VOLUME II-E

LIST OF EXHIBITS - CONTINUED

additional conveyor was also installed to handle the waste rock generated by the mining process. A metal slope belt-drive building with dimensions of 32 x 40 x 20 feet, located north of the existing transfer building, was constructed in 1995, and provides electrical and mechanical support for conveyor system. Bonding calculations addressing removal of the new slope belt-drive building are presented in Volume 1-A.

TCC's upgraded coal handling facilities provide the mine with the flexibility to convey coal at varying rates depending on demand. Uniform construction practices utilized in the facility upgrades include driving/installing caissons and building grade beams and footers to provide an adequate foundation for new or modified structures. The individual design requirements for the various structures dictate the type of foundation required. The facilities are shown on Map 24. During the upgrade, the width of the slope conveyor belt was increased to accommodate the higher tonnage. All belts and systems are sized to efficiently convey the increased tonnage. The existing transfer building is used to support the slope-belt.

The new transfer building is located south of the existing transfer building. In this building, coal is transferred from the slope-belt to the stacker tube feed-belt, or waste rock is transferred from the slope-belt to the waste rock conveyor belt. The location of the belt has been modified to facilitate operations around the storage building. The new location, as shown on Map 24, Surface Facilities, required excavating approximately 11,000 CY of spoil and rerouting Ditch D-4 around the stockpile. The excavated material was either placed in the reclaim tunnel excavation or in the waste rock disposal area. The excavated spoil was sloped to 1H:1V or steeper depending on field conditions. If field conditions require, a safety bench will be constructed in the cut slope. Removal of this material will not impact the reclamation plan.

During construction of the coal stockpile pad and haulroad, a minor amount of cut and fill work was required. The northwestern edge of the pad and the haulroad required approximately 20,000 CY of fill. Approximately 6,000 CY of fill was required for the remainder of the area to get the pad to grade. During site preparation, some of the existing fill was removed from this area. Estimates indicate approximately 15,000 CY of material was removed, relative to the existing configuration at the time. Of this volume, approximately 12,000 CY was not suitable for construction proposes and was placed in the waste rock disposal site. Required fill material was borrowed from the spoil adjacent to the TCC portal area. The borrow area is shown on Map 24. The borrow area was graded level, and thus will provide additional storage area. The sideslopes of the borrow area were regraded to 2H:1V. Construction of the reclaim tunnel and laterals required excavating trenches and then constructing the tunnel within the trenches. The tunnel and laterals are constructed of concrete and/or steel. An exhaust/escape tunnel extends from the reclaim tunnel. The excavated dirt was used in constructing the stockpile base. A concrete wall was constructed where the overland belt exits the reclaim tunnel. Approximately 100 CY of material was removed from the borrow area and used as bedding and packing for Culverts D-2-C and D-2-F.

Coal transferred from the stacker tube feed-belt to the stacker tube is stockpiled around the stacker tube. As shown on Map 24, a portion of existing Haulroad B (see CYCC Permit C-81-071), was covered up by the coal stockpile and reclaim tunnel. This required that the haulroad be routed around the north and west sides of the coal stockpile. The haulroad profile and typical cross-section are provided on Map 30A. The stockpiled coal sits over the reclaim tunnel and is typically fed by gravity to the overland belt by vibratory feeders. As the stockpile increases in size, however, the coal is dozed into the live cone area of the stockpile to facilitate gravity feed to the feeders. Feeders located in the reclaim tunnel feed coal onto the overland belt from the raw coal stockpile.

A control building (MCC-1) is constructed adjacent to the reclaim tunnel exhaust fan. This building houses the instrumentation necessary for the reclaim system. The building is approximately 8 x 10 x 10 feet and is constructed on a 6-inch concrete pad and 4 x 10 foot stem wall. The location of the building is shown on Map 24. When the building is no longer required, it will be removed.

Overland Conveyor (Modified and Superceded by TR07-59 for Washplant II), MR20-317

The 48-inch overland belt was constructed during 1989 to convey coal from the reclaim tunnel at the ROM Coal Stockpile to the Crusher Building at Tipple 2. Alternatively, if trucks are used for coal haulage, the coal can be

loaded from the ROM stockpile with a loader or similar type of equipment and hauled to Tipple 2 using the existing haul road (Haulroad B-1).

Construction of the overland belt required routing the belt over a part of Pond D and along and on portions of Haulroad B. Colorado Yampa Coal Company previously permitted Haulroad B, and TCC has assumed responsibility for the road. In the area of Pond D, and where the belt crosses Haulroad B, a crossing has been permitted and may be constructed in the future to allow light-duty vehicles to pass over the top of the belt and to provide a game crossing.

The overland belt is of typical construction, as shown on Figure 19, Overland Belt Profile, and a partial enclosure over the length of the beltline offers safety protection from the moving belt and rollers as well as dust control. Footers for the belt structure were constructed on 10-foot centers for the length of the belt. An access road parallel to the beltline extends along most of the belt corridor to provide access for periodic belt maintenance. In addition, a small concrete pad was installed beneath the beltline near the Tipple to facilitate access and equipment placement for belt splicing. This pad will be broken-up and buried during final reclamation of the Tipple area.

Due to slope stability issues to the east of the train loadout and above railroad tracks, a 200-foot section of the belt conveyor structure will be suspended with a cable suspension bridge, constructed in 2020, to avoid future movement of the structure since previous slope stability efforts have failed. The cable bridge consists of a 22-foot-tall steel tower on the east side standing on two 30-inch caissons. The west tower will be a 17-foot-tall steel structure also standing on two 30-inch caissons. All caissons will be drilled at least 27 feet below the surface to reach bedrock for stabilization. Concrete anchor pads (approx. 22 yards of concrete each) are placed at a 55-degree angle behind each tower to anchor the two suspension cables. The conveyor structure will be connected to the suspension cables every 10 feet for a total of 20 connections. Detailed drawings for the overland belt suspension bridge can be found in exhibit 49FF.

To accommodate required placement of footers through the Pond D emergency spillway and across the crest and face of the Pond D embankment, fill material was brought in and placed and compacted on the embankment face to provide a level work area for the drill-rig used to drill holes for the footers. A qualified Registered Professional Engineer supervised this work and certified that fill placement would not impact embankment stability. When the site is reclaimed the fill will be graded and blended into surrounding areas and topsoiled.

A small volume of topsoil remained in an area where the conveyor corridor crossed Haulroad B. This material was salvaged to an approximate depth of 24 inches, windrowed to the edge of the belt corridor, and stabilized with the appropriate seed mixture. Approximately 100 CY of topsoil was salvaged and stockpiled. When the site is reclaimed, this material will be redistributed over the site and reseeded with the appropriate seed mixture. As shown on Map 24, a silt fence, or other Alternative Sediment Controls, is used downslope of the disturbance to control runoff and sediment under a Small Area Exemption.

A drive building was constructed adjacent to the existing crusher building to house the drives for the overland belt. The building is approximately 28 x 40 feet and is built on a 5 x 28 x 40 foot concrete foundation. A control building (MCC-2) is located adjacent to the drive building, as shown on Map 24. The building is constructed on a concrete pad approximately 6 inches thick and a 10-inch x 4-foot stem wall, which sits on 8 piers approximately 20-25 feet deep and 10-12 inches in diameter. After the building is no longer required, it will be removed during the reclamation phase. The surficial concrete structures will be broken-up and removed, the piers will remain in place, and backfill will be placed over the area.

Coal Washplant (Washplant I, Modified and Superceded by TR07-59 for Washplant II))

TCC constructed a coal washplant building, thickener tank and refuse bin as part of an overall washplant facility construction project in 1994/1995 to wash existing low-quality coal stockpiled in the Low Quality Coal Stockpile and produced as a result of ongoing mining operations. The Low-Quality Coal Stockpile is traversed along the northwest by

a haulroad. Ramps may be constructed along the southeast and southwest perimeters of the pile at the spoil/coal interface, as necessary, to move material to the plant. The Coal Washplant and associated support facilities were constructed adjacent to the overland conveyor in the area between existing Pond E and the existing Low-Quality Coal Stockpile as shown on Map 24. These structures are located within a previously disturbed area, and drainage from the area passes through the existing sediment control system.

Site preparation and grading activities for the Coal Washplant involved the following activities:

- Placement of a culvert in Ditch D-3 on the south side of the overland conveyor
- Grading to establish effective access and flat areas for installation of the preparation plant feed hoppers and transfer conveyors