

# SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

545 Highland Avenue \* Route 10 \* Cheshire \* Connecticut \* 06410 \* (203) 272-7837  
FAX (203) 272-6698

## WETLANDS/WATERCOURSES AND SOIL REPORT

To: URS Corporation, Inc.  
500 Enterprise Drive  
Rocky Hill, CT 06067

SSSES Job No: 2006-78-CT-MER-2  
Client Job No: OPT011  
Site Inspection Date: February 11, 2006

**PROJECT TITLE AND LOCATION:** Proposed communications tower, First Assembly Church  
of God, 651 Paddock Avenue, Meriden, CT

### IDENTIFICATION OF WETLANDS AND WATERCOURSES RESOURCES

WETLANDS AND WATERCOURSES PRESENT ON PROPERTY: Yes XX No \_\_\_\_\_

Wetlands: Inland Wetlands XX Watercourses: Streams \_\_\_\_\_  
Tidal Wetlands \_\_\_\_\_ Waterbodies \_\_\_\_\_

Remarks: \_\_\_\_\_

### VEGETATION COMMUNITIES PRESENT IN WETLANDS

Forest XX Sapling/Shrub \_\_\_\_\_ Wet Meadow \_\_\_\_\_ Marsh \_\_\_\_\_ Field/Lawn \_\_\_\_\_

### SOIL MOISTURE CONDITION

Dry \_\_\_\_\_  
Moist XX  
Wet XX

### WINTER CONDITIONS

Frost Depth: none inches  
Snow Depth: none inches

*The classification system of the National Cooperative Soil Survey, USDA, Natural Resources Conservation Service and the State Soil Legend were used in this investigation. The investigation was conducted by the undersigned Registered Soil Scientist. A sketch map showing wetland boundaries and the numbering sequence of wetland markers, watercourses and soil types in both wetland and non-wetlands are included with this report. After the wetland boundary and/or watercourse flags have been located/plotted by the surveyor, it is recommended that a copy of the survey map be sent to our firm for review. All wetland boundary lines established by the undersigned Registered Soil Scientist are subject to change until officially adopted by local, state or federal regulatory agencies.*

**Respectfully Submitted by**

**SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.**

*Thomas W. Pietras*

Thomas W. Pietras  
Registered Professional Soil Scientist  
Professional Wetland Scientist

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## WETLANDS/WATERCOURSES AND SOIL REPORT

**PROJECT TITLE AND LOCATION:** First Assembly Church of God, 651 Paddock Avenue, Meriden, CT

**NUMBERING SEQUENCE OF WETLAND BOUNDARY LINE MARKERS:**

1 THRU 12

**SOILS SECTION:**

*Soil Legend: State Soil Number/County Soil Symbol, Soil Series Name, Taxonomic Class & Brief Description.*

**WETLAND SOILS**

6/Wt Wilbraham and Menlo soils, extremely stony (Aquic Dystrudepts & Histic Humaquepts) – These are deep, poorly drained and very poorly drained, reddish-colored, loamy textured, glacial till developed over dense, basal till. The till was derived from sandstone, shale and basalt. The hardpan is within 20 to 30 inches. These soils occur on glaciated plains, hills and ridges.

**NON-WETLAND SOILS**

55/Wc Watchaug fine sandy loam (Aquic Dystrudepts) - This is a deep, moderately well drained, friable, reddish-colored, coarse-loamy textured, glacial till soil derived from sandstone, shale and basalt. Watchaug soils occur on glaciated plains, hills and ridges.

63/Cs Cheshire fine sandy loam (Typic Dystrudepts) - This is a deep, well drained, friable, reddish-colored, coarse-loamy textured, glacial till soil derived from sandstone, shale and basalt. Cheshire soils occur on glaciated plains, hills and ridges.

308/Ud Udorthents, smoothed This is a well drained to moderately well drained soil area that has had two or more feet of the original soil surface altered by filling, excavation or grading activities. Udorthents, smoothed soils commonly occur on leveled land and fill landforms.

**Note:**

The wetlands in the project site are situated at the base of a short, steep forested slope in the northwestern portion of the property. These wetlands occur on a nearly level to slight depressional landscape and are subject to seasonal shallow inundation. Vegetation in the wetlands consists of a forested swamp. Drainage from the wetlands passes off-site in a northern direction alongside the base of the Route 15 roadway embankment.

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## DEFINITIONS AND METHODOLOGY

### DEFINITIONS OF STATE REGULATED WETLANDS & WATERCOURSES

**INLAND WETLANDS AND WATERCOURSES:** According to Section 22a-38 of the State of Connecticut Inland Wetlands and Watercourses Act, Wetlands "means land, including submerged land, not regulated pursuant to sections 22a-28 to 22a-35, which consists of any of the soil types designated as poorly drained, very poorly drained, alluvial, and floodplain by the National Cooperative Soils Survey, as may be amended from time to time, of the Natural Resources Conservation Service (NRCS) of the United States Department of Agriculture." Watercourses "means rivers, streams, brooks, waterways, lakes, ponds, marshes, swamps, bogs and all other bodies of water, natural or artificial, vernal or intermittent, public or private. Intermittent watercourses shall be delineated by a defined permanent channel and bank and the occurrence of two or more of the following characteristics: (A) Evidence of scour or deposits of recent alluvium or detritus, (B) the presence of standing or flowing water for a duration longer than a particular storm incident, and (C) the presence of hydrophytic vegetation."

**TIDAL WETLANDS:** According to Connecticut General Statutes, Sec. 22a-29 (2) of the Tidal Wetlands Act, Tidal Wetlands are defined as "those areas which border on or lie beneath tidal waters, such as, but not limited to banks, bogs, salt marsh, swamps, meadows, flats, or other low lands subject to tidal action, including those areas now or formerly connected to tidal waters, and whose surface is at or below an elevation of one foot above local extreme high water; and upon which may grow or be capable of growing some, but not necessarily all of the following:" (list of those plants common to tidal marshes, brackish wetlands and other wetlands which are subject to tidal influence).

### METHODOLOGY FOR IDENTIFICATION OF SOILS, WETLANDS & WATERCOURSES

1) **SOILS IDENTIFICATION:** Soils are investigated by digging test holes with a spade and auger. Test holes are typically dug to depths of between 15 and 40 inches. Based on soil features, including coloration patterns, texture and depths to restrictive layers, the soils are identified by soil series utilizing the classification system of the National Cooperative Soil Survey. The soil map series correspond with the State Soil Map Legend established by USDA, NRCS in the State of Connecticut Soil Survey. For further information about soils refer to the NRCS website for CT: [www.ct.nrcs.usda.gov](http://www.ct.nrcs.usda.gov)

2) **INLAND WETLAND DELINEATION:** Soil test holes and borings are made in selected areas in order to determine the lateral extent of Inland Wetlands. The boundaries of all Inland Wetlands on each project site are delineated with consecutively numbered survey tapes, unless instructed by the client to only map wetland boundaries for planning purposes.

3) **IDENTIFICATION OF WATERCOURSES:** Watercourse locations are sketched onto maps. Often ponds, streams and rivers are already shown on the survey map. If a watercourse is not shown on a survey map, survey tapes are placed along the channel and labeled "Intermittent or Perennial Watercourse."

4) **TIDAL WETLANDS:** Tidal Wetlands are identified based on a predominance of tidal wetland plants and observation of physical markings or water laid deposits resulting from tidal action. Tidal Wetland boundaries are established by locating the upland limits of the "Listed Plants" from the Tidal Wetlands Act to the extent that these plants reflect inundation by tides.

# WILBUR CROSS PARKWAY

Steep filled roads

Not Access Highway Lns.

N43°15'12"E

1.00°  
5°12'W

N/F  
Donald W. &  
Charlotte J. Jahnke

lawn

6/WT

shallow  
inundation

forested  
we

55/we

forested 55/

SUBJECT TO  
SNETCO EASEMENT  
(See Notes 4.E & 6)

N/F  
Mario V. &  
Judy E. D'Acunto

Elec. Box  
Metal Bldg.  
Conc. Pad  
w/Elec. Box

308  
UD  
Gravel

BM 14-1  
Top of Capped LPin  
ELEV. = 323.43

Fir.  
Chk.

SUBJECT TO 10'  
RIGHT OF WAY  
(See Notes 4.E & 6)

N/F  
John Beier

Shed

Bit. parking

Tel. Box  
Shed UC  
Marker Post

N34°40'12"E  
14.00'

AND  
DEN.

397

N/F  
First Assembly of God  
Church of Meriden, Inc.

308  
UD

Existing Building

Bit. Driveway

Conc. Walk

Conc. Walk

180.92'

N85°47'48"W  
180.00'

N85°25'48"W  
115.00'

N85°25'48"W

180.00'

14.00'

180.92'

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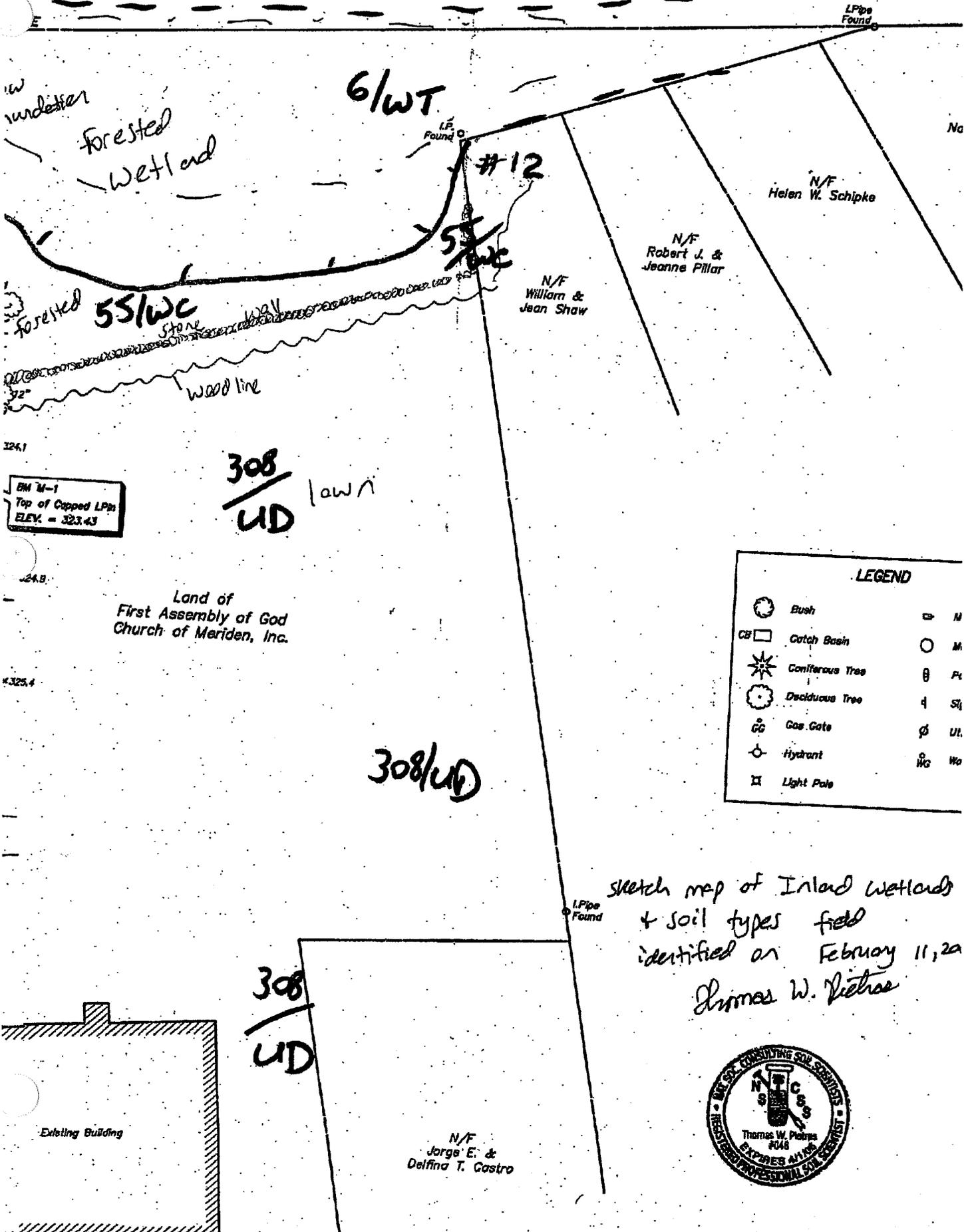
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# ARKWAY (Route 15)

filled roadway embankment



324.1

324.8

325.4

BM M-1  
Top of Capped L.P.M.  
ELEV. = 323.43

Land of  
First Assembly of God  
Church of Meriden, Inc.

6/WT

#12

55/WC

308/UD

308/UD

308/UD

N/F  
Helen W. Schipke

N/F  
Robert J. &  
Jeanne Pillar

N/F  
William &  
Jean Shaw

N/F  
Jorge E. &  
Delfina T. Castro

**LEGEND**

	Bush		N
	Catch Basin		M
	Coniferous Tree		Pc
	Deciduous Tree		St
	Gas Gate		Ul
	Hydrant		Wo
	Light Pole		

sketch map of Inland Wetlands  
& soil types field  
identified on February 11, 2006  
Dianne W. Pietras



Existing Building