c) Porphyry - typically with feldspar > quartz phenocrysts (Max. 20mm) in a fine-medium pink-dark grey biotite rich groundmass. Red "K" feldspar phenocrysts are dominant frequently with white plagioclase rim which kaolinizes accentuating the rims on weathered granite surface.

WHITE GRANITES

This is a less variable granite, all feldspars are white but K/plag differentiated, the latter kaolinising more rapidly, ranges from fine-coarse grained, biotite is the only mafic and mica (some olive green-chloritized). Tourmaline nodules occuring in all grainsizes.

Both "Red" and "White" granites contain aplites (particularly coarse grained "R/W") and are assumed to be dykes of fine grained "White" granite, occuring in close proximity to the main "Red-White" contact. Aplites in the "White" granite have a more restricted distribution to the west of North Heemskirk Spur.

REGIONAL FEATURES OF THE "RED" GRANITE.

a) All red granites are spacially associated outcropping east of the South Gap - St. Dizier Creeks lineament, forming the Agnew-Heemskirk range. Only four seperate bodies of red granite have been located on or within the "White" granite, these characterized by:-

- having similar grainsize to enclosing "White" granite
- lack chilled contacts, tourmaline nodule density changes and other features which typify the main "Red-White" contact.

The largest of these bodies of "Red" granite is on Falconers Creek approx. 0.25km^2. Klominsky considered these to be large plate like xenoliths but they may be due to anomalous coloration of "White" granite.

b) The "Red" granite forms a thin cap like layer overlying the "White" and is interpretted as being discontinuous

- contacts with "White" granite are nearly flat, dips less than granite/sediment contact.
- "White" granite is in contact with sediments west of St. Dizier and south east of the Globe see Dwg. 3 a b

c) Layering - mapping in the South Heemskirk area gives the false impression that coarse R/W is the dominant type in the Heemskirk "Red" granite, but in the north/central granite it is in most places only 20-150m thick. At least three layers of coarse R/W are exposed on the western scarp of Mt. Heemskirk see Dwg. 2, these are interlayered with fine-medium R/W - R/R.

Contacts are shallow dipping usually $< 5^{\circ}$ but locally up to 80°, dips towards the sediment contact.
Layering is accentuated by

- finer grained granites are more resistant to weathering, forming bench like platforms.
- change density of tourmaline nodules, these are usually absent from coarse R/W granite.