



STATE OF NORTH CAROLINA  
DEPARTMENT OF TRANSPORTATION

BEVERLY EAVES PERDUE  
GOVERNOR

May 9, 2011

*R Thomas PE*

ROADWAY DESIGN UNIT	
MAY 11 2011	
<input checked="" type="checkbox"/> BENNETT	<input checked="" type="checkbox"/> STEPHENSON
<input checked="" type="checkbox"/> HUNFORD	<input checked="" type="checkbox"/> J. PERINO
<input checked="" type="checkbox"/> E. A. CONTI	<input checked="" type="checkbox"/> J. MOORE
<input checked="" type="checkbox"/> GOOD	<input checked="" type="checkbox"/> J. MOORE
<input checked="" type="checkbox"/> HARRIS	<input checked="" type="checkbox"/> J. MOORE
<input checked="" type="checkbox"/> HOUSSER	<input checked="" type="checkbox"/> TAYLOR
<input checked="" type="checkbox"/> RYAN	<input checked="" type="checkbox"/> THOMAS
<input checked="" type="checkbox"/> WALKER	<input checked="" type="checkbox"/> WALLS
REVIEW/DESIGN WITH _____	
PREPARE REPLY FOR _____ SIGNATURE _____	

MEMORANDUM TO: Jay Bennett, PE  
State Roadway Design Engineer

FROM: *Njoroge Wainaina*  
Njoroge Wainaina, PE  
State Geotechnical Engineer

SUBJECT: Microstation Line Style for Contaminated Properties

The Geotechnical Engineering Unit, with the help of Cadd Support and Roadway design, has developed drafting standards for contaminated soil and ground water, geoenvironmental borings, and underground storage tanks.

The NCDOT *Conventional Plan Sheet Symbols* legend depicts the four new symbols. The four new symbols are:

- (1) *Known Soil Contamination: Boundary or Site,*



- (2) *Potential Soil Contamination: Boundary or Site,*



- (3) *Underground Storage Tank, Approximate Location*



- (4) *Geoenvironmental Boring.*



During the Project Development stage of a project, our unit will create a design file named TIP\_geo\_env.dgn to define areas of contamination based on existing data. This design file will reside on the Project Store server under the path \\TIP\Geotech\Geoenvironmental and is to be referenced to Roadway's design file. The GeoEnvironmental design file will be updated based on our field investigation of each project site prior to right of way acquisition. Our intent is to identify areas of concern on the plans so that all project contributors can make better decisions in regard to contaminated soil and ground water.

NWW:cfp

Cc:  
Preconstruction  
Division Engineers  
Right of Way Branch