

### LOCATION MAP



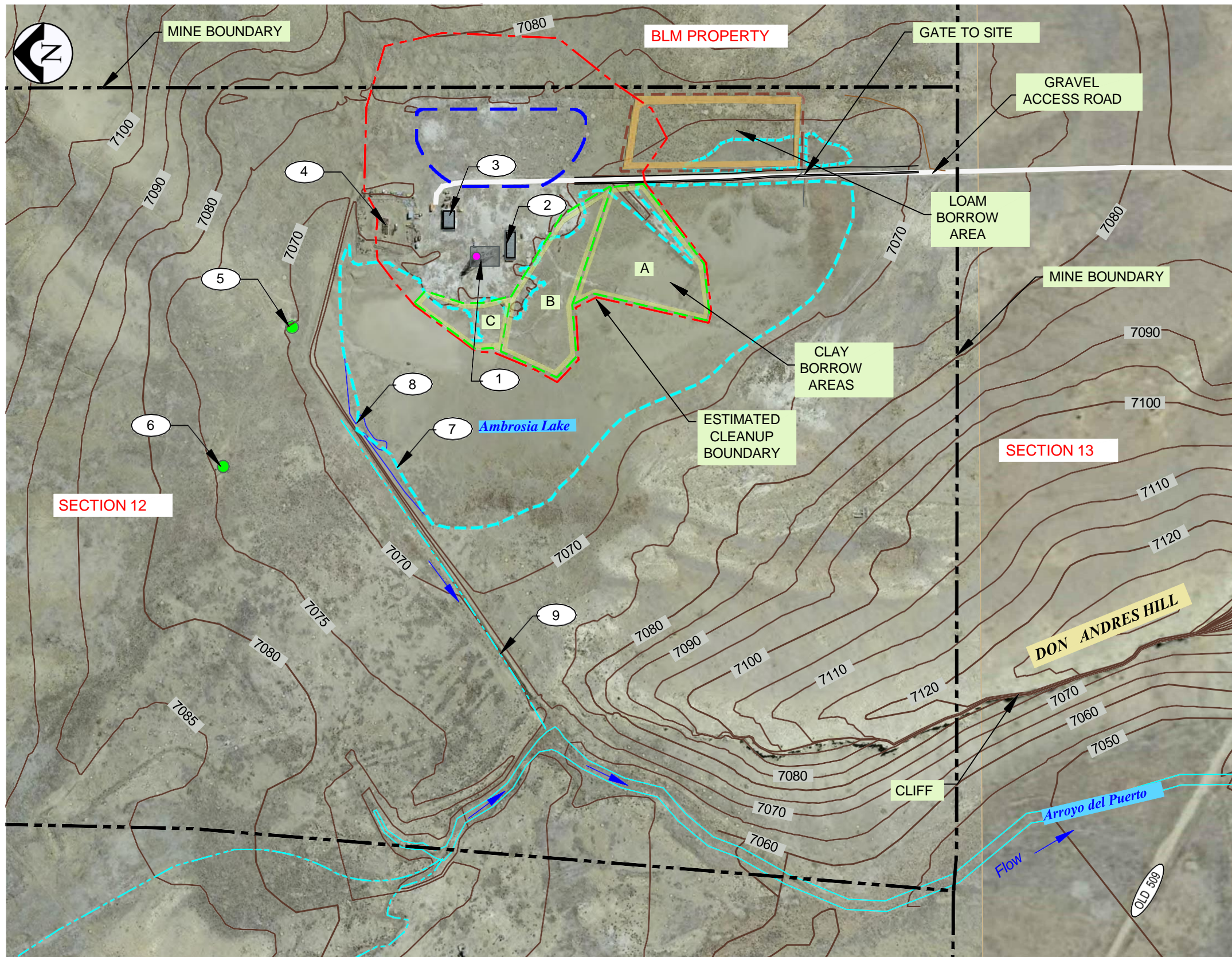
BACKGROUND MAP FROM GOOGLE MAPS

### DRAWING INDEX

SHEET NO.	DWG NO.	SHEET TITLE
CL00	GS00-GC100-00	COVER SHEET - DRAWING INDEX
CL01	GS00-GC101-00	EXISTING MINE FEATURES AND BORROW AREAS
CL02	GS00-GC102-00	PREDICTED CONCENTRATIONS OF RADIUM 226
CL03	GS00-GC103-00	FACILITY DISPOSITION PLAN
CL04	GS00-GC104-00	REMEDIAL EARTHWORK AND CWCA PLAN
CL05	GS00-GC105-00	GRADING PLAN
CL06	GS00-GC106-00	CWCA PLAN
CL07	GS00-GC107-00	CWCA N/S SECTION
CL08	GS00-GC108-00	CWCA E/W SECTIONS
CL13	GS00GC113-00	SHAFT COVER

CWCA = COVERED WASTE CONSOLIDATION AREA

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED	<b>SOUTH WEST RESOURCES</b>	PROJECT TITLE: <b>SECTION 12 MINE RECLAMTION PLAN</b>		SHEET TITLE: <b>COVER SHEET - DRAWING INDEX</b>	REV <b>2</b>
A	FOR SUBMISSION	6-24-22	EL	AK	AK		Prepared By: Alan Kuhn Associates LLC	DWG NO. <b>GS00-GC100-00</b>		
0	FOR CONSTRUCTION	10-11-23	EL	AK	AK			SIZE <b>B</b>		
2	FOR CONSTRUCTION	4-22-24	EL		AK					

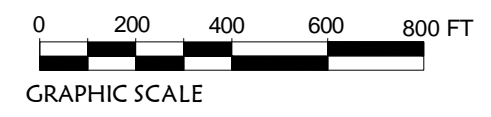


- NOTES**
- ① HEADFRAME AND SHAFT
  - ② HOIST HOUSE
  - ③ OFFICE BUILDING
  - ④ MINE DEBRIS PILE
  - ⑤ EAST VENT SHAFT
  - ⑥ WEST VENT SHAFT
  - ⑦ AMBROSIA LAKE FLOOD LEVEL = ELEV. 7069
  - ⑧ LAKE DRAINAGE POINT = ELEVATION 7069
  - ⑨ EXISTING BERM AND DRAINAGE SWALE

**LEGEND**

	PRIMARY CLAY BORROW AREAS
	PRIMARY LOAM BORROW AREA
	COVERED WASTE CONSOLIDATION AREA
	AMBROSIA LAKE
	PROPERTY LINE
	BUILDING
	VENT LOCATION
	ESTIMATED CLEAN UP BOUNDARY

NOTE: BOUNDARY AREAS SHOWN ON THIS PLAN ARE APPROXIMATE



REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED
A	FOR SUBMISSION	6-24-2022	EL	AK	AK
0	FOR CONSTRUCTION	10-11-23	EL	AK	AK
2	FOR CONSTRUCTION	4-22-24	AK		AK

**SOUTH WEST RESOURCES**

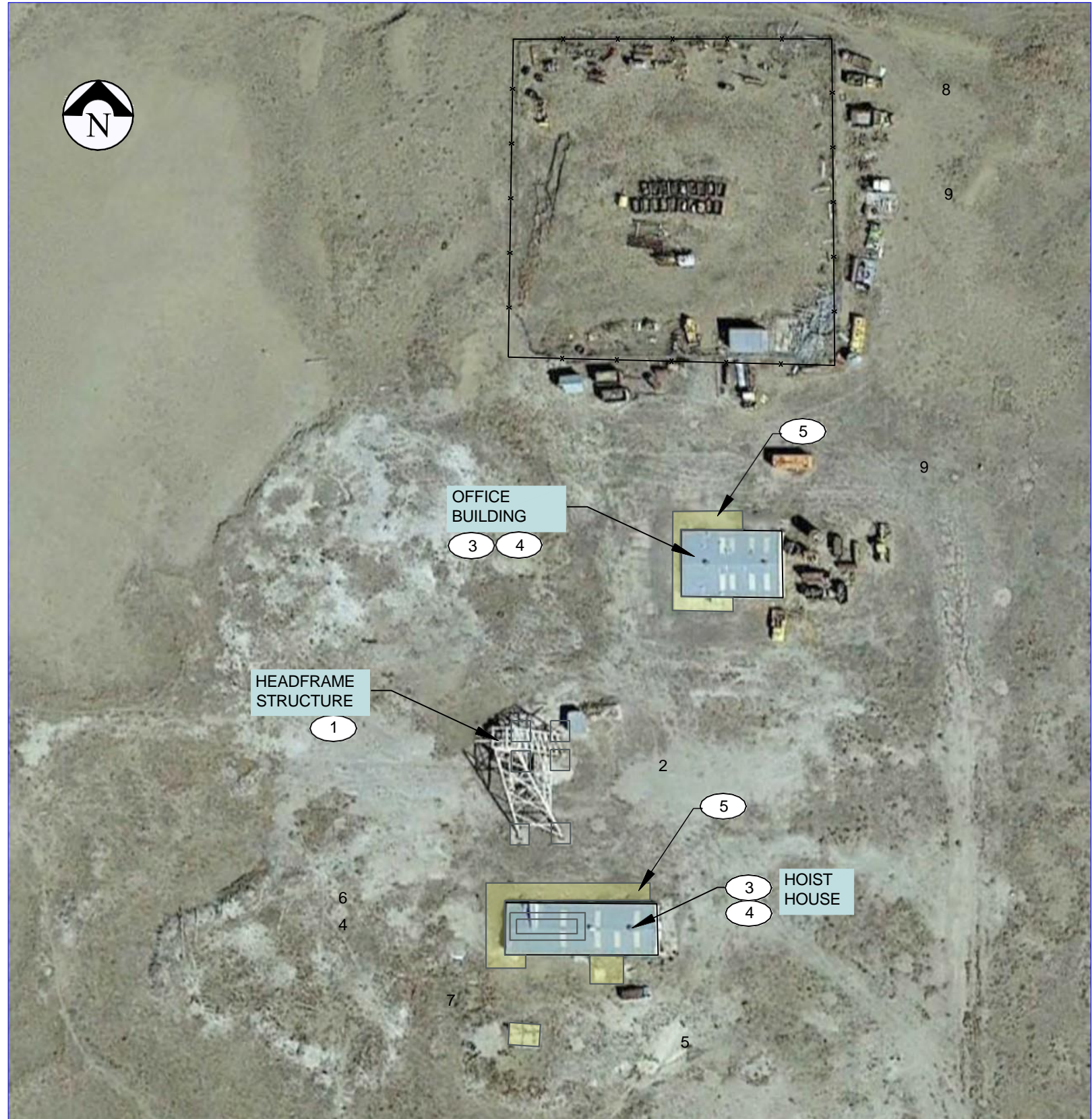
Prepared By: Alan Kuhn Associates LLC

DWG NO. **GS00-GC100-00**  
 SIZE **B** SHEET NO. **CL01**

PROJECT TITLE: **SECTION 12 MINE RECLAMATION PLAN**

SHEET TITLE: **EXISTING MINE FEATURES AND BORROW AREAS**

REV **2**



**TASKS**

**HEADFRAME STRUCTURE**

- ① HEADFRAME TO REMAIN. .- STEEL IN ORE HOPPER AND CHUTE MAY BE REMOVED FOR USE IN SHAFT CAP. .

**OFFICE BUILDING (64' X 42')**

- ③ THE OFFICE BUILDING STRUCTURE, CONCRETE SLABS, AND FOUNDATIONS TO BE LEFT IN PLACE.

- ④ CONCRETE FLOOR SLAB.

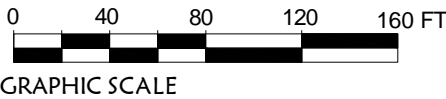
- ⑤ EXTERIOR CONCRETE SLABS. (1,035 SF)

**HOIST HOUSE (95' X 32')**

- ③ HOIST HOUSE TO BE LEFT IN PLACE..

- ④ CONCRETE FLOOR SLAB TO BE LEFT IN PLACE.

- ⑤ EXTERIOR CONCRETE SLABS TO BE LEFT IN PLACE



REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED
A	FOR SUBMISSION	6-24-2022	EL	AK	AK
0	FOR CONSTRUCTION	10-11-23	EL	AK	AK
2	FOR CONSTRUCTION	4-22-24	AK		AK

**SOUTH WEST RESOURCES**

Prepared By: Alan Kuhn Associates LLC

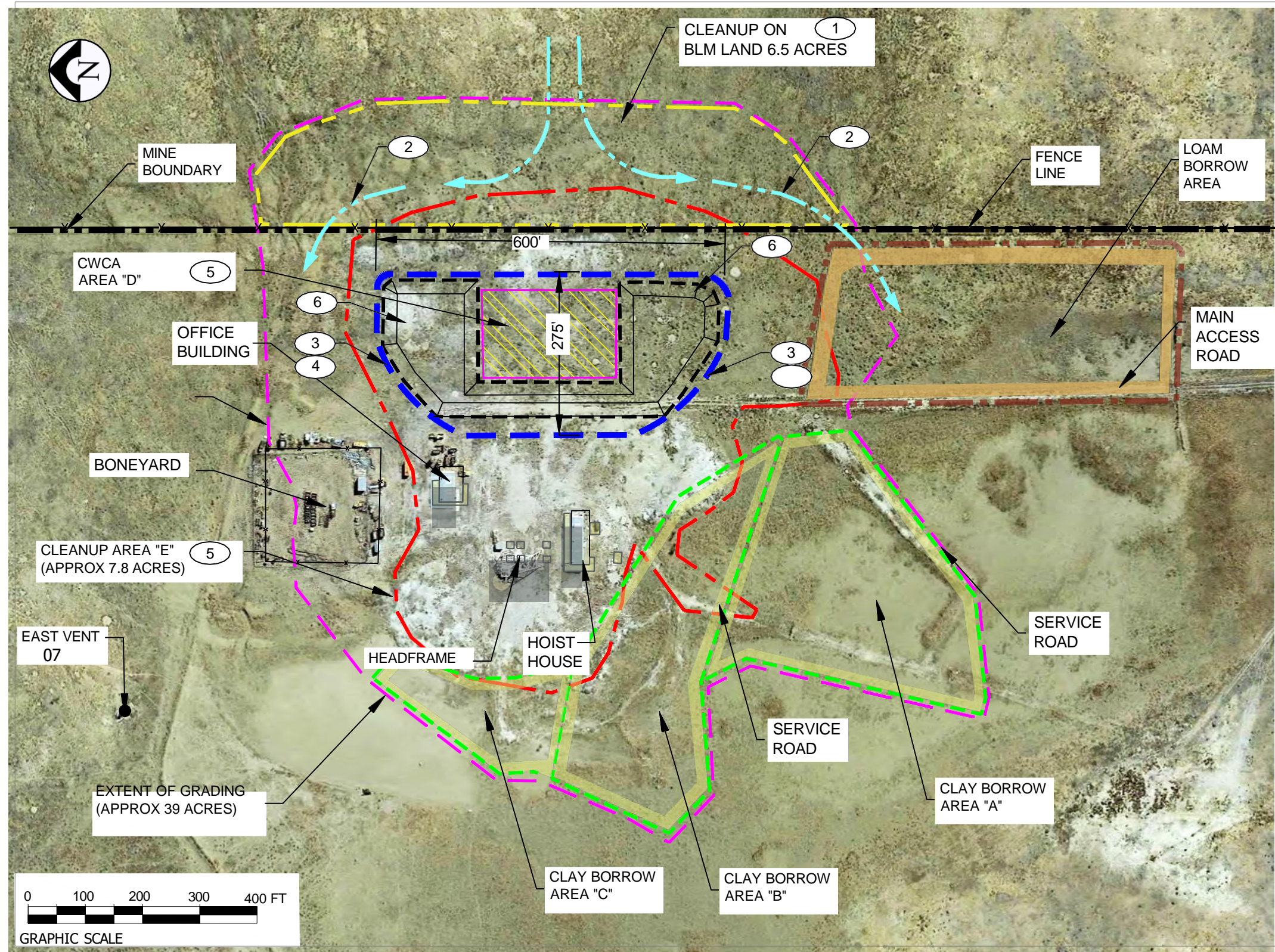
DWG NO. **GS00-GC103-00**

SIZE **B** SHEET NO. **CL 03**

**SECTION 12 MINE RECLAMATION PLAN**

SHEET TITLE: **FACILITY DISPOSITION PLAN**

REV **2**



**PHASE 1 GRADING PLAN - (DONE PRIOR TO CLEANUP EXCAVATIONS)**

**BLM LAND GRADING STEPS**

① REMOVE CONTAMINATED SOILS ON BLM LAND.

② RESTORE NATURAL RUNOFF FLOW PATTERNS AROUND CWCA.

**INITIAL CWCA GRADING STEPS**

③ REMOVE CONTAMINATED SOILS AROUND PERIMETER OF CWCA.

**PHASE 2 GRADING PLAN - (FIRST PART OF CLEANUP EXCAVATIONS)**

⑤ REMOVE THE CONTAMINATED SOILS IN AREA "E" AND PLACE IN CWCA "D". MAXIMUM HEIGHT = 6'

⑥ PLACE CONTAMINATED SOILS FROM EXCAVATION IN AREA "D". STOCKPILE CLEAN SOILS AROUND CWCA PERIMETER FOR USE AS COVER SOILS. (SEE SHEET CL06 FOR PIT DIMENSIONS).

**LEGEND**

- CWCA AREA "D" FOR PHASE 1 CLEANUP (CONTAMINATED SOILS FROM AREA "E")
- FOOTPRINT OF CWCA AT MAXIMUM BUILDOUT WITH COVER SOILS IN PLACE.
- MINE DEBRIS DISPOSAL PITS
- CLEANUP AREA "E" (RAD READINGS ABOVE 50pCi/G) = 7.8 ACRES TO CLEAN OUTSIDE OF THE CWCA.
- CLEANUP IN BLM LAND. (6.5 ACRES)
- ESTIMATED EXTENT OF GRADING (39 ACRES)
- CLAY BORROW AREAS
- LOAM BORROW AREAS

**GENERAL NOTES:**

1. THE EXTENT OF GRADING BOUNDARY AND THE BOUNDARY OF AREA "A" ARE BASED ON ERG REPORT SHEET CL02
2. ALL BUILDINGS AND FOUNDATIONS WILL REMAIN IN PLACE.
3. CWCA = COVERED WASTE CONSOLIDATION AREA

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED
<b>A</b>	FOR SUBMISSION	6-24-2022	EL	AK	AK
<b>0</b>	FOR CONSTRUCTION	10-11-23	EL	AK	AK
<b>2</b>	FOR CONSTRUCTION	4-22-24	AK		AK

**SOUTH WEST RESOURCES**

Prepared By: Alan Kuhn Associates LLC

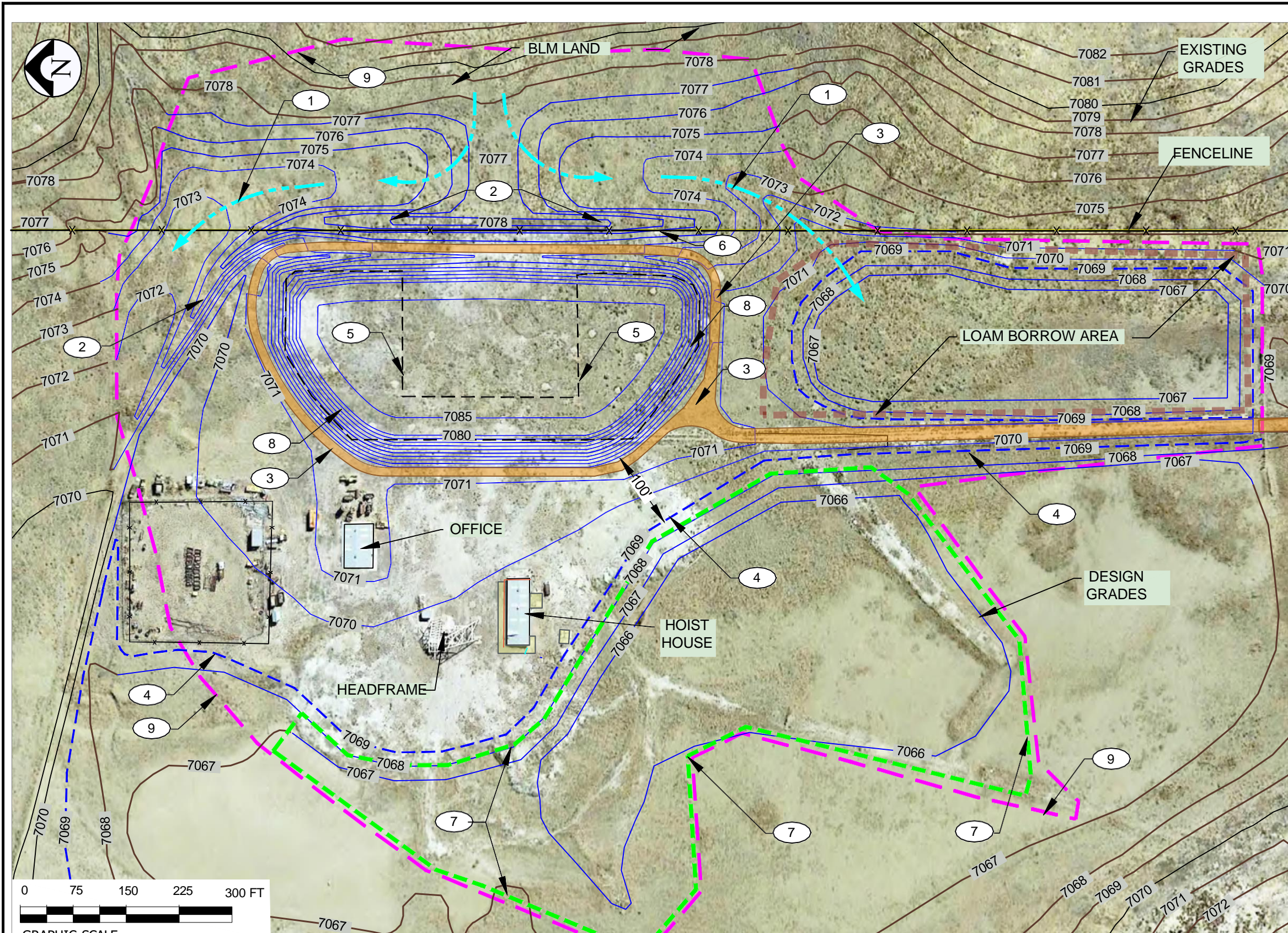
DWG NO. **GS00-GC104-00**

SIZE **B** SHEET NO. **CL04**

PROJECT TITLE: **SECTION 12 MINE RECLAMATION PLAN**

SHEET TITLE: **REMEDIAL EARTHWORK AND CWCA PLAN**

REV **2**



- NOTES**
- ① REMOVE CONTAMINATED SOILS ON BLM LAND AND RESTORE NATURAL RUNOFF FLOW PATTERNS AROUND THE CWCA.
  - ② RESTORE EXISTING DIVERSION BERM.
  - ③ 12' WIDE PERIMETER SERVICE ROAD TO ACT AS A PROTECTION BUFFER AROUND THE TOE OF THE REPOSITORY. THE ELEVATION OF THE ROAD TO BE NO LESS THAN 7071. ( 2' ABOVE THE FLOOD WATER LEVEL).
  - ④ FLOOD WATER LEVEL IN AMBROSIA LAKE = 7069'. THE TOE OF THE CWCA IS 2' HIGHER AND 100' OFFSET FROM THIS WATER LEVEL.
  - ⑤ MINE DEBRIS PITS AND TRENCH. SEE SHEET CL06 FOR DETAILS.
  - ⑥ KEEP ALL CONTAMINATED FILL A MINIMUM OF 50' FROM THE MINE PROPERTY LINE.
  - ⑦ CLAY BORROW AREAS. EXCAVATE NO DEEPER THAN 1' BELOW THE AVERAGE LAKEBED.
  - ⑧ CWCA HEIGHT WILL BE DETERMINED BY THE AMOUNT OF CONTAMINATED SOILS AND WASTE ROCK ENCOUNTERED. SEE SHEET CL06 FOR REPOSITORY DETAILS.
  - ⑨ EXTENTS OF GRADING AND CLEANUP. (30.9 ACRES.)

- GENERAL NOTES**
- G.1 THE GRADES SHOWN ON THIS DRAWING ARE FOR INFORMATIONAL PURPOSES ONLY. THE ACTUAL FINAL GRADES WILL BE DETERMINED BY THE AMOUNT OF WASTE ROCK AND CONTAMINATED SOILS REMOVED.
  - G.2 WHEN PLACING CONTAMINATED SOILS IN THE CWCA, THE CONTRACTOR SHALL TAKE TEMPORARY MEASURES, SUCH AS SMALL BERMS, TO KEEP STORM RUNOFF FROM LEAVING THE CWCA.
  - G.3 GRADING CONTRACTOR TO PROVIDE SWPP MEASURES PER STATE REGULATIONS.
  - G.4 DURING CLEANUP OPERATIONS CONTRACTOR TO TAKE MEASURES TO REDUCE THE SPREAD OF CONTAMINATION BY EITHER TRUCK TRAFFIC OR BY STORM RUNOFF.

CWCA= COVERED WASTE CONSOLIDATION AREA

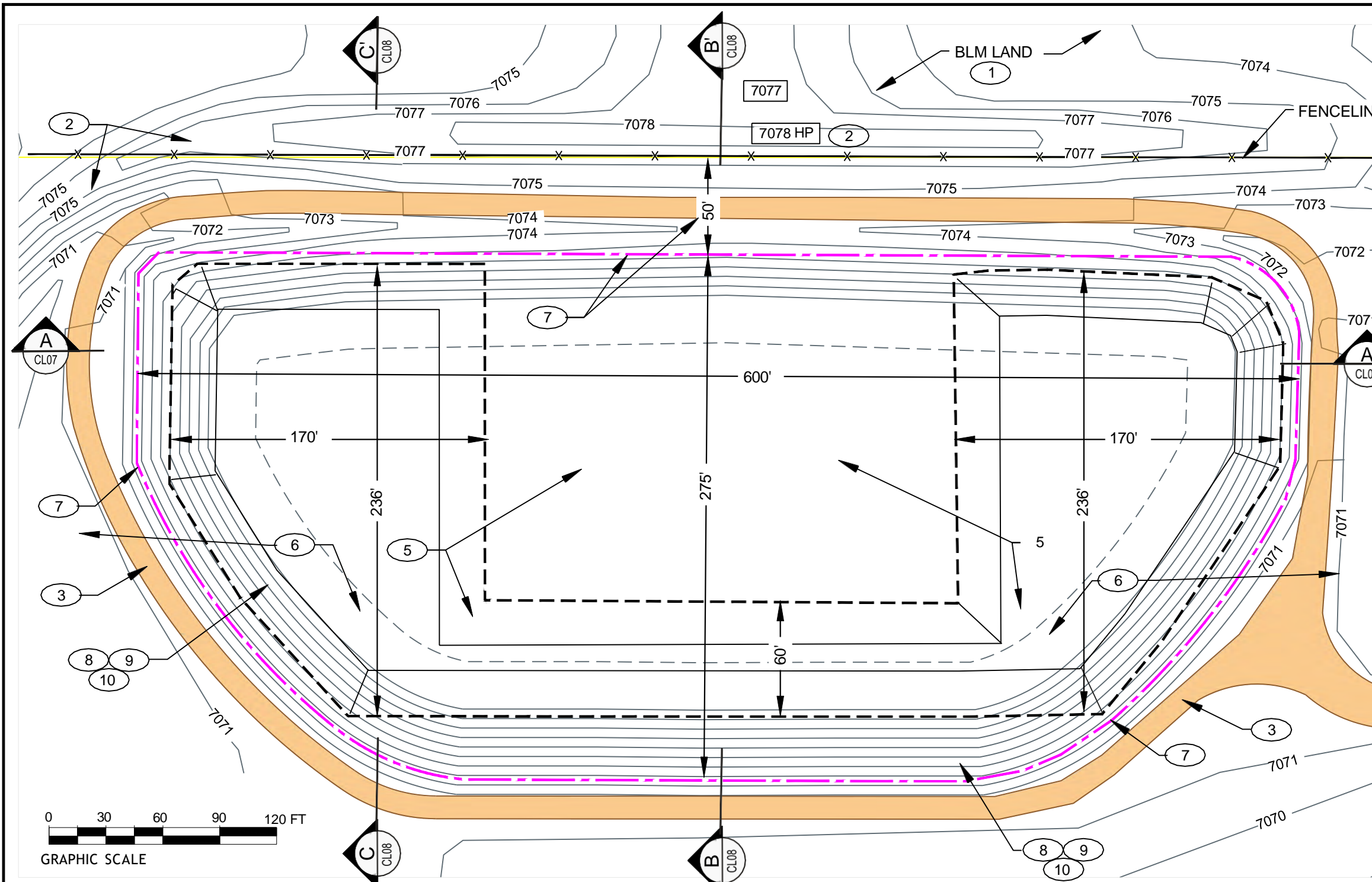
REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED
A	FOR SUBMISSION	6-24-22	EL	AK	AK
0	FOR CONSTRUCTION	10-11-23	EL	AK	AK
2	FOR CONSTRUCTION	4-22-24	EL	AK	AK

**SOUTH WEST RESOURCES**

Prepared By: Alan Kuhn Associates LLC

DWG NO. **GS00-GC105-00**  
 SIZE **B**  
 SHEET NO. **CL05**

PROJECT TITLE: <b>SECTION 12 MINE RECLAMATION PLAN</b>	REV <b>2</b>
SHEET TITLE: <b>GRADING PLAN</b>	

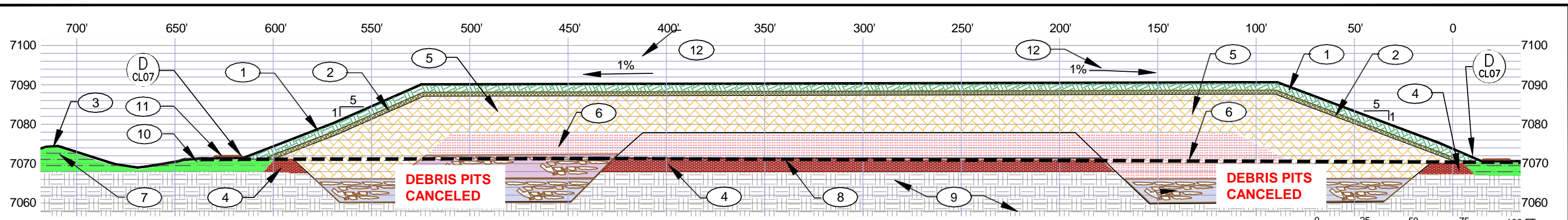


- NOTES**
- 1 REMOVE CONTAMINATED SOILS ON BLM LAND AND RESTORE NATURAL RUNOFF FLOW PATTERNS AROUND THE CWCA AREA BEFORE ANY EARTHWORK IS DONE WITHIN THE CWCA.
  - 2 RESTORE EXISTING DIVERSION BERM.
  - 3 12' WIDE PERIMETER SERVICE ROAD TO ACT AS A PROTECTION BUFFER AROUND THE TOE OF THE CWCA. THE ELEVATION OF THE ROAD TO BE NO LESS THAN 7071. ( 2' ABOVE THE FLOOD WATER LEVEL).
  - 4 CANCELED
  - 5 CANCELED..
  - 6 STOCKPILE CLEAN SPOILS AROUND THE PERIMETER OF THE CWCA FOR USE AS COVER SOILS.
  - 7 EXTENT OF CONTAMINATED FILL. KEEP ALL CONTAMINATED FILL A MINIMUM OF 50' FROM THE MINE PROPERTY LINE.
  - 8 ALL CWCA SLOPES = 5H:1V.
  - 9 CWCA HEIGHT WILL BE DETERMINED BY THE AMOUNT OF CONTAMINATED SOILS AND WASTE ROCK ENCOUNTERED.
  - 10 CWCA COVER SOILS TO CONSIST OF 1' OF CLAY AND/OR. SEE PROJECT SPECIFICATIONS FOR COVER MATERIAL AND PLACEMENT REQUIREMENTS.

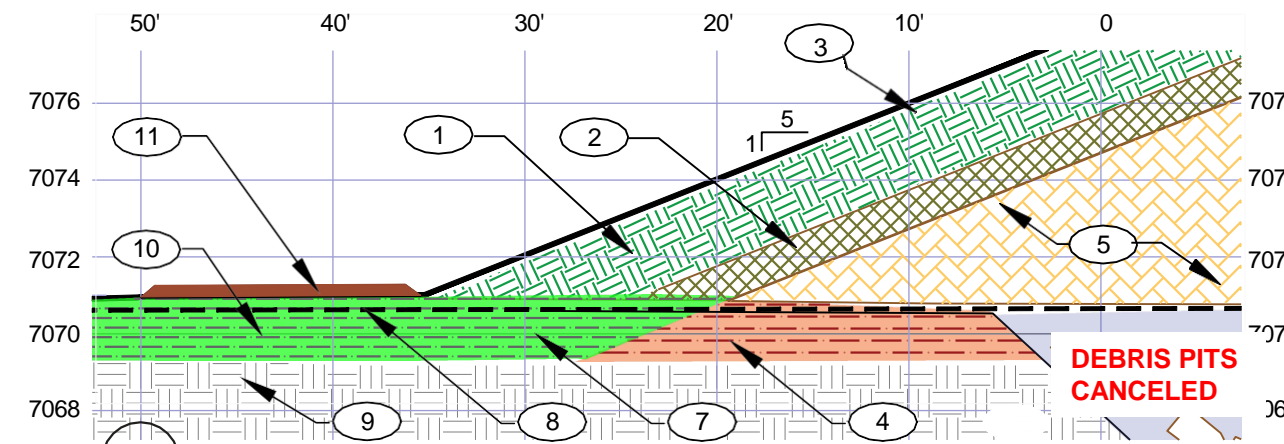
- GENERAL NOTES**
- G.1 DURING CLEANUP OPERATIONS CONTRACTOR TO TAKE MEASURES TO REDUCE THE SPREAD OF CONTAMINATION BY EITHER TRUCK TRAFFIC OR BY STORM RUNOFF.
  - G.2 WHEN PLACING CONTAMINATED SOILS IN THE CWCA THE CONTRACTOR SHALL TAKE TEMPORARY MEASURES, SUCH AS SMALL BERMS, TO KEEP STORM RUNOFF FROM EITHER ENTERING OR LEAVING THE CWCA.
  - G.3 CONTRACTOR TO PROVIDE SWPP MEASURES PER STATE REGULATIONS.

**CWCA = COVERED WASTE CONSOLIDATION AREA**

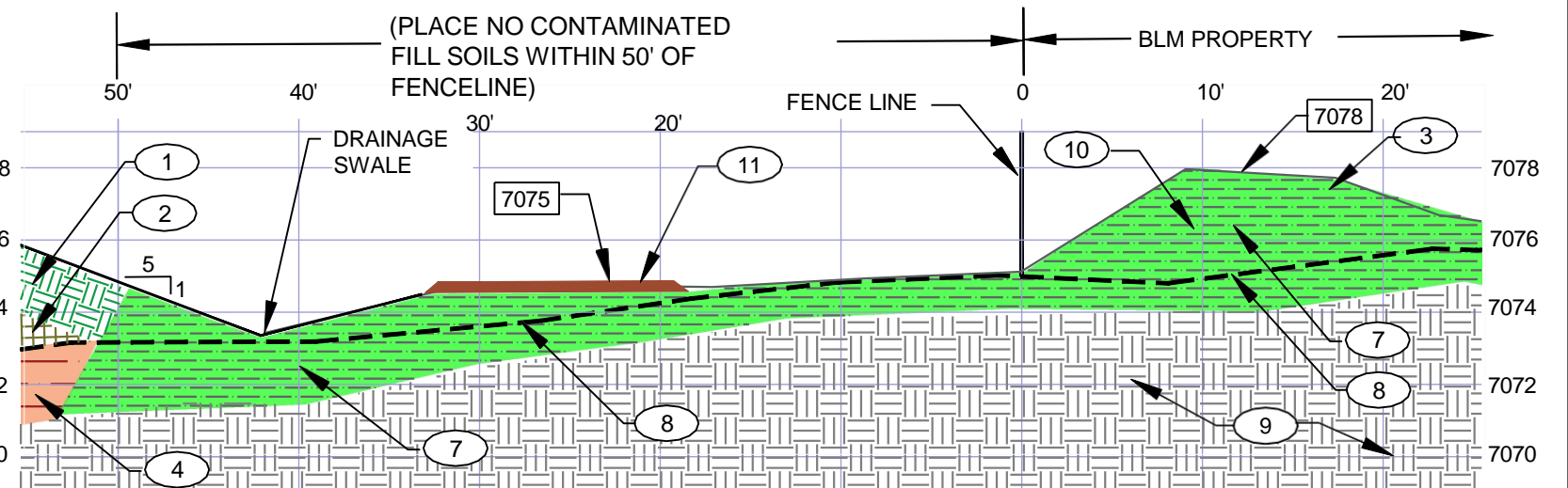
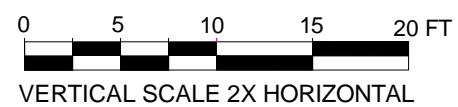
REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED	SOUTH WEST RESOURCES		PROJECT TITLE:		
A	FOR SUBMISSION	6-24-2022	EL	AK	AK	Prepared By: Alan Kuhn Associates LLC		SECTION 12 MINE RECLAMATION PLAN		
0	FOR CONSTRUCTION	10-11-23	EL	AK	AK			DWG NO. GS00-GC106-00	CWCA GRADING PLAN	
2	FOR CONSTRUCTION	4-22-24	EL	AK	AK			SIZE B SHEET NO. CL06	REV 2	



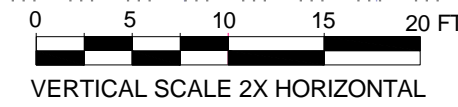
AA' NORTH/SOUTH SECTION THROUGH CWCA



D TOE OF CWCA SLOPE DETAIL (NORTH, SOUTH AND WEST SIDES)



E TOE OF SLOPE DETAIL (EAST SIDE/BLM PROPERTY)



LEGEND

	COVER SOIL, TOTAL OF 12":MIN.
	GROWTH MEDIA SOILS (LOAM)
	CLAY RADON BARRIER COVER SOILS
	RADWASTE FILL (5-50 pCi/g)
	RADWASTE FILL (51 - 100 pCi/g)
	CLEAN SOIL FILL
	EXISTING BELOW GRADE RADWASTE
	EXISTING UNCONTAMINATED SOIL

NOTES

- 1 COVER SOIL, MINIMUM 12", LOAM AND/OR CLAY
- 2 COVER SOIL, MINIMUM 12", LOAM AND/OR CLAY
- 3 GRADE CWCA SLOPES TO 5H:1V
- 4 RESTORE DIVERSION BERMS AND DRAINAGE SWALES TO DIVERT RUNOFF AROUND CWCA.
- 5 EXISTING BELOW GRADE RADWASTE WITHIN CWCA FOOTPRINT STAYS IN PLACE. OUTSIDE OF CWCA, REMOVE AND PLACE IN THE SHAFT OR CWCA. RADWASTE FILL (5-50 pCi/g) PLACE IN UPPER LEVELS OF THE CWCA
- 6 RADWASTE FILL (51 - 100 pCi/g) . PLACE IN THE CENTER AND AT THE BOTTOM OF THE CWCA)
- 7 CLEAN SOIL FILL AS NEEDED TO ACHIEVE FINAL GRADES.
- 8 EXISTING GROUND SURFACE.

- 9 EXISTING UNCONTAMINATED SOILS
- 10 GRADING OUTSIDE OF CWCA REMOVE ALL CONTAMINATED SOILS, DEPOSIT THEM IN THE CWCA, AND FILL WHERE NEEDED WITH CLEAN SOILS TO ESTABLISH FINAL GRADES.
- 11 12' WIDE PERIMETER SERVICE ROAD TO ACT AS A PROTECTION BUFFER AROUND THE TOE OF THE CWCA. THE ELEVATION OF THE ROAD TO BE NO LESS THAN 7071. ( 2' ABOVE THE FLOOD WATER LEVEL).
- 12 TOP OF CWCA WILL BE DETERMINED BY THE AMOUNT OF WASTE ROCK AND CONTAMINATED SOILS PLACED IN THE CWCA. THE TOP OF COVER TO SLOPE 1% TO THE WEST.

GENERAL NOTES

- G.1 CWCA = COVERED WASTE CONSOLIDATION AREA
- G.2 DURING CLEANUP OPERATIONS CONTRACTOR TO TAKE MEASURES TO REDUCE THE SPREAD OF CONTAMINATION BY EITHER TRUCK TRAFFIC OR BY STORM RUNOFF.
- G.3 FOR ALL MATERIAL AND PLACEMENT REQUIREMENTS SEE PROJECT SPECIFICATIONS.
- G.4 ACTUAL FINAL HEIGHT OF THE CWCA WILL DEPEND ON THE QUANTITY OF WASTE ROCK AND CONTAMINATED SOILS ENCOUNTERED DURING THE CLEANUP.

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED
A	FOR SUBMISSION	6-24-2022	EL	AK	AK
0	FOR CONSTRUCTION	10-11-23	EL	AK	AK
2	FOR CONSTRUCTION	4-22-24	EL	AK	AK

**SOUTH WEST RESOURCES**

Prepared By: Alan Kuhn Associates LLC

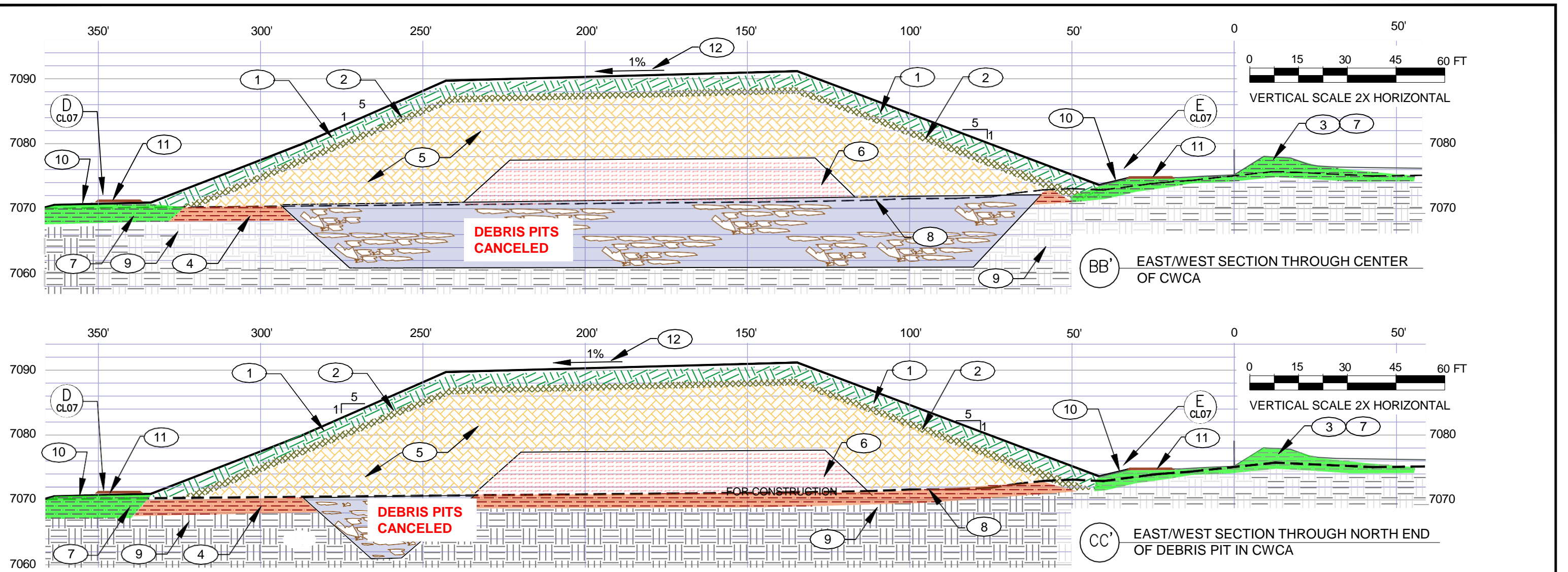
DWG NO. GS00-GC107-00

SIZE B SHEET NO. CL07

PROJECT TITLE: SECTION 12 MINE RECLAMATION PLAN

CWCA NORTH/SOUTH SECTION

REV 2



**NOTES**

- (1) COVER SOIL, TOTAL OF 12":MIN.
- (2) COVER SOIL, MINIMUM 12", LOAM AND/OR CLAY
- (3) RESTORE DIVERSION BERMS AND DRAINAGE SWALES TO DIVERT RUNOFF AROUND CWCA.
- (4) EXISTING BELOW GRADE RADWASTE (ESTIMATED DEPTH = 1.5' THICK) (OUTSIDE OF CWCA- REMOVE AND PLACE IN THE SHAFT OR CWCA.) (INSIDE OF CWCA FOOTPRINT - LEAVE IN PLACE.)
- (5) RADWASTE FILL (5-50 pCi/g) (THICKNESS AS NEEDED - PLACE IN UPPER LEVELS OF THE CWCA)
- (6) RADWASTE FILL (51 - 100 pCi/g) (THICKNESS AS NEEDED - PLACE IN THE CENTER AND AT THE BOTTOM OF THE CWCA)
- (7) CLEAN SOIL FILL AS NEEDED TO ACHIEVE FINAL GRADES.
- (8) EXISTING GROUND SURFACE.
- (9) EXISTING UNCONTAMINATED SOILS
- (10) GRADING OUTSIDE OF CWCA= REMOVE ALL CONTAMINATED SOILS, DEPOSIT THEM IN THE CWCA, AND FILL WHERE NEEDED WITH CLEAN SOILS TO ESTABLISH FINAL GRADES.
- (11) 12' WIDE PERIMETER SERVICE ROAD TO ACT AS A PROTECTION BUFFER AROUND THE TOE OF THE CWCA. THE ELEVATION OF THE ROAD TO BE NO LESS THAN 7071. ( 2' ABOVE THE FLOOD WATER LEVEL).
- (12) TOP OF CWCA WILL BE DETERMINED BY THE AMOUNT OF CONTAMINATED SOILS AND MINE DEBRIS PLACED IN THE CWCA. THE TOP TO SLOPE 1% TO THE WEST.

**GENERAL NOTES**

- G.1 CWCA = COVERED WASTE CONSOLIDATION AREA
- G.2 DURING CLEANUP OPERATIONS CONTRACTOR TO TAKE MEASURES TO REDUCE THE SPREAD OF CONTAMINATION BY EITHER TRUCK TRAFFIC OR BY STORM RUNOFF.
- G.3 FOR ALL MATERIAL AND PLACEMENT REQUIREMENTS SEE PROJECT SPECIFICATIONS.
- G.4 THE ACTUAL HEIGHT OF THE VARIOUS LAYERS IN THE CWCA WILL DEPEND ON THE QUANTITY OF CONTAMINATED SOILS ENCOUNTERED DURING THE CLEANUP.

	COVER SOIL, TOTAL OF 12":MIN.
	GROWTH MEDIA SOILS (LOAM)
	CLAY RADON BARRIER COVER SOILS
	RADWASTE FILL (5-50 pCi/g)
	RADWASTE FILL (51 - 100 pCi/g)
	CLEAN SOIL FILL
	EXISTING BELOW GRADE RADWASTE
	EXISTING UNCONTAMINATED SOILS

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED
A	FOR SUBMISSION	6-24-2022	EL	AK	AK
0	FOR CONSTRUCTION	10-11-23	EL	AK	AK
2	FOR CONSTRUCTION	4-22-24	EL	AK	AK

**SOUTH WEST RESOURCES**

Prepared By: Alan Kuhn Associates LLC

DWG NO. **GS00-GC108-00**

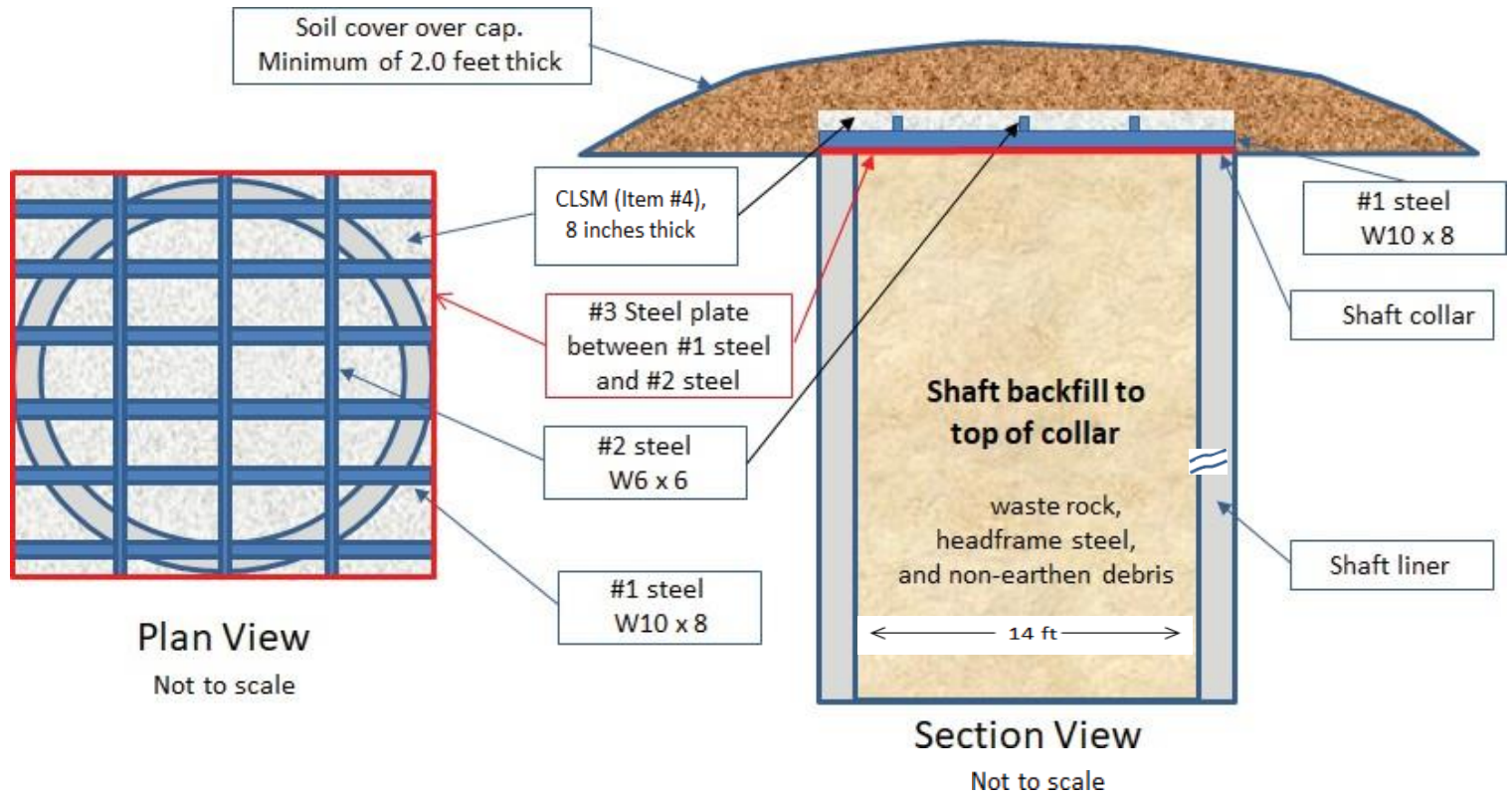
SIZE **B** SHEET NO. **CL08**

**SECTION 12 MNE RECLAMATION PLAN**

**CWCA EAST/WEST SECTIONS**

REV **2**





**NOTES**

1. Waste rock, headframe steel and other non-earthen debris placed in the shaft as backfill to the top of the shaft collar shall be allowed to settle for at least 28 days and topped of with earthen material before starting collar repairs and cap construction.
2. Damaged or deteriorated concrete at the top of the shaft collar shall be removed, exposed surfaces cleaned, and the remaining spaces spaces filled with 3000 psi concrete to complete a uniform surface to support the steel plate
3. Steel salvaged from headframe demolition to be used for cap construction shall be scanned to ensure it meets release standards.  
 All other steel shall be disposed in the shaft.  
 Each contact between cap steel plate and beams and between beams shall be tack welded at least two places at each contact.

SHAFT CAP - LIST OF MATERIALS			
Item #	Quantity	Material	Source
1	6 x16 ft @	Steel, W10 x 8	headframe demolition
2	3 x 16 ft @	steel, W6 x 6	headframe demolition
3	256 ft <sup>2</sup>	steel plate, 0.25-0.50 inch	existing cover, ore chute and hopper demolition
4	9 CY	Controlled Low Strength Material (CLSM) per ACI Committee 229	C&E Concrete

REV	DESCRIPTION	DATE	DRAWN BY	ENGINEER	APPROVED	<b>SOUTH WEST RESOURCES</b>  Prepared By: Alan Kuhn Associates LLC	DWG	+	PROJECT TITLE: <b>SECTION 12 MINE RECLAMATION PLAN</b>	SHEET TITLE: <b>SHAFT COVER</b>  REV <b>1</b>	
A	CONCEPTUAL DESIGN	5-22-2020	EL	AK	AK		SIZE	B	SHEET NO.		CL13
0	DRAFT	3-2 -23	AK	AK	AK						
1	FOR CONSTRUCTION	4-22-24	AK	AK	AK						