# Appendix C:

# Historical On/Off Leach Pad Design

## Bradley Man Camp Dumps Removal and

## On-Site Repository

**TCRA Action Work Plan**

**submitted pursuant to**

**Administrative Settlement and Order on Consent for Removal Actions**

**(CERCLA Docket No. 10-2021-0034)**

**Stibnite Mine Site**

**Stibnite, Valley County, ID**

**Prepared for:**

U.S. Environmental Protection Agency Region 10

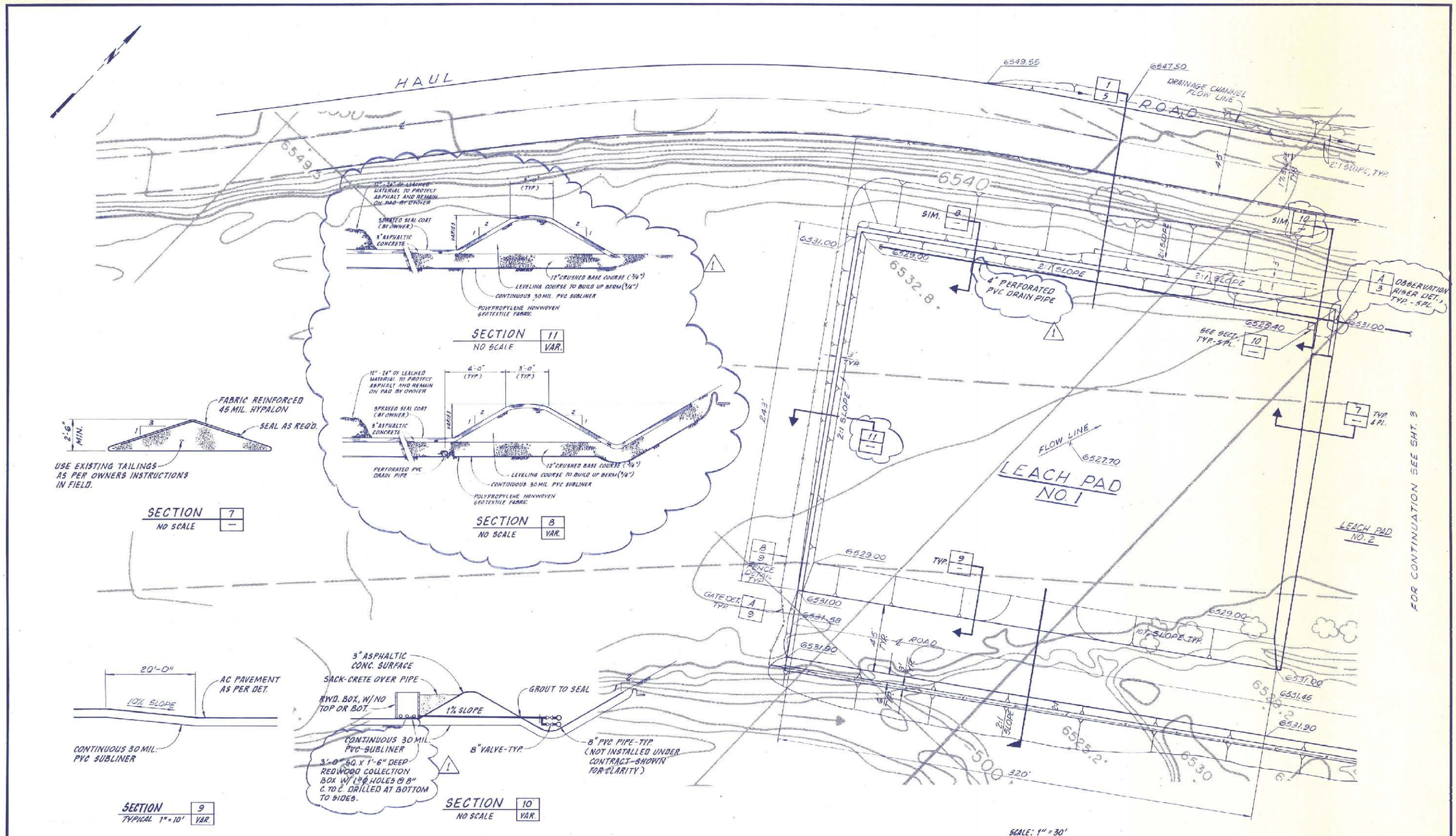
United States Department of Agriculture Forest Service Intermountain Region

**Prepared by:**

Perpetua Resources

405 S 8th St,
Boise, ID, 83702

**July 2021**




| REV | DATE | BY | DESCRIPTION |
|---|---|---|---|
| 1 | 9/9/81 | DBM | ADD SEC. 11 REVISE SEC. 8, MISC. |

SCALE: AS NOTED

DESIGNED ED CRYER
DRAWN W. YATOMI / D. MAGLEGIC
CHECKED B. JOSSIS

SUBMITTED
PROJECT ENGINEER — R.C.E. NO. — DATE
RECOMMENDED
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. — DATE

**JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.**
1301 VISTA AVENUE, BOISE, IDAHO 83705

APPROVED — DATE
APPROVED — DATE

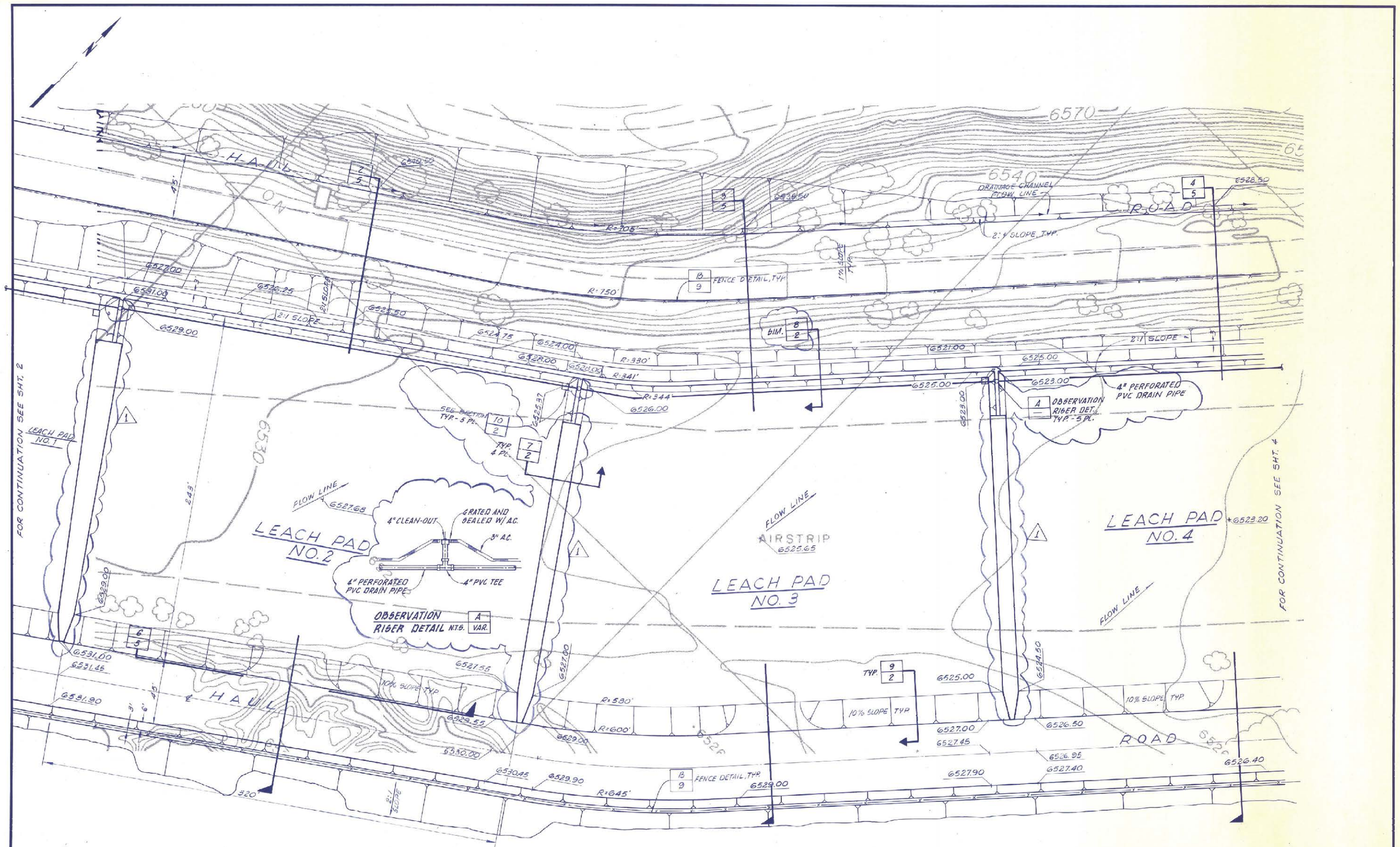
CANADIAN SUPERIOR MINING (U.S.) LTD.
STIBNITE MINING PROJECT GOLD MINE AND MILL

# LEACH PADS AND DETAILS

SHEET 2 OF 9 SHEETS

JOB NO. ____ FILE ____ CC 278

MGI-MAP-2679




| REV | DATE | BY | DESCRIPTION |
|---|---|---|---|
| 1 | 9/9/81 | DSM | ADD. OBV. DET., REV. BERM, MISC. |

SCALE: 1"=30'

DESIGNED ED CRYER
DRAWN W. YATOMI / D. MAGLESIC
CHECKED B. JOSSIE

SUBMITTED
PROJECT ENGINEER R.C.E. NO. DATE
RECOMMENDED
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. R.C.E. NO. DATE

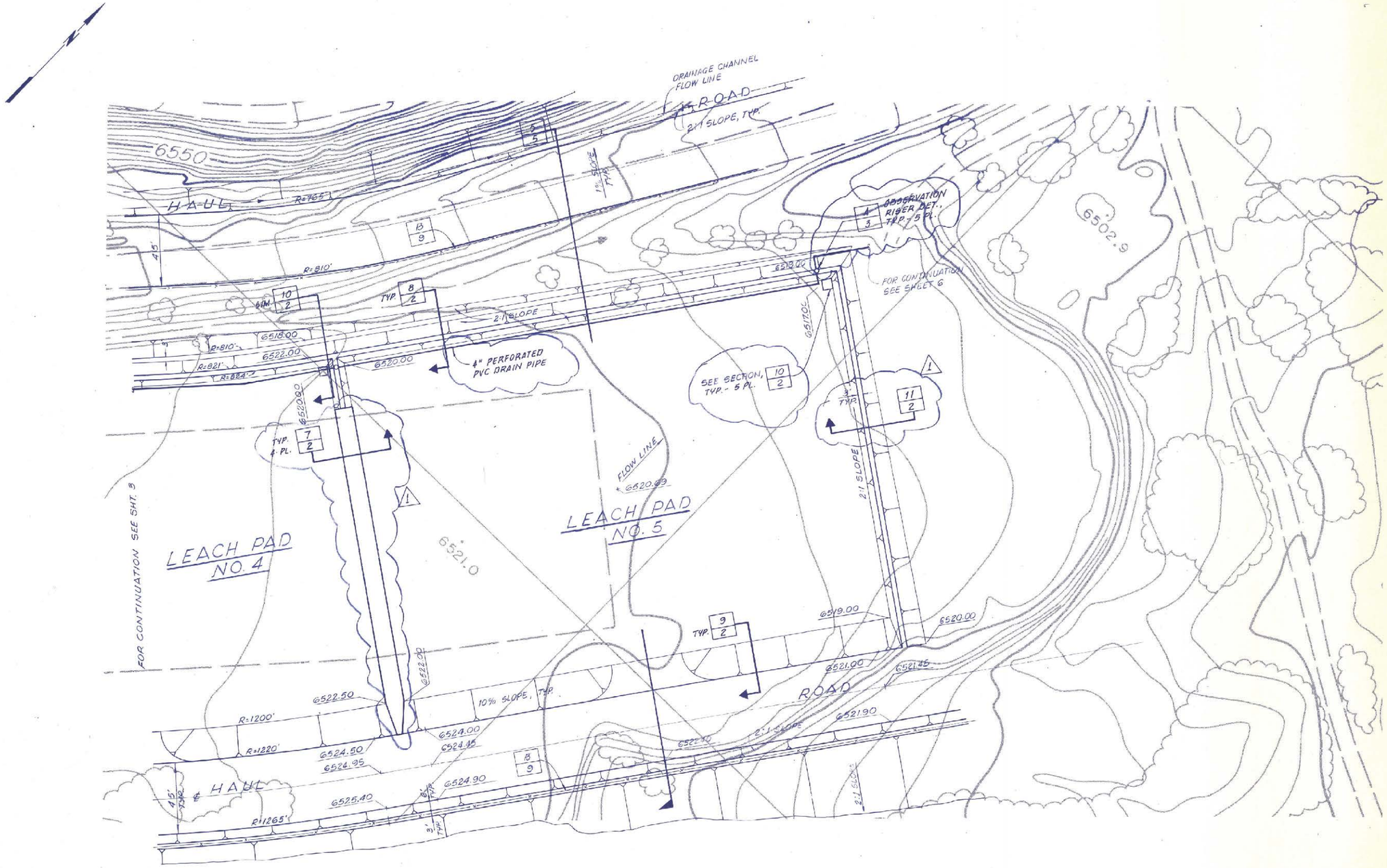
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
1301 VISTA AVENUE, BOISE, IDAHO 83705

APPROVED DATE
APPROVED DATE

CANADIAN SUPERIOR MINING (U.S.) LTD.
STIBNITE MINING PROJECT GOLD MINE AND MILL
LEACH PADS

SHEET 3 OF 9 SHEETS

MGI-MAP-2680




| REV | DATE | BY | DESCRIPTION |
|---|---|---|---|
| 1 | 9/9/81 | DSM | ADD SECTIONS, REVISE BERM, MISC. |

SCALE: 1"=30'

DESIGNED ED CRYER
DRAWN W.Y. ATOMI / D. MAGLECIC
CHECKED B. JOSSIS

SUBMITTED
PROJECT ENGINEER R.C.E. NO. DATE
RECOMMENDED
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. R.C.E. NO. DATE

JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.
1301 VISTA AVENUE, BOISE, IDAHO 83705

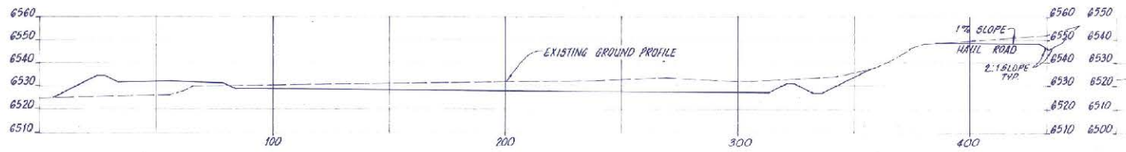
APPROVED DATE
APPROVED DATE

CANADIAN SUPERIOR MINING (U.S.) LTD.
STIBNITE MINING PROJECT GOLD MINE AND MILL
LEACH PADS

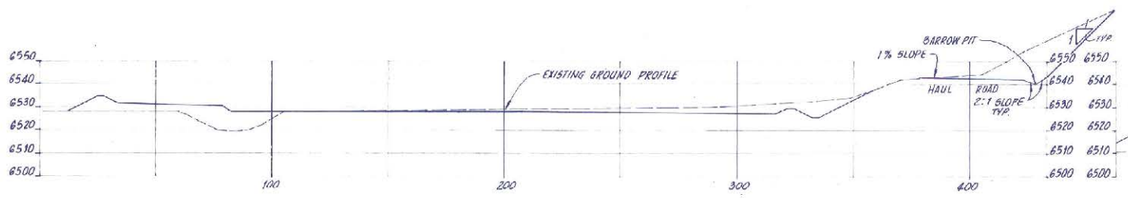
SHEET 4 OF 9 SHEETS

JOB NO. FILE CC 278

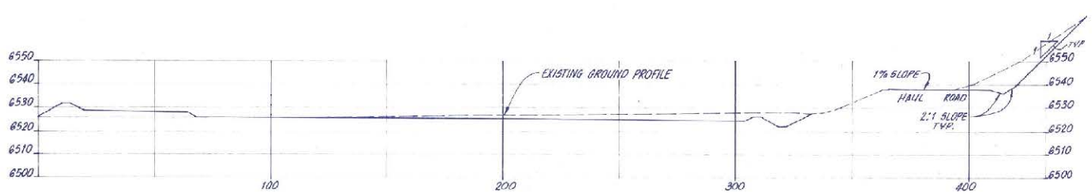
MGI-MAP-2681




**SECTION** 1 / 2
LEACH PAD 1




**SECTION** 2 / 3
LEACH PAD 2

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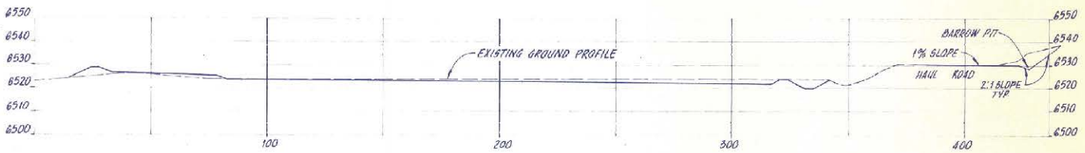
LEACH PAD 3

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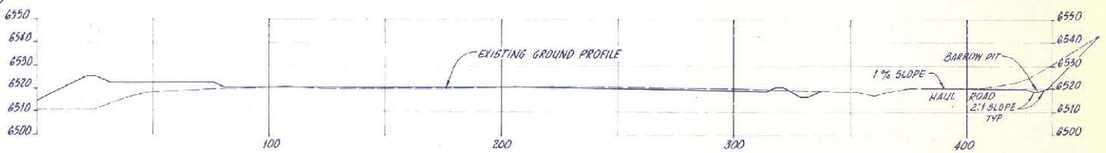
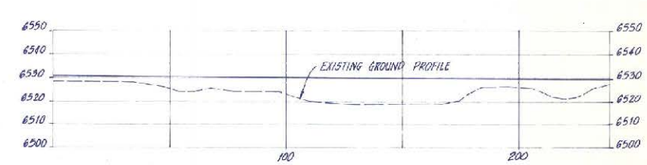



**SECTION** 5 / 4
LEACH PAD 5




**SECTION** 3 / 3
LEACH PAD 3




**SECTION** 6 / 3

| REV | DATE | BY | DESCRIPTION |
|---|---|---|---|
| | | | |

SCALE: 1" = 30' HORIZ. & VERT.

DESIGNED ED CRYER
DRAWN DAVE MAGLECIC
CHECKED B. JOSBIS

SUBMITTED
PROJECT ENGINEER — R.C.E. NO. — DATE
RECOMMENDED
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. — DATE

**JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.**
1301 VISTA AVENUE, BOISE, IDAHO 83705

APPROVED — DATE
APPROVED — DATE

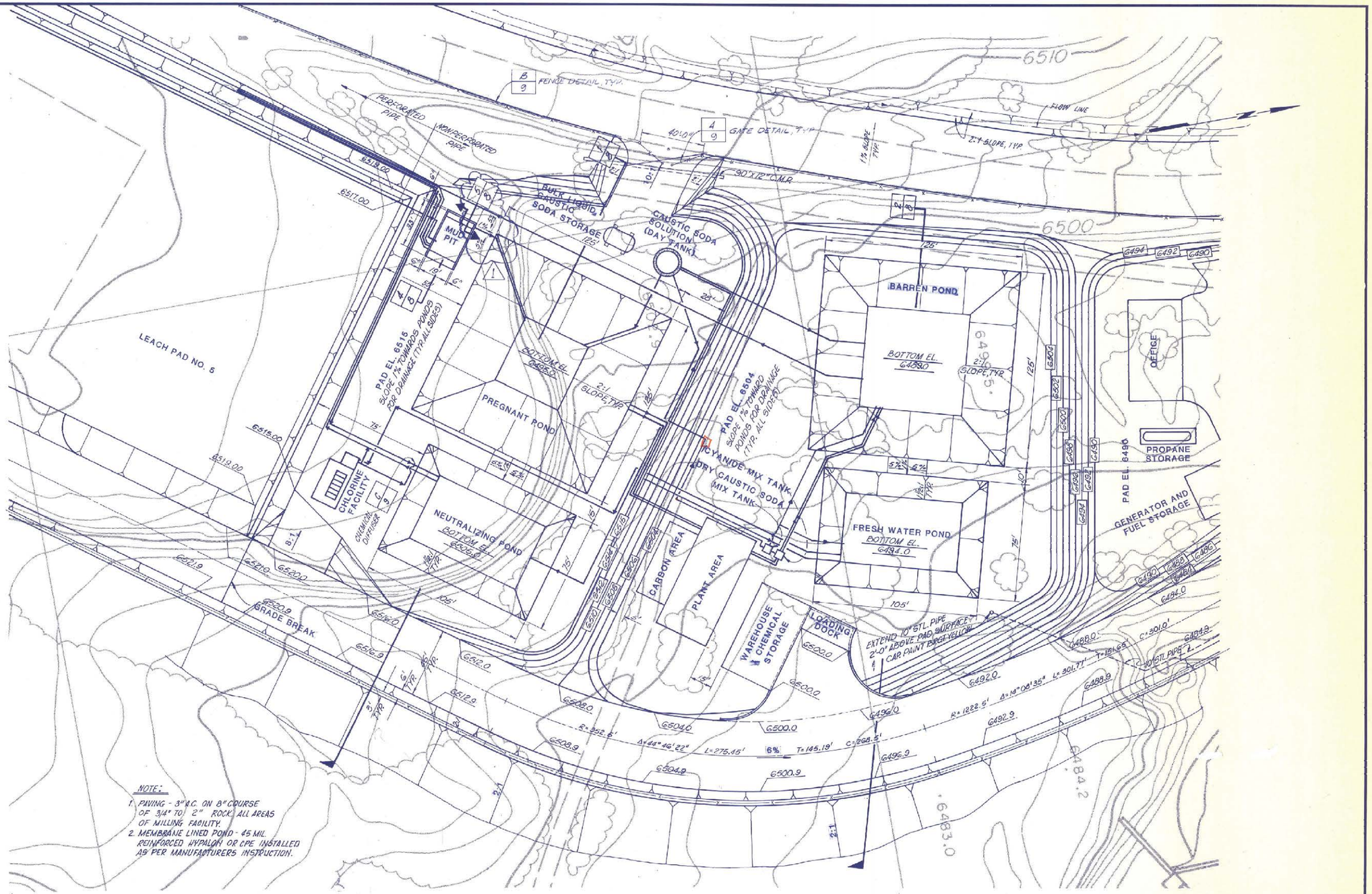
CANADIAN SUPERIOR MINING (U.S.) LTD.
STIBNITE MINING PROJECT GOLD MINE AND MILL

# LEACH PADS–SECTIONS

SHEET 5 OF 9 SHEETS

MGI-MAP-2082

JOB NO. ____ FILE ____ CC 278




NOTE:

1. PAVING - 3" A.C. ON 8" COURSE OF 3/4" TO 2" ROCK ALL AREAS OF MILLING FACILITY.
2. MEMBRANE LINED POND - 45 MIL REINFORCED HYPALON OR CPE INSTALLED AS PER MANUFACTURERS INSTRUCTION.

| REV | DATE | BY | DESCRIPTION |
|---|---|---|---|
| 1 | 9/16/81 | DSM | ADD SLOPE TO 6" PIPE & SEC. 5 |

SCALE: 1" = 30'

DESIGNED E. Carter
DRAWN G. Thomas
CHECKED B. Gossler

SUBMITTED
PROJECT ENGINEER — R.C.E. NO. — DATE
RECOMMENDED
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. — DATE

**JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.**
1301 VISTA AVENUE, BOISE, IDAHO 83705

APPROVED — DATE
APPROVED — DATE

CANADIAN SUPERIOR MINING U.S. LTD.
STIBNITE MINING PROJECT GOLD MINE AND MILL

# MILLING FACILITY-SITE PLAN

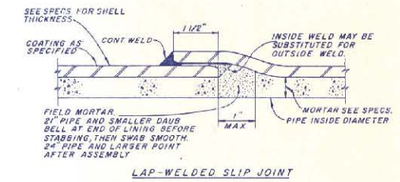
SHEET 6 OF 9 SHEETS

JOB NO. ____ FILE ____ CC 278

MGI-MAP-2683

NOTES:
1. CONTRACTOR SHALL MEET ALL STATE AND LOCAL HEALTH AND CONSTRUCTION REQUIREMENTS.
2. CONTRACTOR SHALL INSTALL A COMPLETE WORKING SEPTIC TANK/DRAINFIELD SYSTEM AS PER CENTRAL DISTRICT HEALTH'S SEWAGE DISPOSAL SYSTEM SPECIFICATIONS.
3. LEACH FIELD TRENCHES SHALL HAVE A MINIMUM OF 18" OF DRAINROCK BELOW INVERT OF DRAIN PIPE.

GENERAL NOTES:
1. PAVING - 3" A.C. ON 8" COURSE OF 3/4" TO 1 1/2" ROCK.
2. SYMBOLS -
   Ⓟ PERCOLATION TEST HOLE
   △ GROUNDWATER/BEDROCK TEST HOLE



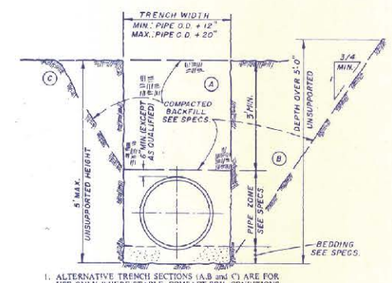

LAP-WELDED SLIP JOINT

SINGLE-BUTT WELD JOINT

DOUBLE-BUTT WELD JOINT

**TYPICAL WELDED STL. PIPE** 1 VAR.
N.T.S.

NOTE: PIPE MATERIAL WELDED STEEL AWWA C-200 SCHEDULE 40, WITH WELDED STEEL FABRICATED FITTINGS.




1. ALTERNATIVE TRENCH SECTIONS (A,B and C) ARE FOR USE ONLY WHERE STABLE, COMPACT SOIL CONDITIONS EXIST.

A. Vertical trench walls-Section Ⓐ
   1. For depths up to 5 feet, no Trench support is required.
   2. For depths exceeding 5 feet, shoring or solid sheathing is required.

B. Sloping trench walls-Section Ⓑ
   1. Sloping trench wall section shall not be used without approval of engineer, unless specifically designated on plans or in specifications.
   2. Except as approved by engineer, unsupported sloping trench walls shall not be steeper than 3/4 horiz. to 1 vert.

C. Combination of vertical and sloping trench walls-Section Ⓒ
   1. Trench depths not exceeding 5 feet shall have vertical walls in pipe zone unless otherwise approved by engineer, or where specified.
   2. For trenches with combined walls and any depth exceeding 5 feet, design calculations by a registered civil engineer and approval by governing agency of support methods are required.

2. WHERE WET, UNSTABLE OR RUNNING SOIL IS ENCOUNTERED, SOLID SHEATHING IS REQUIRED FOR ALL VERTICAL TRENCH WALLS.

**TYPICAL TRENCH SECTION** 2 VAR.
N.T.S.

| REV | DATE | BY | DESCRIPTION |
|---|---|---|---|

SCALE: 1" = 30'

DESIGNED E. Conger
DRAWN
CHECKED B. Jobbins

SUBMITTED
PROJECT ENGINEER — R.C.E. NO. — DATE
RECOMMENDED
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. — DATE

**JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.**
1301 VISTA AVENUE, BOISE, IDAHO 83705

APPROVED — DATE
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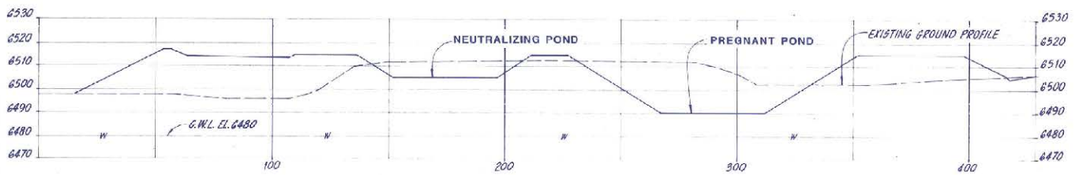
CANADIAN SUPERIOR MINING U.S. LTD.
STIBNITE MINING PROJECT GOLD MINE AND MILL
MILLING FACILITY SITE PLAN

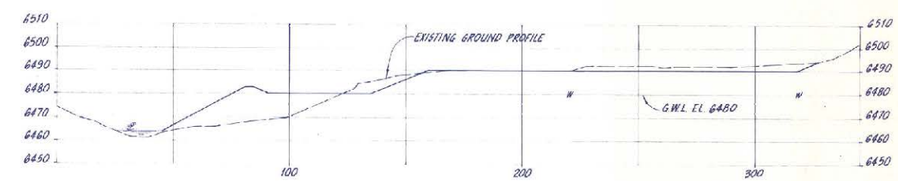
SHEET 7 OF 9 SHEETS

JOB NO. ____ FILE ____ DC 2-78

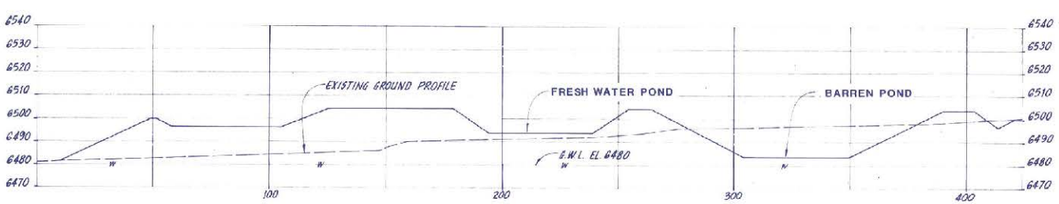
MGI-MAP-2084



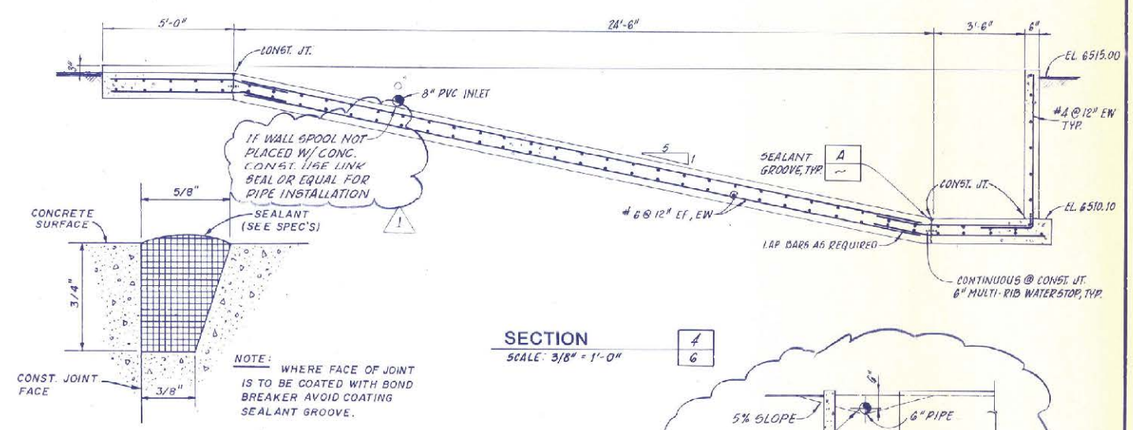

SECTION 1/6




SECTION 3/7
OFFICE




SECTION 2/6




| REV | DATE | BY | DESCRIPTION |
|---|---|---|---|
| 1 | 9/16/81 | DGM | ADD SEC. 5 & SEAL NOTE |

SCALE: 1" = 30' HORIZ. & VERT.

DESIGNED ED CRYER
DRAWN DAVE MAGLECIC
CHECKED BOB JOSSIS

SUBMITTED
PROJECT ENGINEER — R.C.E. NO. — DATE
RECOMMENDED
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. — DATE

**JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC.**
1301 VISTA AVENUE, BOISE, IDAHO 83705

APPROVED — DATE
APPROVED — DATE

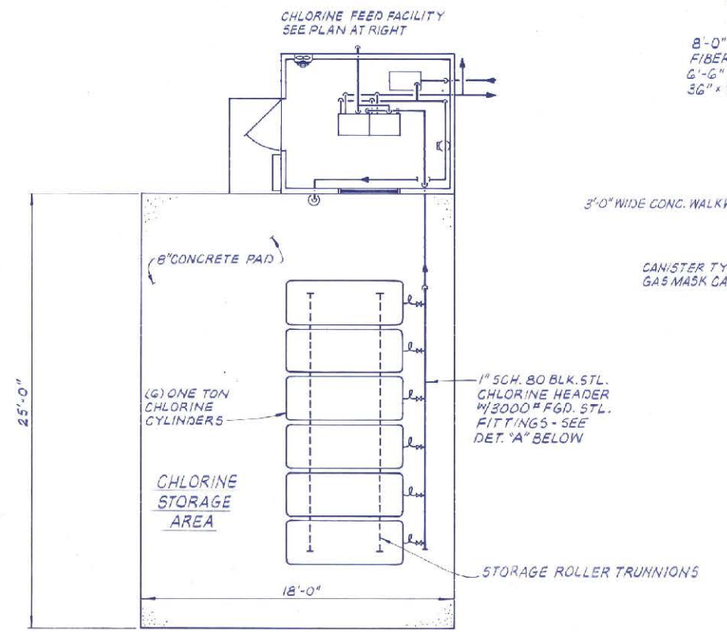
CANADIAN SUPERIOR MINING (U.S.) LTD.
STIBNITE MINING PROJECT GOLD MINE AND MILL

MILLING FACILITY–SECTIONS

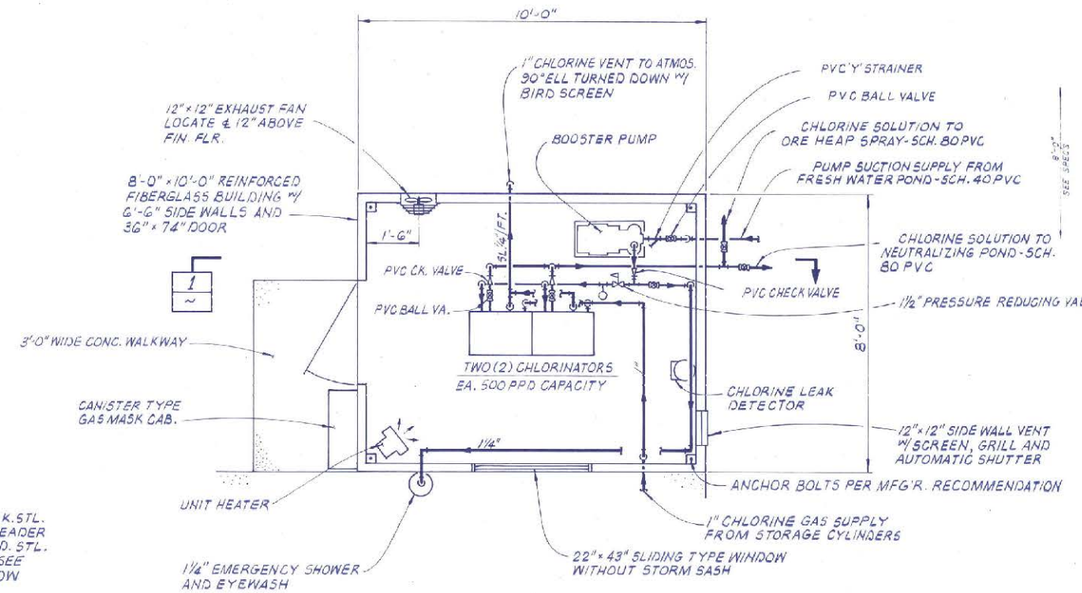
SHEET 8 OF 9 SHEETS

JOB NO. ____ FILE ____ CC 278

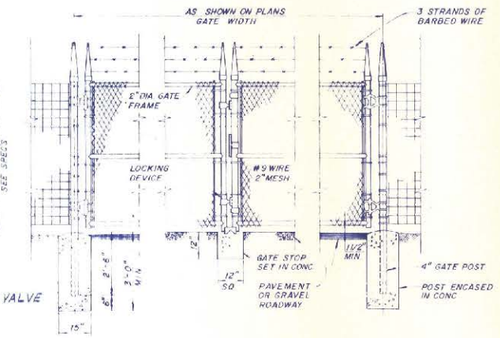
MGI-MAP-2685



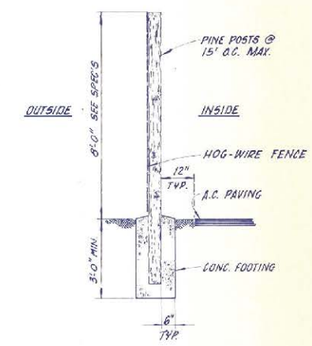

PLAN - CHLORINE STORAGE AND FEED FACILITY
SCALE: 1/4" = 1'-0"



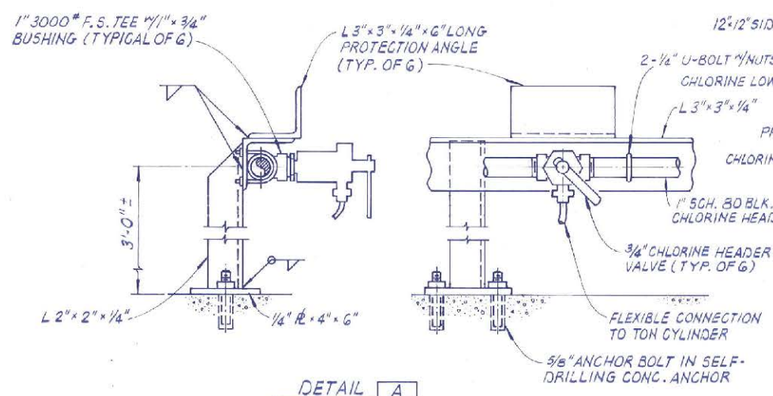

PLAN - CHLORINE FEED FACILITY
SCALE: 1/2" = 1'-0"



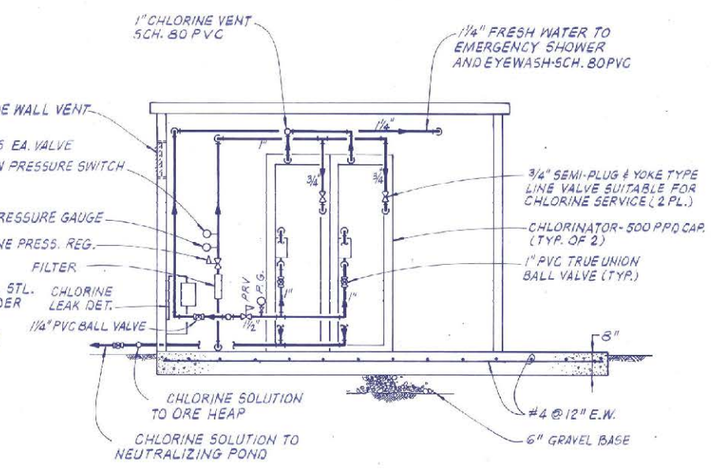

TYPICAL GATE DETAIL | A | VAR.
N.T.S.



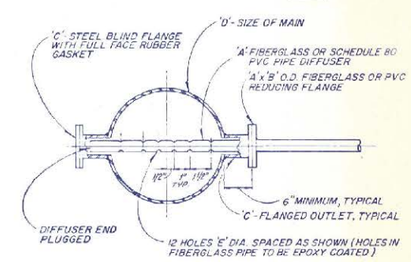

FENCE DETAIL | B | VAR.
N.T.S.




DETAIL | A | ~
NTS
CHLORINE HEADER ASSEMBLY




SECTION | 1 | ~
1/2" = 1'-0"




EXPOSED IN-LINE CHEMICAL DIFFUSER | C | 6
N.T.S.

| REV | DATE | BY | DESCRIPTION |
|---|---|---|---|

SCALE: NOTED

DESIGNED
DRAWN
CHECKED B. JOSSIS

SUBMITTED
PROJECT ENGINEER — R.C.E. NO. — DATE
RECOMMENDED
JAMES M. MONTGOMERY CONSULTING ENGINEERS, INC. — R.C.E. NO. — DATE

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1301 VISTA AVENUE, BOISE, IDAHO 83705

APPROVED — DATE
APPROVED — DATE

CANADIAN SUPERIOR MINING U.S. LTD.
STIBNITE MINING PROJECT GOLD MINE AND MILL
CHLORINATION FACILITY

SHEET 9 OF SHEETS

MGI-MAP-26866

JOB NO. ____ FILE ____ CC 2-78