



STATE OF NORTH CAROLINA
DEPARTMENT OF TRANSPORTATION


MICHAEL F. EASLEY
GOVERNOR

OCTOBER 3, 2008

LYNDO TIPPETT
SECRETARY

WBS Element: 34400.1.1
TIP: R-2519B
County: Mitchell
Description: US 19E from SR 1186 to West of Spruce Pine

MEMORANDUM TO: Andrew Nottingham, PE
Project Engineer
Hydraulics Design Unit

FROM: Terry W. Fox, LG 
GeoEnvironmental Project Manager
Geotechnical Engineering Unit

SUBJECT: **Natural Channel Design Subsurface Investigation**
Samir's 8 Gas Station (Former Jim Robbins Parcel)

Enclosed is one (1) "Preliminary Site Assessment Report" the above referenced project. Earth Tech, Inc. of Raleigh completed the assessment work on this parcel. Pyramid Environmental & Engineering, Inc. of Greensboro conducted the geophysical site assessments. This subsurface investigation was initiated by the NCDOT Hydraulics Design Unit to determine the feasibility of a natural channel design, of up to 10 feet deep, cutting across this parcel. Upon reviewing the report, the Geotechnical Engineering Unit offers the following Right of Way Recommendations:

Samir's 8 Gas Station (Former Jim Robbins Parcel)

This operational gas station is located in the southwest quadrant of the intersection of NC 19E and SR 1235 (Old US 19E) at 1426 US 19E in Spruce Pine. There are currently five (5) USTs in use at the site. Sixteen (16) soil borings were advanced and 15 samples were collected to determine if petroleum contamination is present within the proposed right-of-way. Laboratory results indicated that petroleum contamination above the State action levels is present in 12 borings at a consistent depth of four (4) feet. The depth of contamination ranges from eight (8) feet at the USTs, to 12 feet at the western edge of the property. The soils on the southern half of this parcel are less impacted by petroleum contamination. However, an unknown contaminate with a 'sweet odor' was detected in this area. The geophysical survey confirmed the location of the five (5) known USTs in the northwestern portion of the property. No other potential USTs were located on this parcel.

Please contact me at (919) 250-4088 or twfox@dot.state.nc.us if you have any questions or comments concerning this site or our assessment work on it.

enclosure