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March 12, 2010

John J. Kuhl
Ecology Program Manager
Hicks & Company
504 West 5th Street
Austin, Texas 78703

RE: JOLLYVILLE TRANSMISSION MAIN: PARD SITE; PRELIMINARY KARST
SURVEY RESULTS

Dear Mr. Kuhl,

A karst survey of the PARD site for the Jollyville Transmission Main on 11 Mar 2010 by Zara Environmental revealed 2 potentially significant karst features within the 150 ft CEF (critical environmental feature) buffer. For the purposes of this preliminary report, these features will be referred to as JVPARD-03 and JVPARD-04.

JVPARD-03 is a potential sinkhole with an entrance of 0.3 m by 0.2 m and a visible depth of approximately 1.5 m. The void space opens up below the entrance to an area that might be humanly accessible with minor excavation. Due to the collapse development of the feature and the presence of modern soils and clean-washed rocks, this feature has a high probability of being habitat for karst species (USFWS guidelines 2006). This feature receives sheetwash recharge from an area approximately 50 m by 20 m which lies mainly inside the site boundary. Excavation to enlarge this feature for biological monitoring and biological monitoring following USFWS guidelines is recommended for this feature.

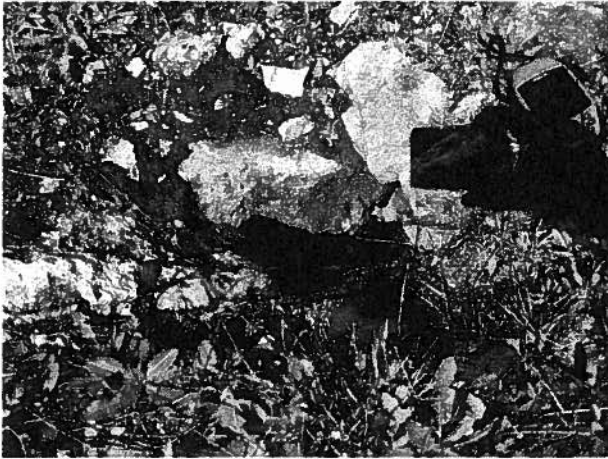


Fig. 1. JVPARD-03



Fig. 2. JV PARD-03

JVPARD-04 is a potential sinkhole with an entrance of 0.6 m by 0.3 m and a visible depth of approximately 1 m. The void space continues out of site as a tube that trends towards JVPARD-03. JVPARD-04 is approximately 5 m to the north of JVPARD-03, and there is a chance that they may connect to each other. Due to the collapse development of the feature and the presence of airflow and clean-washed rocks, this feature has a high probability of being habitat for karst species (USFWS guidelines 2006). This feature receives sheetwash recharge from an area approximately 50 m by 20 m which lies mainly inside the site boundary. Excavation to enlarge this feature for biological monitoring and biological monitoring following USFWS guidelines is recommended for this feature.



Fig. 3. JVPARD-04



Fig. 4. JVPARD-04

These features are similar in appearance to JVPARD-02 which proved to be non-karstic after minor exploratory excavation revealed non-native fill consisting of rocks and bricks. There is a chance that this entire field consists of non-native fill; however, preliminary investigation indicates that features JVPARD-03 and JVPARD-04 have a significant potential for karst species habitat according to USFWS guidelines and for recharge due to their size and location.

JVPARD-01, JVPARD-05, and JVPARD-06 are non-karstic manmade features. They are all storm water drains for runoff from the road, and they appear to drain to Bull Creek.

Please contact myself or Kathleen O'Connor if you have any further questions regarding these features.

Sincerely,

Saj Zappitello
Zara Environmental LLC

