

**Transportation
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Services



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May 26, 2009

Ref. No. 41479.30

Vanasse Hangen Brustlin, Inc.

Ms. Dawn McKay, Biologist/Environmental Analyst
Connecticut Department of Environmental Protection
Natural Resources Center
Environmental and Geographic Information Center
Natural Diversity Data Base
79 Elm Street - Store Level
Hartford, CT 06106-5127

Re: Natural Diversity Data Base/Data Request- Review Request
Proposed Verizon Wireless Telecommunications Facility
271 Dayton Road
South Glastonbury, Connecticut 06073

Dear Ms. McKay:

Vanasse Hangen Brustlin, Inc. (VHB) has been retained by Celco Partnership d.b.a. Verizon Wireless (Verizon Wireless) to review environmental resource information, including threatened or endangered species or designated critical habitats, outlined in 47 CFR Ch.1 § 1.1307 sections (a) and (b) for environmental consequences pursuant to the Federal Communications Commission ("FCC or Commission") requirements. As a licensing agency, the FCC complies with the National Environmental Policy Act (NEPA) by requiring its licensees to review their proposed actions for environmental consequences. Rules implementing NEPA are found at Title 47 of the Code of Federal Regulations, Part 1, Subpart I, rule sections 1.1301 to 1.1319.

VHB understands that Verizon Wireless is proposing to construct a new telecommunications facility to be developed on portions of property located at 271 Dayton Road in Glastonbury, Connecticut. Development of this facility includes the installation of a 117-foot tall monopine tower with associated ground equipment to be situated within an approximate 75-foot by 50-foot fenced lease compound area. The compound area will be developed for use by Verizon Wireless, as well as other future wireless service providers. Based on current Site Plans, Verizon Wireless antenna will be attached to the top of the monopine and an associated approximate 12-foot by 30-foot Verizon Wireless equipment shelter will be installed at its base. Additional future wireless service transmission/reception antenna will be mounted to the monopine with associated ground equipment installed at its base. The proposed access drive/easement will extend off Dayton Road along the existing dirt/gravel driveway on the property.

The site is basically forested land with an existing structure northeast of the proposed facility.

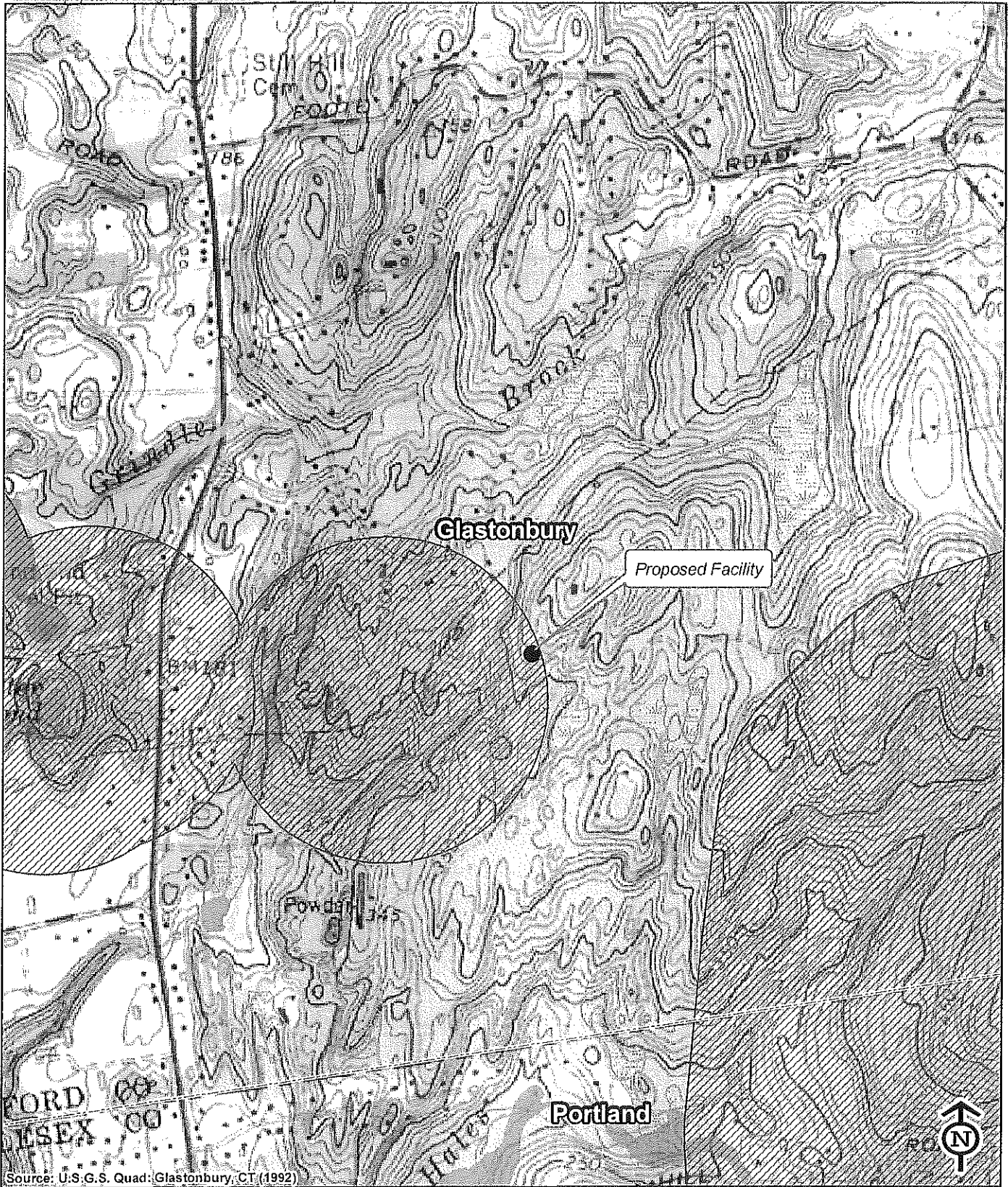
VHB has reviewed Connecticut's Natural Diversity Data Base (NDDB; please see our attached NDDB Screen map). Based on your criteria, we have determined that our proposed project may have a conflict with *a listed species or significant natural community*. We are submitting herein a completed NDDB Request Form for your review and a copy of the Site Plans for your reference. At your earliest convenience, please forward your comments to my attention.

Very truly yours,


Coreen Kelsey
Environmental Coordinator

Enclosures

54 Tuttle Place
Middletown, Connecticut 06457-1847
860.632.1500 • FAX 860.632.7879
email: info@vhb.com
www.vhb.com



Source: U.S.G.S. Quad: Glastonbury, CT (1992)

Legend

- Proposed Facility
- Town Line
- ▨ NDDB Areas (buffered; last updated 12/08)
- ▤ Wetlands
- Open Water
- FEMA Flood Zone
 - ▨ 100 Year Flood Zone
 - ▤ 500 Year Flood Zone
 - ▧ Floodway in Zone AE
 - ▩ Other Flood Areas



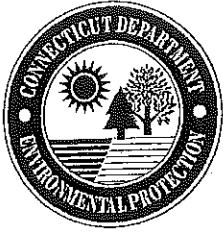
Vanasse Hangen Brustlin, Inc.

Natural Diversity Data Base (NDDB)
 State and Federally-Listed Endangered,
 Threatened, and Special Concern Species
 and Significant Natural Communities Screen
 Proposed Verizon Wireless Facility
 Glastonbury South 2
 271 Dayton Road
 So. Glastonbury, Connecticut

* FEMA Floodplain Data Not Available for Windham County

May 21, 2009





Connecticut Natural Diversity Data Base Review Request Form

Please complete this form *only* if you have conducted a review which determined that your activity is located in an area of concern.

Name: **Verizon Wireless**

Affiliation: **Vanasse Hangen Brustlin, Inc.**

Mailing Address: **54 Tuttle Place**

City/Town: **Middletown**

State: **CT**

Zip Code: **06457**

Business Phone: **860-632-1500**

ext. **2306**

Fax: **860-632-7879**

Contact Person: **Coreen Kelsey**

Title: **Environmental Coord.**

Project or Site Name: **Glastonbury South 2**

Project Location

Town: **South Glastonbury**

USGS Quad: **Glastonbury 1992**

Brief Description of Proposed Activities:

Construct a telecommunications tower facility (see attached letter)

Have you conducted a "State and Federal Listed Species and Natural Communities Map" review?

Yes No Date of Map: **5/21/09**

Has a field survey been previously conducted to determine the presence of any endangered, threatened or special concern species? Yes No

If yes, provide the following information and submit a copy of the field survey with this form.

Biologists Name:

Address:

If the project will require a permit, list type of permit, agency and date or proposed date of application:

Certificate of Environmental Compatibility and Public Need, Connecticut Siting Council, to be determined

(See reverse side - you must sign the certification on the reverse side of this form)

The Connecticut Natural Diversity Data Base (CT NDDB) information will be used for:

- permit application
- environmental assessment (give reasons for assessment):

NEPA Compliance Documentation

- other (specify):

"I certify that the information supplied on this form is complete and accurate, and that any material supplied by the CT NDDB will not be published without prior permission."

Signature

Coreen Kelsey

Date

5/26/09

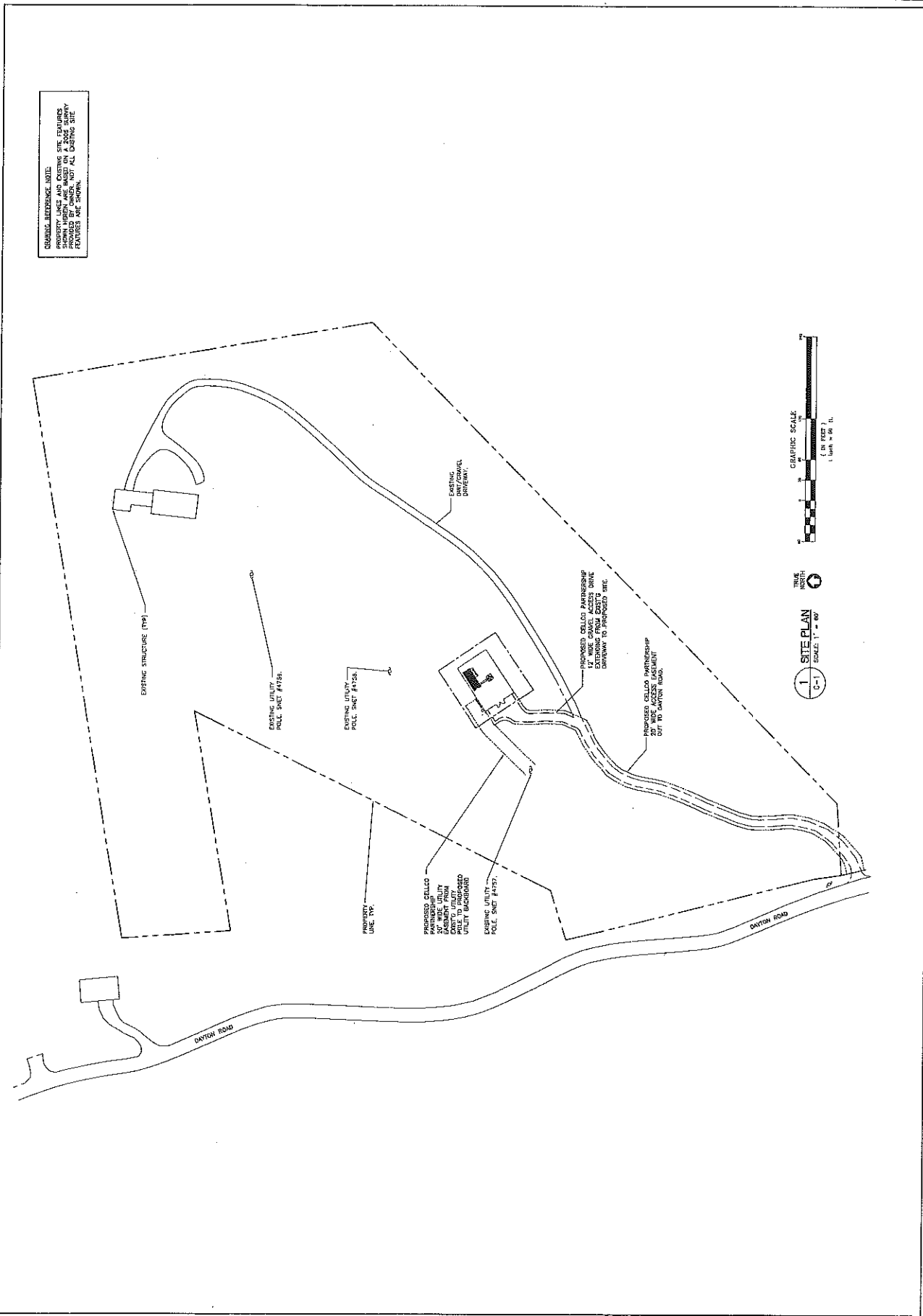
All requests must include a USGS topographic map with the project boundary clearly delineated.

Return completed form to:

WILDLIFE DIVISION
BUREAU OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM ST, 6TH FLOOR
HARTFORD, CT 06106-5127

* You must submit a copy of this completed form with your registration or permit application.

REV.	DATE	DESIGN BY	CHECKED BY	DESCRIPTION
1	08/22/08	JMM	JMM	ISSUED FOR PERMIT REVIEW - CLIENT REVIEW



GRAPHIC REFERENCE NOTE:
DIMENSIONS AND LOCATIONS OF UTILITIES SHOWN HEREIN ARE BASED ON RECORDS PROVIDED BY OWNER. NOT ALL EXISTING UTILITIES MAY BE SHOWN.

**DYNAMIC
ENVIRONMENTAL
ASSOCIATES, INC.**

A PROFESSIONAL ENVIRONMENTAL CONSULTING FIRM

June 17, 2009

Ms. Dawn McKay
Wildlife Division, Bureau of Natural Resources
CT Department of Environmental Protection
79 Elm St, 6th Floor
Hartford, Ct 06106

Re: Informal Biological Assessment
Natural Diversity Database Review
Dayton Rd.-South Glastonbury Tower Site
DEA No. 20807029

Dear Ms. McKay:

Dynamic Environmental Associates, Inc. is completing a NEPA Review for the proposed construction of a telecommunication tower facility site within the State of Connecticut, in accordance with 47 CFR 1.1307 (a) 3. As part of this Assessment, we are requesting a Natural Diversity Data Base Review.

As described herein, an Informal Biological Assessment (IBA) has been conducted for Message Center Management (MCM) to identify federal and state threatened and endangered species (T&E) and/or critical habitat that may be located at or near the proposed project location.

Project Description: Message Center Management, Inc. has proposed to construct a telecommunications tower facility in Hartford County, Connecticut (Figure 1 and Figure 2). The proposed Site will consist of an approximately 75' x 75' (22.9 x 22.9 m) lease area to contain a tower compound of approximately the same size. Within the tower compound will be a 178' (54.3 m) tall monopole tower and associated communications equipment. The tower compound and tower will include space to accommodate the collocation of additional antennae and ground mounted equipment. The approximately 25' (7.62 m) wide access/utility easement is proposed to extend south from Dayton Road for approximately 410' (125 m) to end at the lease area. Electric power and telephone lines will run along this easement.

Project Location: The Site is located within a larger Parent Tract parcel of land located at 7 Dayton Road, in Glastonbury, Hartford County, CT. The Site is found at Latitude N41-38-42.16 and Longitude W72-35-48.15.

Location Maps: The subject site location is shown on a portion of the USGS Glastonbury, CT, FL 7.5-minute topographic quadrangle and Street Atlas road map, enclosed.

Photographs: Color photographs of the tower Site and immediate project area are enclosed.

Description of Project Area:

The following has been derived from information provided by Message Center Management (MCM), a review of available data and literature, and on observations made during a site visit conducted on April 13, 2009:

Location Description:	The Site lease parcel area is located approximately 250' west of Dayton Road. The Site, access easement and surrounding land area is undeveloped.
Area Description:	The Parent Tract is bordered to the north and south by undeveloped land, to the west by a cleared utility easement, and to the east by Dayton Road. The surrounding area is lightly developed with land in the immediate area consisting of woodland and scattered residential property.
Vegetation (Onsite):	The site is located within a mixed-hardwood forested area. The majority of trees in the area are less than 4" dbh with some presence of more mature species (6"-12" dbh)
Vegetation (Vicinity):	Vegetation in the surrounding area is similar to that found on the Site and described above.
Hydrology & Wetlands:	No water bodies or wetlands were observed on the Site. Hydric soils and hydrophytic vegetation were not present on the site. As described in the attached Wetlands/Watercourses and Soils Report and depicted on the preliminary site plan, three isolated wetlands are located to the north, west and east of the Site.
T&E Species Analysis:	Species lists and habitat information for plants and animals protected or proposed for protection under the Federal Endangered Species Act were obtained from the sources listed on Table 1 (attached). We also reviewed "designated critical habitat" as defined in 50 CFR, and confirmed that no designated or proposed critical habitats exist in the site area. In addition, an Amphibian Study was conducted to assess potential impacts to reptiles and amphibians that may be associated with a vernal pool located near the Site.
T&E Species Evidence Observed:	No evidence or occurrences of Threatened or Endangered Species were observed on or adjacent to the Site.

Conclusions: Based on visual observations, various maps, and publicly available information it is DEA's opinion that:

- 1) The Site location falls within a shaded area ("blob") shown on the Glastonbury, Natural Diversity Database Digital Data, December 2008 map.
- 2) The Site is not designated as "Critical Habitat" as defined in 50 CFR.
- 3) The above designated facility is not located in an officially designated wilderness area.
- 4) The facility is not located in an officially designated wildlife preserve.
- 5) This facility will not likely effect listed threatened or endangered species or designated critical habitats.
- 6) The facility is not likely to jeopardize the continued existence of any proposed endangered or threatened species or result in the destruction of, or adverse modification of proposed critical habitats.
- 7) In our opinion, a finding of "no impact" is appropriate for this project.

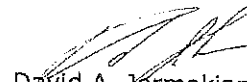
Ms. Dawn McKay
Ct DEP Wildlife Division

-3-

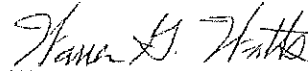
June 17, 2009

We trust that this information is suitable for your needs. Should you have any questions, please do not hesitate to call.

Very truly yours,
**Dynamic Environmental
Associates, Inc.**



David A. Jermakian
President



Warren G. Watts
Senior Environmental Biologist

enc: NDDB Review Request Form
NDDB Map
Color Photographs
Figure 1 - Site Location Map
Figure 2 - Site Sketch
Figure 3 - USGS Topographic Map
Figure 4 - 2006 Aerial Photograph
Site Survey & Preliminary Site Plan
Amphibian Study Report
Wetlands/Watercourses and Soils Report
Biologist CV

20807029 - IBA



Connecticut Natural Diversity Data Base Review Request Form

Please complete this form *only* if you have conducted a review which determined that your activity is located in an area of concern.

Name: **David A. Jermakian, Consultant for Message Center Management**

Affiliation: **Dynamic Environmental Associates, Inc.**

Mailing Address: **3850 Lake Street**

City/Town: **Macon**

State: **GA**

Zip Code: **31204**

Business Phone: **877-968-4787**

ext.

Fax: **860-628-4600**

Contact Person: **David A. Jermakian**

Title: **President**

Project or Site Name: **Dayton Road - South Glastonbury**

Project Location

Town: **Glastonbury**

USGS Quad: **Galstonbury CT**

Brief Description of Proposed Activities:

Telecommunications tower facility consisting of a 178' tall monopole tower and associated communications equipment within an approximately 75' x 75' tower compound, as well as a 25' x 410' access.

Have you conducted a "State and Federal Listed Species and Natural Communities Map" review?

Yes No Date of Map: **December 2008**

Has a field survey been previously conducted to determine the presence of any endangered, threatened or special concern species? Yes No

If yes, provide the following information and submit a copy of the field survey with this form.

Biologists Name: **Thomas W. Pietras**

Address: **Soil Science and Environmental Services Inc.,
545 Highland Avenue
Cheshire, CT 06410
& See attached cover letter**

If the project will require a permit, list type of permit, agency and date or proposed date of application:

Certificate of Environmental Compatibility and Public Need, Connecticut Siting Council, expected 4th Quarter 2009

(See reverse side - you must sign the certification on the reverse side of this form)

The Connecticut Natural Diversity Data Base (CT NDDDB) information will be used for:

- permit application
- environmental assessment (give reasons for assessment):

NEPA Compliance Assessment

- other (specify):

"I certify that the information supplied on this form is complete and accurate, and that any material supplied by the CT NDDDB will not be published without prior permission."

Signature _____

Date _____

All requests must include a USGS topographic map with the project boundary clearly delineated.

Return completed form to:

WILDLIFE DIVISION
BUREAU OF NATURAL RESOURCES
DEPARTMENT OF ENVIRONMENTAL PROTECTION
79 ELM ST, 6TH FLOOR
HARTFORD, CT 06106-5127

* You must submit a copy of this completed form with your registration or permit application.

STATE AND FEDERAL LISTED SPECIES AND SIGNIFICANT NATURAL COMMUNITIES

Glastonbury

LEGEND

Listed Species and Natural Communities*

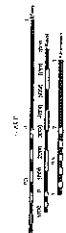
- State Boundary
- County Boundary
- Town Boundary
- Constable
- Primary Route
- Secondary Route
- Local Road
- Railroad
- Water, Shore
- Drainage Ditch
- Intermittent Water
- Dam
- Dredged Channel
- Aqueduct
- Water
- Instream Water
- Tidal, Sand Flats
- Rocks in Water
- Inundated Area
- Marsh
- Dam

TO USE MAP

Local street boundaries and city regional features are on the map. If the project is not within the town boundaries, the map may be used to determine the town boundaries. The map is based on 1:25,000 scale topographic data. The map is not intended to be used as a legal document. The map is not intended to be used as a legal document. The map is not intended to be used as a legal document.

DATA SOURCES

1. **STATE BOUNDARIES:** From the State of Connecticut, Office of the State Geologist, 1990. 2. **COUNTY BOUNDARIES:** From the State of Connecticut, Office of the State Geologist, 1990. 3. **TOWN BOUNDARIES:** From the State of Connecticut, Office of the State Geologist, 1990. 4. **CONSTABLES:** From the State of Connecticut, Office of the State Geologist, 1990. 5. **ROADS:** From the State of Connecticut, Office of the State Geologist, 1990. 6. **RAILROADS:** From the State of Connecticut, Office of the State Geologist, 1990. 7. **WATER:** From the State of Connecticut, Office of the State Geologist, 1990. 8. **WATER, SHORE:** From the State of Connecticut, Office of the State Geologist, 1990. 9. **DRAINAGE DITCHES:** From the State of Connecticut, Office of the State Geologist, 1990. 10. **INTERMITTENT WATER:** From the State of Connecticut, Office of the State Geologist, 1990. 11. **DAMS:** From the State of Connecticut, Office of the State Geologist, 1990. 12. **DREDGED CHANNELS:** From the State of Connecticut, Office of the State Geologist, 1990. 13. **AQUEDUCTS:** From the State of Connecticut, Office of the State Geologist, 1990. 14. **WATER:** From the State of Connecticut, Office of the State Geologist, 1990. 15. **INSTREAM WATER:** From the State of Connecticut, Office of the State Geologist, 1990. 16. **TIDAL, SAND FLATS:** From the State of Connecticut, Office of the State Geologist, 1990. 17. **ROCKS IN WATER:** From the State of Connecticut, Office of the State Geologist, 1990. 18. **INUNDATED AREAS:** From the State of Connecticut, Office of the State Geologist, 1990. 19. **MARSHES:** From the State of Connecticut, Office of the State Geologist, 1990. 20. **DAMS:** From the State of Connecticut, Office of the State Geologist, 1990.



Map Area: 1000' x 1000'
Scale: 1 inch = 1 mile
Date: 11/11/00
Author: [Name]
Title: [Title]

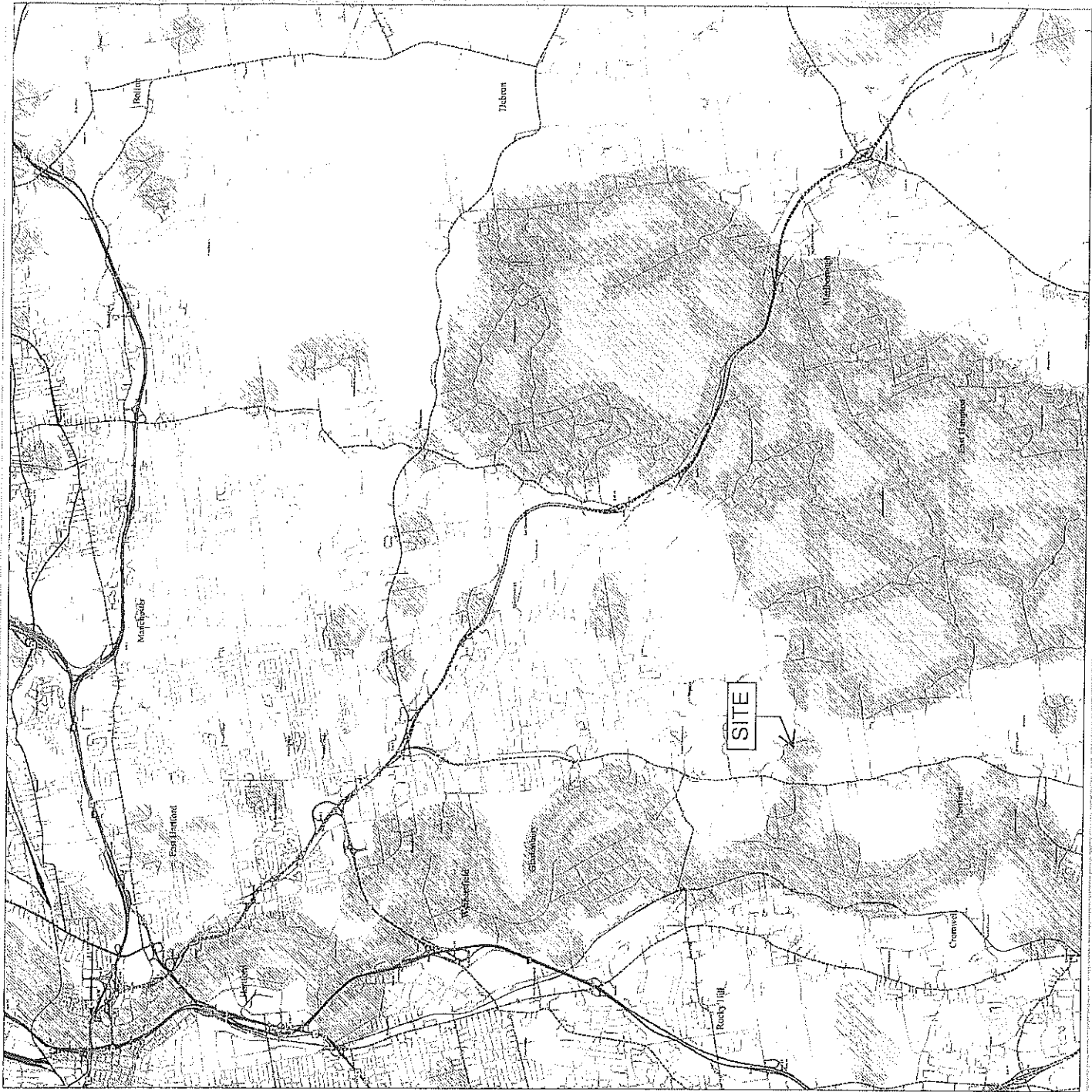
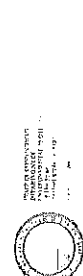




Photo 1 - View of proposed access/utility easement from Dayton Road, facing south.



Photo 2 - View of proposed access/utility easement from lease area, facing northeast.



Photo 3 - View of proposed lease area, facing south.



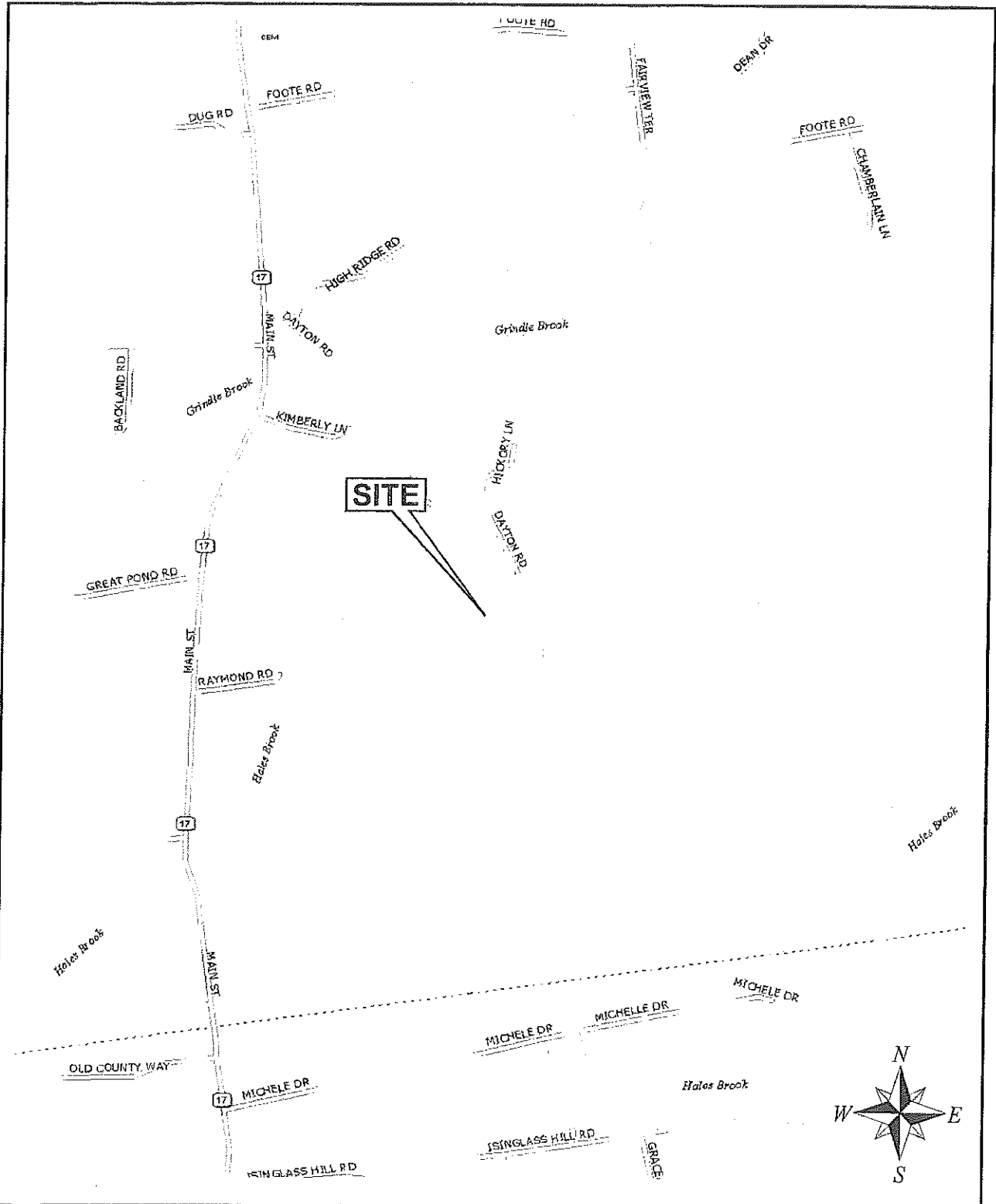
Photo 4 - View of proposed lease area, facing east.




Photo 5 - View of proposed lease area, facing southwest.



Photo 6 - View of typical rock outcropping along Dayton Road south of proposed access/utility easement, facing north.



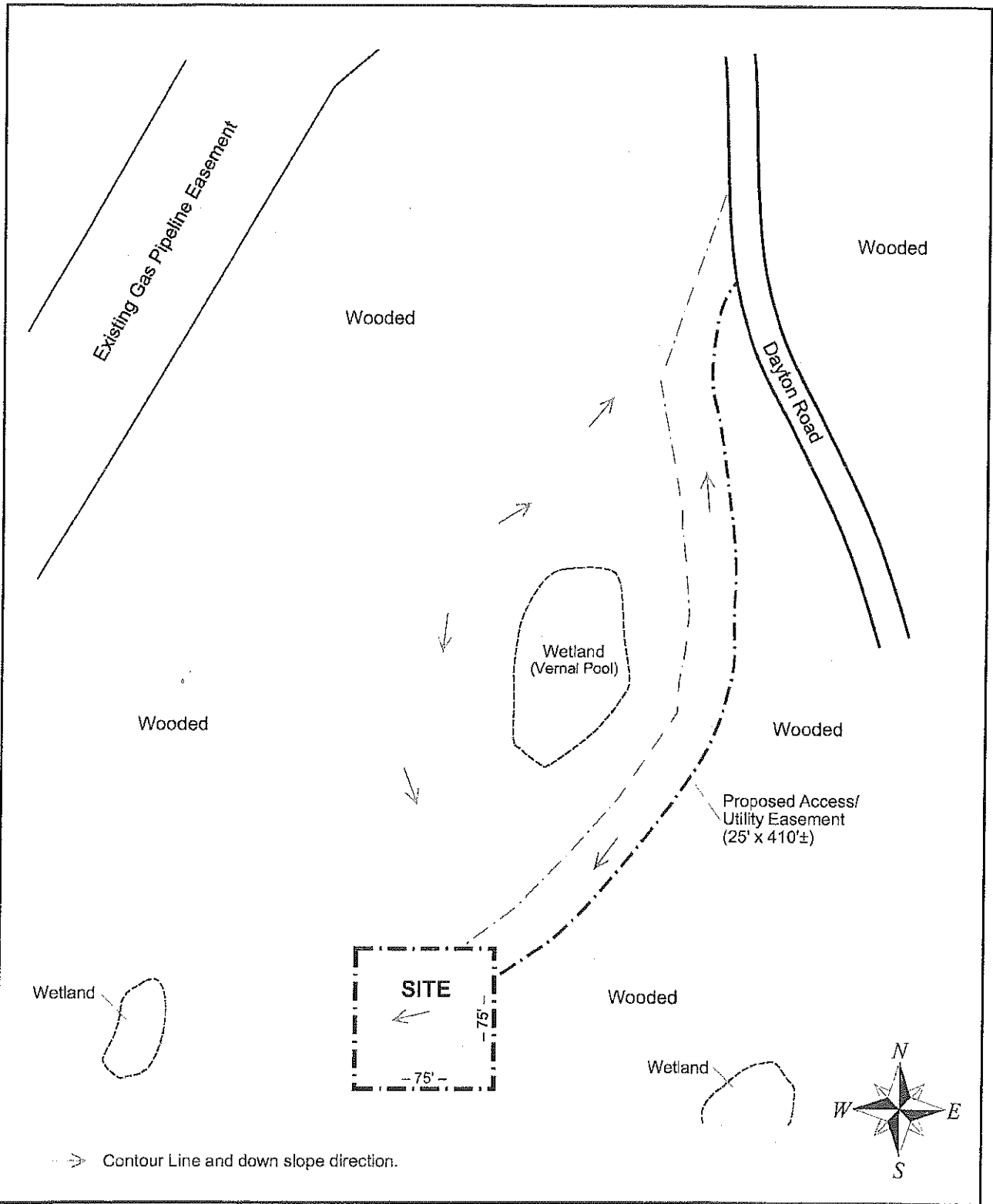
SITE LOCATION MAP




DYNAMIC ENVIRONMENTAL ASSOCIATES, INC.
www.DynamicEnvironmental.com

Informal Biological Assessment
South Glastonbury-Dayton Tower Site
Hartford County, Connecticut

Figure No.: 1
Date: 06/17/09
DEA No.: 20807029

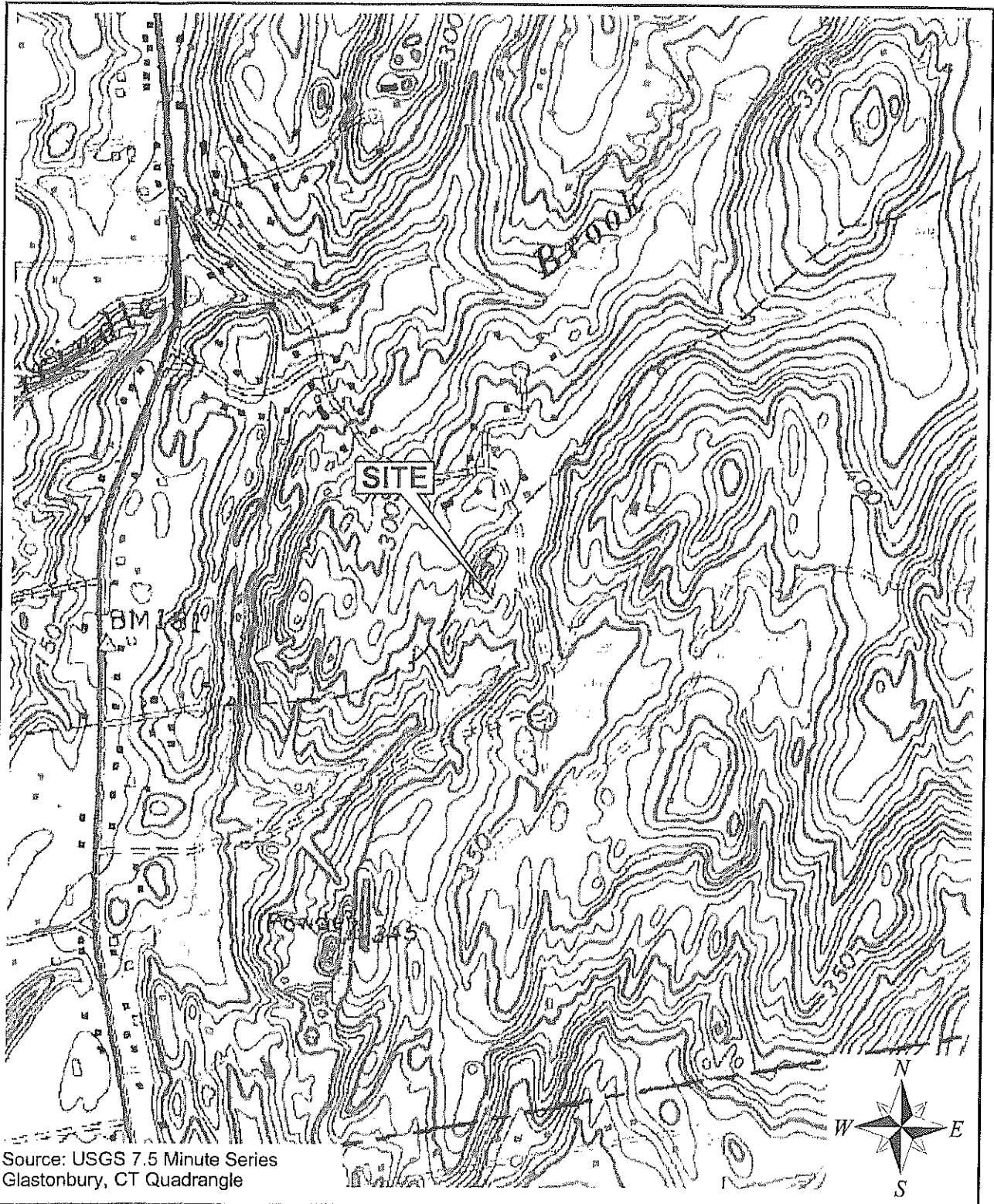


SITE SKETCH

 **DYNAMIC ENVIRONMENTAL ASSOCIATES, INC.**
www.DynamicEnvironmental.com


Informal Biological Assessment
South Glastonbury-Dayton Tower Site
Hartford County, Connecticut

Figure No.: 2
Date: 06/17/09
DEA No.: 20807029



Source: USGS 7.5 Minute Series
Glastonbury, CT Quadrangle

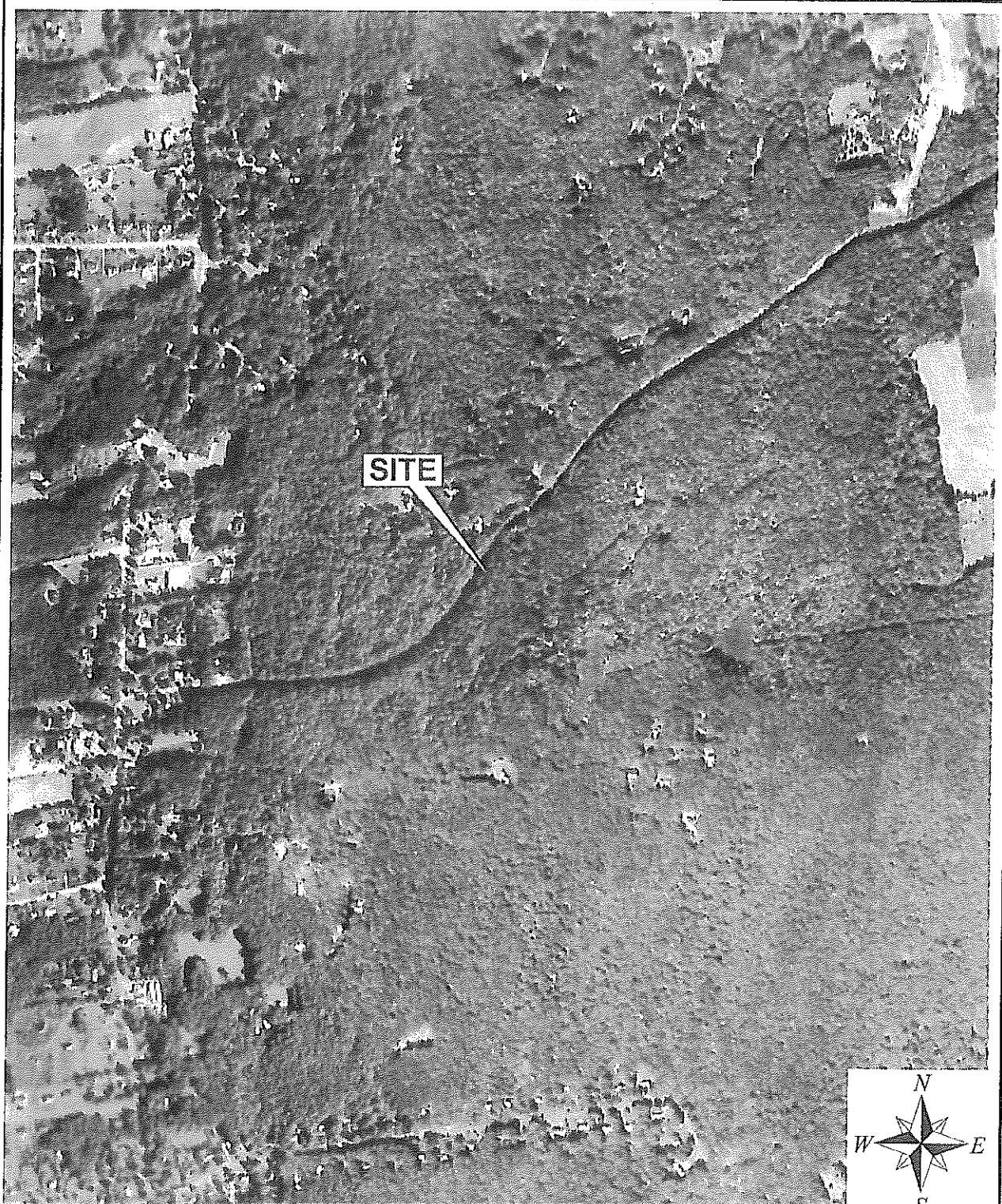
U.S.G.S. Topographic Map w/Visual APE



**DYNAMIC
ENVIRONMENTAL
ASSOCIATES, INC.**
www.DynamicEnvironmental.com

Informal Biological Assessment
South Glastonbury-Dayton Tower Site
Hartford County, Connecticut

Figure No.: 3
Date: 06/17/09
DEA No.: 20807029



2006 Aerial Photograph w/Visual APE



**DYNAMIC
ENVIRONMENTAL
ASSOCIATES, INC.**

www.DynamicEnvironmental.com

Informal Biological Assessment
South Glastonbury-Dayton Tower Site
Hartford County, Connecticut

Figure No.: 4

Date: 06/17/09

DEA No.: 20807029

MCM-10

SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

Soil Science • Ecological Studies • Hazardous Waste Assessments • Project Planning • Soil & Water Testing

KENNETH C. STEVENS, Jr.
President

April 2, 2009

Michael J. Egan III, AIA
URS Corporation
500 Enterprise Drive, Suite 3B
Rocky Hill, CT 06067

Re: Amphibian Study at Proposed Tower Site
Parcel W7, Dayton Road, Glastonbury, CT
URS# 36924846/MCM-010
SS&ES Job No. 2009/08-161-CT-GLA-1A

Dear Mr. Egan:

In accordance with your request, Soil Science and Environmental Services, Inc. (SS&ES) conducted three site inspections of the subject property. Two occurred during the night and one in the day. The purpose of the inspections was to identify any amphibians and reptiles as they migrate to a small vernal pool that is located near Dayton Road. The first inspection was conducted on March 26, 2009 by Thomas W. Pietras, SS&ES Professional Wetland and Soil Scientist, and Scott D. Stevens, SS&ES Soil Scientist. The 3/26/09 inspection was made during the evening (9:30 pm) when temperatures were in the low 40's and there was a light to moderate rainfall. Prior to 3/26/09 there was minimal rainfall for several weeks and temperatures were seasonally cold. SS&ES utilized flashlights during the investigation. The area encircling the vernal pool, including the routes of Alternative Driveways A and B, were traversed. Wood frog calls were heard from within the vernal pool. However, there was no sign of any amphibians or reptiles outside of the pool.

A second inspection was made by Mr. Pietras during the very early morning (4:30 am) on March 29, 2009. Temperatures were in the high 40's and a light to moderate rainfall event had occurred during the previous several hours. Both wood frogs and spring peepers were heard calling from inside the pool. There was no sign of amphibians or reptiles outside of the pool.

Mr. Pietras also inspected the property on April 1, 2009 during the late afternoon when the temperatures were in the high 40's, the sky was overcast and there was not yet any precipitation. The day prior to the 4/1/09 inspection was sunny with temperatures in the upper 50's. There was no evidence of amphibians or reptiles in the vernal pool or surrounding area on 4/1/09, neither sightings of individuals or hearing their calls.

BRIEF DESCRIPTION OF ALTERNATIVE DRIVES A AND B

There are two alternative routes for the access drive from Dayton Road to the proposed tower site (refer to Figures 1 and 2). Both alternative drives extend through upland, mixed hardwood forest. Alternative A extends to the north of the pool, while Alternative B passes to the south. Running westerly from Dayton Road, Alternative Drive A goes up a fairly steep incline and nicks the southeastern tip of a bedrock ridgeline. It appears

that some blasting would be required to extend the drive through the southwestern tip of the ridge line. Driveway A would then pass fairly steeply down a forested hillside to the proposed tower compound. Remains of an old, relatively narrow, woods road are present to the south of Alternative Driveway A in the vicinity of the vernal pool. The woods road passes just to the south of the bedrock ridge, but lies very close to the vernal pool.

Alternative B Drive runs in a southwesterly direction. In the vicinity of the vernal pool Alternative B runs along the crest of a minor ridge characterized by some exposed bedrock and soils shallow to bedrock. After passing close to the vernal pool, Alternative B Drive then runs down a moderately steep slope to the tower site.

POTENTIAL IMPACTS OF THE ACCESS DRIVES TO THE VERNAL POOL

Of the two alternative driveways, Alternative A would appear to be associated with more potential negative impacts to the vernal pool. These include possible negative impacts from sediment and erosion control during construction and quality of storm water runoff following construction. The route for Alternative A contains a section of steep slope in the vicinity of the vernal pool and it may extend through a tip of bedrock ridge that would require some blasting. Also, the slope from the Alternative Drive A down to the vernal pool is steeper than for Alternative B. During large storm events stormwater runoff can rapidly sheetflow down the southern side of the bedrock ridge. The concentrated flow would pass onto Alternative Drive A and then run downslope into the pool. Control of sediments may be problematic. In contrast the route of Alternative B is along the crest of a minor ridge, where some stormwater runoff passes westerly towards the pool and a portion of stormwater is directed easterly and away from the pool. The volume of any stormwater coming off the minor ridge is a very small amount, even during the largest rainfall events. Control of sediments washing off the driveway for Alternative B would be much easier than for Alternative A.

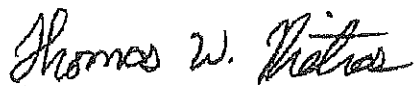
Alternative Driveway A also appears to pass through more viable upland habitat for any amphibians and reptiles that utilize the vernal pool. Wood frogs and spring peepers were found in the pool. It is possible that salamanders are also utilizing the pool. Vernal pools provide wood frogs, spring peepers and salamanders with breeding habitat. A good portion of their life is spent outside of water when they utilize forest habitat, with a preference for upland forest containing thick herbaceous vegetation, duff and friable soils. Certain species have a preference for rocky slopes that have southern or southwestern exposures. With the exception of the southwestern tip of a bedrock ridge, Alternative A passes over shallow, moderately deep and deep to bedrock, forest soil. The forest soil has a thick litter layer at the surface. Alternative A also passes through a section of rocky slope containing a southern exposure. The proposed driveway for Alternative A extends through potential habitat for amphibians and reptiles that are presently utilizing the pool.

In the vicinity of the vernal pool Alternative B runs along either exposed bedrock or on soils that are mainly shallow to bedrock. Forest litter is absent in the areas of exposed ledge and relatively thin in the shallow to bedrock soils. The potential habitat for amphibians and reptiles provided along the crest of the minor ridge for Alternative B is harsh with seasonal variations ranging from extreme cold in the winter to hot and droughty in the summer.

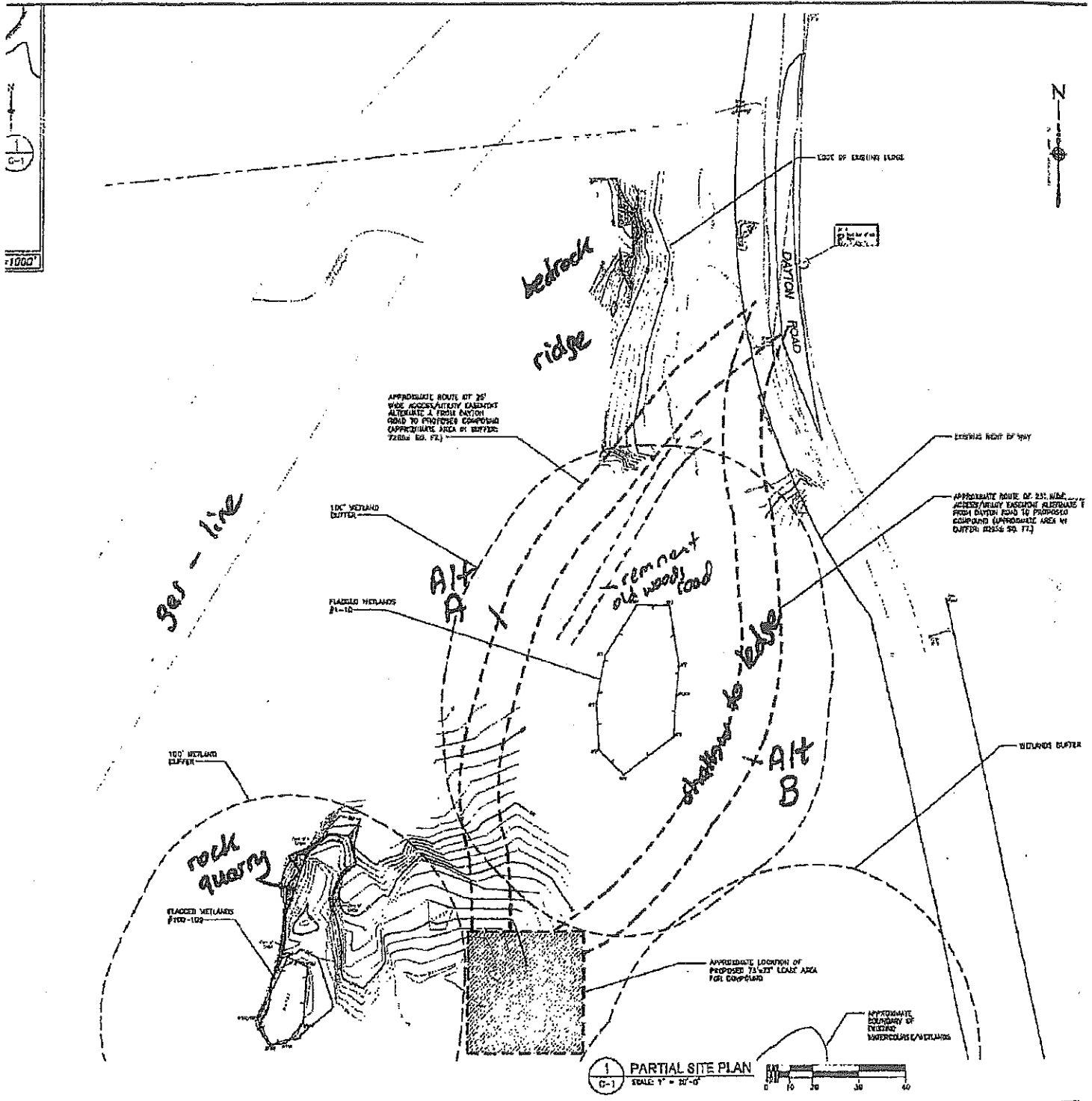
SUMMARY AND CONCLUSION

SS&ES found evidence of wood frogs and spring peepers in the vernal pool located to the west of Dayton Road on the subject property. Based on the information collected from the site inspections, it is the professional opinion of SS&ES that Alternative Drive B would result in less negative impacts to the small vernal pool that is present near Dayton Road.

Respectfully submitted,

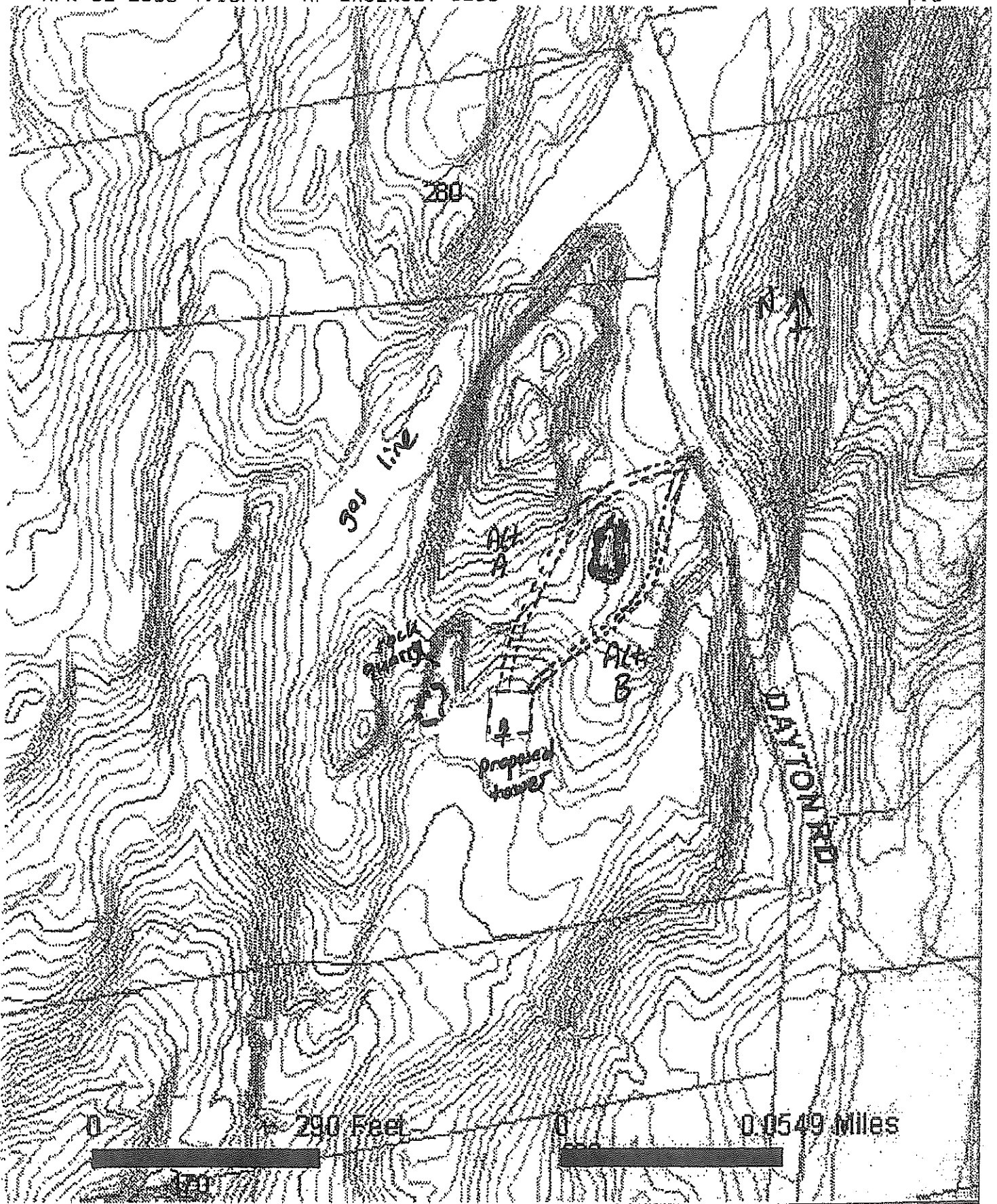


Thomas W. Pietras
Professional Wetland and Soil Scientist



1 PARTIAL SITE PLAN
 SCALE 1" = 20'-0"

Figure 1
 Alternative Drives A + B
 Tower Side, Glastonbury, CT



end and Disclaimer

Figure 2 Alternative Drives

1.0 1.0 1.0 1.0 1.0

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 SSES Job No: 2008-161-CT-GLA-1
ATTN: Alitz Abadjian Client Job No: _____
500 Enterprise Drive
Rocky Hill, CT 06067 Site Inspection Date: July 17, 2008

PROJECT TITLE AND LOCATION: Parcel W7 (39 acres), northeast portion of property,
Dayton Road, Glastonbury, CT

IDENTIFICATION OF WETLANDS AND WATERCOURSES RESOURCES

WETLANDS AND WATERCOURSES PRESENT ON PROPERTY: Yes XX No _____
Wetlands: Inland Wetlands XX Watercourses: Streams XX
Tidal Wetlands _____ Waterbodies XX
Remarks: _____

VEGETATION COMMUNITIES PRESENT IN WETLANDS

Forest XX Sapling/Shrub XX Wet Meadow _____ Marsh _____ Field/Lawn _____

SOIL MOISTURE CONDITION

Dry XX
Moist XX
Wet _____

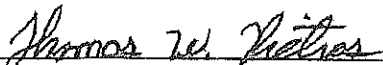
WINTER CONDITIONS

Frost Depth: _____ inches
Snow Depth: _____ 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
Registered Professional Soil Scientist
Professional Wetland Scientist

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

PROJECT TITLE AND LOCATION: Parcel W7, northeast portion of property, Dayton Road, Glastonbury, CT

NUMBERING SEQUENCE OF WETLAND BOUNDARY LINE MARKERS:

Wetlands: orange survey tapes – 1 thru 10

Watercourse pond: pink survey tapes – 100 thru 109

SOILS SECTION:

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

WETLAND SOILS

4 Leicester fine sandy loam (Aeric Endoaquepts) – This is a deep, poorly drained, friable, coarse-loamy textured, glacial till soil. The till was derived from schist, gneiss and granite. Leicester soils occur on glaciated plains, hills and ridges.

NON-WETLAND SOILS

50 Sutton fine sandy loam (Aquic Dystrudepts) - This is a deep, moderately well drained, friable, coarse-loamy textured, glacial till soil derived from schist, gneiss and granite. Sutton soils occur on glaciated plains, hills and ridges.

75 Hollis-Chatfield-Rock outcrop complex (Typic & Lithic Dystrudepts) - These are moderately deep and shallow, well drained to somewhat excessively drained, friable, coarse-loamy textured, glacial till soils derived from schist, gneiss and granite. Depths to bedrock range from 0 to over 5 feet. Roughly 1/3 of the soils in this complex are shallow (10-20 inches) to bedrock, while another 1/3 are moderately deep (20-40 inches). The Hollis-Chatfield-rock outcrop complex occurs on glaciated plains, hills and ridges.

76 Rock outcrop-Hollis complex (Lithic Dystrudepts) - This map unit consists mainly of exposed bedrock and shallow to bedrock (10-20 inches) soils that are somewhat excessively drained, friable, coarse-loamy textured, glacial till soils derived from schist, gneiss and granite. The Rock outcrop-Hollis complex occurs on glaciated plains, hills and ridges.

303 Pits, quarries Pits are open excavations from which soil and underlying material have been removed, exposing either rock or other material.

Notes: 1) The Leicester wetland (flags 1 thru 1) occurs in a slight depressional area of a forested, minor ridgeline. Within the wetland there is a scarcity of herbaceous and woody plants and the soil surface is covered with darkened leaves. This may indicate that during the wetter months of the year there is temporary, seasonal shallow inundation.

2) A small ponding area is present in the bottom of rock quarry (flags 100 thru 109). The ponding was over four feet in depth and contained a lot of decaying leaves.

Is Wetland a Vernal Ptdl ?

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).

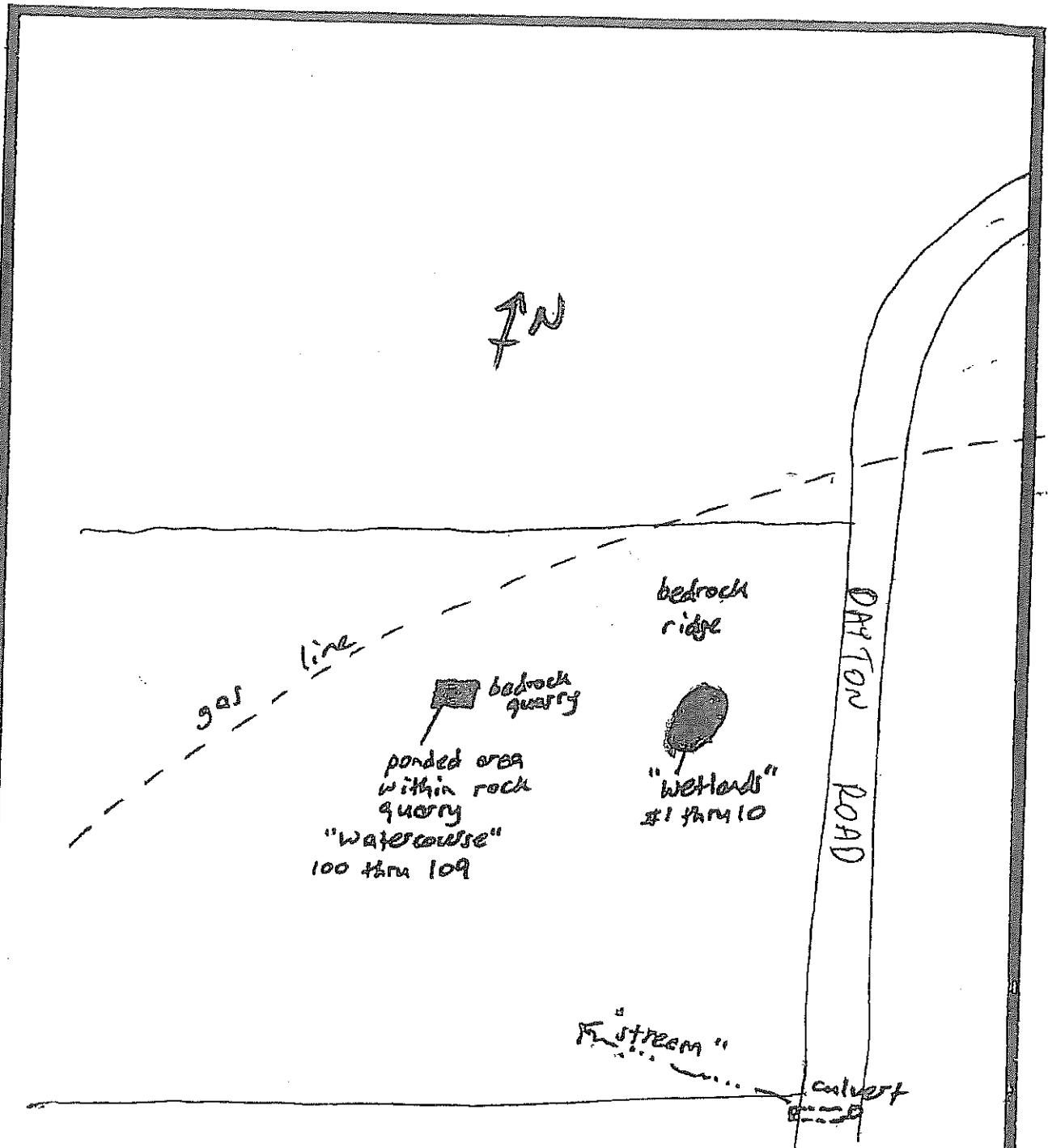
METHODOLOGY FOR IDENTIFICATION OF SOILS, WETLANDS & WATERCOURSES

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

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.



Proposed communications tower, Dayton Road, Glastonbury, CT
 sketch map of wetlands + water courses

FIG.

SCALE: /

SOIL SCIENCE AND ENVIRONMENTAL SERVICES, INC.

DATE: 7/17/08



WARREN G. WATTS

Mr. Watts is a Project Manager with the firm and has over twenty years of experience in the environmental arena. His responsibilities include completion of: Phase I and Phase II Environmental Site Assessments for construction of cellular communication towers and other industrial projects; biological impact assessments under NEPA, state, and local requirements; RCRA compliance and remedial investigation & design for industrial sites; and environmental compliance auditing. As a Project Manager, he is responsible for direct communications with clients and with personnel from federal, state and local regulatory agencies.

Mr. Watts has extensive experience in providing environmental impact assessment and compliance implementation for both small and large scale industrial construction projects, including: multimedia environmental regulatory/legislative requirement interpretation, permit acquisition and compliance oversight, field evaluation of potential biological impacts and mitigation measures, project management, site supervision, and health & safety compliance oversight. Specific environmental program area experience includes environmental management systems development, environmental compliance assurance for utility industry power plant and gas & electric transmission/distribution facility construction and operation, NPDES monitoring, soil/ground water investigations and remediation, underground and aboveground storage tank management, hazardous/toxic/solid waste management and pollution prevention initiatives, superfund/hazardous/PCB waste site investigations and remedial designs, emergency response action oversight and planning, EA/EIS preparation, NEPA compliance, wetland and floodplain delineations, and erosion & sediment control for large construction projects. He has extensive experience with field investigation, environmental sampling/analysis methods and equipment, personal protective equipment, and health and safety equipment and practices.

As Manager of Environmental Compliance & Auditing with a Mid-Atlantic utility, he was responsible for corporate-wide compliance of gas and electric utility operations in five (5) Mid-Atlantic states. He supervised a large technical staff in all functional areas of the environmental field, including compliance management systems development, safety and environmental program integration, permit acquisition, compliance auditing, personnel training, compliance guidance development, and real property contamination assessment and remediation.

As Senior Environmental Specialist with a major gas transmission company, he managed all environmental matters relating to construction and operation of gas transmission pipeline and compressor station facilities in five northeastern states. As the sole environmental professional on staff, he was responsible for assessment of proposed facilities to support FERC licensing, construction policy and permitting, property assessment and remediation, safety and environmental compliance procedure development, personnel training, and expert witness testimony for environmental matters.

BACKGROUND:

B.S. Chemistry, Metropolitan State College
M.S. Environmental Engineering course work, Northeastern University
Southeastern Electric Exchange, Former Environmental Committee Chairman
AGA, INGAA, UWAG and USWAG Utility Industry Trade Groups, Member