

January 16, 2018

## MEMORANDUM

To: Brian Hunt  
From: Tom Grimshaw  
Subject: Revised Geologic Map of the Northeast Corner of the Mountain City and Surrounding Quads (Elliot Ranch Area)

As a major part of our joint project to prepare an updated geologic map of the Mountain City Quadrangle, in August 2017 we focused on the northeast part of the quadrangle, particularly in the area of the Elliott Ranch gated community and the nearby area just west of FM 1826. In a memo I prepared before the trip (August 14), I presented a preliminary geologic map as well as the 1958 photos stereo air photos used to prepare the map, as the basis for a planned geologic field trip. A number of field stops for outcrop investigations was also proposed.

After the field trip was accomplished on August 17, I prepared a second memo dated August 24 that recorded the results. About 25 stops were listed and described, along with two bases (topographic map and Google earth image) showing the field stop locations. Several photos taken at the stops were also included, and previous geologic mapping by you was presented.

The purpose of this memo is to provide a revised geologic map (from the one in the August 14 memo) along with the air photos used to prepare the revisions. The revised map, as in the August 14 memo, includes portions of the Mountain City quad, the Signal Hill quad to the north, and the Buda quad to the east. The geologic maps for the three quads, shown in Attachments A1 to A3, have been updated based on the August 17 field observations and photos. The air photos used to prepare the maps are in Attachments B1 and B2.

Comparison of the revised geologic map in Attachment A to the corresponding earlier maps in the August 14 memo show a number of refinements in the mapping based on the results of the field visit on August 17.

Please let me know if you have any questions about this revised geologic map.

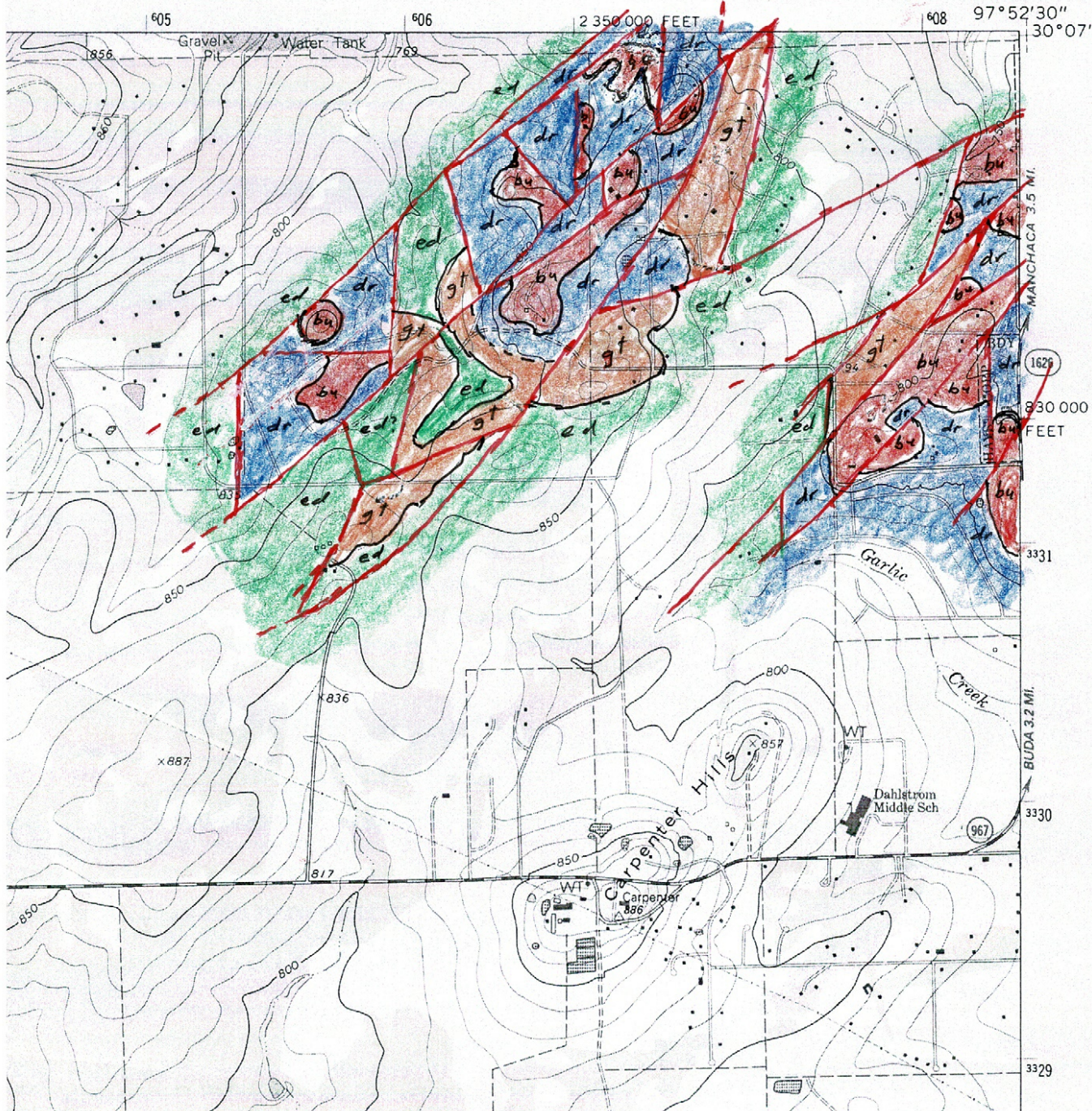
Attachment A.

Geologic Maps on the Mountain City, Buda, and Signal Hill Quadrangles

# Attachment A1

## MOUNTAIN CITY QUADRANGLE TEXAS-HAYS CO. 7.5 MINUTE SERIES (TOPOGRAPHIC)

(OAK HILL)



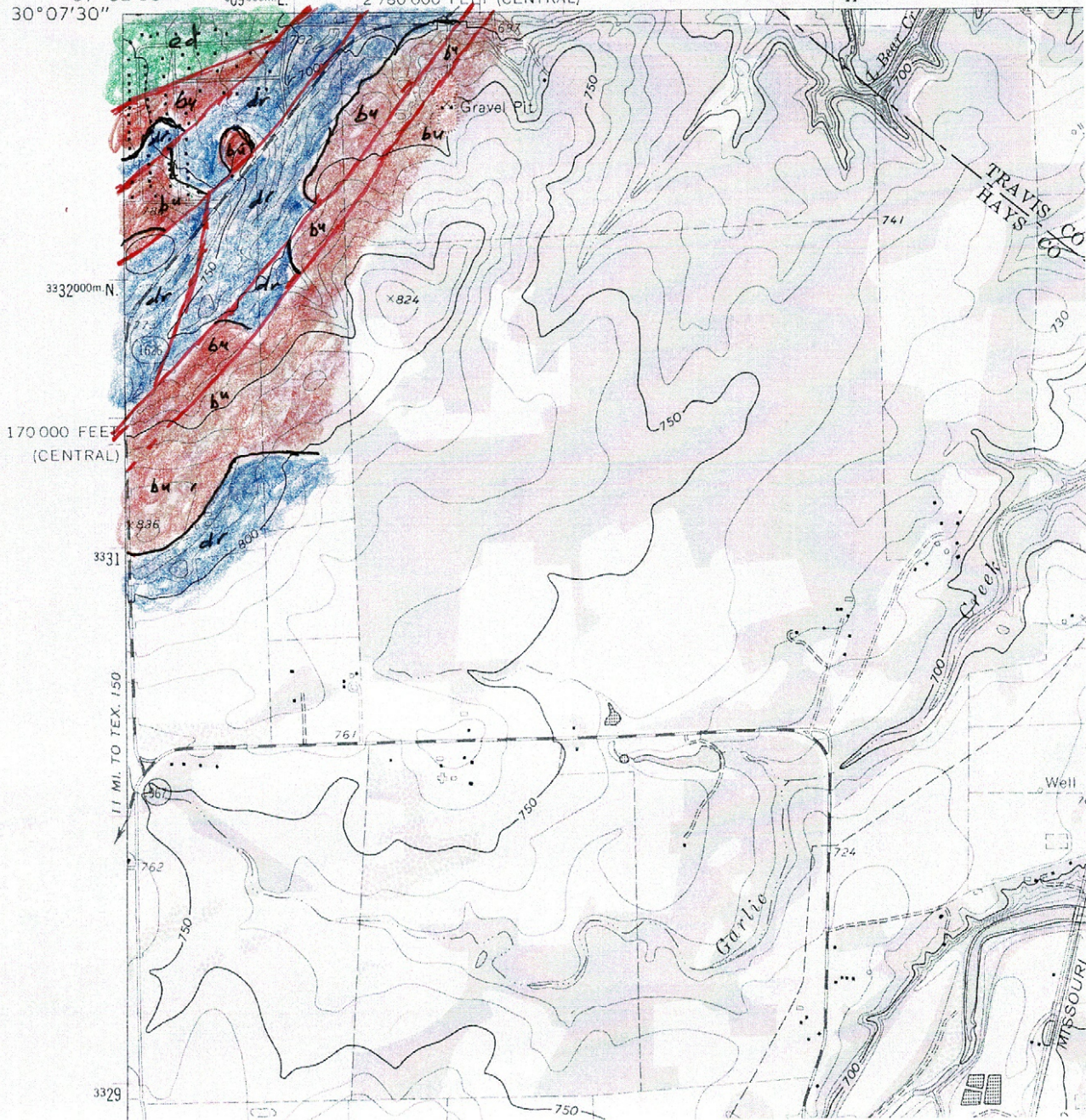
# Attachment A2

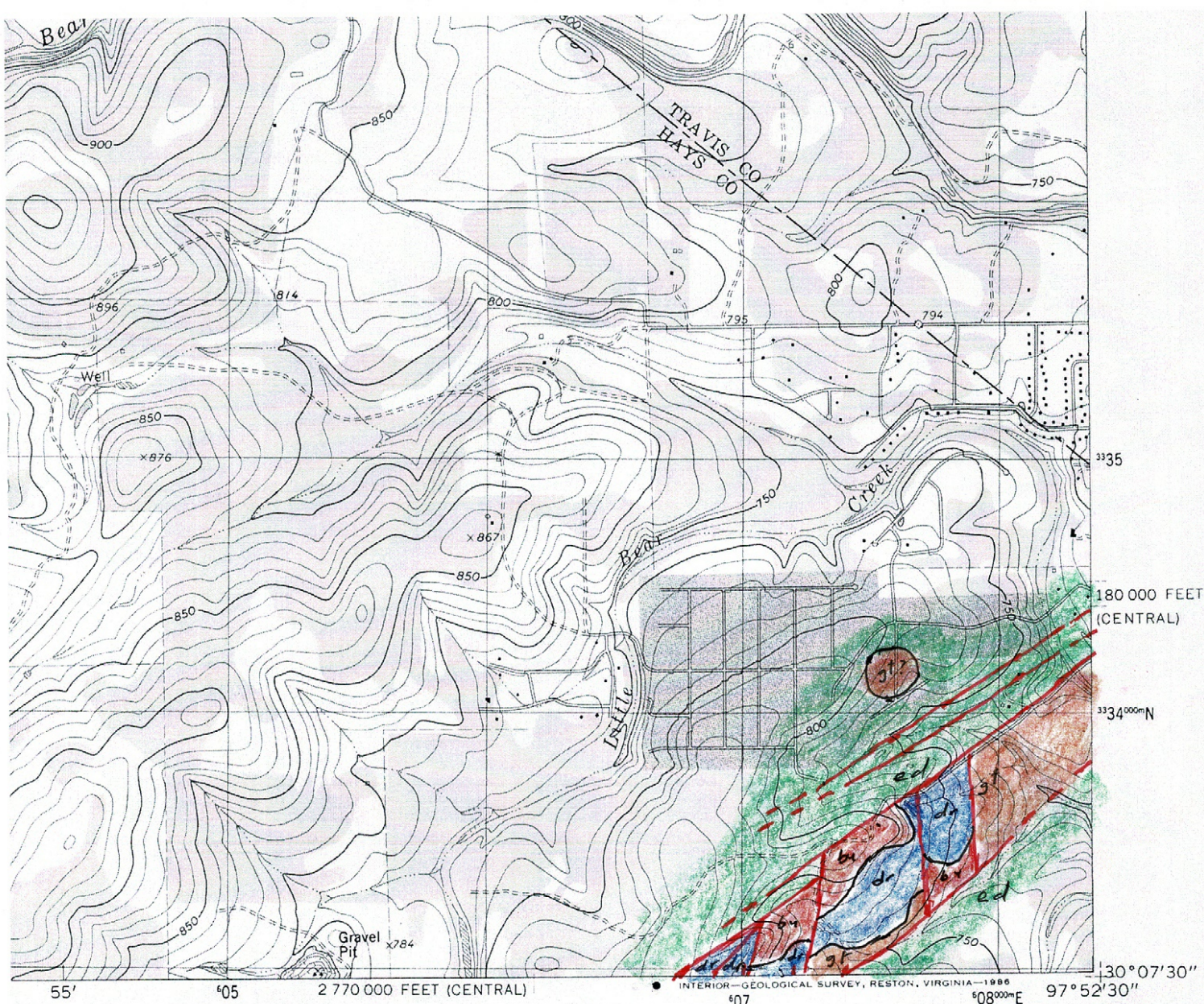
6442 III NW  
(SIGNAL HILL)

## UNITED STATES DEPARTMENT OF THE INTERIOR GEOLOGICAL SURVEY

97°52'30" 609000m E. 2 780 000 FEET (CENTRAL) MANCHACA 2.4 MI.

611





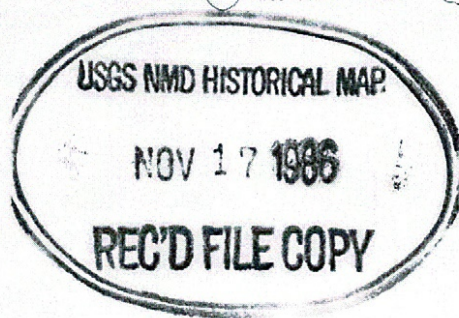
# ROAD CLASSIFICATION

- Primary highway, hard surface —————
- Secondary highway, hard surface —————
- Light-duty road, hard or improved surface —————
- Unimproved road - - - - -
- Interstate Route (circle with 'I')
- U. S. Route (circle with 'U.S.')
- State Route (circle with 'S.R.')



QUADRANGLE LOCATION

3097-223



## SIGNAL HILL, TEX.

NW/4 BUDA 15' QUADRANGLE  
30097-B8-TF-024

1986

DMA 6444 III NW-SERIES V882

Attachment A3

Attachment B.

1958 Air Photo Stereo Pairs Used to Prepare the Geologic Map

Attachment B1

