Transition

A transition layer is required between the filter and the run of mine rock fill to prevent the filter from piping into the dyke rockfill.

2.4 Kimberlite Ore, Coarse Processed Kimberlite and Recovery Circuit Rejects

The Jericho Waste Rock Management Plan, Part 2 (SRK 2006) provides design information on the Kimberlite ore storage, coarse processed kimberlite storage and recovery circuit rejects storage. This section is taken from SRK 2006.

Four coarse PK stockpiles are planned, with Area 2 being incorporated in the East Dam (Figure 2-14 [SRK Drawing WRMP-2-2]). At the end of December 2006 all coarse PK was stored adjacent to the diamond plant (designated coarse PK Site 4). Recovery circuit rejects are stored in the same location, separated from the rest of the coarse PK pending construction of Area 1.

2.4.1 Kimberlite Ore Stockpile

The kimberlite ore will only be stockpiled to separate mining and processing operations and provide a surge against weather and mine delays. It is expected that no more than one month's supply will be stockpiled at any given time (<30,000 m^3 of kimberlite). The kimberlite ore stockpile will be situated immediately east of the plant facility and will be limited to blending piles. The kimberlite ore stockpile [was] graded so that any runoff is directed to the east sump for recycling or pumping to the PKCA.

2.4.2 Foundation Conditions at the Stockpiles

2.4.2.1 Kimberlite Ore Stockpile

Based on site reconnaissance and surficial geological mapping, the foundation conditions at the kimberlite ore stockpile area consist primarily of bedrock, with till under portions of the stockpile. Local permafrost data indicates that all areas are underlain by permafrost conditions.

2.4.2.2 Coarse PK Stockpile

Coarse PK stockpile Areas 1 and 2 will be integrated with the fine PK in the PKCA, and will therefore be discussed in the PKCA Management Plan. Site reconnaissance and surficial geological mapping indicates that the foundation conditions at coarse PK stockpile Area 3 consist primarily of bedrock. At coarse PK stockpile Area 4, the foundation conditions consist primarily of bedrock with isolated small pockets of granular colluvial soils or till with, in some locations, a thin veneer of organic soil. The small natural pond (East Sump) will be left in place as a water management control structure for the coarse PK drainage and plant area drainage. Local permafrost data indicates that all areas are underlain by permafrost conditions.

2.4.3 Stockpile Designs

2.4.3.1 General

The dimensions and storage capacities of the proposed stockpiles are provided in Table 2-7. Excluding the kimberlite ore stockpile, the total available capacity of the four stockpile areas is 1.94 Mcm. [T]he required stockpile capacity is 1.86 Mcm, which is based on 1.77 Mcm of coarse PK and 0.09 Mcm of recovery circuit rejects.