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of the tailings dam. The F1 fold associated with this dome is better developed than others and has a marked effect on outcrop patterns in this area. In general, the F1 folds have a lesser effect on outcrop patterns than the F2 folds.

The F1 fold axes are often associated with areas of strong shearing and quartz veins, along both synclinal and anticlinal axes. This is best illustrated at locations 4 and 5 as well as in the canal behind the tailings dam. Location 5 is complicated by the dip of bedding back toward the north, contrary to the southern dips expected if the F1 structure is an anticline. The complexity in this area, and possibly other zones of similar geometry, may be due to the problems associated with synclinally folding an existing anticline in a competent, massive unit. This is illustrated in Figure 4 (normal faults parallel to fold axis) where the F2 fold event results in normal faulting parallel to the F1 fold axis. This can be produced under the same stress conditions if F2 folding is initiated with sigma 2 approx. equal to sigma 3, where sigma 3 begins in the vertical axis and switches to the horizontal initiating normal faulting. This would also explain why the normal faults are such late, planar structures. Relationships between fold structures and faulting are further discussed in section 2.2.

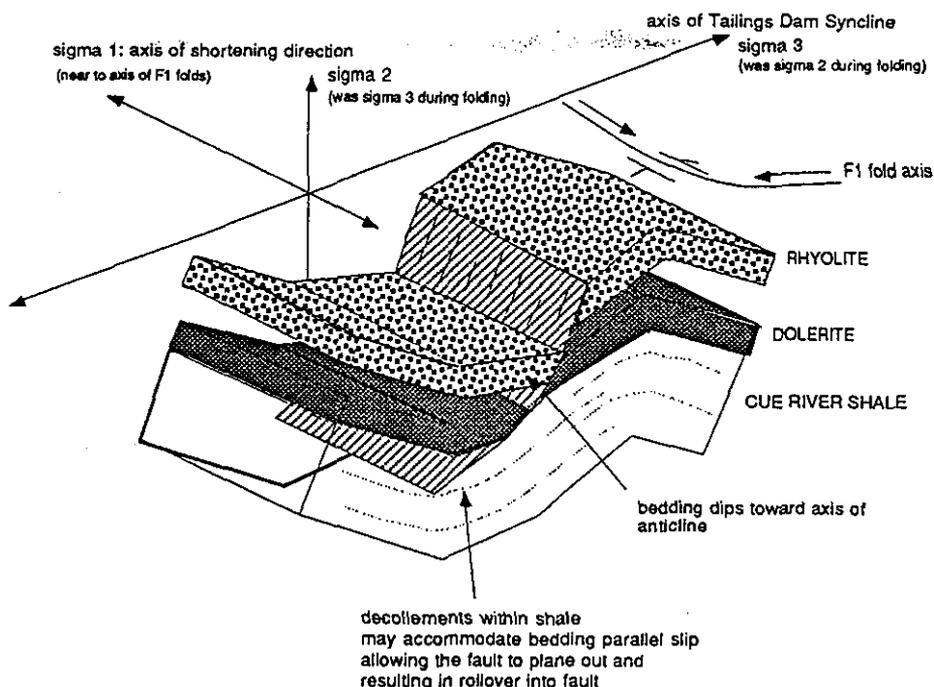


Figure 4: Diagrammatic illustration of rollover into normal faulting along the F1 fold axis during F2 fold event.