STATE OF CONNECTICUT
CONNECTICUT SITING COUNCIL

IN RE:	:	
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APPLICATION OF CELLCO PARTNERSHIP d/b/a VERIZON WIRELESS FOR A CERTIFICATE OF ENVIRONMENTAL COMPATIBILITY AND PUBLIC NEED FOR THE CONSTRUCTION, MAINTENANCE AND OPERATION OF A WIRELESS TELECOMMUNICATIONS FACILITY OFF ROUTE 190 IN THE TOWN OF WOODSTOCK, CONNECTICUT	:	DOCKET NO. 350
	:	JANUARY 30, 2008

PRE-FILED TESTIMONY OF DEAN GUSTAFSON

Q.1. Please identify yourself and describe your position.

A. I am Dean Gustafson, a Professional Soil Scientist and Senior Wetland Scientist in the Middletown, Connecticut office of Vanasse Hangen Brustlin, Inc. ("VHB"). A copy of my resume is attached as Exhibit A to this testimony.

Q.2. Please summarize your qualifications.

A. I have a Bachelor of Science degree from the University of Massachusetts with a concentration in Soil Science. My background includes 19 years of professional experience of wetland consulting. I have been the lead soil/wetland scientist on more than 1000 development projects in Connecticut. In addition, I have assisted in the permitting of more than 100 wireless telecommunication facilities in Connecticut during the past ten years. My responsibilities include: coordination and oversight of site screenings, environmental assessments and compliance documentation to fulfill NEPA requirements, wetland delineations and assessments, wetland mitigation design, vegetative/biological surveys, and

regulatory permitting support.

Q.3. Please describe your involvement in the Docket No. 350 application.

A. I was responsible for the identification and delineation of wetland and watercourse resources, preparing a Wetland Delineation report (October 23, 2007), and preparing a Wetland Impact Analysis report (October 23, 2007) for the proposed site at Route 198 in Woodstock (the "Site"), which is located on property owned by Michael and Sandra Walsh. In addition, I was responsible for review of proposed development activities within and proximate to said resources, evaluation of potential impacts to wetlands, review of proposed wetland crossing design, and review of soil erosion and sediment control measures.

Q.4. Please describe the existing wetland crossing that Cellco Partnership d/b/a Verizon Wireless ("Cellco") is proposing to access the Woodstock NW cell site.

A. A relatively narrow (ranging from 30± to 100 feet wide) forested wetland corridor is located on the subject property approximately 520 feet east of Route 198 extending from and beyond the south and north property boundaries. Access to the proposed facility will follow an existing logging road generally along the north property boundary providing access from Route 198. The existing woods road crosses this narrow wetland corridor near the north property boundary. Deep ruts and some washing of exposed wetland soils characterize the wetland crossing as no fill or other road stabilizing methods were observed. The wetland generally drains to the north across the width of the wetland corridor as no intermittent watercourse feature (e.g., defined bank or channel) was identified. The transition from wetland to upland is well defined at the existing wetland crossing location.

Q.5. Please describe the proposed improvements to the crossing and what efforts have been incorporated into the design that will minimize impacts to the wetland habitat.

A. I feel it is important to start my response to this question with a historical perspective on Cellco Partnership's commitment to protection of wetland resources. Throughout my

professional relationship with Cellco, which spans more than eight years and involves numerous development projects, Cellco has always maintained a clear corporate policy of avoiding wetland impacts whenever possible. In those rare cases when wetland impacts are unavoidable, Cellco has gone to great lengths to minimize such impacts and provide improvements as compensation. Such is the case in this instance.

The path of the existing dirt drive wetland crossing will be followed in order to minimize impacts to currently undisturbed wetland and watercourse areas. A comprehensive erosion and sedimentation control plan, designed in accordance with the 2002 Connecticut Guidelines for Soil Erosion and Sediment Control (DEP Bulletin 34), will be implemented to protect adjacent wetland resources. This plan will include the maintenance of erosion controls throughout construction activities on the site and until areas of exposed soil are permanently stabilized with vegetation.

The proposed improvements to the existing wetland crossing in support of Cellco's development include the removal of unsuitable organic material (e.g., topsoil, roots, etc.), placement of stable road base fill material and topping with 8 inches of processed gravel. In addition, four 12-inch culverts would be placed across the wetland corridor approximately 15 feet apart. In addition, ¾" crushed stone will envelop the four culverts and extend out to the east and west limits of the proposed wetland crossing. The four culverts and crushed stone bed spread out across the entire wetland crossing will promote the current diffuse hydraulic flows supported by this narrow wetland corridor and will not adversely affect the wetland system by artificially concentrating flows or impeding movement of water over the surface of the wetland or through the wetland soils. The deep ruts currently located within this wetland

crossing do promote concentrations of surface flows from both within the wetland corridor and from the surrounding upland areas. Although not currently a significant problem, there is evidence of washing of exposed wetland soils and some transporting of sediment. The proposed improvements to the wetland crossing will correct this situation and prevent future erosion problems.

Q.6. <u>How do the proposed improvements to the crossing affect the wetland and intermittent watercourse?</u>

A. The wetland crossing improvements result in 2,106± square feet of permanent fill in wetlands. It is important to point out that this permanent wetland fill will only take place in the existing disturbed and degraded portion of the wetland corridor. The use of four culverts enveloped in crushed stone will allow for the hydraulic connection of the up gradient and down gradient portions of the wetland corridor post-development and will not promote concentration of surface flows and possible resulting erosion within the wetland. As a result, the proposed work will not result in an adverse effect to the function and value of this disturbed wetland area and has been designed specifically to upgrade current conditions.

Q.7. <u>Are there any other wetland crossing locations that would have less of an impact than the proposed location?</u>

A. A second logging road deviates from the main logging road approximately 300 feet east of Route 198. This second logging road (Alternate "A") heads in a more east/southeast direction towards the south property boundary. The forested wetland corridor, which extends to and beyond the south property boundary, is approximately 50 feet wide at the existing Alternate A wetland crossing. This existing wetland crossing is generally similar in character as the proposed wetland crossing, located 300± feet to the north, with slightly less rutting. Use of this existing crossing would result in an overall reduction in direct

wetland impact with approximately 1,200 square feet of wetland fill required.

A second alternate ("B") access road location was also explored through a parcel owned by the Site's property owner which is located adjacent and west of the owner's residence. Alternate B access would originate from Old Turnpike Road. No existing logging road or trail exists on this parcel from Old Turnpike Road. A forested wetland system was identified and approximate wetland limits were delineated within the south end of this parcel fronting along Old Turnpike Road. A proposed access road from Old Turnpike Road would require crossing this wetland system, which is approximately 100 feet wide. An Alternate B access road would require a new wetland crossing resulting in 2,500± square feet of direct wetland impact. A Plot Plan showing the location of the proposed access drive as well as Alternate routes A and B is attached as Exhibit B.

Q.8. Have you reviewed the November 29, 2007 comments received from the Connecticut Department of Public Health ("DPH") regarding Petition No. 350? If yes, please respond to or comment on the remarks of the DPH.

A. Yes. The DPH comments appear to be general in nature and discuss possible concerns to drinking water sources as a result of the proposed development due to erosion and sediment control, construction equipment cleaning, stormwater drainage facilities and water company land. The erosion and sediment control plan complies with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control*. No construction equipment will be cleaned on Site and any refueling of vehicles will be performed at least 200 feet from wetlands or watercourses. No stormwater drain pipes, except for the wetland crossing, are proposed or necessary for the control of stormwater from the proposed access road or facility. The Site is not located on water company land.

Q.9. Have you reviewed the letter dated August 9, 2007 from Priscilla W. Baillie? If yes, would you summarize Ms. Baillie's concerns related on the Woodstock NW tower site and comment on her concerns?

A. Yes. Ms Baillie's letter states that "Any erosion and sedimentation problems during the construction period or thereafter will carry soil and associated phosphorus directly into the lake (Black Pond), creating a nutrient pollution problem." (pg.2) The proposed access road and approximately half of the proposed facility compound lie in a separate watershed from the "small ravine" (pg. 2) referenced in Ms. Baillie's letter. As a result, approximately 0.2 acres of the area of disturbance associated with the Cellco facility construction actually lies within the watershed of the small ravine, which drains into Black Pond. The proposed limit of clearing associated with construction of the Cellco facility will be entirely encircled with silt fence. In addition, the south/southeast side of the limit of clearing will be backed by a row of hay bales, affording addition sediment and erosion protection from the potential receptor (small ravine). Generally, slopes exceeding 15% are classified as "steep". The slopes immediately surrounding and extending out several hundred feet from the proposed facility are less than 15 percent; refer to soil map found under Tab 11 of the Connecticut Siting Council Application. The soil map reveals that the soils surrounding the proposed facility are classified as soil symbol 47C (Woodbridge fine sandy loam, 2 to 15 percent slope) and soil symbol 86C (Paxton and Montauk fine sandy loams, 3 to 15 percent slopes). The "small ravine" is located approximately 600 feet east of the proposed facility. A soil type with slopes exceeding 15 percent is associated with this ravine (soil symbol 86D; Paxton and Montauk fine sandy loams, 15 to 35 percent slopes), however this steeply sloped area is located more than 300 feet east of the proposed facility. Therefore, due to the relatively small area of disturbance (0.2 acre), the sedimentation and erosion controls proposed and the distance separating the proposed construction activities from the ravine it

is unlikely that the proposed project would cause an erosion or sedimentation problem (or a resulting nutrient problem) within the ravine or Black Pond.

Ms. Baille's letter also discusses concern regarding potential threat to birds due to the proposed tower. The proposed facility is a 140-foot tall monopole tower structure with twelve panel-type antennas. Potential impacts to avian species can be reduced through the tower design process. The proposed height and style of the proposed tower are consistent with current recommendations for minimizing bird strikes (U.S. Fish and Wildlife Service, September 14, 2000. *Service Guidance on the Siting, Construction, Operation and Decommissioning of Communications Towers*). Namely, the tower is less than 200 feet in height, is not guyed and is unlighted. Therefore, the proposed tower will minimize impact on migratory birds.

Q.10. Have you prepared or assisted with the development of a soil erosion and sedimentation control plan for this site?

A. The soil erosion and sedimentation control plan was prepared by Dewberry- Goodkind, Inc. I have reviewed the plan and based on my experience reviewing numerous other similar plans, the proposed soil erosion and sedimentation controls are consistent with the *2002 Connecticut Guidelines for Soil Erosion and Sediment Control* and are adequately protective of nearby wetlands and the surrounding landscape. It is important to point out that the key to ensuring that these controls operate as designed is the proper installation and maintenance of these devices. A comprehensive operations and maintenance plan of the soil erosion and sedimentation control measures is typically provided to the Council during the D&M phase of the permitting process.

The statements above are true and complete, to the best of my knowledge.

January 31, 2008
Date

Dean Gustafson

Subscribed and sworn before me this 31 day of January, 2008.

Patricia A. Lozinski
Notary Public

My Commission Expires On August 31, 2010

EXHIBIT A

Dean E. Gustafson

Project Manager
Professional Soil Scientist

Mr. Gustafson is a Professional Soil Scientist and Senior Wetland Scientist with Vanasse Hangen Brustlin (VHB), and has 19 years of experience with a wide variety of wetland environmental issues. His areas of expertise include wetland delineation and evaluation, permit preparation, local, state and federal regulatory coordination, and wetland mitigation.

General Background

Mr. Gustafson is a Professional Soil Scientist and Senior Wetland Scientist with nineteen years of experience in the environmental field. As the leader of VHB's Middletown, Conn., office's Environmental Group, he manages environmental permitting, NEPA/CEPA documentation, wetlands (delineation, evaluation, mitigation design, monitoring, stream restoration, and local, state and federal permitting), water-quality investigations, coastal-zone-management studies, and natural-resource and ecological evaluations. Mr. Gustafson has particular expertise in wetland identification, soil mapping, soil classification, vegetative and hydrology surveys, wetland impact assessment, wetland mitigation design and oversight. In addition, he has extensive experience in local, state, and federal wetland permitting. Furthermore, he is highly qualified in delineating wetlands according to the Federal Interagency Method's three-parameter approach and has extensive wetland mapping experience in Connecticut, Massachusetts, New York and New Jersey. Mr. Gustafson has been responsible for the mapping of all wetlands during several town-wide wetland identification and evaluation projects. In addition, he has experience in wetland quality assessments using various evaluation models including the federal Descriptive Approach, Connecticut Wetland Evaluation Method (Bulletin No. 9), and the Golet Wetland Wildlife Evaluation Method. Mr. Gustafson also has experience applying the Massachusetts Wildlife Habitat Protection Guidance for Inland Wetlands (March 2006). Mr. Gustafson has been involved in over 1,000 wetland projects in more than 170 towns throughout New England and the Northeast.

Key Projects

National Retailer, Rocky Hill
Responsible for wetland permitting of a multi-tenant retail development resulting in significant unavoidable wetland impacts and the creation of a wetland mitigation area exceeding 1 acre is size. Wetland permits were secured from the Rocky Hill Wetland Agency, CTDEP and U.S. Army Corps of Engineers for wetland impacts and wetland mitigation area.

On Call Environmental Services, Northeast Utilities Transmission Group
Task Manager in support of various Connecticut projects, including assessment and permitting of bulk power substations, transmission lines/structures, underground utility installations, and environmental investigations of existing facilities. Services include pre-acquisition due diligence activities, conducting site development feasibility assessments, natural resources inventories of existing flora and fauna, habitat evaluations, wetland delineations, site layout and design evaluations, preparation of technical documents, coordination with State and local agencies, and permitting support.

Retail Wetland Program
Project manager for the Connecticut office for large retail Client Fee-for-Service and Turnkey Developer Programs. Provide project management and technical direction for wetland compliance of projects undertaken in Connecticut including wetland determination, evaluation, mitigation design and local, state and Army Corps of Engineers permitting.

Connecticut DOT West Haven/Orange Railroad Station, Environmental Assessment
Task manager for assessing natural resources, including wetlands, floodplain, aquatic habitats, and wildlife, associated with a proposed railroad station at one of two possible sites. Prepared technical documents in support of Draft Federal Environmental Assessment/Draft State Environmental Impact Evaluation.

Continued, p. 2

Telecommunications Carrier Wetland Program
Project Manager for major telecommunications carrier's wetland program. Responsible for wetland delineation, assessment, mitigation, alternatives analysis, design review for permit feasibility, and successful permitting of over 50 wireless telecommunications facilities with local wetland/conservation commissions in the Connecticut, Massachusetts, and Rhode Island market areas.

Certificates of Environmental Compatibility and Public Need, Various Sites, Connecticut
Mr. Gustafson has served as Task Manager in support of numerous Applications to the Connecticut Siting Council (CSC) for the permitting of new electrical substations throughout Connecticut. These projects require extensive site data collection and analysis including natural resources inventories of existing flora and fauna, habitat evaluations, wetland delineation and function/value analysis, site layout analysis and wetland impact evaluation, wetland mitigation, preparation of technical documents, coordination with State and local agencies, and permitting. Environmental monitoring services for adherence to the CTDEP's General Permit for Construction Activities were also provided.

Luxury Residential Development
Project manager for an award-winning luxury residential community developer. Provided project management and technical direction for wetland compliance of projects undertaken in Connecticut including wetland determination, evaluation, mitigation design and local, state and Army Corps of Engineers permitting.

Regulatory Permitting, Barbour Hill Substation Modifications, South Windsor, Connecticut
Task Manager responsible for the preparation of a Petition to the Connecticut Siting Council for a determination that no Certificate of Environmental Compatibility and Public Need was required for the proposed modifications to the Barbour Hill Substation in South Windsor, Connecticut. The project included the replacement and expansion of an existing facility and the modification of line interconnections. Responsibilities included conducting natural resource inventories, wetland delineation, and local and state permit documents.

Certificate for Environmental Compatibility and Public Need, Utility Client, Connecticut
Task Manager in support of Application to the Connecticut Siting Council (CSC) for the permitting of a new 345/115 kV substation in eastern Connecticut. This project required extensive coordination of numerous team members, including client's in-house discipline managers and engineers, consultants, legal counsel, VHB staff, and subcontractors. Responsible for natural resources inventories of existing flora and fauna, habitat evaluations, wetland delineations and local wetland permit application.

Luxury Automobile Dealership, Hartford, CT
Provided critical wetland support services in the successful approval of a new luxury automobile dealership. Services included both CT and federal wetland delineation, wetland evaluation and alternatives assessment for wetland impacts, City of Hartford and Army Corps of Engineers wetland permit preparation, and coordination with City planning staff.

Wetlands Survey and Permitting, ConnDOT Maintenance Facility.
Performed both a state and federal wetland survey and delineation in conjunction with the submission and successful obtainment of a CTDEP Inland Wetlands and Watercourses permit and 401 Water Quality Certifications to conduct remedial activities within and adjacent to existing floodplain wetlands.

Continued, p. 3

Wetlands Survey at Historic Industrial Facility, Norwalk, CT
Performed both state and federal wetland surveys in conjunction with a proposed remediation of impacted materials located adjacent to a coastal tidal river. Assessed necessary wetland regulatory requirements and secured permits from the Connecticut Department of Environmental Protection Office of the Long Island Sound and Army Corps of Engineers.

Wetland Survey, U.S. Naval Subbase, Groton, CT
Task Manager. Delineation of both state and federally regulated wetlands in conjunction with a remedial investigation at this Superfund site. Also assisted in developing specifications and plans for both in-kind and out-of-kind wetland mitigation for areas impacted with the proposed corrective-action activities.

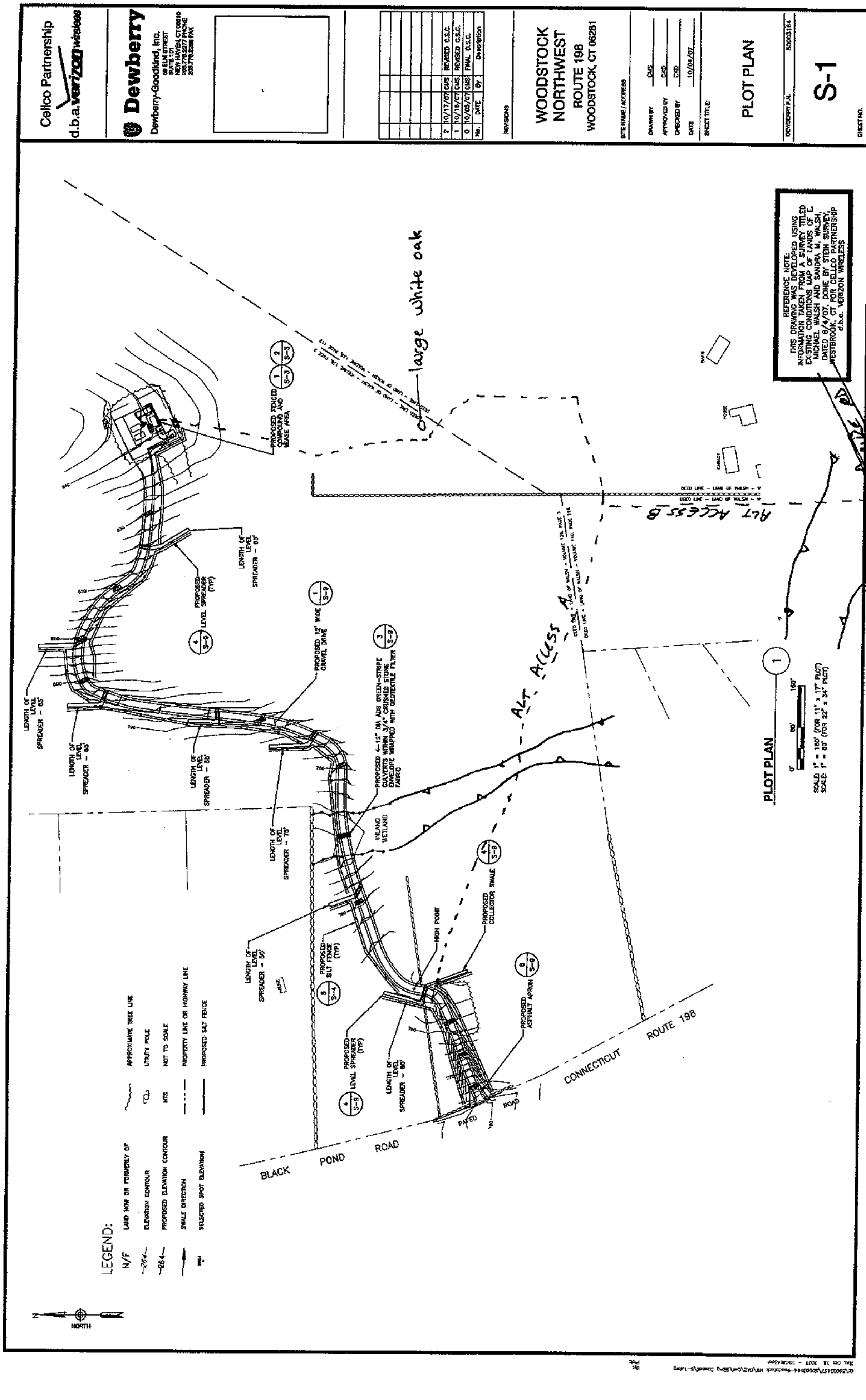
Town of Cromwell, Wetland Mapping and Inventory Project, Cromwell, CT
Task Manager. Town wide study included the field mapping and classification/ evaluation of all the wetlands within the municipality according to the State of Connecticut Inland Wetlands and Watercourses regulations and Federal criteria (Army Corps of Engineers).

Town of Fairfield, Wetlands Mapping Project, Fairfield, CT
Project Manager. Assisted in the field delineation of wetlands and watercourses for the entire municipality according to the State of Connecticut Inland Wetland Regulations.

Wetland Mapping, Correctional Institution, Somers/Enfield, CT
Assistant Project Manager. Responsibilities included mapping wetlands according to the standards set forth by the State of Connecticut for the 1,700+ acre facility and the production of a high-intensity soil survey and wetland map of the property.

Education	B.S. University of Massachusetts, Plant and Soil Sciences, 1988
	Graduate coursework, University of New Hampshire
Affiliations	Member, Lebanon Inland Wetlands and Watercourses Commission, since 1995.
Registration	Professional Soil Scientist, Society of Soil Scientists of Southern New England, since 1988.
	Connecticut Association of Wetland Scientists.
	Association of Massachusetts Wetland Scientists.
Certifications	OSHA Hazardous Water Operations and Emergency Response (HAZWOPER) Training (29 CFR 1910.120)

EXHIBIT B


Cellco Partnership
d.b.a. verizon wireless
Dewberry
Dewberry-Goodkind, Inc.
WOODSTOCK
NORTHWEST
ROUTE 198
WOODSTOCK, CT 06281
PLOT PLAN
S-1
REFERENCE NOTE:
THIS DRAWING WAS DEVELOPED USING INFORMATION TAKEN FROM A SURVEY TITLED EXISTING CONDITIONS MAP OF LANDS OF E MICHAEL WALSH AND SANDRA M. WALSH, DATED 8/4/07, DONE BY STEIN SURVEY, WESTBROOK, CT FOR CELLCO PARTNERSHIP d.b.a. VERIZON WIRELESS
large white oak
ALT ACCESS A
ALT ACCESS B
OLD TURNPIKE RD
BLACK POND ROAD
CONNECTICUT ROUTE 198
LEGEND:
NORTH