

from J. B. Yrnes

Date: July 26, 1973

Subject: Geologic map of the Hartford South Quadrangle

After having reviewed both versions of the Hartford South I find a general agreement within the northern and eastern portions of the quadrangle. In these areas I have taken some liberties in extending faults over greater distances than available data probably permits and perhaps the more moderate approach used by Joe Weitz should be followed here. Furthermore, one of the two faults which extends from the Cripple Childrens Home to the Drive In Theater west of Cedar Mountain should be deleted from my version of the map.

There are several other areas where the two versions of the Hartford South geologic maps are not in complete agreement. I have prepared an overlay of Joe Weitz's map and have labelled the areas where we disagree. The supporting evidence for my interpretations of the map are listed below. In some cases I feel the evidence is strong whereas in other areas where data is sparse the interpretations may be more conjectural or intuitive than factual.

f

Location # 1 Basalt ridge mapped as Holyoke from south the Mettabeset River to Cromwell Avenue, Rocky Hill.

Agree ok This is Hampden Basalt.

- ✓ 1. Thickness doesn't appear great in field.
- 2. Bore hole (water well) near France St. and New Rd. went through basalt to underlying red beds. Total basalt thickness on the order of 60 feet.
- ✓ 3. At Hartford Electric substation on Beckley Rd. Basalt ridge is amygdaloidal and brecciated. There appear to be two distinct flows--- these are very similar to two of the eight flows of Hampden described by Chapman (1965) in the Rte 72 cut at the Berlin Tpk.
- ✓ 4. Careful stud of the sedimentary units lying north of this ridge reveal several black, shale horizons which have similar stratigraphic relationships to the basalt as those seen in roadcuts at Rte 72 and the Berlin Tpk, Rte 72 at