R7E
SECTION 4

ROADS

1) Main Haul/Access Road
This road provides access to the site from the Town of Clear Creek and will remain following reclamation work. The iron gate at the mine entrance will remain so Jack Otani can lock the site to prevent unauthorized entrance. The sign at the entrance should be removed or re-identified as to now belonging to Jack Otani.

2) Improved Access Road
This road was improved during mining activities to provide access not only up Mud Creek but also to the upper portal bench. This road will remain following reclamation activities to serve as continuing access up Mud Creek.

3) Existing Mud Creek Road
This road is the original Mud Creek road which exists now in its original condition. It will remain.

4) Portal Access Road
This road provided access from the lower bench to the mine entries. It will be re-contoured, scarified, mulched, and seeded as part of reclamation activities.

5) Exploration Road
This road was constructed for some previous exploration by drilling work. It has been reclaimed. No additional work is necessary.

6) General Access Road
This road provides access to the substation, powerline transformer pole, culinary and fire protection water storage tanks, and for some former exploration work. This road will remain following reclamation activities. The road surface will be dressed and the cut side ditch re-established

7) Substation Access Road
Although the substation will be removed and sold, the powerline and main transformer pole will remain for future use by Jack Otani. Therefore, the substation access road will be left in place.

8) North Access Road to Development Waste Pile
This road will not be needed for postmining use. It will be re-contoured, scarified, mulched, and seeded as part of reclamation activities.

9) Exploration Road
This road was constructed for some previous exploration work. It has been reclaimed. No additional work is necessary.

10) Access Road to Water Tanks
This road provides access to the culinary and fire protection water storage tanks. It will remain following reclamation activities for future use by Jack Otani.

CULVERTS

11) Culvert A - 84" Diameter CSP This culvert will be removed

12) Culvert B - 84" Diameter CSP
This culvert will remain in place following reclamation activities. It will allow for continued access into the lower bench area.

13) Culvert C - 84" Diameter CSP
This culvert will remain in place following reclamation activities. It will allow for continued access into the lower bench area.

14) Culvert D - 24" Diameter CMP
This culvert is used to route water from undisturbed watershed east of site beneath the mine development waste pile and lower bench into Mud Creek. The portion of this culvert underneath the mine development waste pile will be removed, and the drainage channel re-established. The part of the culvert beneath the lower bench area will remain for future drainage control. An appropriate "headwall" and riprap will be used at this new culvert entrance for erosion control.

14A) Culvert D' This 42" diameter corrugated metal pipe culvert will be installed parallel to Culvert D.

15) Culvert E - 8" Diameter CMP
This culvert is used to route water from Road #7 and #8 and a small portion of the surface of the mine development waste pile into the ditch which diverts runoff into the existing sediment pond structures. This culvert will be removed during reclamation activities as it will have no future use.

16) Culvert F - 8" Diameter CMP
This culvert is used to route water from the portal bench area into the ditch at the base of the slope which diverts runoff into the existing sediment pond structures. This culvert will be removed during reclamation work as it will have no future use.

DRAINAGE CONTROL

17) Lower Sediment Pond Cell
This structure will remain following reclamation activities for future sediment control. The NPDES permit for this structure will be vacated. A riprap energy dissipator will be installed downstream of the emergency spillway to this pond.

18) Upper Sediment Pond Cell
This structure will remain following reclamation activities for future sediment control. The emergency spillway to this pond will be reconstructed.

19) Berm A
This small berm is used to route runoff from the lower bench area into the sediment pond structures. It will be reconstructed during reclamation activities.

20) Ditch B
This small ditch is used to route runoff from disturbed slopes east of the lower bench area into the sediment pond structures. It will be reconstructed during reclamation activities.

TOPSOIL

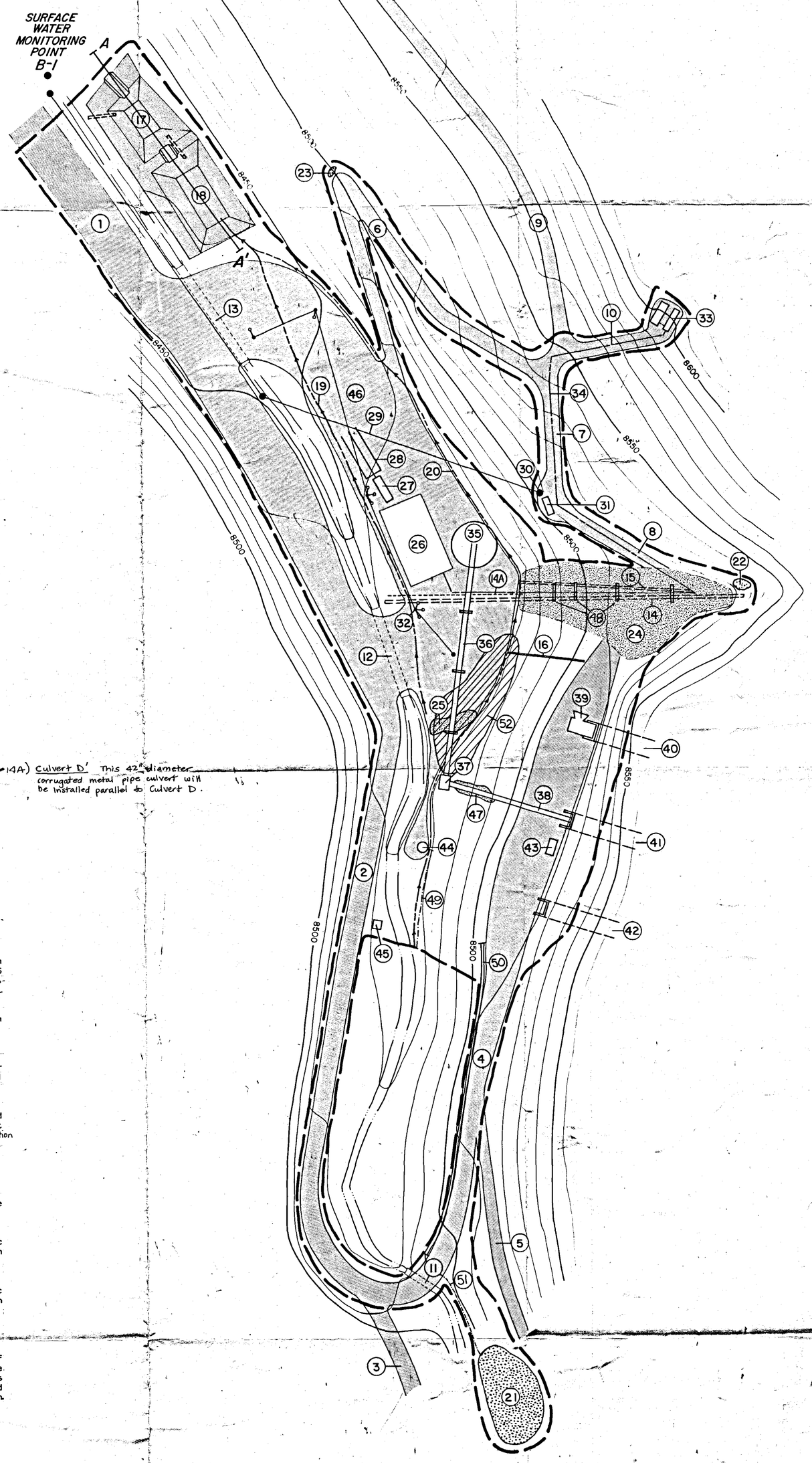
21) Topsoil Stockpile A
This topsoil stockpile contains approximately 290 cubic yards of topsoil which will be used in the reclamation activities.

22) Topsoil Stockpile B
This topsoil stockpile contains approximately 40 cubic yards of topsoil which will be used in the reclamation activities.

23) Topsoil Stockpile C
This topsoil stockpile contains approximately 10 cubic yards of topsoil which will be used in the reclamation activities.

DEVELOPMENT WASTE

24) Mine Development Waste Pile
This pile contains approximately 4,000 cubic yards of mine development waste which was removed from the underground mine during operations. This material will be used to seal the underground entries on the portal bench.



25) Small Development Waste Pile

This pile contains approximately 200 cubic yards of mine development waste. This material will be placed on the portal bench with the remainder of the mine development waste.

STRUCTURES

26) Office, Bath House & Shop
This structure will remain after reclamation activities for use by Jack Otani.

27) Septic Tank
This structure will remain for future use.

28) Leach Field
The leach field will be left in place for use after reclamation activities.

29) Powerline
The powerline will remain after reclamation activities to provide electric power for Jack Otani.

30) Main Transformer Pole
This pole was installed to serve as the main transformer pole for the site. It will remain for future use.

32) Light Poles
The numerous light poles located around the lower bench area will remain following reclamation activities.

33) Culinary and Fire Protection Water Storage Tanks
These tanks are buried and will remain for future use by Jack Otani.

34) Water Main 4" PVC - Class 160
The water main is a buried line that runs from the water storage tanks to the office, bath house and shop. This line will remain after reclamation.

35) Loading Bin
This structure will be removed from the site.

40) Exhaust/Fan Entry
Once the fan and associated structures are removed, then the exhaust/fan entry can be closed. The entry will be permanently sealed by backfilling underground development waste and overburden material into and over the opening to prevent future access in the old workings.

41) Belt Entry
This entry has caved since cessation of mining in 1982. No access is possible into the underground workings. The entry will be permanently sealed by placing underground development waste and overburden material over the caved entry to prevent access into the old workings.

42) Intake Entry
This entry has caved since cessation of mining in 1982. No access is possible into the underground workings. The entry will be permanently sealed by placing underground development waste and overburden material over the caved entry to prevent access into the old workings.

T 14 S

45) Water Well
The water well will remain for long-term use by Jack Otani.

MISCELLANEOUS

46) General Housekeeping on Lower Bench Area
Support items such as cinder blocks, roof bolts, aluminum piping, conveyor idlers, wood wedges, etc. will be left for use by Jack Otani or sold if possible.

47) A Small Amount of Mine Development Waste on Portal Outslope Underneath Conveyor
This small amount of material should be removed from underneath the conveyor. Hand methods would be most appropriate for removal of this material.

48) Straw bale dikes as needed

49) Sediment Fence will be installed if, during subsequent inspections, the UDOGM staff deem it necessary to protect the hydrologic balance.

50) Straw bale dike

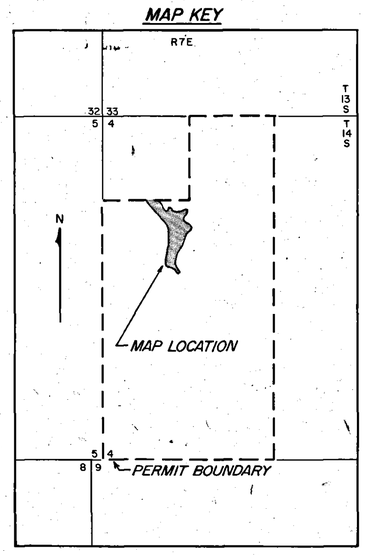
51) Sediment Fence

52) Alternate waste disposal location

LEGEND

- DISTURBED AREA BOUNDARY
- ROADS & BENCH AREAS
- MINE DEVELOPMENT WASTE
- TOPSOIL STOCKPILE
- SEDIMENT POND STRUCTURE

MAP KEY



SCALE
50 0 50 100 feet
CONTOUR INTERVAL: 10 FT.

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OCT 29 1986
DIVISION OF
OIL, GAS & MINING

REVISED 10/86, DJK

NORTH AMERICAN EQUITIES, n.v.

RECLAMATION PLAN

Scale:	Date:	Design By:	Drawn By:
1" = 50'	MAY 1985	AWC	KRL

ACZ INC.
ENGINEERING AND ENVIRONMENTAL DIVISION
STEAMBOAT SPRINGS, CO 80477

Drawing Number: MAP 7