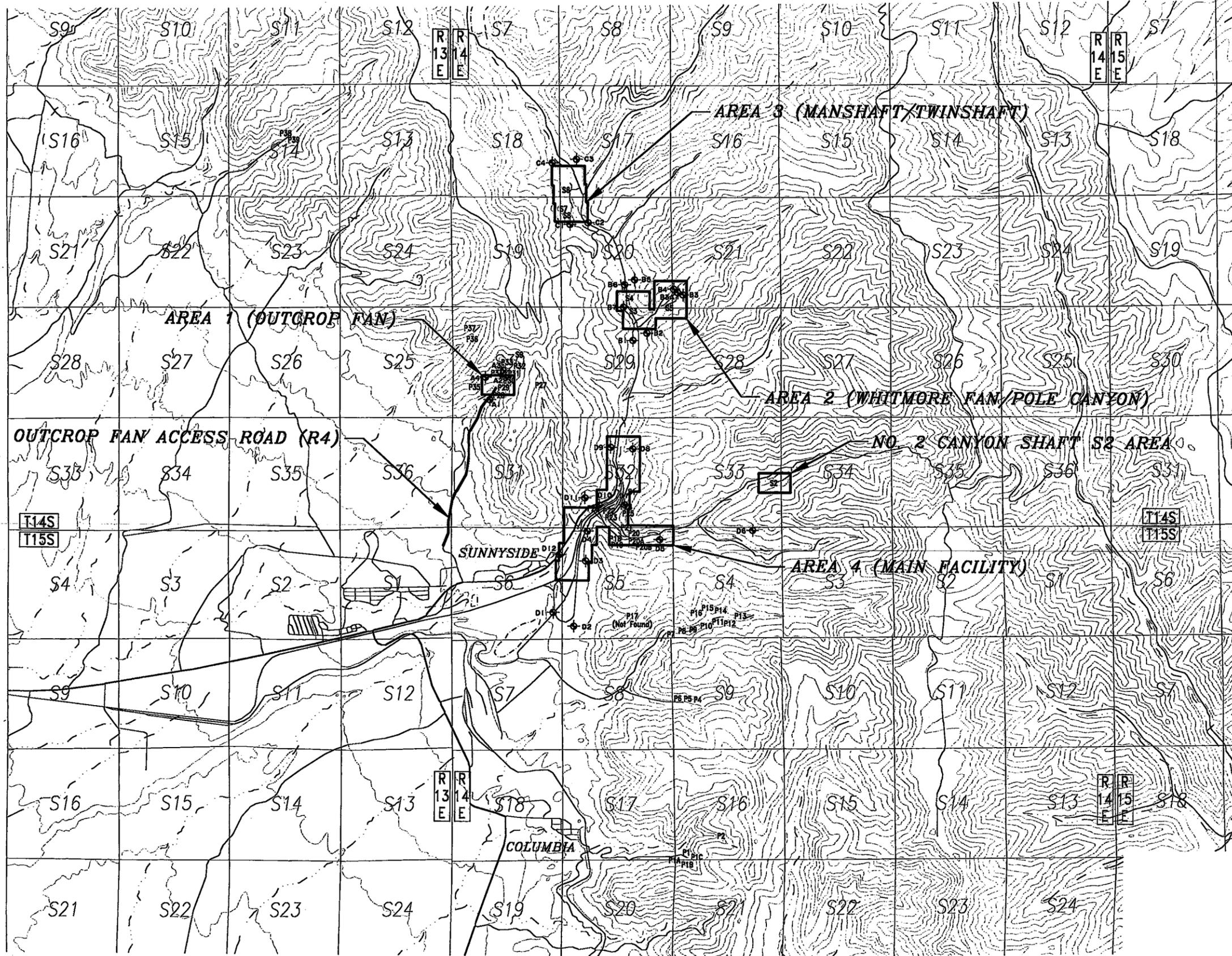
**VICINITY MAP**  
Not to Scale

JOB No. 11990-0124-002 FILE No. C04SH1.DWG

REV	DATE	BY	DESCRIPTION

DESIGNED T. LEIDICH	SUBMITTED
DRAWN J. BEVER	PROJECT ENGINEER R. C. E. NO. DATE
CHECKED	MONTGOMERY WATSON R. C. E. NO. DATE

DIVISION OF OIL, GAS AND MINING	SHEET
SUNNYSIDE MINE RECLAMATION	G-1
TITLE SHEET	



# LEGEND

- P24 PORTAL LOCATION
- S3 SHAFT LOCATION
- ⊕ D1 CONTROL POINT

POINT	NORTHING (Y)	EASTING (X)	ELEV. (Z)
A1	7015442.3	1951942.5	7094.1
A2	7016516.6	1952702.9	7253.7
A3	7016859.2	1952574.9	7332.6
A4	7016517.7	1951727.7	7377.6
B1	7018322.3	1958748.5	6961.0
B2	7018673.2	1959405.9	7029.5
B3	7020508.2	1961121.7	7306.2
B3A	7020608.9	1960867.5	7162.7
B4	7020785.2	1960665.8	7237.8
B5	7021218.0	1958807.6	7148.6
B6	7020981.8	1958337.1	7066.4
B7	7019913.4	1958284.4	7009.6
C1	7023843.2	1955726.3	7311.3
C2	7023929.0	1956581.5	7191.9
C3	7026934.1	1956018.1	7436.5
C4	7026755.0	1954869.3	7391.3
D1	7005215.1	1955042.2	6578.3
D2	7004559.6	1956018.9	6636.5
D3	7007703.3	1956562.4	6687.9
D4	7009143.0	1956629.0	6644.0
D5	7008749.9	1960066.2	6964.6
D6	7009211.7	1964540.8	6884.9
D7	7010420.6	1958394.0	6853.4
D8	7013109.1	1958764.9	6825.2
D9	7013184.0	1957722.9	6829.5
D10	7010399.4	1957189.9	6668.7
D11	7010743.8	1956506.9	6732.9
D12	7008004.6	1955314.2	6563.6

NOTE:  
PORTAL AND SHAFT LOCATIONS  
PROVIDED BY CASTLE VALLEY SERVICES.

JOB NO. 1168652.D1233003 FILE NO. GENLOC.DWG

REV	DATE	BY	DESCRIPTION

SCALE  
0 2500' 5000'  
CONTOUR INTERVAL 50 FT.

DESIGNED T. LEIDICH  
DRAWN J. BEVER  
CHECKED \_\_\_\_\_  
SUBMITTED \_\_\_\_\_  
PROJECT ENGINEER R. C. E. NO. \_\_\_\_\_ DATE \_\_\_\_\_  
MONTGOMERY WATSON R. C. E. NO. \_\_\_\_\_ DATE \_\_\_\_\_

**MONTGOMERY WATSON**  
Mining Group

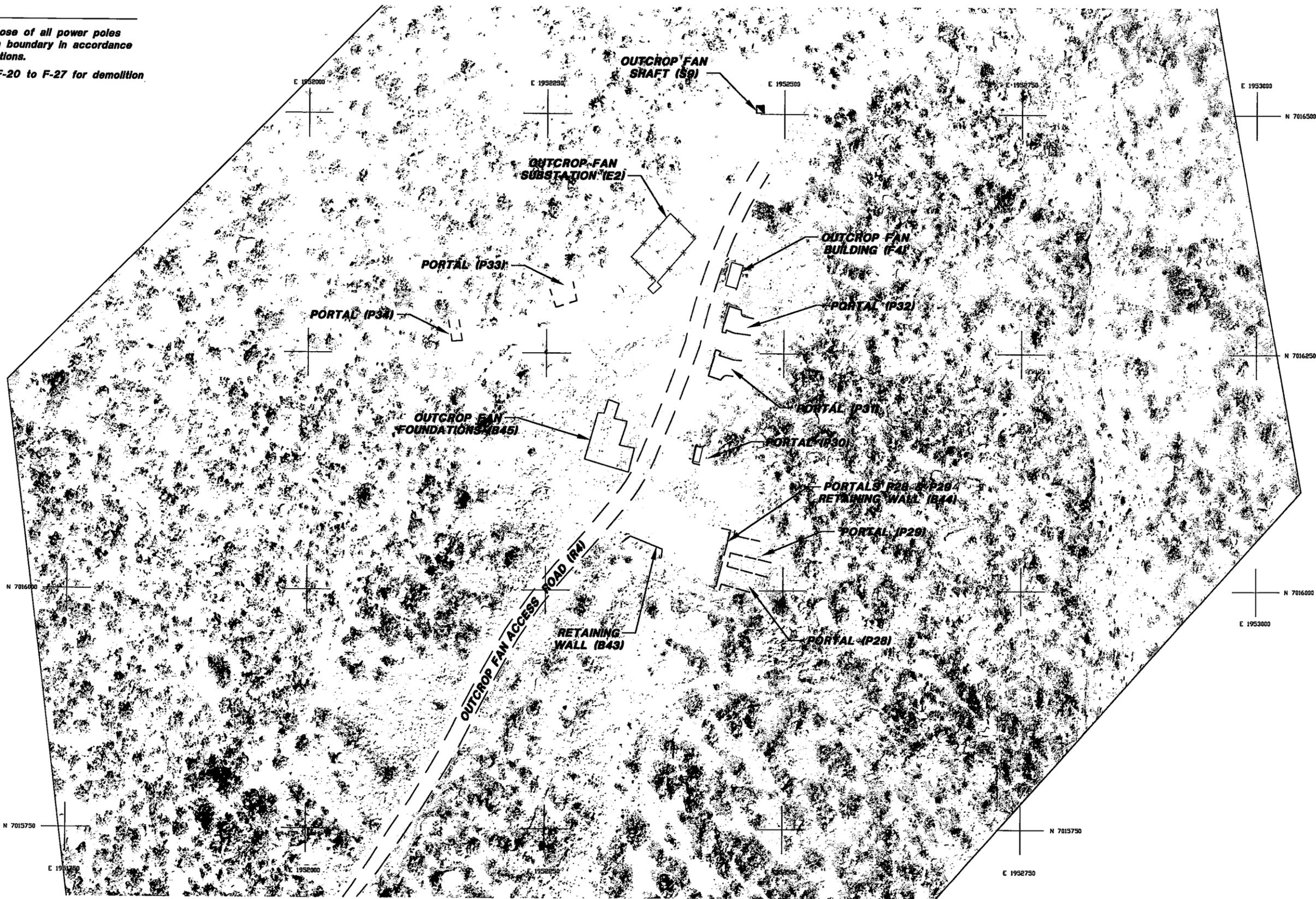
**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING  
SUNNYSIDE MINE RECLAMATION  
GENERAL LOCATION MAP

SHEET  
**G-2**

**NOTES:**

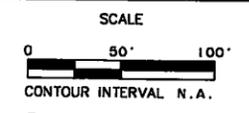
1. Demolish and dispose of all power poles within revegetation boundary in accordance with the Specifications.
2. Refer to Sheets F-20 to F-27 for demolition requirements.



FILE No. ACE.DWG

JOB No. 1188097012501US

REV	DATE	BY	DESCRIPTION



DESIGNED T. LEIDICH  
 DRAWN J. BEVER  
 CHECKED

SUBMITTED  
 PROJECT ENGINEER R. C. E. NO. DATE  
 MONTGOMERY WATSON R. C. E. NO. DATE



DIVISION OF OIL, GAS AND MINING  
 SUNNYSIDE MINE RECLAMATION  
 FACILITIES - AREA 1 - OUTCROP FAN

SHEET  
 F-1

MATCHLINE (SHEET F-3)

MATCHLINE (SHEET F-4)

SCC

PRIVATE WATER MAIN  
(PROTECT & RETAIN)

MINE WATER PIPELINE (PL6)

WHITMORE SUBSTATION (E5)

WHITMORE MINE WATER DISCHARGE POND (NORTH POND) (D2)

MINE WATER DISCHARGE LINES (PL5)

COUNTY ROAD CULVERT (RC7-9)

ORDINARY WATER LINES (PL7)

COUNTY ROAD CULVERT (RC7-10)

ROAD (R22)

POLE CANYON SHAFT ACCESS ROAD (R6)

TOPSOIL STOCKPILE (D14)

WHITMORE MINE WATER DISCHARGE POND (SOUTH POND) (D3)

SCC

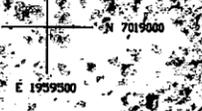
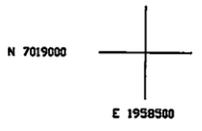
OVERBURDEN STOCKPILE (D15)

GRASSY TRAIL CREEK

UP & L POWER LINE

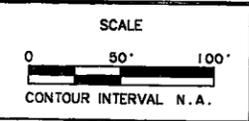
FAN SIGNAL LINE

- NOTES:**
- Demolish and dispose of all power poles within revegetation boundary in accordance with the Specifications.
  - Refer to Sheets F-20 to F-27 for demolition requirements.



FILE NO. B-CED.WG

REV	DATE	BY	DESCRIPTION



DESIGNED	T. LEIDICH	SUBMITTED	
DRAWN	J. BEVER	PROJECT ENGINEER	R. C. E. NO. DATE
CHECKED		MONTGOMERY WATSON	R. C. E. NO. DATE

**MONTGOMERY WATSON**  
Mining Group

State of Utah  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING	SHEET
SUNNYSIDE MINE RECLAMATION	F-2
FACILITIES - AREA 2 - WHITMORE FAN / POLE CANYON (1 of 4)	

E 1958000  
N 7029500

E 1959000

E 1959300  
N 7020500

E 1958000  
N 7020000

E 1959300  
N 7020000



CULINARY WATER LINES (PL7)

AC DISCONNECT STATION (E11)

WHITMORE RETURN AIR SHAFT (S4)

RETAINING WALL (B47)

MINE WATER PIPELINE (PL6)

WHITMORE AIR RETURN SHAFT ROAD (R23)

GRASSY TRAIL  
CREEK

SCC

WHITMORE INTAKE FAN (F5)

WHITMORE SHAFT (S3)

UP & L POWER LINE

BOREHOLE (DH90-2)

BOREHOLE DH90-2 FOUNDATION (B74)

B7

FAN SIGNAL LINE

FLOCCULANT STATION (B46)

SHAFT S3 ACCESS ROAD (R24)

MINE WATER PIPELINE (PL6)

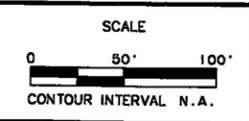
MATCHLINE (SHEET F-2)

**NOTES:**

1. Demolish and dispose of all power poles within revegetation boundary in accordance with the Specifications.
2. Refer to Sheets F-20 to F-27 for demolition requirements.

FILE No. B-CEDWG  
JOB No. 1166007-0125003

REV	DATE	BY	DESCRIPTION



DESIGNED T. LEIDICH	SUBMITTED
DRAWN J. BEVER	PROJECT ENGINEER R. C. E. NO. DATE
CHECKED	MONTGOMERY WATSON R. C. E. NO. DATE

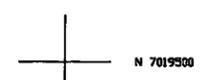
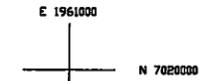
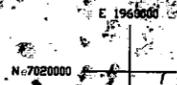
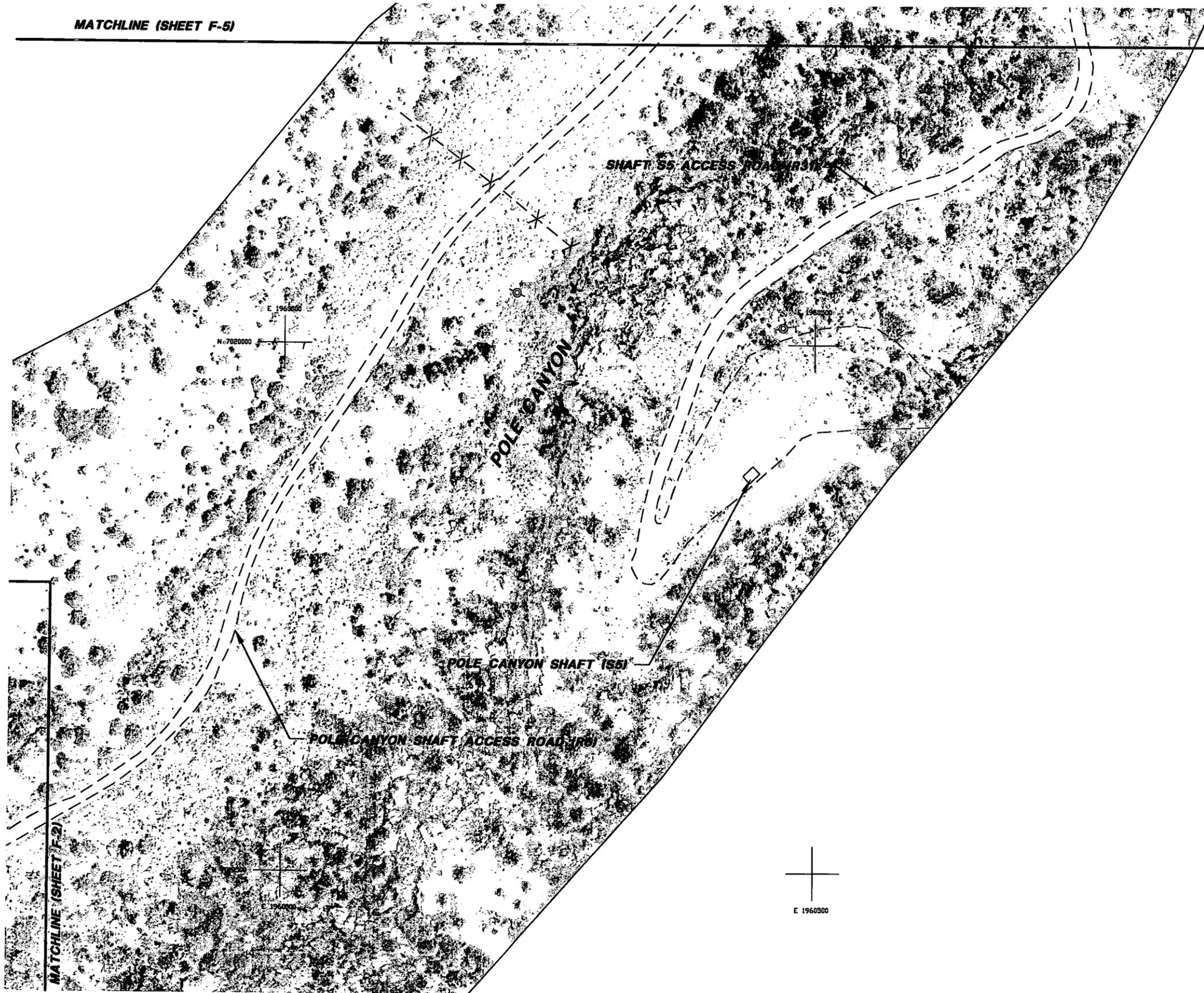
**MONTGOMERY WATSON**  
Mining Group

State of Utah  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING  
SUNNYSIDE MINE RECLAMATION  
FACILITIES - AREA 2 - WHITMORE FAN / POLE CANYON (2 of 4)

SHEET  
F-3

MATCHLINE (SHEET F-5)

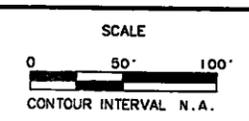


- NOTES:**
- Demolish and dispose of all power poles within revegetation boundary in accordance with the Specifications.
  - Refer to Sheets F-20 to F-27 for demolition requirements.

FILE No. B-CE-DWG

MATCHLINE (SHEET F-2)

REV	DATE	BY	DESCRIPTION



DESIGNED T. LEIDICH  
 DRAWN J. BEVER  
 CHECKED -

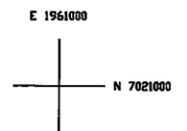
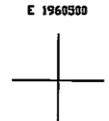
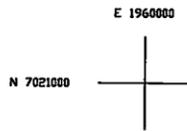
SUBMITTED  
 PROJECT ENGINEER R. C. E. NO. DATE  
 MONTGOMERY WATSON R. C. E. NO. DATE

**MONTGOMERY WATSON**  
Mining Group

**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

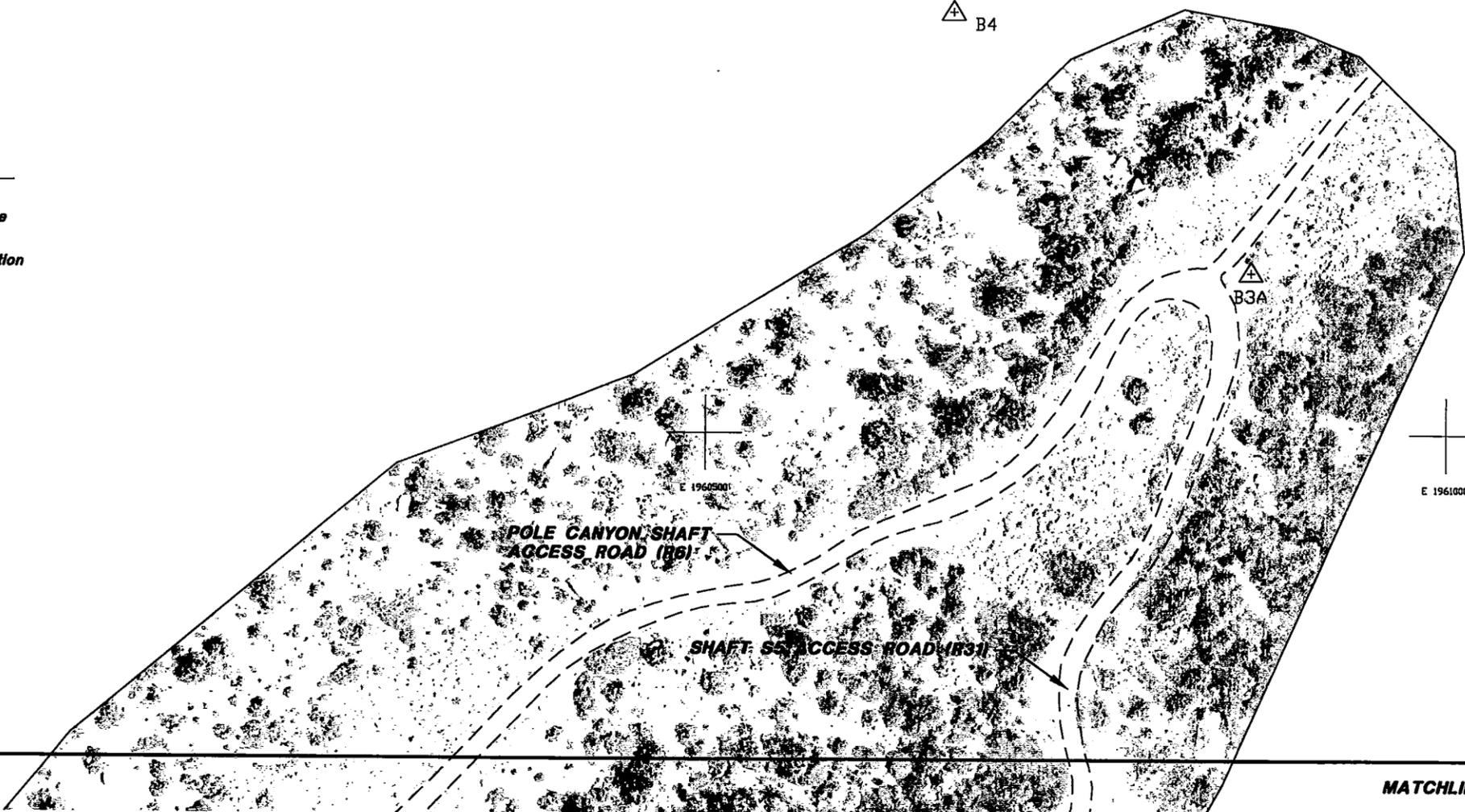
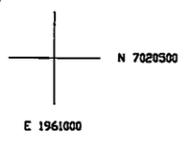
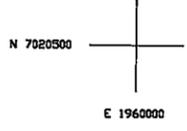
DIVISION OF OIL, GAS AND MINING  
 SUNNYSIDE MINE RECLAMATION  
 FACILITIES - AREA 2 - WHITMORE FAN / POLE CANYON (3 of 4)

SHEET F-4



**NOTES:**

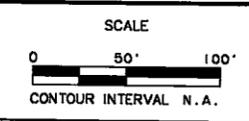
1. Demolish and dispose of all power poles within revegetation boundary in accordance with the Specifications.
2. Refer to Sheets F-20 to F-27 for demolition requirements.



MATCHLINE (SHEET F-4)

JOB No. 1186087-01250103 FILE No. BASE DWG

REV	DATE	BY	DESCRIPTION



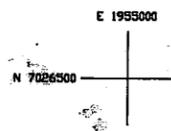
DESIGNED	T. LEIDICH	SUBMITTED	
DRAWN	J. BEVER	PROJECT ENGINEER	R. C. E. NO. DATE
CHECKED			
MONTGOMERY WATSON		R. C. E. NO. DATE	

**MONTGOMERY WATSON**  
Mining Group

**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

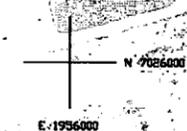
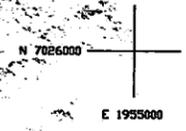
DIVISION OF OIL, GAS AND MINING  
SUNNYSIDE MINE RECLAMATION  
FACILITIES - AREA 2 - WHITMORE FAN / POLE CANYON (4 of 4)

SHEET  
F-5



**NOTES:**

1. Demolish and dispose of all power poles within revegetation boundary in accordance with the Specifications.
2. Refer to Sheets F-20 to F-27 for demolition requirements.



TWINSHAFT ACCESS ROAD (R29)

MANSHAFT ACCESS ROAD AND PARKING AREA (R7)

CULVERT (RC7-4)

CULVERT (RC7-3)

CULVERT (RC7-5)

CULVERT (RC7-1)

GUARDRAIL (B39)

DIVERSION DITCH (D14)

CITY WATER TREATMENT PLANT

GATE (B40)

GRASSY TRAIL RESERVOIR ACCESS ROAD

UP & L POWER LINE

CULINARY WATER LINES (PL7)

POWER CABLE BOREHOLE ACCESS ROAD (R30)

MANSHAFT SUBSTATION FOUNDATIONS (E6)

POWER CABLE BOREHOLE (DH86-1)

STEEL POLE

COUNTY ROAD CULVERT (RC7-6)

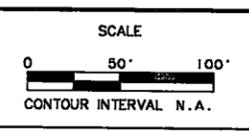
UP & L POWER LINES

POWER POLE (UP1)

MATCHLINE (SHEET F-7)

JOB No. 1168027.D1234567 FILE No. C-CED.DWG

REV	DATE	BY	DESCRIPTION



DESIGNED	T. LEIDICH	SUBMITTED	
DRAWN	J. BEVER	PROJECT ENGINEER	
CHECKED		R. C. E. NO.	
		DATE	
		MONTGOMERY WATSON	
		R. C. E. NO.	
		DATE	

**MONTGOMERY WATSON**  
Mining Group

**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING	SHEET
SUNNYSIDE MINE RECLAMATION	F-6
FACILITIES - AREA 3 - MANSHAFT/TWINSHAFT (1 of 3)	

MATCHLINE (SHEET F-6)

POWER POLE (UP1)

UPPER BATHHOUSE (B9)

SCC

TWINSHAFT ACCESS ROAD (R29)

MANSHAFT (S6)

CULVERT (RC7-2)

CULVERT (RC7-7)

BRIDGE (M-BR9)

COUNTY ROAD CULVERT (RC7-9)

FAN SIGNAL LINE (E-13)

E 1995000

N 7025500

WELL & PUMP HOUSE (DH90-1)

PIT CAR SLOPE SUPPORT (B42)

HOIST HOUSE (B10)

MANSHAFT HEADFRAME (B10-1)

MANSHAFT PIPELINE (PL1) (CONNECTED OLD CULINARY WATER LINE)

NO. 1 EMULSION HOUSE (B22)

EMULSION TANK (B41)

NOTES:

- 1. Demolish and dispose of all power poles within revegetation boundary in accordance with the Specifications.
- 2. Refer to Sheets F-20 to F-27 for demolition requirements.

MANSHAFT SEDIMENT POND (WEST POND) (D4)

DIVERSION DITCH (D14)

MANSHAFT PIPELINE (PL1)

EAST POND ACCESS ROAD EXTENSION (R28)

TWINSHAFT FAN (F6)

FAN CHART BUILDING (B24)

TWINSHAFT MINE WATER PIPELINE (PL2)

TOPSOIL PILE (D15)

MINE WATER DISCHARGE POND (EAST POND) (D1)

TWINSHAFT (S7 & S8)

PIT CAR SLOPE SUPPORT (B25)

ROAD TO UPPER BENCH (R37)

CULINARY WATER LINES (PL7)

N 7025000

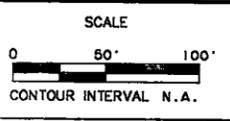
E 1995000

MATCHLINE (SHEET F-8)

FILE No. C-CEDWG

JOB No. 1186087.DT

REV	DATE	BY	DESCRIPTION



DESIGNED	T. LEIDICH	SUBMITTED	
DRAWN	J. BEVER	PROJECT ENGINEER	H. C. E. NO. DATE
CHECKED			
		MONTGOMERY WATSON	H. C. E. NO. DATE

**MONTGOMERY WATSON**  
Mining Group

**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING	SHEET
SUNNYSIDE MINE RECLAMATION	F-7
FACILITIES - AREA 3 - MANSHAFT/TWINSHAFT (2 of 3)	

MATCHLINE (SHEET F-7)

ROAD TO UPPER BENCH (R37)

MANSHAFT SEDIMENT POND (WEST POND) (D4)

WEST POND DISCHARGE CULVERT (PL4)

SCC

WEST POND ACCESS ROAD (R19)

MINE WATER POND DISCHARGE SPILLWAY (D16)

EAST POND ACCESS ROAD (R20)

CULVERT (RC7-B)

MINE WATER DISCHARGE POND (EAST POND) (D1)

MINE WATER POND DISCHARGE LINE (PL3)

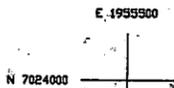
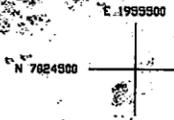
TWP & L POWER LINE

COUNTY ROAD

CULINARY WATER LINES (PL7)

NOTES:

- 1. Demolish and dispose of all power poles within revegetation boundary in accordance with the Specifications.
- 2. Refer to Sheets F-20 to F-27 for demolition requirements.



E 1956000

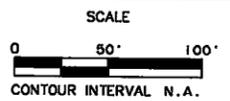
E 1956500

N 7024000

FILE No. C-CEDWG

JOB No. 116807 DT2003

REV	DATE	BY	DESCRIPTION



DESIGNED T. LEIDICH	SUBMITTED
DRAWN J. BEVER	PROJECT ENGINEER R. C. E. NO. DATE
CHECKED	MONTGOMERY WATSON R. C. E. NO. DATE

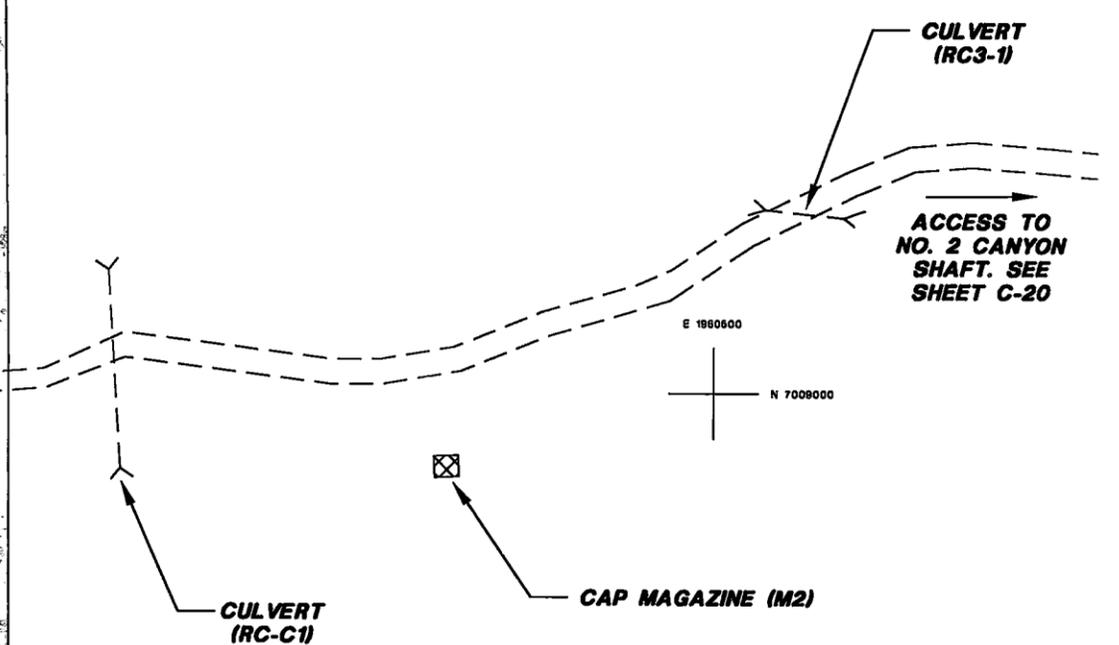
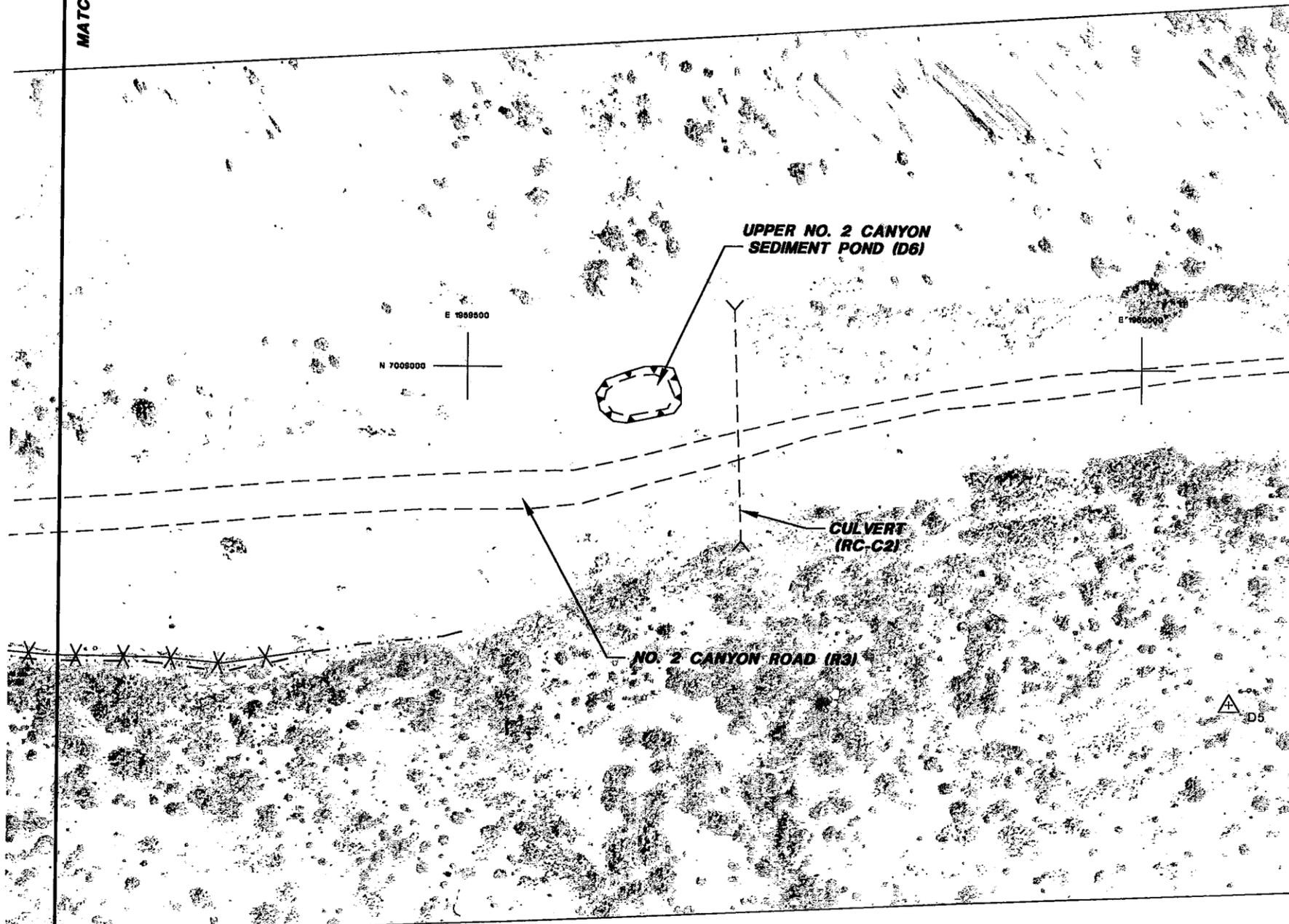
**MONTGOMERY WATSON**  
Mining Group

**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING  
SUNNYSIDE MINE RECLAMATION  
FACILITIES - AREA 3 - MANSHAFT/TWINSHAFT (3 of 3)

SHEET F-8

MATCHLINE (SHEET F-10)



**NOTES:**

1. Demolish and dispose of all power poles within revegetation boundary in accordance with the Specifications.
2. Refer to Sheets F-20 to F-27 for demolition requirements.

FILE No. D-CE.DWG  
JOB No. 116608F-0126P03


SCALE  
 0 50' 100'  
 CONTOUR INTERVAL N.A.

DESIGNED T. LEIDICH  
 DRAWN J. BEVER  
 CHECKED -

SUBMITTED  
 PROJECT ENGINEER R. C. E. NO. DATE  
 MONTGOMERY WATSON R. C. E. NO. DATE

**MONTGOMERY WATSON**  
Mining Group

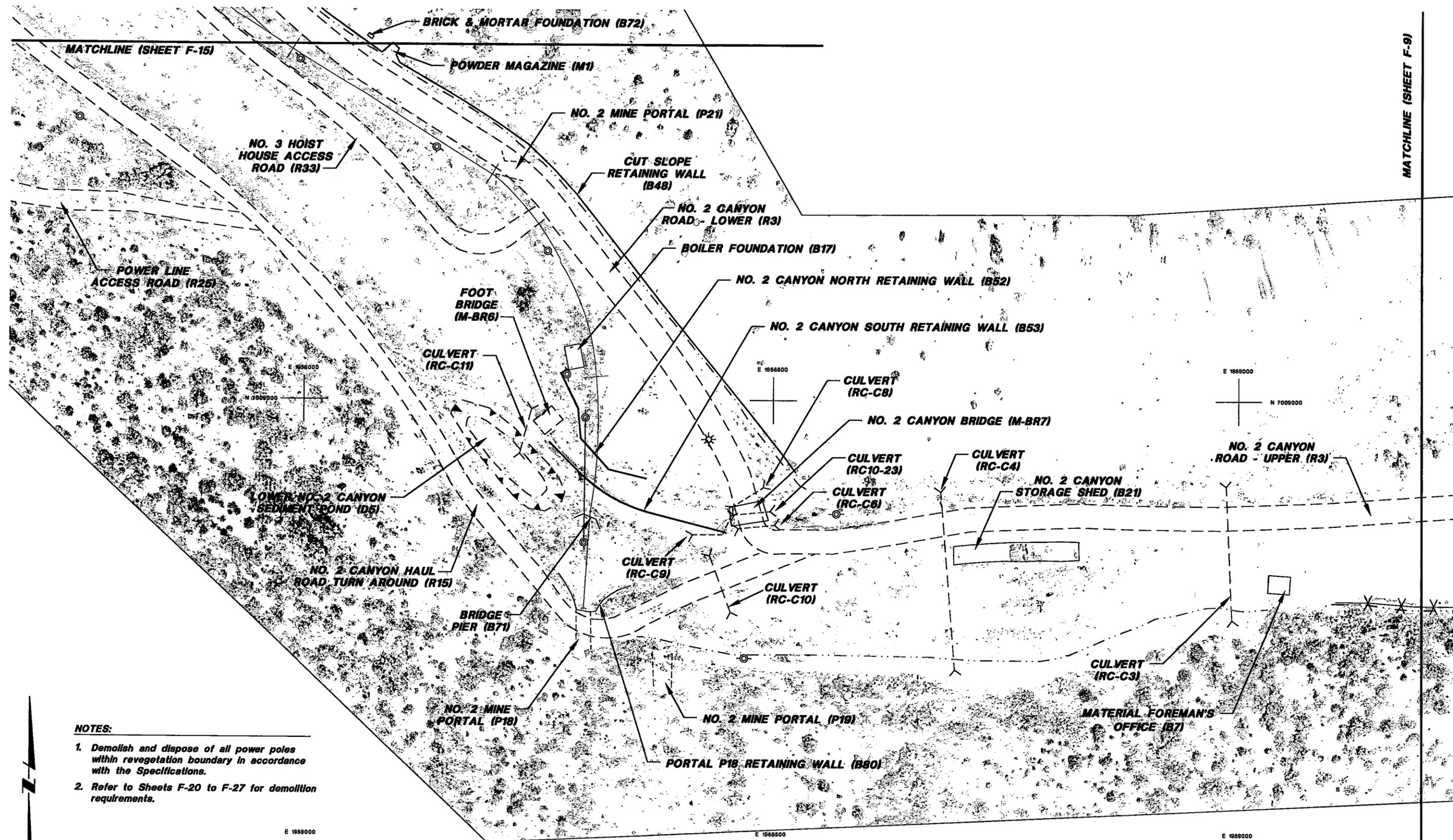
**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING  
 SUNNYSIDE MINE RECLAMATION  
 FACILITIES - AREA 4 - MAIN FACILITY (1 OF 11)

SHEET  
F-9

MATCHLINE (SHEET F-9)

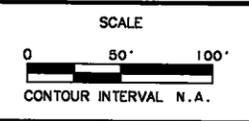
MATCHLINE (SHEET F-15)



**NOTES:**

- 1. Demolish and dispose of all power poles within revegetation boundary in accordance with the Specifications.
- 2. Refer to Sheets F-20 to F-27 for demolition requirements.

FILE No. D-CEDWG  
JOB No. 1166081-0125-003



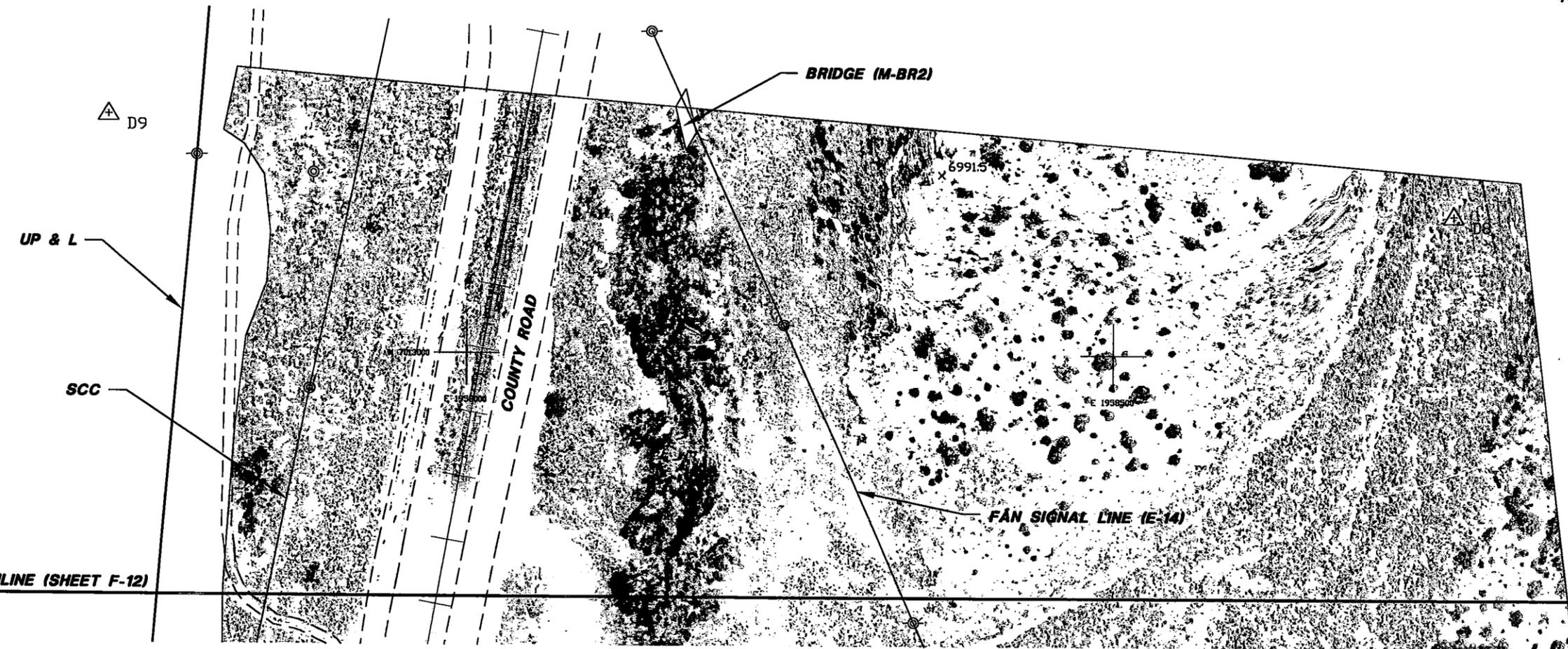
DESIGNED T. LEIDICH	SUBMITTED
DRAWN J. BEVER	PROJECT ENGINEER R. C. E. NO. DATE
CHECKED	MONTGOMERY WATSON R. C. E. NO. DATE

**MONTGOMERY WATSON**  
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**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING	SHEET
SUNNYSIDE MINE RECLAMATION	F-10
FACILITIES - AREA 4 - MAIN FACILITY (2 OF 11)	

FILE No. D-CEDDWG



- NOTES:**
1. Demolish and dispose of all power poles within revegetation boundary in accordance with the Specifications.
  2. Refer to Sheets F-20 to F-27 for demolition requirements.




SCALE  
 0 50' 100'  
 CONTOUR INTERVAL N.A.

DESIGNED T. LEIDICH	SUBMITTED
DRAWN J. BEVER	PROJECT ENGINEER R. C. E. NO. DATE
CHECKED -	
	MONTGOMERY WATSON R. C. E. NO. DATE



**MONTGOMERY WATSON**  
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**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING	SHEET
SUNNYSIDE MINE RECLAMATION	F-11
FACILITIES - AREA 4 - MAIN FACILITY (3 OF 11)	



MATCHLINE (SHEET F-12)

SEAL PORTAL IN ACCORDANCE WITH DETAIL 1 ON SHEET C-29.

PROTECT BURIED PHONE LINE

NO. 1 SLOPE ROCK TUNNEL PORTAL (P26)

NOTES:

- 1. Demolish and dispose of all power poles within revegetation boundary in accordance with the Specifications.
- 2. Refer to Sheets F-20 to F-27 for demolition requirements.

UTILITY LINES

UP & L POWER LINE

SCC

MATCHLINE (SHEET F-14)

FIRE HYDRANT (FH2)

FACILITIES PARKING AREA (R10)

FAN SIGNAL LINE (E-14)

SLOPE ROCK TUNNEL BRIDGE (M-BR3)

MAIN OFFICE (B1-a)

DRAINAGE DITCH (B73)

BATHHOUSE (B2-a)

WAREHOUSE ANNEX (B4)

TRAINING BLDG & AMBULANCE GARAGE (B2-B)

NO WORK SHALL BE PERFORMED INSIDE THIS BOUNDARY UNLESS OPTION A IS EXERCISED.

WAREHOUSE (B1.b)

EMERGENCY MINE MAP STORAGE (B38)

TRAIN BRIDGE (M-BR4)

STEEL RACK (B37)

COUNTY ROAD

WATER VALVE BOX (B36)

CULVERT (RC10-5)

DRAINAGE DITCH (B68)

MANTRIP UNDERPASS (B28)

CUTSLOPE RETAINING WALL (B48)

DRAINAGE DITCH (WEST) (B63)

SHOP (B3)

RETAINING WALL (B54)

SHOP SUBSTATION (E9)

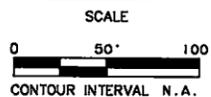
SOUTH BRIDGE (M-BR5)

SHOP FAN SHAFT (S1)

DRAINAGE DITCH (EAST) (B62)

SHOP FAN (F2)

FILE No. D-CEDWG



DESIGNED T. LEIDICH  
 DRAWN J. BEVER  
 CHECKED

SUBMITTED  
 PROJECT ENGINEER R. C. E. NO. DATE  
 MONTGOMERY WATSON R. C. E. NO. DATE



MONTGOMERY WATSON

Mining Group



State of Utah  
 DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING  
 SUNNYSIDE MINE RECLAMATION  
 FACILITIES - AREA 4 - MAIN FACILITY (5 OF 11)

SHEET F-13













NUMBER	NAME	AREA	SHEET	PORTAL CONSTRUCTION	EXISTING SEAL	DEMOLITION REQUIREMENTS (1)	SEALING REQUIREMENTS	EARTHWORK REQUIREMENTS (2)	PHOTO-GRAPHS	ACCESS BY TRUCKS	COMMENTS	NUMBER
<b>AREA 1: OUTCROP FAN AREA (PROJECT 3)</b>												
P28	Outcrop Fan portal, No. 1 Mine	Outcrop Fan Canyon	C-1	concrete	block and dirt backfill	Demolish concrete structures to 4' below final grade	None	Backfill and grade	Y	yes	Use caution not to disrupt seals during earthwork	P28
P29	Outcrop Fan portal, No. 1 Mine	Outcrop Fan Canyon	C-1	concrete	block and dirt backfill	Demolish concrete structures to 4' below final grade	None	Backfill and grade	Y	yes	Use caution not to disrupt seals during earthwork	P29
P30	Outcrop Fan portal, No. 1 Mine	Outcrop Fan Canyon	C-1	concrete	dirt backfill	Demolish concrete structures to 4' below final grade	None	Backfill and grade	Y	yes	VOIDS along top of backfill, but no air movement detected.	P30
P31	Outcrop Fan portal, No. 1 Mine	Outcrop Fan Canyon	C-1	concrete	unknown	Demolish concrete structures to 4' below final grade	None	Backfill and grade	Y	yes	Use caution not to disrupt seals during earthwork	P31
P32	Outcrop Fan portal, No. 1 Mine	Outcrop Fan Canyon	C-1	concrete	unknown	Demolish concrete structures to 4' below final grade	None	Backfill and grade	Y	yes	Use caution not to disrupt seals during earthwork	P32
<b>AREA 4: MAIN FACILITIES, NO. 2 CANYON, MAIN SUBSTATION (PROJECT 2)</b>												
P18	No. 2 Mine	No. 2 Canyon	C-10	rock (grouted)	dirt backfill	None	None	See grading sheets		yes	Leave rock wing walls as historical landmark	P18
P19	No. 2 Mine	No. 2 Canyon	C-10	unknown	dirt backfill	None	None	Backfill large depression behind wall		yes	Leave rock wing walls as historical landmark	P19
P22	No.3 Slope portals, No. 1 Mine	Base of No. 2 Canyon	C-14, C-14a	metal and dirt	dirt backfill	Remove metal portal walls and wood/metal retaining walls	None	Backfill and grade	Y	yes	Depth and length of portals unknown. Use care during grading.	P22
P23	No.3 Slope portals, No. 1 Mine	Base of No. 2 Canyon	C-14, C-14a	metal and dirt	dirt backfill	Remove metal portal walls and wood/metal retaining walls	None	Backfill and grade	Y	yes	Depth and length of portals unknown. Use care during grading.	P23
P24	No.3 Slope portals, No. 1 Mine	Base of No. 2 Canyon	C-14, C-14a	unknown	unknown	Remove debris	None	Backfill and grade		yes	Very little portal evidence. Use care during grading.	P24
P25	No.3 Slope portals, No. 1 Mine	Base of No. 2 Canyon	C-14, C-14a	unknown	unknown	None	None	None		yes	No work required. Use care during grading.	P25
<b>AREA 5: REMOTE PORTALS (PROJECT 3)</b>												
P1	Columbia Bleeder	Columbia Canyon	G-2	concrete	grouted block	Remove RR tie access and debris from surrounding area.	None	None	Y	4-WD	Leave portal brow. No mine exhaust air detected.	P1
P1A	Columbia Bleeder	Columbia Canyon	G-2	unknown	dirt backfill	Remove protruding rails and other sharpe objects, remove power poles & debris from surrounding area.	None	None	Y	4-WD	No mine voids are evident.	P1A
P1B	Columbia Bleeder	Columbia Canyon	G-2	timber	dirt backfill	Remove timbers. Place other steel within opening and cover with adjacent soils.	None	10 cy	Y	4-WD	Steep slopes and no direct vehicular access.	P1B
P1C	Columbia Bleeder	Columbia Canyon	G-2	rock and concrete	dirt backfill	Remove fan housing, water bridge, pipe, and clean area.	grout 1'x6'x3' opening	None	Y	4-WD	Leave rockwork.	P1C
P2	Columbia Bleeder	Columbia Canyon	G-2	steel arch	block	Collapse steel arch and pull down loose material.	Foam	Pull down loose rock, 10 cy	Y	no	Exhaust air not detected, but musty smell. Steep terrain.	P2
P26	No. 1 Slope Rock Tunnel, No. 1 Mine	Main facilities area, N. end, under County Road	C-13, C13a	concrete tunnel	none	Cut a 10' wide slot across the concrete tunnel roof and push non combustible demolition Also, remove fence from portal area.	Dirt seal. See Detail on C-29.	See grading plan	Y	yes	Leave balance of tunnel. Oxygen-deficient atmosphere expected.	P26
P33	Outcrop Fan portal, No. 1 Mine	Outcrop Fan Canyon	C-1	concrete	unknown	Demolish concrete structures to 4' below final grade.	None	Backfill and grade, 10 cy	Y	yes	Use caution not to disrupt seals during earthwork	P33
P34	Outcrop Fan portal, No. 1 Mine	Southwest of outcrop Fan Canyon	C-1	concrete	unknown	Demolish concrete structures to 4' below final grade and remove timber.	None	Backfill and grade, 10 cy	Y	4-WD	No air movement detected.	P34
P35	Inside Raise portal	Outcrop Fan Canyon, SW of pad area	G-2	rock	none	Collapse and seal opening.	Foam and fill voids into mine with dirt	Backfill and grade, 5 cy	Y	no	Exhaust air detected. Steep terrain.	P35
P36	Inside Raise portal	Canyon NW of Outcrop Fan Canyon	G-2	timber	block	Collapse and seal opening. Remove timber and other debris.	Foam	Backfill and grade, 5 cy	Y	no	Exhaust air detected. Steep terrain.	P36
P37	Inside Raise portal, No. 1 Mine	Canyon NW of Outcrop Fan Canyon	G-2	steel arch	block	Remove portion of arch that projects beyond face of hillside.	None	Backfill and grade, 5 cy	Y	no	No air movement detected.	P37
P38	B Canyon Portal	3 miles NW of Outcrop Fan Canyon	G-2	steel arch	block	Remove steel structures at entry	None	Backfill and grade, 10 cy	Y	4-WD	Seal is pressurized. Use extra care.	P38
P39	B Canyon Portal	3 miles NW of Outcrop Fan Canyon	G-2	steel arch	block	Remove steel structures at entry	None	Backfill and grade (3)	Y	4-WD	Seal is pressurized. Use extra care. One entrance access both P38 and P39.	P39

- (1) Non combustible demolition material should be removed from the site, or may be incorporated into the fill over portals provided it is 4' below final ground surface.  
(2) All portals that require regrading shall be covered by a minimum of 4' of compacted material. Revegetate all disturbed areas per Specifications.  
(3) Regrade with locally available materials as approved by the Owner.

FILE No. SHT-F20.DWG

JOB No. 1166067.01250104

REV	DATE	BY	DESCRIPTION

DESIGNED	S. NEWTON	SUBMITTED	
DRAWN	J. BEVER	PROJECT ENGINEER	R. C. E. NO. DATE
CHECKED			
		MONTGOMERY WATSON	R. C. E. NO. DATE



**MONTGOMERY WATSON**

Mining Group



**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING  
SUNNYSIDE MINE RECLAMATION

PORTAL CLOSURE SCHEDULE

SHEET

F-20

NUMBER	NAME	AREA	FACILITIES SHEET	GRADING SHEET	APPROXIMATE EXISTING GROUND ELEVATION	APPROXIMATE EXISTING TOP OF CAP ELEVATION	SHAFT INSIDE DIAMETER (ft)	APPROXIMATE SIZE OF EXISTING CAP (2)	PRESENT CONDITION	RECLAMATION ACTION	ACCESS BY TRUCKS	COMMENTS	NUMBER
S1	Shop Fan Shaft	Main facilities, north end	F-13, F-14	C-13, C-14, C-13a, C-14a	6740.0	6740.5	16	20' x 20'	Exposed concrete cap with vent. Cap thickness and support capacity are unknown.	Construct new concrete cap, seal vent, and cover with soil per grading plan. See Sheet S-1 for cap construction requirements.	Yes	Adjacent large boulder may need to be moved. Remove outer tapered concrete from around the existing cap prior to placement of new cap. Will require perimeter support for the new cap. No exhaust air was detected.	S1
S2	No. 2 Canyon Shaft	No. 2 Canyon, east end	N/A	C-20	7000.0	7000.5	8	16.3' x 15' x 9' <sup>(1)</sup>	Exposed concrete cap with vent. Cap thickness and support capacity are unknown.	Construct new concrete cap, seal vent, and cover with soil per grading plan. See Sheet S-1 for cap construction requirements. Prior to placing new concrete, clean and grout space under circular cap to assure continuous bearing onto shaft collar.	Yes, with some difficulty	Will require perimeter support for the new cap. Exhaust air has been detected through voids around existing cap.	S2
S3	Whitmore Shaft	Whitmore Canyon, center	F-3	C-3	7038.0	7038.8	16	20' x 20'	Exposed concrete cap with vent. Cap thickness and support capacity are unknown.	Construct new concrete cap, seal vent, and cover with soil per grading plan. See Sheet S-1 for cap construction requirements.	Yes	Will require perimeter support for the new cap. No exhaust air was detected.	S3
S4	Whitmore Return Air Shaft	Whitmore Canyon, north	F-3	C-3	7055.0	7056.5	16	20' x 20'	Exposed concrete cap with vent. Cap thickness and support capacity are unknown.	Construct new concrete cap, seal vent, and cover with soil per grading plan. See Sheet S-1 for cap construction requirements.	Yes	Will require perimeter support for the new cap. No exhaust air detected.	S4
S5	Pole Canyon Shaft	Pole Canyon, east end	F-4	C-4	7257.0	7257.5	7	12' x 11'	Exposed concrete cap with vent. Cap thickness and support capacity are unknown.	Construct new concrete cap, seal vent, and cover with soil per grading plan. See Sheet S-1 for cap construction requirements.	Yes, with some difficulty	Remove loose soil, rock and concrete from around the existing cap prior to placement of new cap. Will require perimeter support for the new cap. No exhaust air was detected.	S5
S6	Manshaft	Manshaft/Twinshaft, lower pad	F-7	C-7	7300.0	7300.5	8	9.5' x 9.8'	Exposed concrete cap with vent. Cap thickness and support capacity are unknown.	Construct new concrete cap, seal vent, and cover with soil per grading plan. See Sheet S-1 for cap construction requirements.	Yes	Will require perimeter support for the new cap. No exhaust air detected.	S6
S7	Twinshaft	Manshaft/Twinshaft, upper pad	F-7	C-7	7369.0	7369.5	7	8.3' x 8.3'	Exposed concrete cap with vent. Cap thickness and support capacity are unknown.	Construct new concrete cap, seal vent, and cover with soil per grading plan. See Sheet S-1 for cap construction requirements.	Yes, with some difficulty	Will require perimeter support for the new cap. No exhaust air detected.	S7
S8	Twinshaft	Manshaft/Twinshaft, upper pad	F-7	C-7	7369.0	7369.5	7	8.3' x 8.3'	Exposed concrete cap with vent. Cap thickness and support capacity are unknown.	Construct new concrete cap, seal vent, and cover with soil per grading plan. See Sheet S-1 for cap construction requirements.	Yes, with some difficulty	Will require perimeter support for the new cap. No exhaust air detected.	S8
S9	Outcrop Fan Shaft	Outcrop Fan, north end	F-1	C-1	7175.0	unknown	16	unknown	Reported as a shallow shaft filled to the surface.	Cover with soil per grading plan.	Yes	No work required except as indicated on the grading plan. No exhaust air detected.	S9

- (1) Rectangular cap is partially covered with a 9' diameter x 7" concrete cap  
(2) Thicknesses should be considered minimums. Existing reinforcement is unknown and Contractor should NOT apply loads to existing caps.

FILE No. SHT-F21.DWG

JOB No. 1166007\_U1250\_U4

REV	DATE	BY	DESCRIPTION

DESIGNED S. NEWTON	SUBMITTED
DRAWN J. BEVER	PROJECT ENGINEER R. C. E. NO. DATE
CHECKED	
	MONTGOMERY WATSON R. C. E. NO. DATE



**MONTGOMERY WATSON**

Mining Group



**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING  
SUNNYSIDE MINE RECLAMATION  
SHAFT CLOSURE SCHEDULE

SHEET

F-21

Inventory No.	Area Feature	Sheet Nos.	Approx. Feature Length (feet)	Approx. Feature Width (feet)	Approx. Feature Height/(Depth) (feet)	Approx. Feature Diameter (feet)	Wall Type	Foundation Notes	Hazardous Conditions	Special Materials <sup>(a)</sup>	Reclamation Action	Comments
<b>AREA 1: OUTCROP FAN (PROJECT 3)</b>												
B 43	Retaining Wall	F-1	80	1	8		Timber				Remove	
B 44	Portals P 28 and P 29 Retaining Wall	F-1	120	1	10		Concrete	Concrete			Cover	
B 45	Outcrop Fan Foundations	F-1	Varies	Varies	2 to 3			Concrete			Remove	Eleven foundations, representing approximately 28 cubic yards of concrete.
E 2	Outcrop Fan Substation	F-1	70	52				4 concrete slabs, 1' to 2' thick; approximately 6.5 cubic yards of concrete			All fencing and debris to be removed and buried. Foundations to be covered per grading plan.	Substation area is enclosed by a chainlink fence. Miscellaneous electrical equipment still present. Approximately 14 poles and crossarms are present.
F 4	Outcrop Fan Building	F-1	27	13	13		Concrete	Slab thickness unknown.			Remove building and adjacent slabs.	Several concrete slabs in area of building, representing approximately 10 cubic yards of concrete.
R 4	Outcrop Fan Access Road	F-1	8600	Varies							Reclaim by extreme roughening and revegetate. Remove cable guardrail.	Bid Option C. See Bid Schedule.
	Misc. Debris										All non native materials within the indicated revegetation boundaries for this area (except those items indicated to remain) are to be disposed of as discussed in Specifications.	Debris present in the area include discarded equipment, concrete rubble, pipe, wire, and steel cable. Minor amounts of debris in substation area, including electrical equipment, steel posts, conduit, and steel fenceposts.
<b>AREA 2: WHITMORE FAN AND POLE CANYON FAN (PROJECT 2)</b>												
B 46	Flocculent Station	F-3	10	10	10		Cinderblock	Concrete, 0.25' thick		1-gallon container of wax shipper inside building.	Remove	
B 47	Retaining Wall	F-3	120	1	3 to 4						Pull down and cover with fill.	Timber retaining wall, timber are 1' x 1' x 10'.
B 74	Borehole DH90-2 Foundation	F-3	41	29				Concrete, 1' thick			Remove	
D 2	Whitmore Mine Water Discharge Pond (North Pond)	F-2	200	150	15(D)						Reclaim	Pond is surrounded by a 6' high chainlink fence - approximately 700 lineal feet. Various pipes may be present between ponds D2 and D3.
D 3	Whitmore Mine Water Discharge Pond (South Pond)	F-2	220	140	20(D)						Reclaim	Pond is surrounded by a 6' high chain-link fence - approximately 720 lineal feet. Various pipes may be present between ponds D3 and D2.
D 14	Topsail Stockpile	F-2									Reclaim	
D 15	Overburden Stockpile	F-2									Reclaim	
DH 90-2	Borehole	F-3			4	1.08		Concrete, thickness unknown			Cut and cap 2 ft below existing ground surface.	Steel outer casing is 4' high and 1.08' diameter.
E 5	Whitmore Substation	F-2	Varies	Varies	Varies			Concrete, 1' thick			Remove above grade structures. Cover foundations with fill material.	The main portion (northern) of the substation area consists of six concrete foundations ranging from 3' by 3' to 44' by 8'; all foundations are approximately 1' thick. The total slab area is approximately 710 square feet. There are also ten 6' by 3' concrete piers in the main part of the substation area. A 12' high steel switch frame is located at the northern portion of the substation area. A concrete wall is present south of the main substation area. The wall is 22' long and 5' high with 12' wingwalls. The wall is 4" thick.
E 11	AC Disconnect Station	F-3	40	16				Concrete, 2' thick			Cover with fill.	Concrete slab.
F 5	Whitmore Intake Fan	F-3	25	13	15		Concrete, 6" thick	Concrete, 2' thick	Oil staining in building interior. Oil inside raised platform inside building		Remove building and the three support foundations closest to building.	South end of interior of building has a 2' high by 6' wide raised concrete platform. Seven concrete support foundations are present south and east of the building. The lengths range from 5' to 10', widths range from 2' to 5.5', and thicknesses range from 2.5 to 3.5 feet.
PL 5	Mine Water Discharge Lines	F-2	Varies				Varies				Remove as required to facilitate grading. Provide a minimum of 2 feet of cover at terminations.	
PL 6	Mine Water Pipeline	F-2, F-3	2110								Remove as required to facilitate grading. Provide a minimum of 2 feet of cover at terminations.	
PL 7	Culinary Water Lines	F-2, F-3			0.83						Remain. Protect within disturbed area boundary.	Two lines are present.
R 6	Pole Canyon Shaft Access Road	F-2, F-4, F-5	3700	Varies							Reclaim position shown on Sheets C-4 and C-5.	
R 22	Road	F-2	125	Varies							Reclaim	
R 23	Whitmore Air Return Shaft Road	F-3	180	10							Reclaim	
R 24	Shaft S3 Access Road	F-3	350	Varies							Reclaim	
R 31	Shaft S5 Access Road	F-4, F-5	1100								Reclaim	
RC 7-9	Culvert	F-2									Retain	
RC 7-10	Culvert	F-2	90				CMP				Retain	County Road Culvert
	Misc. Debris										All non native materials within the indicated revegetation boundaries for this area (except those items indicated to remain) are to be disposed of as discussed in Specifications.	Debris present in the area include drill steel, cinderblocks, pipes, and steel cable. Minor amounts of debris in substation area; debris includes electrical equipment, steel posts, conduit, and steel fenceposts.
<b>AREA 3: MANSHAFT/TWINSHAFT (PROJECT 2)</b>												
B 9	Upper Bathhouse	F-7	128	42				Concrete slab, 0.5 foot thick	Protruding rebar		Remove slab.	Debris in vicinity of slab that includes drill steel, cinderblocks, pipes, cables, and insulation.
B 10	Hoist House	F-7	24	23	11		Cinderblock	Concrete slab, thickness unknown	Potential for wall and roof collapse.	55-gallon drum at north side of building contains oil.	Remove building, slab to remain. Remove and dispose of 55-gallon drum.	Additional slab east side of building - 7'x32'x1'. Also three concrete piers east of building - 3'x3'x1'; these slabs will be allowed to remain.
B 10-1	Manshaft Headframe	F-7	34	25				Concrete slab, 1 foot thick			Remove foundations.	Headframe structure has been removed. Three 3'x3'x1' concrete piers are located west of slab. Also present in the area is an 8' diameter x 25' long CMP.
B 22	No. 1 Emulsion House	F-7	28	19	9 (2/3 of building); 19 (1/3 of building)		Cinderblock	Concrete slab, thickness unknown	Potential for wall and roof collapse.		Remove	
B 24	Fan Chart Building	F-7	4	4				Concrete slab, 2' thick			Remove foundations.	Building foundation only.
B 25	Pit Car Slope Support	F-7	80	4	8						Cover per plan.	Cars to remain in place for slope support.
B 39	Guardrail	F-6	800	1.75	3						Remove	Timber and steel construction. Vertical timbers are approximately 6" x 8" and set approximately 8' apart.
B 40	Gate	F-6	20		4		Steel pipe				Gate to remain.	Protect from damage.
B 41	Emulsion Tank	F-7	31	9	5		Timber				Remove	Tank is constructed of railroad ties with a heavy rubber liner and sheet steel lid. The tank is filled with sediment that has a slight hydrocarbon odor. Incorporate the tank contents into fill at area north of hoist house.
B 42	Pit Car Slope Support	F-7	110	4	8						Cover	Cars to remain in place for slope support.

JOB No. 1166087.012501.04  
FILE No. SHT-F22.DWG

REV	DATE	BY	DESCRIPTION

DESIGNED	S. NEWTON	SUBMITTED	
DRAWN	J. BEVER	PROJECT ENGINEER	R. C. E. NO. DATE
CHECKED			
		MONTGOMERY WATSON	R. C. E. NO. DATE



**MONTGOMERY WATSON**

Mining Group



**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING

SUNNYSIDE MINE RECLAMATION

DEMOLITION SCHEDULE (1 OF 6)

SHEET

F-22

Inventory No.	Area Feature	Sheet Nos.	Approx. Feature Length (feet)	Approx. Feature Width (feet)	Approx. Feature Height/(Depth) (feet)	Approx. Feature Diameter (feet)	Wall Type	Foundation Notes	Hazardous Conditions	Special Materials <sup>(a)</sup>	Reclamation Action	Comments
D 1	Mine Water Discharge Pond (East Pond)	F-7	280	170	(15)						Reclaim. Retain riprap for use at Main Facility.	
D 4	Manshaft Sediment Pond (West Pond)	F-7, F-8	180	100	(10)						Reclaim	
D 14	Diversion Ditch	F-6, F-7	1500	4	3						Construct ditch cutouts as shown on Sheets C-6 and C-7. Hand seed all areas disturbed by contractor.	
D 15	Topsoil Pile	F-7	180	70	10						Reclaim. To be used as top dressing on Manshaft and Twinshaft pads.	
D 16	Mine Water Pond Discharge Spillway	F-8	190								Remove pipe, fill gully, and revegetate.	
DH 86-1	Power Cable Borehole	F-6			3	1	Steel casing				Abandon	Borehole requires plugging.
DH 90-1	Well and Pump House	F-7	6	6	7.5		Concrete	Concrete slab, thickness unknown			Retain. Disturbed portion of discharge line to be replaced "in-kind" and with a 42-inch burial depth.	Structure and well to remain. The location of the underground discharge line is unknown. Contractor to coordinate service interruption with City of East Carbon.
E 6	Manshaft Substation Foundations	F-6	20	6				Concrete slabs			Cover	Foundation also has two 2' x 4' extensions on the north side, there are also two 2' x 2' x 1' concrete slabs, one 5.5' x 9' x 1' concrete slab and one 4' x 6' x 2' concrete slab within the boundaries of the substation. Concrete slab north of borehole (9' x 6' x 1').
E 13	Fan Signal Line	F-7	570								Remove	
F 6	Twinshaft fan	F-7	65	12				Concrete slab, thickness unknown			Remove eastern 25' of slab and isolated foundations.	Building has been demolished - only the slab and foundation remain. Also present in the area are three 8.5' x 2.5' x 1' concrete fan foundations and two 3' x 3' x 1' concrete piers. These need to be removed.
MBR-9	Bridge	F-7	30	10							Retain	Foot bridge to remain.
PL 1	Manshaft Pipeline	F-7	900			0.25					Remove above-ground portion of line. For underground portion of line, remove as required to facilitate grading. Provide minimum of two feet of cover at terminations of pipeline.	Majority of pipe is above ground.
PL 2	Twinshaft Mine Water Pipeline	F-7	700			0.5					Remove	Majority of pipe is above ground.
PL 3	Mine Water Pond Discharge Pipeline	F-8	80								Remove above-ground portion of line. For underground portion of line, remove as required to facilitate grading. Provide minimum of two feet of cover at terminations of pipeline.	
PL 4	West Pond Discharge Culvert	F-8	250								Remove	
PL 7	Culinary Water Lines	F-6, F-7, F-8				0.83					Retain. Protect within disturbed area boundary.	Two lines are present.
R 7	Manshaft Access Road and Parking Area	F-6									Portion of road to remain per grading plans. Retain asphalt in non-graded areas.	
R 19	West Pond Access Road	F-8	500	10							Reclaim by extreme roughening and revegetate.	
R 20	East Pond Access Road	F-8	450	15							Reclaim by extreme roughening and revegetate.	
R 28	East Pond Access Road Extension	F-7	300	10							Reclaim by extreme roughening and revegetate.	
R 29	Twinshaft Access Road	F-6	1180	Varies, approx. 20 feet.							Reclaim portion from Twinshaft area to intersection of Manshaft access road. Follow extreme roughening requirements and revegetate.	Asphalt thickness uncertain.
R 30	Power Cable Borehole Access Road	F-6									Reclaim	
R 37	Road to Upper Bench	F-7, F-8	110	15							Reclaim	
RC 7-1	Culvert	F-6	60			7	CMP				Retain	Culverts to remain along with roadway.
RC 7-2	Culvert	F-7	9			0.75	CMP				Remove	Fill to original grade and revegetate.
RC 7-3	Culvert	F-6	20			0.75	CMP				Retain	Culverts to remain along with roadway.
RC 7-4	Culvert	F-6	55			1.5	CMP				Retain	Culverts to remain along with roadway.
RC 7-5	Culvert	F-6	15			1	CMP				Retain	Culverts to remain along with roadway.
RC 7-6	Culvert	F-6	40			1.25	Unknown				Retain	
RC 7-7	Culvert	F-7	21			0.75	CMP				Remove	Fill to original grade and revegetate.
RC 7-8	Culvert	F-8	30				Unknown	Unknown			Retain	
RC 7-9	Culvert	F-7	40				Unknown	Unknown			Retain	
UP 1	Power Pole	F-6									Retain	
	Misc. Debris										All non native materials within the indicated revegetation boundaries for this area (except those items indicated to remain) are to be disposed of as discussed in Specifications.	Debris include miscellaneous building rubble, minor electrical equipment, steel posts, conduit, and fencing.

**AREA 4: MAIN FACILITY (PROJECT 2)**

B 5	Engineering Building	F-12	55	40	13.5		Wood frame	Concrete slab. Concrete patio on west side of building 28' x 6'. Concrete sidewalks on south side of building 35' x 4' x 4" and 62' x 4' x 4".	Falling ceiling	Several gallons of paint thinner. Non-friable ACM present in floor tile and tile master (290 H2) and roofing material.	Remove building, patio, and foundation. Off-site disposal for non-concrete debris.	
B 6-1	Backfill Building	F-14	80	50				Concrete slab, 1.5' thick			Remove	
B 6-2a	Coal Storage Bins	F-15	140	35	70		Reinforced concrete, 9" to 10" thick	Concrete, the floor height drops 5' about half way through the building	Overhead structures in poor condition	55-gal drum of DC Formula 80	Remove	The interior of the building has a series of 8 bins in the ceiling. The metal coal sorting hoppers are present in the ceiling.
B 6-2b	Rotary Breaker	F-14, F-15	60	30				Concrete slab.			Remove	Partially demolished.
B 6-3b	Train Loadout Tunnel	F-16	450	18	28		Steel frame				Remove	The west side of the north headwall of the tunnel is constructed of mine cars. South headwall is constructed of corrugated sheet metal as are the tunnel walls. Two coal hoppers are present within the coal pile and extend into the tunnel.
B 6-4a	Rotary Dump	F-15	40	30	(20)		Reinforced concrete, 1' thick		Partial caving at surface expression		Collapse roof and fill.	
B 6-4b	Preparation Plant Office	F-14	25	16				Concrete slab, 6" thick			Remove	Building demolished

FILE No. SHT-F23.DWG

JOB No. 1166087.01250104

REV	DATE	BY	DESCRIPTION

DESIGNED	S. NEWTON	SUBMITTED	
DRAWN	J. BEVER	PROJECT ENGINEER	R. C. E. NO. DATE
CHECKED			
		MONTGOMERY WATSON	R. C. E. NO. DATE



**MONTGOMERY WATSON**

Mining Group



**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING  
SUNNYSIDE MINE RECLAMATION

DEMOLITION SCHEDULE (2 OF 6)

SHEET

F-23

Inventory No.	Area Feature	Sheet Nos.	Approx. Feature Length (feet)	Approx. Feature Width (feet)	Approx. Feature Height/(Depth) (feet)	Approx. Feature Diameter (feet)	Wall Type	Foundation Notes	Hazardous Conditions	Special Materials <sup>(a)</sup>	Reclamation Action	Comments
B 6-5	Preparation Plant	F-14	140	120	40		Concrete	Reinforced concrete slab, 3' thick	Potential for roof and wall collapse.		Remove to ground surface and cover.	The preparation plant has been partially demolished, only the eastern portion remains intact. The reported thickness of the foundation is 3'; there are several 6' to 10' deep pits present within the structure, along with several concrete heavy machine foundations.
B 7	Material Foreman's Office	F-10	20	16	8		Cinderblock	Concrete slab, 6" thick			Remove building and remove slab.	
B 8	No. 3 Mine Hoist House	F-15	64	43	(12)			Reinforced concrete slab, 1.5' thick. Central portion of slab contains a pit approximately 12' x 12' x 7' deep.	Oil-stained concrete	Oily water in pit.	Remove	
B 15	No. 3 Mine Milk House	F-14	21.5	19	9		Cinderblock	Concrete slab, additional 3.5 x 19' x 6" slab is present in front of the building.		Two 55-gallon drums labeled "Jayplot" have some sediment in them.	Remove building and concrete slabs.	A 16' x 5' x 5' steel bin is located on the north wall of the building, the bin contains a skid-mounted tank enclosed by a 2.5' wide x 8" thick concrete curb.
B 16	Storage Shed/Garage	F-15	28	23	9		Cinderblock	Concrete slab, 6" thick			Remove building and slab.	
B 17	Boiler Foundation	F-10	26	17	12			Concrete slab		Asbestos around pipes.	Remove building and slab.	Adjacent rock wall needs to be protected.
B 21	No. 2 Canyon Storage Shed	F-10	140	30	4			Concrete slab			Remove slab and stem walls.	A portion of the slab appears to be concrete walls filled with dirt.
B 26	Thickener	F-14			(10)	120	Concrete				Cover	
B 27	No. 3 Mine Slope Belt Building	F-14, F-15	46	32				Concrete slab		5-gal can of unknown lubricant.	Cover slab and concrete walls.	A 35' long x 6' high x 1" thick reinforced concrete wall is present on the south side of the foundation. Several reinforced concrete foundations are present south of the Belt Building foundation, including a 12' long x 4' high x 1.5' thick concrete wall
B 29	Museum Foundation	F-12	252	15.5				Concrete slab, 0.5' thick			Remove slab.	
B 31	Rock Loadout	F-14			4	30	Steel				Remove	Most of the steel tank has been removed.
B 32	Old Train Loadout	F-15	40+	8	7		Concrete	Tunnel extends downward to the east.			Remove as necessary to provide 4' cover in accordance with the grading plans. Collapse roof and walls to close opening at tunnel termination.	Steel rollers are present in the structure.
B 33	Fuel Tank and Pump Area	F-15						Concrete slabs			Remove	Concrete slab and one pump island, tank was previously removed.
B 34	Conveyor Tower Foundation	F-16	37	35	5			Reinforced concrete slab, 5' thick			Remove	
B 49	Portable Shed	F-15	12	8	8		Corrugated Steel				Remove	
B 50	Wall	F-15	65	1	2		Concrete	Unknown			Remove wall.	
B 51	Retaining Wall	F-15	141	1	14.5		Concrete				Cover	
B 52	No. 2 Canyon North Retaining Wall	F-10	170	1.5	10 to 15		Stone and mortar, concrete				Retain, except remove handrail.	
B 53	No. 2 Canyon South Retaining Wall	F-10	230	1.5			Stone and mortar				Retain	
B 55	No. 3 Slope Ramp Walls	F-15	175	0.75	Ranges from 0 to 9' high		Concrete	Unknown			Remove	The ramp consists of two parallel walls approximately 12' apart; the area between the walls is filled with soil, railroad ties, and rail line.
B 56a	Coal Loadout Structure	F-15	64	20	24 (entry), 35 (top of face)		Concrete				Collapse roof and fill.	Thickness of concrete unknown.
B 56b	Coal Loadout Structure	F-15	50	27	43		Concrete				Collapse roof and fill.	Thickness of concrete unknown. North side has a concrete wingwall 1-foot thick and 27 feet wide. The height ranges from 5 feet to 24 feet. Miscellaneous concrete foundations present on surface expression.
B 57	Guardrails	F-14, F-15, F-16, F-17	2800	1	3						Remove	Timber and steel construction. Vertical timbers are approximately 6" x 8" and set approximately 8' apart. The west guardrail supports a rubber conveyor belt as a short retaining wall.
B 58	Museum Foundation Retaining Wall	F-12	120	1	Varies, 6" at south end to 3.5' at north end		Stone and mortar				Remove, regrade to maximum 4 to 1 slope, revegetate.	
B 59	Retaining Walls	F-14	970	1	2.5		Concrete				Remove wall.	
B 60	Train Bridge Retaining Wall	F-14		0.25	10-15		Corrugated steel				Remove	
B 61	Guardrail	F-14	320	1	3						Remove	Timber and steel construction.
B 62	Drainage Ditch (East)	F-13, F-14, F-15	1,030	3	(2)						Retain per grading plans.	
B 63	Drainage Ditch (West)	F-13, F-14	950	3	(2)						Reclaimed	
B 64	Railroad Tracks	F-17, F-18, F-19		13							Retain	
B 65	Coal Pile Retaining Wall	F-16	120	1	25		Corrugated steel				Remove	
B 66	Slurry Ditch	F-17, F-18, F-19	2,800	3	(2)						Reclaim to culvert C-16.	
B 67	No. 3 Mine Substation Retaining Wall	F-14	230	1	2.5						Remove	Timber construction.
B 68	Drainage Ditch	F-13, F-14	120	3	2						Reclaim	
B 70	Old Train Loadout Retaining Wall	F-14, F-15	300	1	9		Reinforced concrete	Unknown			Remove	
B 71	Bridge Pier	F-10	30	10	8		Concrete	Unknown			Remove	

FILE No. SHT-F24.DWG

JOB No. 1166087.01250104

REV	DATE	BY	DESCRIPTION

DESIGNED	S. NEWTON	SUBMITTED	
DRAWN	J. BEVER	PROJECT ENGINEER	R. C. E. NO. DATE
CHECKED			
		MONTGOMERY WATSON	R. C. E. NO. DATE



**MONTGOMERY WATSON**

Mining Group



**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING  
SUNNYSIDE MINE RECLAMATION  
DEMOLITION SCHEDULE (3 OF 6)

SHEET

F-24

Inventory No.	Area Feature	Sheet Nos.	Approx. Feature Length (feet)	Approx. Feature Width (feet)	Approx. Feature Height/(Depth) (feet)	Approx. Feature Diameter (feet)	Wall Type	Foundation Notes	Hazardous Conditions	Special Materials <sup>(a)</sup>	Reclamation Action	Comments
B 72	Brick and Mortar Foundation	F-15	8	3	2.5			Brick and mortar			Remove and revegetate.	
B 73	Drainage Ditch	F-12, F-13	1,000	5	(3)						Reclaim	
B 75	Train Bridge Retaining Wall	F-14	350	1	6 to 8		Reinforced concrete (180') Timber (170')	Unknown			Remove	
B 76	Portal P22 Walls	F-15	160	1	8 to 10		Reinforced concrete	Unknown			Remove	
B 77	Preparation Plant Slab	F-14	25	35	5			Concrete			Remove to ground level.	Slab may extend north to the preparation plant. Also, remove wall extension to the east.
B 80	Portal P19 Retaining Wall	F-10	115	1	10						Retain	
B 90	Rock Loadout Retaining Wall	F-14	60	0.5	5		Reinforced concrete				Remove	
B 91	Creek Retaining Wall	F-14	1,000	1	6 to 10		Timber/steel				Remove	Construction varies, timber in some areas, steel in others.
B 92	Portal P23 Retaining Wall	F-14	50	0.5	6		Sheet steel				Cover	
B 93	Guardrail	F-14	250	1	3		Timber/steel				Remove	
B 94	Guardrail	F-14	160	1	3		Timber/steel				Remove	
B 95	Portal P22 Retaining Wall	F-14	110	1	3		Concrete				Remove	
B 96	Drainage Ditch	F-16, F-17	1,200	3	2						Retain	
C 11a	Culvert	F-17	60			1	CMP				Retain	
C 13	Culvert	F-19									Retain	
C 14	Culvert	F-19									Retain	
C 15	Culvert	F-19	20			0.5	G. Iron Pipe				Retain	
D 5	Lower No. 2 Canyon Sediment Pond	F-10	150	50	-15						Reclaim	
D 6	Upper No. 2 Canyon Sediment Pond	F-9	60	40	-10						Reclaim	
D 7	No. 2 Hoist House Sediment Pond	F-15	100	30	-15						Reclaim	
D 9	SSSF Sediment Pond	F-17	250	130	-15						Reclaim	
D 19	Spoil Pile	F-18									Reclaim	
D 20	Sacco Flat Equipment Storage Area	F-18, F-19									Reclaim	
E 3	Hillside substation	F-15	60	90				Concrete slab, range from 7" to 10" thick			Remove aboveground structures, cover.	Nine concrete slabs are present. The slabs range in size from 3' x 3' to 35' x 6'. The total area comprised of concrete is approximately 585 ft <sup>2</sup> .
E 4	Roadside Substation	F-14	110	110				Concrete slab, range from 6" to 9" thick			Remove retaining wall in southeast corner, remove foundations in southeast corner, cover remaining foundations.	Ten concrete slabs are present; the slabs range in size from 2.5' x 3.5' to 8' x 10'. The total area comprised of concrete is approximately 475 ft <sup>2</sup> . Some electrical components are present as are several large posts. A 5' high bin type retaining wall is present along the southeast corner of the substation.
E 7	No. 3 Mine Substation	F-14	7	7				Concrete slab, 10" thick			Remove	Four-post electrical substation with several conduits. Several 12" x 12" timbers are present in the area, along with power poles and other debris.
E 8	Power Visual Disconnect Station	F-17	60	30							Remove	There are six large posts (16" diameter x 50' high) and two smaller posts (12" diameter and 35' high) present along with several insulators.
E 9	Shop Substation	F-13	46	15	6 (fence)						Remove	The east side of the substation area has a 6" thick concrete wall approximately 5' high.
E 10	Substation	F-14	8	11	6.5 (fence)			Concrete slab, 13" thick			Remove	Various electrical components are present.
E 12	No. 2 Canyon Fan Substation	C-20	18	15				Concrete slab, thickness varies			Cover	Four poles cut off; fenceposts with gate remain.
E 14	Fan Signal Line	F-11, F-12, F-13	2010								Remove	
F 2	Shop Fan	F-14	20.5	13.5	11.5		Concrete	Concrete slab, 0.5" thick			Remove building	There is a 27" thick concrete machine pad that encompasses about 50% of the interior of the building. Various electrical controls and switches are present within the building.
F 3	No. 2 Canyon Air Shaft Fan	C-20	12	8.5				Concrete slab, 8" thick			Cover	
FH 1	Fire Hydrant	F-14									Remove	
M 1	Powder Magazine	F-10									Collapse at entry, fill 15'-20" into magazine, cover, and regrade.	Contains explosives to be removed by Owner.
M 2	Cap Magazine	F-9	12	10	10		Concrete	Concrete slab, 1' thick			Remove	
M-BR2	Bridge	F-11	40	13							Remove bridge, bridge abutments to remain.	Bridge has collapsed into riverbed. Bridge abutments are approximately 2 1/2' to 3' thick. Bridge deck is railroad rails set on 17" x 7" beams. Bridge deck consists of 9" of concrete overlain by asphalt.
M-BR3	Slope Rock Tunnel Bridge	F-13	170	30							Remove bridge and abutments.	
M-BR4	Train Bridge	F-13	80	20							Retain	Bridge contains five piers attached to concrete foundations. Wingwalls are present on both stream banks. Bridge deck is 2" plank. Miscellaneous structures in the area that need to be removed include water pipelines, power poles, and steel culverts.
M-BR5	South Bridge	F-13, F-14	55	24							Remove bridge and abutments. Regrade and revegetate.	Bridge features include abutment walls on both stream banks.
M-BR6	Foot Bridge	F-10	25	15							Remove bridge and steel pipe.	Wood construction.
M-BR7	No. 2 Canyon Bridge	F-10	40	20							Retain	Bridge is constructed of twelve 14" I-beams. The bridge deck is constructed of 6" x 12" timbers and 3" x 10" timbers. There is a 2" diameter steel rail on both sides. The stream channel below the bridge is concrete.
M-BR8	Railroad Bridge	F-14, F-15	70	15	10						Remove	Timber construction.
M-CV	Culvert	F-17	40			7.5	CMP				Retain	

FILE No. 511.F25.DWG

JOB No. 1169087.01250104

REV	DATE	BY	DESCRIPTION

DESIGNED	S. NEWTON	SUBMITTED	
DRAWN	J. BEVER	PROJECT ENGINEER	R. C. E. NO. DATE
CHECKED			
		MONTGOMERY WATSON	R. C. E. NO. DATE



**MONTGOMERY WATSON**  
Mining Group



**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING	SHEET
SUNNYSIDE MINE RECLAMATION	F-25
DEMOLITION SCHEDULE (4 OF 6)	

Inventory No.	Area Feature	Sheet Nos.	Approx. Feature Length (feet)	Approx. Feature Width (feet)	Approx. Feature Height/Depth (feet)	Approx. Feature Diameter (feet)	Wall Type	Foundation Notes	Hazardous Conditions	Special Materials <sup>(a)</sup>	Reclamation Action	Comments
PL 9	Culinary Water Line and Backflow Box	F-14									Remove, cut, and cap water line on west side of Grassy Trail Creek. Coordinate with City of Sunnyside 7 days prior to work.	
PL 10	Main Bridge Water Line	F-12	Unknown			0.75					Cut and cap pipe on west and east sides of bridge. Coordinate with City of Sunnyside 7 days prior to work.(a)	
R 1	Haul Road	F-17									Retain	
R 3	No. 2 Canyon Road	F-9, F-10, F-15									Reclaim lower section as indicated on grading sheets. Retain and relocate upper section.	
R 12	Lower Gate Haul Road	F-17									Retain	
R 13	SSSF Pond Access Road	F-17	500	Varies							Reclaim	
R 14	Facilities Loop Haul Road	F-14	2000								Reclaim	
R 15	No. 2 Canyon Haul Road Turnaround	F-10, F-15	2000	Varies							Retain	
R 25	Power Line Access Road	F-10	800	20							Reclaim	
R 32	Engineering Building Road	F-12	600	Varies							Reclaim	
R 33	No. 3 Hoist House Access Road	F-10, F-15	1125	Varies							Reclaim	
R 34	Hillside Substation Access Road	F-15	275	Varies							Reclaim	
R 35	Coal Pile Access Road	F-16, F-17	500	Varies							Reclaim	
R 36	Water Tank Access Road	F-15	275	Varies							Reclaim	
R 37	No. 3 Slope Belt Building Road	F-14	400	15							Reclaim	
RC 1-1	Culvert	F-17	120			3	CMP				Retain	
RC 1-2	Culvert	F-17	120			1.25	CMP				Retain	
RC 1-3	Culvert	F-19	85			3	CMP				Retain	
RC 1-7	Culvert	F-17	60			1	CMP				Remove	
RC 3-1	Culvert	F-9	45			Unknown	CMP				Remove	
RC 3-5	Culvert	C-20	40			Unknown	CMP				Retain	
RC 3-6	Culvert	C-20	45			Unknown	CMP				Remove, slope banks at 3:1.	
RC 3-7	Culvert	F-15	93			1	CMP				Remove	
RC 3-8	Culvert	C-20	50			Unknown	CMP				Retain	
RC 10-1	Culvert	F-12	56			3	CMP				Remove, fill and revegetate.	
RC 10-2	Culvert	F-14	20			1.5	CMP				Remove	
RC 10-3	Culvert	F-14	124			2.25	CMP				Remove	
RC 10-3a	Culvert	F-14	105			Unknown	CMP				Remove	
RC 10-4	Culvert	F-16	150			12	CMP				Retain	
RC 10-5	Culvert	F-13	110			1	CMP				Remove	
RC 10-6	Culvert	F-14	110			2	CMP				Remove	
RC 10-7	Culvert	F-14	103			1	CMP				Remove, portion under rail line to remain.	
RC 10-8	Culvert	F-16	300			3	CMP				Collapse both ends and cover.	
RC 10-9	Culvert	F-16	164			1	CMP				Remove	
RC 10-10	Culvert	F-14	43			1.5	CMP				Cover	
RC 10-11	Culvert	F-15	320			2.5	CMP				Remove	
RC 10-12	Culvert	F-15	24			2	CMP				Remove	
RC 10-13	Culvert	F-15	51			1.5	CMP				Remove	
RC 10-14	Culvert	F-15	60			7.42 x 8.5	Box Culvert				Remove	
RC 10-15	No. 2 Canyon Wash Arches	F-15	150	30	15		Wood/steel				Remove	
RC 10-16	Culvert	F-15	35			2	CMP				Remove	
RC 10-17	Culvert	F-15	43.4			3.5 x 2.36	CMP				Collapse upper end and cover.	
RC 10-18	Culvert	F-16	205			2	CMP				Remove, portion under rail line to remain.	
RC 10-19	Culvert	F-16	73			0.75	CMP				Remove	
RC 10-20	Culvert	F-17	22			0.5	Aluminum Pipe				Retain	
RC 10-21	Culvert	F-14	21			1	Iron Pipe				Remove	
RC 10-22	Culvert	F-14	20.5			1.31	Iron Pipe				Cover	
RC 10-23	Culvert	F-10	25.7			10.6 x 5	Box Culvert				Retain	
RC 10-24	Slurry Culvert	F-14, F-15, F-16, F-17	1700			Unknown	Unknown				Remove	
RC 10-25	Culverts (2)	F-15	51			Unknown	CMP				Remove	
RC 10-27	Culvert	F-15	25			Unknown	Unknown				Remove	
RC-C1	Culvert	F-9	119			1.5	CMP				Remove	
RC-C2	Culvert	F-9	155			1	CMP				Remove	
RC-C3	Culvert	F-10	126			2	CMP				Remove	
RC-C4	Culvert	F-10	172			1.5	CMP				Remove	
RC-C6	Culvert	F-10	51.2			1	CMP				Retain	
RC-C8	Culvert	F-10	33.2			2	CMP				Remove	
RC-C9	Culvert	F-10	50			1	CMP				Retain	
RC-C10	Culvert	F-10	74.5			1	CMP				Remove	
RC-C11	Culvert	F-10	51.6			0.5	CMP				Remove	

JOB No. 1160687.01250104  
FILE No. SHT-F26.DWG

REV	DATE	BY	DESCRIPTION

DESIGNED S. NEWTON	SUBMITTED
DRAWN J. BEVER	PROJECT ENGINEER R. C. E. NO. DATE
CHECKED	MONTGOMERY WATSON R. C. E. NO. DATE

**MONTGOMERY WATSON**  
Mining Group

**State of Utah**  
DEPARTMENT OF NATURAL RESOURCES

Inventory No.	Area Feature	Sheet Nos.	Approx. Feature Length (feet)	Approx. Feature Width (feet)	Approx. Feature Height/(Depth) (feet)	Approx. Feature Diameter (feet)	Wall Type	Foundation Notes	Hazardous Conditions	Special Materials <sup>(a)</sup>	Reclamation Action	Comments
RW 5	Drainage Structure	F-12	25	4	2		Reinforced concrete				Retain	2' x 4' x 25' reinforced concrete box culvert. Wingwalls are present on the west side of the structures; wingwalls are concrete and taper from 8" thick at the top to 1 1/2" thick at the base. The wingwall is 24' long and 9' high. 17' east of the wingwall.
UP 2	Power Visual Disconnect Station Lines	F-17, F-18, F-19									Remove entire line.	Line starts at Columbia Substation and terminates at power visual disconnect station (E8).
W 1	Water Tanks	F-15, F-16			17	70	Steel, 1/4" thick	Asphalt, 6" thick			Remove	Both tanks are partially filled with coal refuse. Debris in the vicinity of the tanks include 6" and 8" diameter pipe, 4" diameter rubber hose, cinderblocks, and small timbers. The northern tank has a siren with wiring that runs to a power pole located
	Miscellaneous Debris										All non native materials within the indicated revegetation boundaries for this area (except those items indicated to remain) are to be disposed of as discussed in Specifications.	Debris present in this area may include drill steel, cinderblock and concrete rubble, pipes, steel cable, building debris and insulation, electrical equipment, steel posts, timbers, conduit, fencing, wire mesh on cut slopes, and discarded equipment.
	Perimeter Boundary Fence Posts						Steel				Remove	
<b>MISCELLANEOUS FEATURES OUTSIDE OF AREAS 1 THROUGH 4</b>												
	Remote Power Poles and Conductors										Remove as directed by Owner.	Cut flush with ground surface and remove conductor wire, hardware and timber.
<b>PROJECT 2: OPTION A</b>												
B 1-a	Main Office	F-13	51	50	15		Wood frame, brick exterior	Concrete slab, full basement	Debris inside building	Oxygen cylinders in basement, friable ACM in acoustical ceiling material and paper gasketing, non-friable ACM in sheet vinyl flooring and roofing material.	Remove building. Fill basement and cover basement foundation walls.	Sidewalk areas North and West side of building, ramp and overhead at east side.
B 1-b	Warehouse	F-13	200	75	23		Cinderblock	Reinforced concrete slab 4' high	Debris inside building	Some oil staining on concrete floors.	Remove building and dock-height concrete slab and stem walls. Bury footings.	
B 2-a	Bathhouse	F-13	175	71	23		Cinderblock	Reinforced concrete slab. Walls of boiler room are 1' thick.	Debris inside building	Friable ACM in pipe elbow/fitting insulation in boiler room and changing areas, and Flame Safety Lamp Gaskets in the lamp cleaning room. Non-friable ACM in vinyl flooring and roofing material.	Remove building. Cover footings and slab. Remove boiler and associated piping prior to backfilling. Demolish bin and stack to grade.	A concrete coal storage bin is located at the southwest corner of the building extending approximately 10 feet below grade and 3 feet above grade. The boiler and associated piping and tanks are present in the boiler room.
B 2-b	Training Building and Ambulance Garage	F-13	120	37	17		Cinderblock	4" Reinforced concrete slab in garage area.		1-gallon container of a liquid labeled "poison", 5-gal can of anti-skid coating, 10-gal drum labeled "salvage" (contents unknown), miner's lamps in garage area, and non-friable ACM in floor tile and roofing material.	Remove building slab and footings.	
B 3	Shop	F-13	202	102	37		Steel frame building. Outer walls are corrugated steel and fiberglass sheets. A concrete outer wall 8" thick and 5.5' high forms the base of the outer wall of the building.	Reinforced concrete slab, thickness unknown, contains some imbedded railroad tracks.	Debris, oil-stained floor	Non-friable ACM in floor tile and roofing material. Approximately twenty-eight empty 55-gal drums and one hundred 5-gal pails are present in the northern portion of the building; the 5-gallon containers contain residual hydraulic fluids. Rustoleum alumi	Remove building and cover slab.	Railroad tracks enter the south wide of the shop and split to both sides of the building. At the south side there is a 3' deep by 3' wide concrete pit that contains iron gratings over the top. This structure extends approximately 30 feet out from the building. The concrete apron of the pit is approximately 8' wide. There are many telephone poles along the east side of the Shop.
B 4	Warehouse Annex	F-13	204	30	12.5 on south half of building, 16 on north half		Steel-frame with corrugated steel	Concrete slab with perimeter foundation.		Miners' lamps.	Remove building. Cover slab and foundation.	
B 28	Mantrip Underpass	F-13	42	20	(12)		Reinforced concrete, 12" to 15" thick	Concrete slab			Remove	
B 35	Portable Shed	F-12	9	7	13		Corrugated steel				Remove	
B 36	Water Valve Box	F-13	5	5	(8)						Cover	
B 37	Steel Rack	F-13									Remove	Miscellaneous steel rack and pipe material.
B 38	Emergency Mine Map Storage	F-13	8		4	2	Steel pipe				Remove	Map storage structure constructed of steel pipe.
B 48	Cut Slope Retaining Wall	F-10, F-13, F-14, F-15	3,300	1	3 to 4						Remove	Timber retaining wall, approximate 12" x 12" timbers.
B 54	Retaining Wall	F-13	655	1	6 to 10		Reinforced concrete	Unknown			Remove wall.	
FH 2	Fire Hydrant	F-12									Remove	
M-BR1	Main Bridge	F-12	130	25					A hole is present near the south/central portion of the bridge.		Remove bridge, bridge abutments to remain. Remove west end asphalt approach and revegetate. Place boulders as indicated on Sheet C-12.	Bridge is wood-frame construction. Water line PL10 needs to be capped at west side of bridge prior to bridge removal.
PL 8	Water Line	F-14				0.75					Remove, cut, and cap water line on west side of Grassy Trail Creek. Coordinate with City of Sunnyside 7 days prior to work.	
R 10	Facilities Parking Area	F-12, F-13						Asphalt			Remove	

All dimensions and non earthwork quantity estimates are approximate. Variations from indicated dimensions shall not be cause for changes in cost.

(a) Remove and dispose of all materials per the Specifications.

FILE No. SHEET 27 DWG

JOB No. 1166087.012c

REV	DATE	BY	DESCRIPTION

DESIGNED	S. NEWTON	SUBMITTED	
DRAWN	J. BEVER	PROJECT ENGINEER	R. C. E. NO. DATE
CHECKED			
		MONTGOMERY WATSON	R. C. E. NO. DATE



**MONTGOMERY WATSON**

Mining Group



**State of Utah**

DEPARTMENT OF NATURAL RESOURCES

DIVISION OF OIL, GAS AND MINING

SUNNYSIDE MINE RECLAMATION

DEMOLITION SCHEDULE (6 OF 6)

SHEET

F-27

# LEGEND

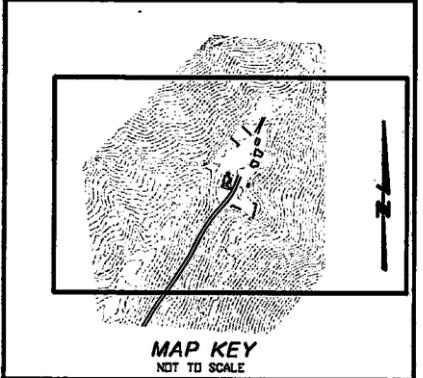
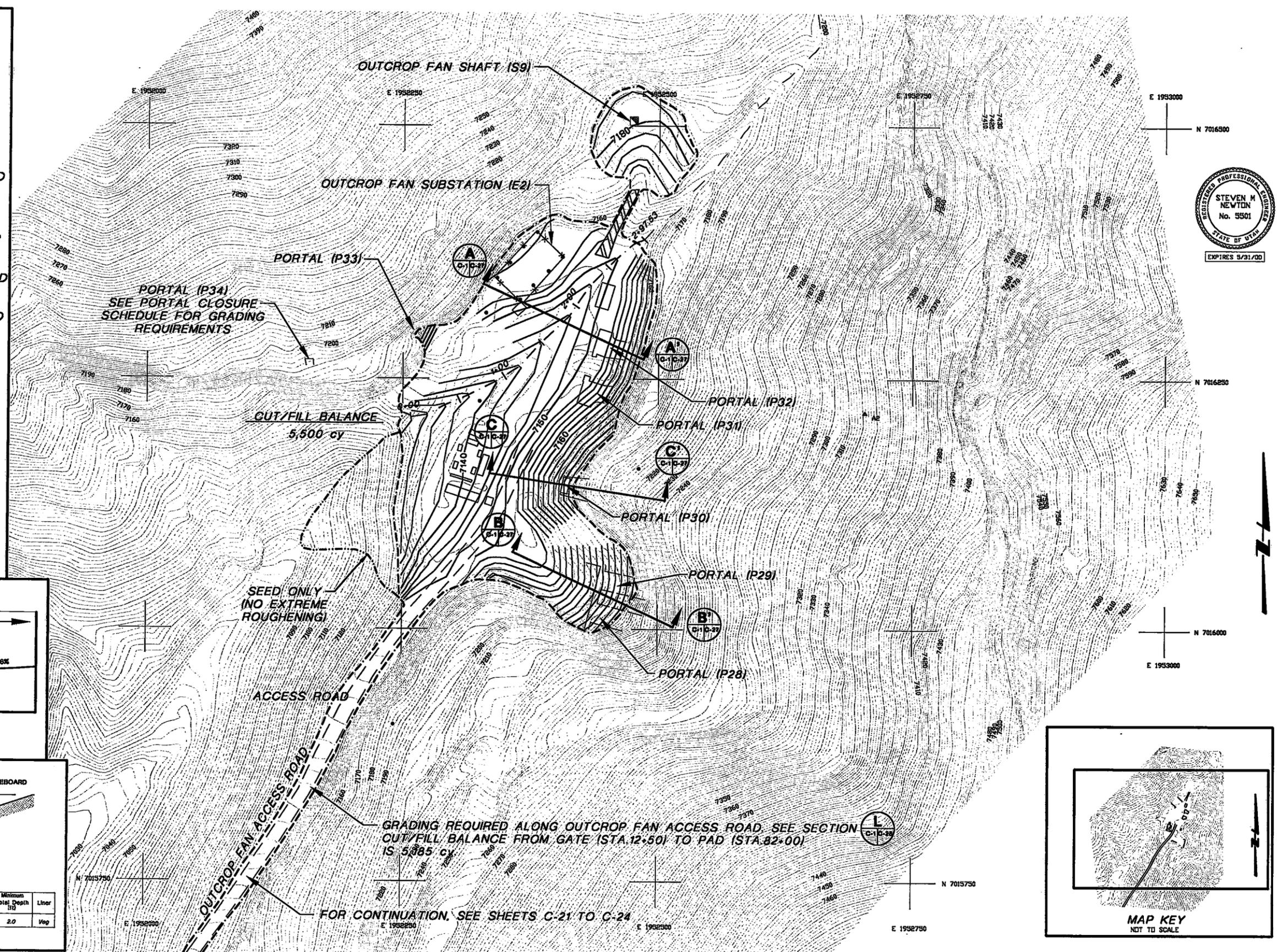
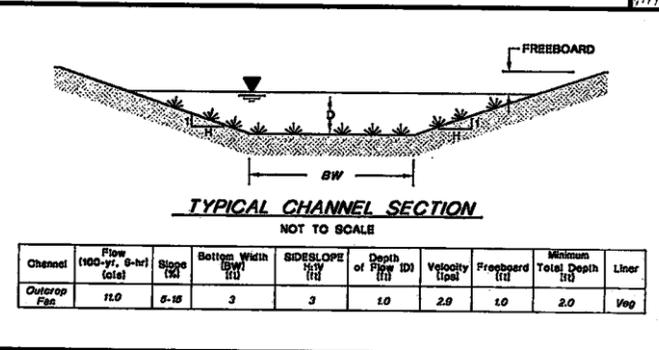
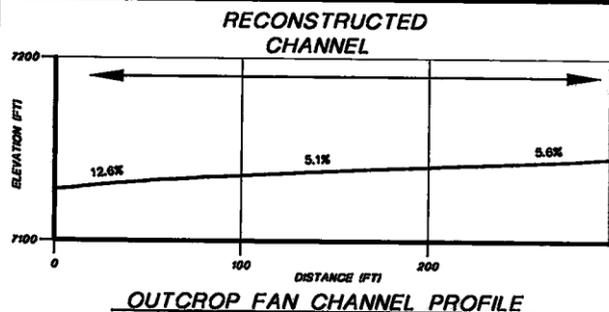
- EXISTING ROAD
- - - EXISTING STREAM
- - - RECONSTRUCTED CHANNEL
- - - REVEGETATION BOUNDARY
- POWER POLE TO REMAIN
- POWER POLE TO BE REMOVED

- NOTES:**
1. PROVIDE A MINIMUM OF 4 FEET OF COVER OVER PORTALS P28 TO P34 AND SHAFT S9. BLEND INTO SURROUNDING TOPOGRAPHY. REVEGETATE ALL DISTURBED AREAS, AND OTHER AREAS AS INDICATED.
  2. ALL DEMOLITION DEBRIS SHALL BE PLACED IN THE DEEPEST PORTION OF FILL AREAS ACCORDING TO THE SPECIFICATIONS.
  3. ALL CUT SLOPES SHALL BE EXTREME ROUGHNRD ACCORDING TO THE SPECIFICATIONS.
  4. ALL AREAS INSIDE REVEGETATION BOUNDARIES, EXCEPT ROADS DESIGNATED TO REMAIN, SHALL BE EXTREME ROUGHENED IN ACCORDANCE WITH SECTION 0300 OF THE SPECIFICATIONS



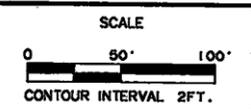
DRAWING No. WHERE  
DETAIL/SECTION  
IS REFERENCED

DRAWING No. WHERE  
DETAIL/SECTION  
IS SHOWN



JOB No. 1188007-01250103 FILE No. AREA-A-1.DWG

REV	DATE	BY	DESCRIPTION



DESIGNED T. LEIDICH  
DRAWN J. BEVER  
CHECKED

SUBMITTED  
PROJECT ENGINEER R. C. E. NO. DATE  
MONTGOMERY WATSON R. C. E. NO. DATE



DIVISION OF OIL, GAS AND MINING  
SUNNYSIDE MINE RECLAMATION  
REGRADING - AREA 1 - OUTCROP FAN

SHEET  
C-1

MATCHLINE TO SHEET C-3

MATCHLINE TO SHEET C-4



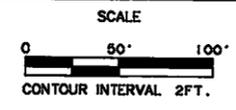
# LEGEND

- EXISTING DIRT ROAD
- EXISTING STREAM
- REVEGETATION BOUNDARY
- POWER POLE TO REMAIN
- POWER POLE TO BE REMOVED
- CULVERT

- NOTES:**
1. PROVIDE A MINIMUM OF 4 FEET OF COVER OVER SUBSTATION (E5). BLEND INTO SURROUNDING TOPOGRAPHY.
  2. ALL DEMOLITION DEBRIS SHALL BE PLACED IN THE DEEPEST PORTION OF FILL AREAS ACCORDING TO THE SPECIFICATIONS.
  3. DISTURBED AREAS AND ROADS NOT REGRADED, BUT SCHEDULED TO BE REVEGETATED, SHALL BE EXTREME ROUGHENED TO ALLEVIATE COMPACTION.
  4. ALL AREAS INSIDE REVEGETATION BOUNDARIES, EXCEPT ROADS DESIGNATED TO REMAIN, SHALL BE EXTREME ROUGHENED IN ACCORDANCE WITH SECTION 0300 OF THE SPECIFICATIONS

FILE NO. AREA-B-1.DWG

REV	DATE	BY	DESCRIPTION



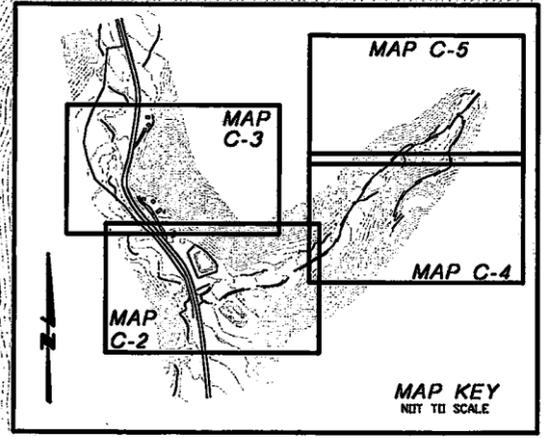
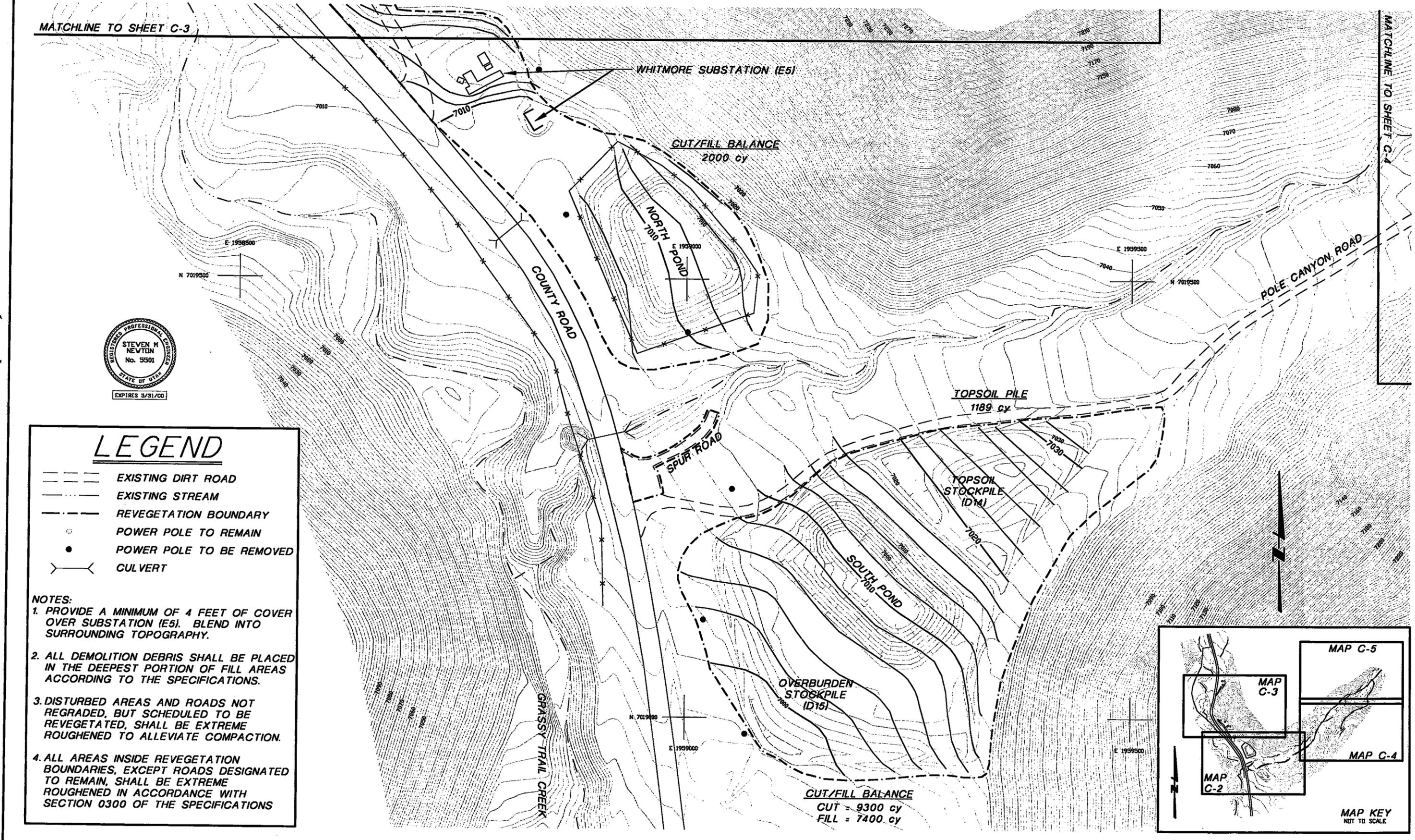
DESIGNED T. LEIDICH  
DRAWN J. BEVER  
CHECKED

SUBMITTED  
PROJECT ENGINEER R. C. E. NO. DATE  
MONTGOMERY WATSON R. C. E. NO. DATE



DIVISION OF OIL, GAS AND MINING  
SUNNYSIDE MINE RECLAMATION  
REGRADING - AREA 2 - WHITMORE FAN/POLE CANYON (1 OF 4)

SHEET C-2



E 1958000  
N 7020500

E 1958000  
N 7020000

E 1959000

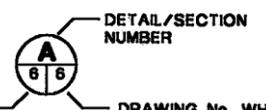
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# LEGEND

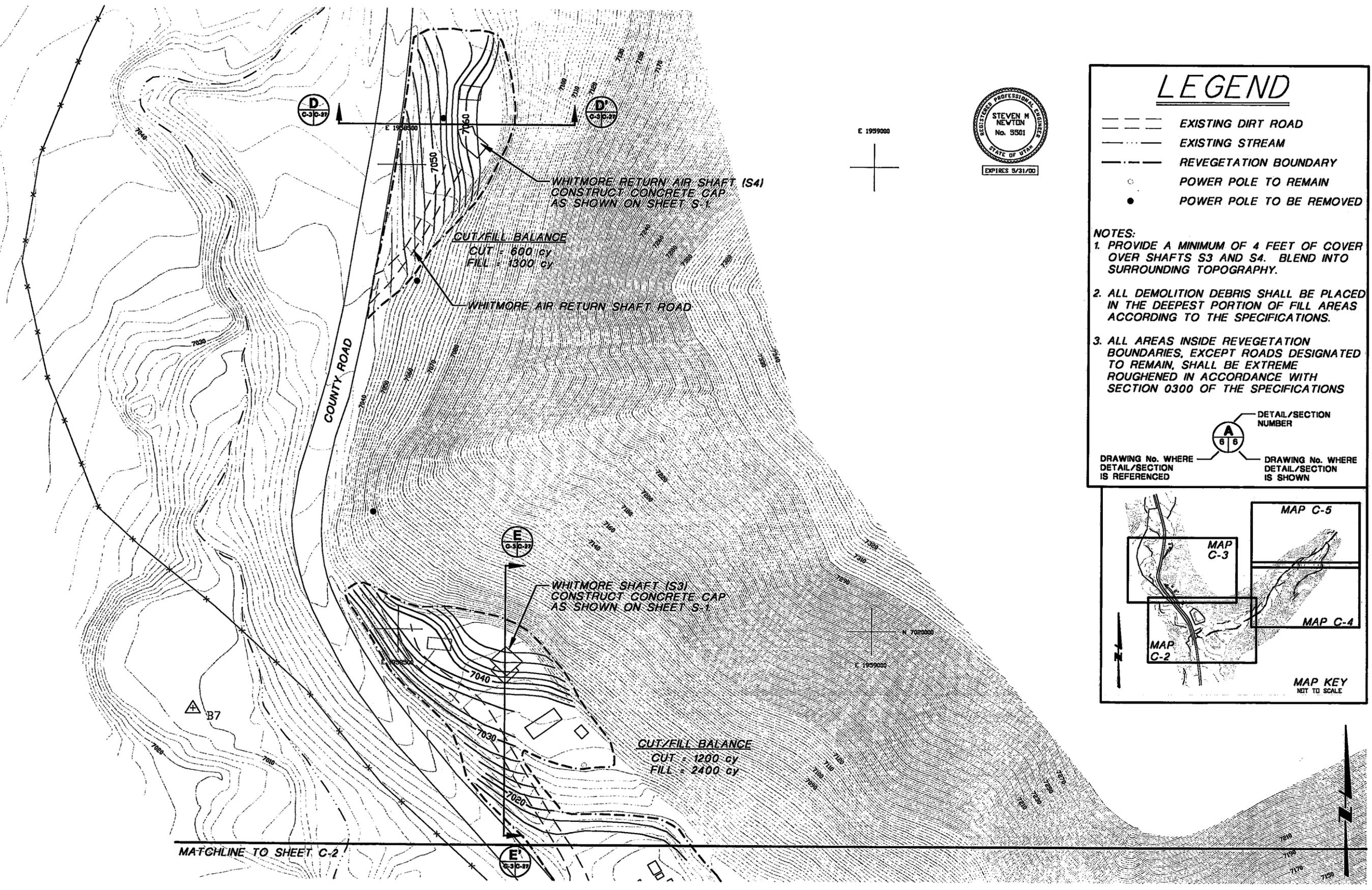
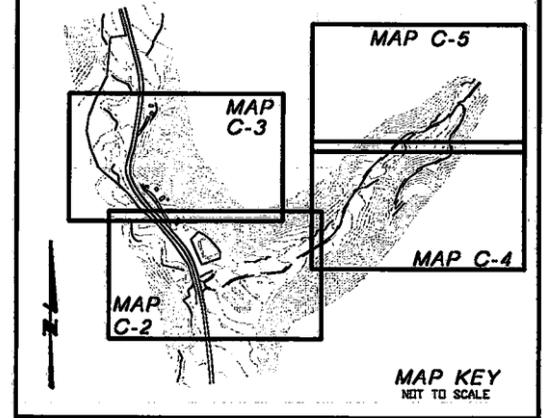
- EXISTING DIRT ROAD
- EXISTING STREAM
- - - REVEGETATION BOUNDARY
- POWER POLE TO REMAIN
- POWER POLE TO BE REMOVED

- NOTES:**
1. PROVIDE A MINIMUM OF 4 FEET OF COVER OVER SHAFTS S3 AND S4. BLEND INTO SURROUNDING TOPOGRAPHY.
  2. ALL DEMOLITION DEBRIS SHALL BE PLACED IN THE DEEPEST PORTION OF FILL AREAS ACCORDING TO THE SPECIFICATIONS.
  3. ALL AREAS INSIDE REVEGETATION BOUNDARIES, EXCEPT ROADS DESIGNATED TO REMAIN, SHALL BE EXTREME ROUGHENED IN ACCORDANCE WITH SECTION 0300 OF THE SPECIFICATIONS



DRAWING No. WHERE DETAIL/SECTION IS REFERENCED

DRAWING No. WHERE DETAIL/SECTION IS SHOWN



JOB No. 1168087.D1229704 FILE No. AREA-B-DWG

REV	DATE	BY	DESCRIPTION

SCALE  
0 50' 100'  
CONTOUR INTERVAL 2FT.

DESIGNED T. LEIDICH  
DRAWN J. BEVER  
CHECKED

SUBMITTED  
PROJECT ENGINEER R. C. E. NO. DATE  
MONTGOMERY WATSON R. C. E. NO. DATE



DIVISION OF OIL, GAS AND MINING  
SUNNYSIDE MINE RECLAMATION  
REGRAIDING - AREA 2 - WHITMORE FAN/POLE CANYON (2 OF 4)

SHEET  
C-3