County: Cornwall Site Name: Tater-Du

District: Penwith

Status: Site of Special Scientific Interest (SSSI) notified under Section 28

of the Wildlife and Countryside Act 1981, as amended.

Local Planning Authority: Cornwall County Council. Penwith District

Council

National Grid Reference: SW 440231 Area: 4.8 (ha) 11.86 (ac)

Ordnance Survey Sheet 1:50,000: 203 1:10,000: SW 42 SW

Date Notified (Under 1949 Act): - Date of Last Revision: -

Date Notified (Under 1981 Act): 1992 Date of Last Revision: -

## Other Information:

A new site, listed as of national importance in the Geological Conservation Review, under the name of Tater-Du. Within an Area of Outstanding Natural Beauty.

## Description and Reasons for Notification:

This site comprises a partially faulted roof pendant of metabasic rocks within the aureole of the Land's End Granite (which is here at a shallow depth and reaches the surface at both ends of the site). The contact between the granite and the metabasic country-rock is excellently exposed at Zawn Gamper. The metabasic rocks are submarine pillow lavas, subsequently deformed during the Variscan orogeny and thermally metamorphosed during later granite intrusion. The pillow lavas are strongly deformed but preserve identifiable relict textures and lithological contacts which allow their original identity to be determined. A strong mineral foliation is superimposed on the metabasic lavas, as a result of Variscan regional deformation. Contact metamorphism then altered the country-rock into a gradational aureole of amphibole-bearing hornfels. At this stage, the regional foliation promoted throughmovement of fluids related to the granite, giving rise to the development of metasomatic mineral assemblages in the aureole.

This site is of national significance because it provides unique evidence of the geological history of SW England during the Variscan orogeny, in particular because of the occurrence of pillow lavas. The site is also important for the rare assemblage of minerals associated with granite metasomatism of metabasic rocks.