WETLANDS DELINEATION REPORT

Vanasse Hangen Brustlin, Inc.

Date: May 15, 2009

Project No.: 40505.07

Prepared For: Mr. Scott Chasse
All-Points Technology Corp., P.C.
3 Saddlebrook Drive
Killingworth, Connecticut 06419

Site Location: T-Mobile Site No. CTNH01B - Amtrak Branford
123 Pine Orchard Road
Branford, Connecticut

Site Map: VHB Wetland Sketch on APT Site Plan, 04/22/09

Inspection Date: April 22, 2009

Field Conditions: Weather: rain, low 50's
Snow Depth: none
General Soil Moisture: moist
Frost Depth: none

Type of Wetlands Identified and Delineated:

Connecticut Inland Wetlands and Watercourses	☒
Connecticut Tidal Wetlands	☐
U.S. Army Corps of Engineers	☐

Inland Wetland Regulated Upland Review Areas: Wetlands: 100 feet Watercourses: 100 feet

Field Numbering Sequence of Wetlands Boundary: WF 1 - 14
[as depicted on attached wetland sketch map]

The classification systems of the National Cooperative Soil Survey, the U.S. Department of Agriculture, Natural Resources Conservation Service, County Soil Survey Identification Legend, Connecticut Department of Environmental Protection and United States Army Corps of Engineers New England District were used in this investigation.

All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.

The wetlands delineation was conducted and reviewed by:

Dean Gustafson
Professional Soil Scientist

Enclosures

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Middletown, Connecticut 06457-1847
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Attachments

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- Wetland Delineation Field Form
- Soil Map
- Soil Report
- Wetland Delineation Sketch Map

Wetland Delineation Field Form

Project Address:	123 Pine Orchard Road Branford, CT	Project Number:	40505.07
Inspection Date:	4/22/09	Inspector:	Dean Gustafson, PSS
Wetland I.D.:	Wetland 1		

Field Conditions:	Weather: rain, low 50's	Snow Depth: none
	General Soil Moisture: moist	Frost Depth: none
Type of Wetland Delineation:	CT Inland ☒	
	CT Tidal ☐	
	ACOE ☐	
Field Numbering Sequence: WF 1 to 14		

WETLAND HYDROLOGY:

NONTIDAL

Regularly Flooded ☐	Irregularly Flooded ☐	Permanently Flooded ☒
Semipermanently Flooded ☐	Seasonally Flooded ☐	Temporarily Flooded ☐
Permanently Saturated ☐	Seasonally Saturated – seepage ☐	Seasonally Saturated - perched ☐
Comments: man-made pond		

TIDAL

Subtidal ☐	Regularly Flooded ☐	Irregularly Flooded ☐
Seasonally Flooded ☐	Temporarily Flooded ☐	
Comments: N/A		

WETLAND TYPE:

SYSTEM:

Estuarine ☐	Riverine ☐	Palustrine ☒
Lacustrine ☐	Marine ☐	
Comments:		

CLASS:

Emergent ☒	Scrub-shrub ☒	Forested ☒
Open Water ☒	Disturbed ☐	Wet Meadow ☐
Comments:		

WATERCOURSE TYPE:

Perennial ☐	Intermittent ☐	Tidal ☐
Comments: N/A		

SPECIAL AQUATIC HABITAT:

Vernal Pool ☐	Other ☐	
Comments: N/A		

Wetland Delineation Field Form (Cont.)

MAPPED SOILS:

SOIL SERIES (Map Unit Symbol)	WET	UP	NRCS MAPPED	FIELD IDD/ CONFIRMED
Branford silt loam (30)	☐	☒	☒	☒
Ludlow silt loam (41)	☐	☒	☒	☒
Cheshire-Holyoke complex(77)	☐	☒	☒	☒
Udorthents (308)	☐	☒	☒	☒
Water (W)	☒	☐	☒	☒
Raypol silt loam (12)	☒	☐	☐	☒
	☐	☐	☐	☐
	☐	☐	☐	☐
	☐	☐	☐	☐

DOMINANT PLANTS:

red maple (*Acer rubrum*)	common reed (*Phragmites australis*)
pin oak (*Quercus palustris*)	buttonbush (*Cephalanthus occidentalis*)
tussock sedge (*Carex stricta*)	green bulrush (*Scirpus atrovirens*)

WETLAND NARRATIVE:

Wetland 1 follows the boundary of the existing man-made pond located just north of the railroad tracks and along the east property boundary apparently on the adjoining parcel. The subject property is developed as a trailer storage company (ACE Trailer Leasing, Inc.) and includes numerous trailer storage units, a maintenance building, mobile office trailer and associated paved and gravel parking area. The proposed T-Mobile Facility is located nearby to the west within an existing gravel parking lot that is occupied by mobile trailer storage units. The pond is characterized by a relatively steep cut bank bordered by mature forest canopy. The fringe of the pond and some interior areas are occupied by shrubs while the majority of the pond is dominated by aquatic bed/emergent marsh habitat. The dominant species found along the pond edge and within the marshy areas include common reed (*Phragmites australis*), buttonbush (*Cephalanthus occidentalis*), green bulrush (Scirpus atrovirens) and tussock sedge (*Carex stricta*). The pond edge is occupied by pin oak (*Quercus palustris*), and red maple (*Acer rubrum*).

Soil Map—State of Connecticut
(123 Pine Orchard Road, Branford, CT)

MAP LEGEND

Area of Interest (AOI)
- Area of Interest (AOI)

Soils
- Soil Map Units

Special Point Features
- Blowout
- Borrow Pit
- Clay Spot
- Closed Depression
- Gravel Pit
- Gravelly Spot
- Landfill
- Lava Flow
- Marsh or swamp
- Mine or Quarry
- Miscellaneous Water
- Perennial Water
- Rock Outcrop
- Saline Spot
- Sandy Spot
- Severely Eroded Spot
- Sinkhole
- Slide or Slip
- Sodic Spot
- Spoil Area
- Stony Spot
- Very Stony Spot
- Wet Spot
- Other

Special Line Features
- Gully
- Short Steep Slope
- Other

Political Features
- Cities

Water Features
- Oceans
- Streams and Canals

Transportation
- Rails
- Interstate Highways
- US Routes
- Major Roads
- Local Roads

MAP INFORMATION

Map Scale: 1:3,500 if printed on A size (8.5" × 11") sheet.

The soil surveys that comprise your AOI were mapped at 1:12,000.

Please rely on the bar scale on each map sheet for accurate map measurements.

Source of Map: Natural Resources Conservation Service
Web Soil Survey URL: http://websoilsurvey.nrcs.usda.gov
Coordinate System: UTM Zone 18N NAD83

This product is generated from the USDA-NRCS certified data as of the version date(s) listed below.

Soil Survey Area: State of Connecticut
Survey Area Data: Version 6, Mar 22, 2007

Date(s) aerial images were photographed: 8/13/2006

The orthophoto or other base map on which the soil lines were compiled and digitized probably differs from the background imagery displayed on these maps. As a result, some minor shifting of map unit boundaries may be evident.

Map Unit Legend

State of Connecticut (CT600)			
Map Unit Symbol	**Map Unit Name**	**Acres in AOI**	**Percent of AOI**
30B	Branford silt loam, 3 to 8 percent slopes	5.7	22.7%
41B	Ludlow silt loam, 2 to 8 percent slopes, very stony	1.6	6.3%
77C	Cheshire-Holyoke complex, 3 to 15 percent slopes, very rocky	2.2	8.6%
77D	Cheshire-Holyoke complex, 15 to 35 percent slopes, very rocky	0.2	0.8%
308	Udorthents, smoothed	14.3	57.0%
W	Water	1.2	4.6%
Totals for Area of Interest		**25.0**	**100.0%**

Map Unit Description (Brief)

The map units delineated on the detailed soil maps in a soil survey represent the soils or miscellaneous areas in the selected area. The map unit descriptions in this report, along with the maps, can be used to determine the composition and properties of a unit. A map unit delineation on a soil map represents an area dominated by one or more major kinds of soil or miscellaneous areas. A map unit is identified and named according to the taxonomic classification of the dominant soils. Within a taxonomic class there are precisely defined limits for the properties of the soils. On the landscape, however, the soils are natural phenomena, and they have the characteristic variability of all natural phenomena. Thus, the range of some observed properties may extend beyond the limits defined for a taxonomic class. Areas of soils of a single taxonomic class rarely, if ever, can be mapped without including areas of other taxonomic classes. Consequently, every map unit is made up of the soils or miscellaneous areas for which it is named and some minor components that belong to taxonomic classes other than those of the major soils.

The "Map Unit Description (Brief)" report gives a brief, general description of the major soils that occur in a map unit. Descriptions of nonsoil (miscellaneous areas) and minor map unit components may or may not be included. This description is written by the local soil scientists responsible for the respective soil survey area data. A more detailed description can be generated by the "Map Unit Description" report.

Additional information about the map units described in this report is available in other Soil Data Mart reports, which give properties of the soils and the limitations, capabilities, and potentials for many uses. Also, the narratives that accompany the Soil Data Mart reports define some of the properties included in the map unit descriptions.

Report—Map Unit Description (Brief)

State of Connecticut

Description Category: SOI

Map Unit: 30B—Branford silt loam, 3 to 8 percent slopes

Branford Silt Loam, 3 To 8 Percent Slopes This map unit is in the Connecticut Valley Major Land Resource Area. The mean annual precipitation is 38 to 50 inches (965 to 1270 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 80 percent Branford soils. 20 percent minor components. Branford soils This component occurs on valley and outwash plain terrace landforms. The parent material consists of eolian deposits over glaciofluvial deposits derived from basalt, sandstone, and shale. The slope ranges from 3 to 8 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 6.3 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 2e Typical Profile: 0 to 8 inches; silt loam 8 to 18 inches; loam 18 to 24 inches; gravelly loam 24 to 65 inches; stratified very gravelly coarse sand to loamy fine sand

Map Unit: 41B—Ludlow silt loam, 2 to 8 percent slopes, very stony

Ludlow Silt Loam, 2 To 8 Percent Slopes, Very Stony This map unit is in the Connecticut Valley Major Land Resource Area. The mean annual precipitation is 40 to 50 inches (1016 to 1270 millimeters) and the average annual air temperature is 45 to 52 degrees F. (7 to 11 degrees C.) This map unit is 80 percent Ludlow soils. 20 percent minor components. Ludlow soils This component occurs on upland drumlin and hill landforms. The parent material consists of lodgement till derived from sandstone, shale, and basalt. The slope ranges from 2 to 8 percent and the runoff class is low. The depth to a restrictive feature is 20 to 40 inches to densic material. The drainage class is moderately well drained. The slowest permeability within 60 inches is about 0.00 in/hr (very slow), with about 4.8 inches (moderate) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is about 24 inches. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 6s Typical Profile: 0 to 8 inches; silt loam 8 to 20 inches; silt loam 20 to 26 inches; silt loam 26 to 65 inches; gravelly loam

Map Unit: 77C—Cheshire-Holyoke complex, 3 to 15 percent slopes, very rocky

Cheshire-Holyoke Complex, 3 To 15 Percent Slopes, Very Rocky This map unit is in the Connecticut Valley Major Land Resource Area. The mean annual precipitation is 40 to 50 inches (1016 to 1270 millimeters) and the average annual air temperature is 45 to 54 degrees F. (7 to 12 degrees C.) This map unit is 45 percent Cheshire soils, 35 percent Holyoke soils. 20 percent minor components. Cheshire soils This component occurs on till plain and upland landforms. The parent material consists of melt-out till derived from sandstone, shale, and basalt. The slope ranges from 3 to 15 percent and the runoff class is low. The depth to a restrictive feature is greater than 60 inches. The drainage class is well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 8.4 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 6s Typical Profile: 0 to 8 inches; fine sandy loam 8 to 16 inches; fine sandy loam 16 to 26 inches; fine sandy loam 26 to 65 inches; gravelly sandy loam Holyoke soils This component occurs on ridge and upland landforms. The parent material consists of eolian deposits over melt-out till derived from sandstone, shale, and basalt. The slope ranges from 3 to 15 percent and the runoff class is medium. The depth to a restrictive feature is 10 to 20 inches to bedrock (lithic). The drainage class is well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 2.7 inches (low) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 6s Typical Profile: 0 to 1 inches; moderately decomposed plant material 1 to 3 inches; silt loam 3 to 8 inches; silt loam 8 to 18 inches; gravelly silt loam 18 to 28 inches; unweathered bedrock

Map Unit: 77D—Cheshire-Holyoke complex, 15 to 35 percent slopes, very rocky

Cheshire-Holyoke Complex, 15 To 35 Percent Slopes, Very Rocky This map unit is in the Connecticut Valley Major Land Resource Area. The mean annual precipitation is 40 to 50 inches (1016 to 1270 millimeters) and the average annual air temperature is 45 to 54 degrees F. (7 to 12 degrees C.) This map unit is 45 percent Cheshire soils, 35 percent Holyoke soils. 20 percent minor components. Cheshire soils This component occurs on till plain and upland landforms. The parent material consists of melt-out till derived from sandstone, shale, and basalt. The slope ranges from 15 to 35 percent and the runoff class is medium. The depth to a restrictive feature is greater than 60 inches. The drainage class is well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 8.4 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 7s Typical Profile: 0 to 8 inches; fine sandy loam 8 to 16 inches; fine sandy loam 16 to 26 inches; fine sandy loam 26 to 65 inches; gravelly sandy loam Holyoke soils This component occurs on ridge and upland landforms. The parent material consists of eolian deposits over melt-out till derived from sandstone, shale, and basalt. The slope ranges from 15 to 35 percent and the runoff class is high. The depth to a restrictive feature is 10 to 20 inches to bedrock (lithic). The drainage class is well drained. The slowest permeability within 60 inches is about 0.57 in/hr (moderate), with about 2.7 inches (low) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.5 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table, when present, is greater than 6 feet. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 7s Typical Profile: 0 to 1 inches; moderately decomposed plant material 1 to 3 inches; silt loam 3 to 8 inches; silt loam 8 to 18 inches; gravelly silt loam 18 to 28 inches; unweathered bedrock

Map Unit: 308—Udorthents, smoothed

Udorthents, Smoothed This map unit is in the New England and Eastern New York Upland, Southern Part Connecticut Valley Major Land Resource Area. The mean annual precipitation is 32 to 50 inches (813 to 1270 millimeters) and the average annual air temperature is 45 to 55 degrees F. (7 to 13 degrees C.) This map unit is 80 percent Udorthents soils. 20 percent minor components. Udorthents soils This component occurs on leveled land and fill landforms. The slope ranges from 0 to 35 percent and the runoff class is medium. The depth to a restrictive feature varies, but is commonly greater than 60 inches. The drainage class is typically well drained. The slowest permeability within 60 inches is about 0.00 in/hr (very slow), with about 9.0 inches (high) available water capacity. The weighted average shrink-swell potential in 10 to 60 inches is about 1.4 LEP (low). The flooding frequency for this component is none. The ponding hazard is none. The minimum depth to a seasonal water table is greater than 60 inches. The maximum calcium carbonate within 40 inches is none. The maximum amount of salinity in any layer is about 0 mmhos/cm (nonsaline). The Nonirrigated Land Capability Class is 3e Typical Profile: 0 to 5 inches; loam 5 to 21 inches; gravelly loam 21 to 80 inches; very gravelly sandy loam

Data Source Information

Soil Survey Area: State of Connecticut
Survey Area Data: Version 6, Mar 22, 2007

ALL-POINTS TECHNOLOGY CORPORATION, P.C.	APT FILING NUMBER: CT-255T-360	T-Mobile	T-MOBILE SITE NUMBER
3 SADDLEBROOK DRIVE KILLINGWORTH, CT. 06419 PHONE: (860)-663-1697 FAX: (860)-663-0935 www.allpointstech.com	LE-1	35 GRIFFIN ROAD BLOOMFIELD, CT 06002 OFFICE: (860)-692-7100	CTNH801B
	SCALE: AS NOTED / DRAWN BY: AAJ		AMTRAK BRANFORD 123 PINE ORCHARD ROAD BRANFORD, CT 06405-3939
	DATE: 11/16/08 / CHECKED BY: SMC		

NOTE:
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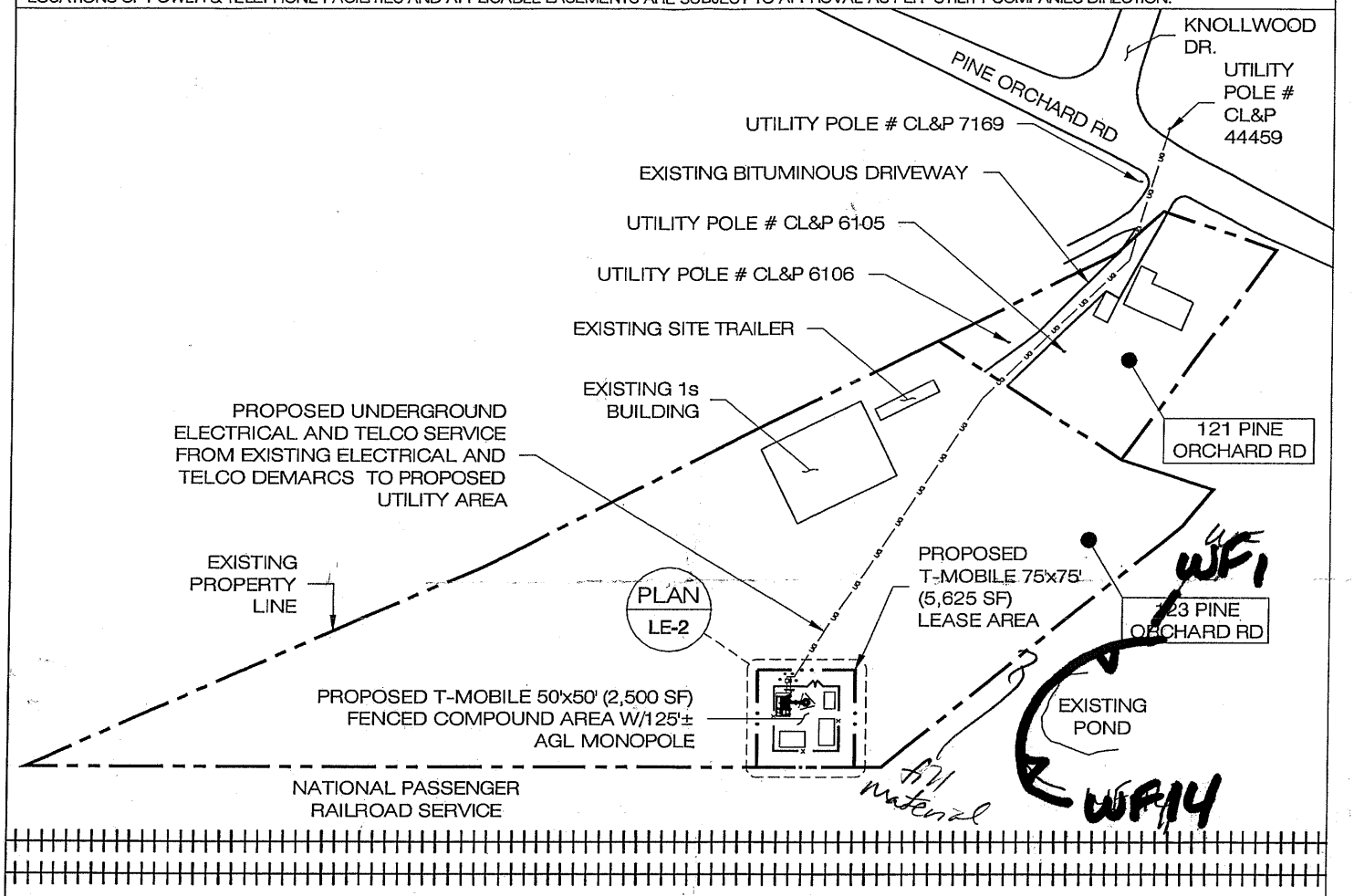
LOCATIONS OF POWER & TELEPHONE FACILITIES AND APPLICABLE EASEMENTS ARE SUBJECT TO APPROVAL AS PER UTILITY COMPANIES DIRECTION.



SITE PLAN
SCALE : 1" = 130'-0"

VANASSE HANGEN BRUSTLIN, INC.

WETLAND SKETCH

4/22/09 DEG

WF 1 to 14