ALL-POINTS
TECHNOLOGY CORPORATION

ENVIRONMENTAL ASSESSMENT

FUEL CELL GENERATION FACILITY INSTALLATION

245 CHAPEL ROAD

SOUTH WINDSOR, CONNECTICUT

HARTFORD COUNTY

Prepared for:

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October 2013

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(bound separately)

Fuel Cell Project Introduction

CTS Energy, LLC ("CTS") a wholly owned subsidiary of Connecticut Studios, LLC, retained All-Points Technology Corporation, P.C. ("APT") to prepare this Environmental Assessment ("EA") for the installation of a 4.98 megawatt ("MW") fuel cell generation facility in the Town of South Windsor (the "Fuel Cell Project").

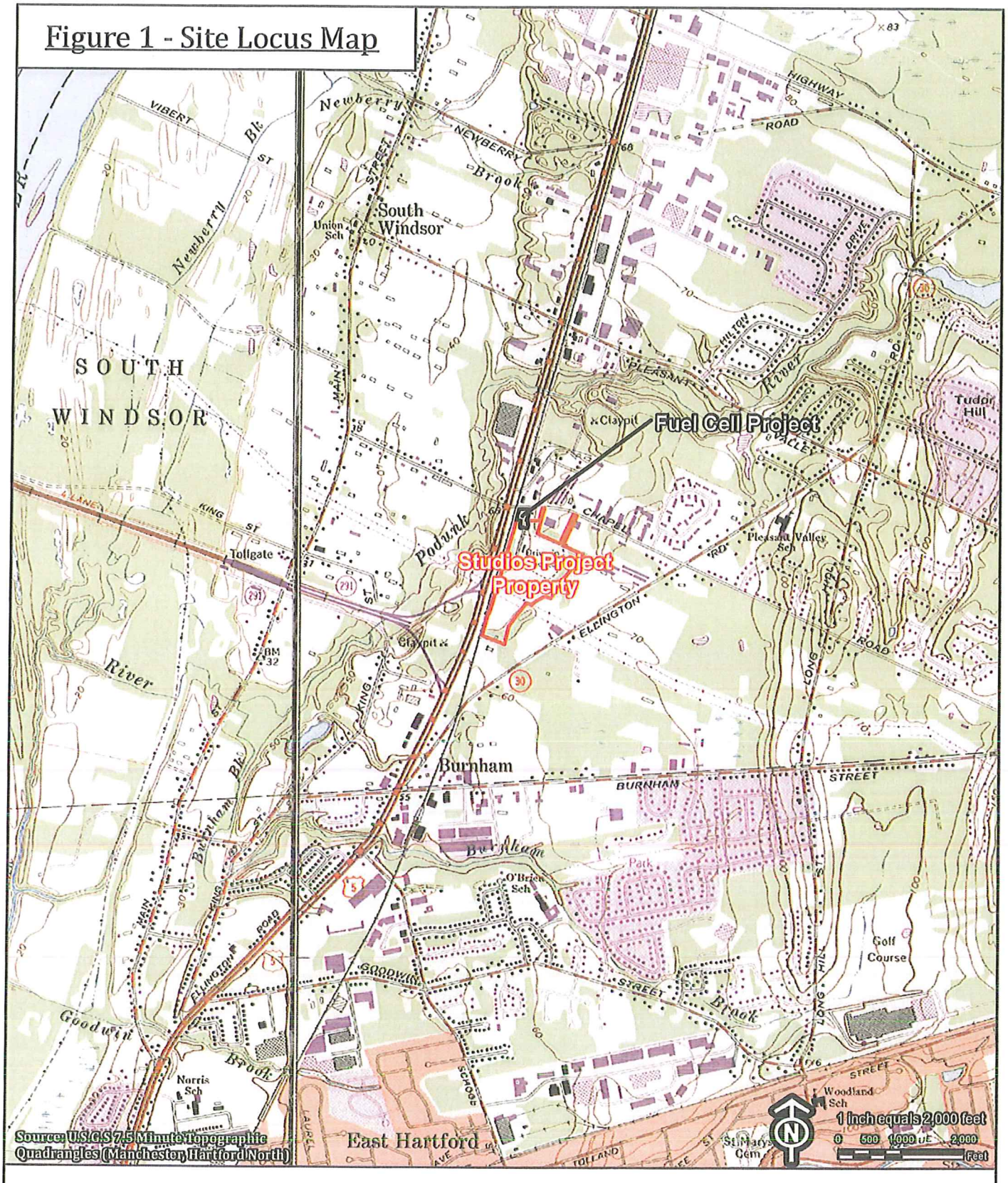
This EA has been completed to support CTS's submission of a petition for declaratory ruling that no Certificate of Environmental Compatibility and Public Need is required for the construction, maintenance, and operation of the Fuel Cell Project ("Petition"). Pursuant to Section 16-50k(a)(2)(B) of the Connecticut General Statutes ("CGS"), the proposed Fuel Cell Project involves a fuel cell and, as demonstrated from the information included in this EA, the project will not have a substantial adverse environmental effect. Additionally, the Fuel Cell Project will comply with air and water quality standards of the Connecticut Department of Energy and Environmental Protection ("CTDEEP"), and will further the State's energy policy by developing renewable energy resources.

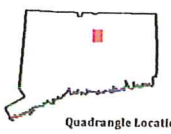
The Fuel Cell Project will be located at 245 Chapel Road, on a 17.6± acre parcel identified in the South Windsor Assessor records as Map 13, Lot 1 ("subject parcel"). The subject parcel is bound by Chapel Road to the north, a railroad corridor and John Fitch Boulevard (Route 5) to the west, and abutting properties to the south and east that, collectively with the subject parcel, comprise a 60± acre site proposed to house the future Connecticut Studios development ("Studios Project").

CTS is proposing the installation of a 4.98 MW fuel cell facility in the northwest corner of the subject parcel (the "Site") as part of its overall studio complex. The facility would include twin custom designed fuel cell systems, at 2.49 MW each, electrical and mechanical balancing systems, and water treatment unit. The system will be fueled by natural gas, which is available to the Site from John Fitch Boulevard.

For purposes of this evaluation, the Site is defined as an irregularly shaped, 0.99-acre area measuring roughly 160± feet wide by 270± feet long abutting the northern subject parcel boundary with Chapel Road and rail line to the west. Figure 1, *Site Locus Map*, depicts the location of the subject parcel, the Site and surrounding area.

Figure 1 - Site Locus Map





Fuel Cell Project
245 Chapel Road
South Windsor, Connecticut

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Existing Conditions

The purpose of this section is to describe current conditions on the subject parcel. An Existing Conditions Map, depicting current conditions on the Site, its access, abutting properties, and several key features discussed herein, is provided as Figure 2. A detailed discussion of the Fuel Cell Project's effects on the environment is provided in the following section of this document.

Fuel Cell Project Location

The ±17.6-acre subject parcel is located in South Windsor, Hartford County, Connecticut. The subject parcel is part of larger property comprised of four (4) separate and abutting parcels of land identified by the South Windsor Assessor's Office on Map 13, Lots 1 (the subject parcel), 26, and 27 and Map 22, Lot 22. These parcels are collectively referred to herein as the CT Studios Property, which is planned for development of movie studio/production facilities, a hotel, restaurants, and retail space. The CT Studios Property, including the subject parcel, is located in a "CD" I-291 Corridor Development zone.

The Site is located in the northwest corner of the subject parcel near the intersection of John Fitch Boulevard (Route 5) and Chapel Road. The Site is currently vacant land occupied by a gravel parking area off Chapel Road, scrub vegetation and the remnants of an access road associated with a former drive-in theater. Deteriorated theater infrastructure, including the steel skeleton of the screen remains in southeastern portions of the subject parcel, just beyond the Site.

The subject parcel is bordered by commercial developments along Chapel Road to the north, Ellington Road to the east, and Route 5 (John Fitch Boulevard) to the west. The remainder of the CT Studios Property, abutting the subject parcel to the east and south, is primarily undeveloped. An overhead electrical transmission corridor extends through the CT Studios Property in an east to west direction, south of the subject parcel. The nearest residence to the Site is located approximately 910 feet to the west, on the north side of Chapel Road and across the Podunk River.

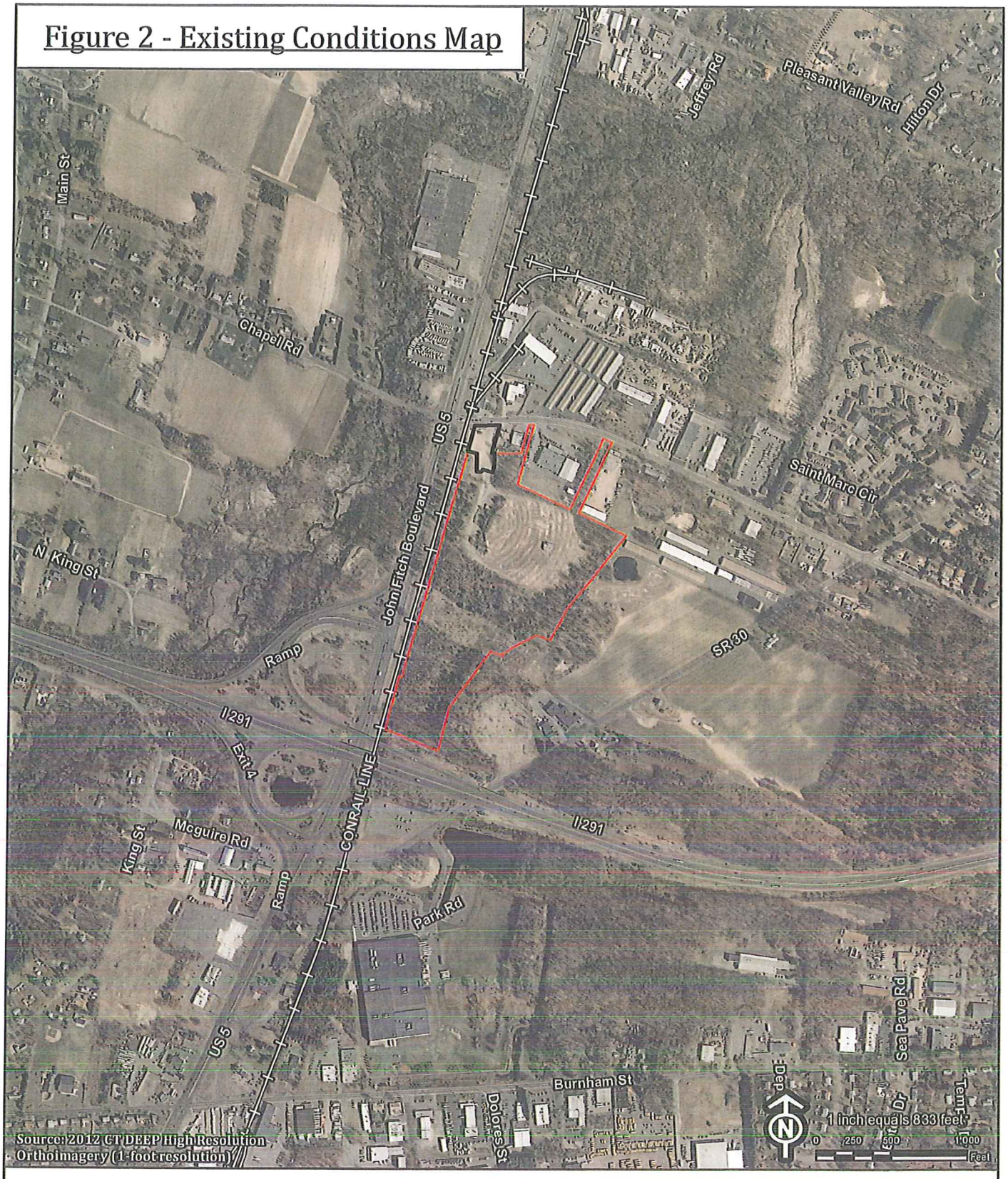
Site Access

Access to the Site is gained via curb cuts from Chapel Road that lead to an open, gravel parking area. A remnant access road extends south from this area into the abandoned, former drive-in theater area.

Wetlands and Watercourses

Dean Gustafson, a Connecticut registered Professional Soil Scientist with APT conducted an inspection of the subject parcel on September 11, 2013 to determine the presence or absence of wetlands and watercourses within approximately 200 feet of the Site. The delineation

Figure 2 - Existing Conditions Map



Legend

- Railroad
- Fuel Cell Project
- Studios Project Property

Connecticut Studios Project
245 Chapel Road
South Windsor, Connecticut

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methodology followed was consistent with both the Connecticut Inland Wetlands and Watercourses Act (IWWA) and the Corps of Engineers *Wetland Delineation Manual* (1987) and the *Regional Supplement to the Corps of Engineers Wetland Delineation Manual: Northcentral and Northeast Region, Version 2.0* (January 2012).

No wetlands or watercourses were identified on or within 200 feet of the Site or on the subject parcel. Soils encompassing the Site and surrounding area were field classified as upland soil units Udorthents and Windsor loamy sand, generally consistent with digitally available soil survey information obtained from the Natural Resources Conservation Service ("NRCS").[1] Udorthents is a miscellaneous land type used to denote moderately well to excessively drained earthen material which has been so disturbed by cutting, filling, or grading that the original soil profile can no longer be discerned. The Windsor series consists of very deep, excessively drained soils formed in sandy glacial outwash. They are nearly level to very steep soils on glaciofluvial landforms.

The nearest wetland or watercourse resource to the Site is the Podunk River's associated bordering floodplain wetlands, located across John Fitch Boulevard approximately 400 feet west of the Site; the Pondunk River is approximately 630 feet to the west. The nearest wetland or watercourse resource to the Site on the CT Studios Project property is a man-made pond located approximately 950 feet to the southeast. A *Wetland Investigation Map* is provided as Figure 3. The constructed pond has limited fringing wetland vegetation, primarily along the west bank of the pond. The pond appears to have been constructed in uplands to serve originally as an agricultural pond possibly for irrigation. A self-storage facility located near the north bank of the pond currently discharges stormwater into the pond, which has no outlet.

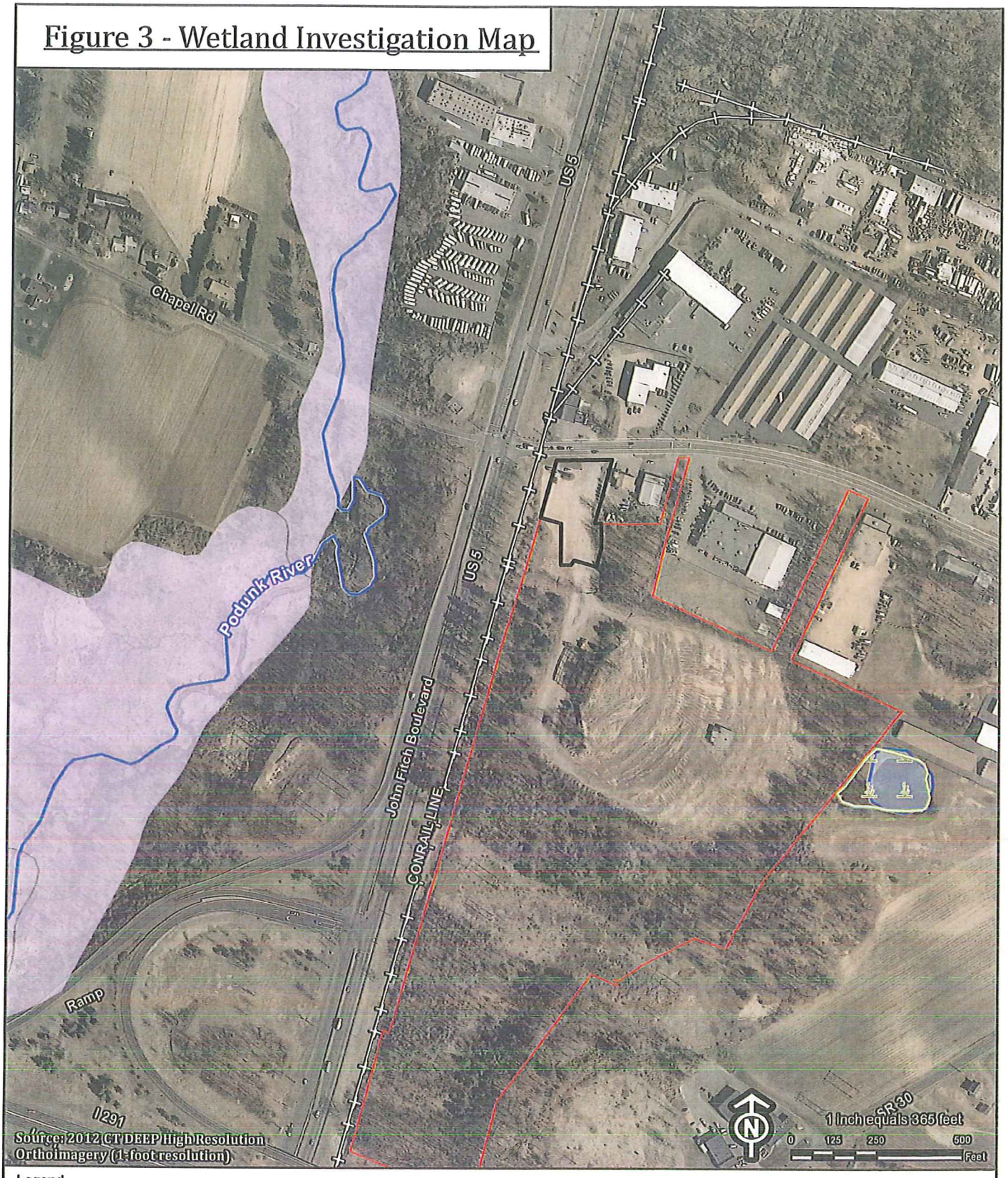
Vegetation and Wildlife

The variety of land use and history of different disturbances has led to greatly varied vegetative communities and habitats on the Site. These upland vegetative communities can be separated into three distinct types with transitional ecotones separating the areas, as depicted on the *Vegetative Cover Map* provided as Figure 4. These vegetative communities and the wildlife likely to utilize them are described below.

Forest: This habitat type comprises the smallest area within the Site, located in separate areas along the southwest and southeast limits of the Fuel Cell Project. The forest habitats are generally a mixed deciduous/coniferous community of moderate age. The dominant canopy species including beech (*Fagus grandifolia*), red oak (*Quercus rubra*), white oak (*Quercus alba*), black birch (*Betula lenta*) and white pine (*Pinus strobus*) trees. The forest understory is relatively open with a moderate groundcover dominated by princess pine (*Lycopodium obscurum*), woodferns (*Dryopteris spp.*), and Canada mayflower (*Maianthemum canadense*).

[1] NRCS Web Soil Survey, http://websoilsurvey.nrcs.usda.gov/app/, accessed on September 9, 2013.

Figure 3 - Wetland Investigation Map



Legend

- Railroad
- CT DEEP Waterway
- Field Confirmed Wetland
- Fuel Cell Project
- CT DEEP Waterbody
- CT DEEP Wetland
- Studios Project Property

Fuel Cell Project
245 Chapel Road
South Windsor, Connecticut

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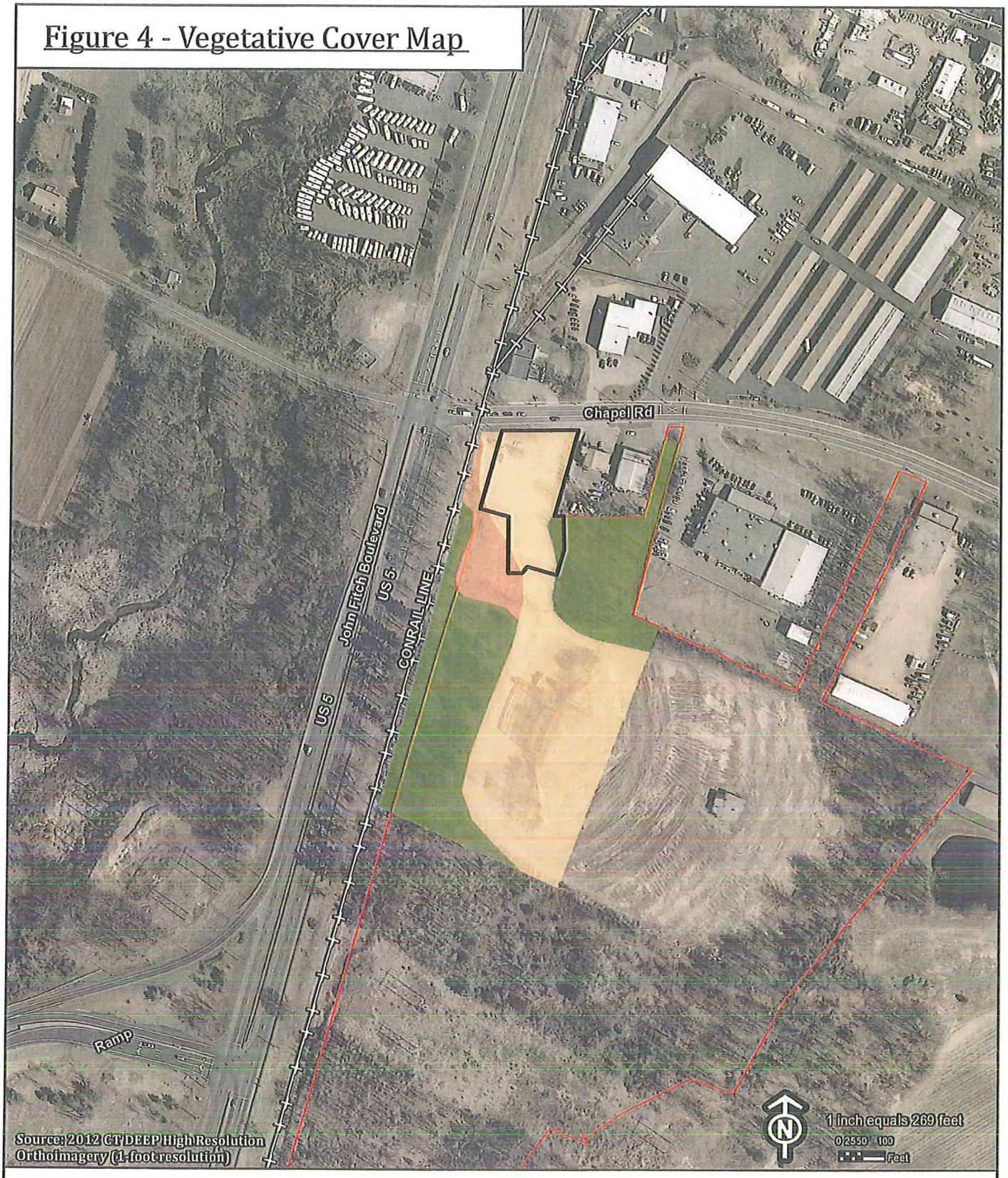
Figure 4 - Vegetative Cover Map



Legend

- Railroad
- Fuel Cell Project
- Studios Project Property

Vegetative Cover

- Forest
- Developed Area
- Old Field

Fuel Cell Project
245 Chapel Road
South Windsor, Connecticut

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The presence of I-291 to the south, John Fitch Boulevard (Route 5) and the railroad to the west, and dense commercial and residential development to the north and east limits wildlife usage as a travel or migratory corridor. The medium sized block of forested habitat may offer some habitat for interior forest songbirds, which will likely utilize the interior of this forested area. However, the majority of the songbirds encountered within this forested block will be those favoring edge habitats and suburban areas. Avian species observed or likely to be present include species habituated to the high level of human activity, including blue jay (*Cyanocitta cristata*), American crow (*Corvus brachyrhynchos*), robin (*Turdus migratorius*), black capped chickadee (*Poecile atricapillus*), hairy woodpecker (*Picoides villosus*), vireo (*Vireo spp.*), northern cardinal (*Cardinalis cardinalis*), catbird (*Dumetella carolinensis*), house sparrow (*Passer domesticus*), and tufted titmouse (*Baeolophus bicolor*).

Since these forested areas are fragmented and separated from other natural areas by major roads and development, wildlife usage by larger species would also be limited. Generalist wildlife species that are tolerant of human disturbance would be expected. Larger mammals and other species that require large blocks of un-fragmented habitats are not likely to utilize this site to any appreciable degree. Species such as raccoon (*Procyon lotor*), striped skunk (*Mephitis mephitis*), grey squirrel (*Sciurus carolinensis*), Virginia opossum (*Didelphus virginiana*), eastern chipmunk (*Tamias striatus*), and white tailed deer (*Odocoileus virginianus*) are likely mammals utilizing the Site.

Old Field: This small patch community is primarily a transition from the forest habitat to the developed area associated with a paved and gravel access and parking area created by the former drive-in theater development. A variety of native and invasive grasses, forbs, shrubs and saplings inhabit this cover type. Dominant species include autumn olive (*Elaeagnus umbellate*), wild sensitive plant (*Chamaecrista nictitans*), common ragweed (*Ambrosia artemisiifolia*), bull thistle (*Cirsium vulgare*), mugwort (*Artemisia vulgaris*), little bluestem (*Schizachyrium scoparium*), slender fragrant goldenrod (*Euthamia tenuifolia*), sweet everlasting (*Pseudognaphalium obtusifolium*), nodding smartweed (*Polygogum lapathifolium*), quaking aspen (*Populus tremuloides*) saplings, butter and eggs toadflax (*Linaria vulgaris*), pin oak (*Quercus palustris*) saplings, corn chamomile (*Anthemis arvenis*), Canada goldenrod (*Solidago Canadensis*), bristly blackberry (*Rubus hispidus*), tufted lovegrass (*Eragrostis pectinacea*), black locust (*Robinia pseudo-acacia*), oriental bittersweet (*Celastrus orbiculatus*), Tree of heaven (*Ailanthus altissima*), and deer-tounge grass (*Dichanthelium clandestinum*).

Due to the small size of this old field area, its isolation from larger similar habitats and proximity to areas of high human activity (e.g., state highway, railroad, commercial and residential development), this habitat is not large enough to support species such as New England cottontail (*Sylvilagus tansitionalis*), yellow-breasted chats (*Icteria virens*), field sparrows (*Spizella pusilla*), etc., that would be typical of large habitat blocks of this type. Species with small home ranges including various butterflies, dragonflies, and some songbirds that are tolerant of the high level of human activity to which the Site is subjected may utilize this habitat patch for foraging and cover as they move to more suitable habitat. However, the lack of

sapling and small tree stem density in this cover type provides little protection to wildlife from avian predation.

Developed Area: This cover type represents the majority of the cover type present within the Site. Previously developed land includes the paved and gravel access and parking area associated with the former drive-in theater area. Vegetation is generally void in these areas.

No significant wildlife usage is anticipated of the Developed Area.

Rare Species

CTDEEP's Natural Diversity Data Base ("NDDB") program performs hundreds of environmental reviews each year to determine the impact of proposed development projects on state listed species and to help landowners conserve the state's biodiversity. State agencies are required to ensure that any activity authorized, funded or performed by a state agency does not threaten the continued existence of endangered or threatened species. Maps have been developed to serve as a pre-screening tool to help applicants determine if there is a potential impact to state listed species.

The NDDB maps represent approximate locations of endangered, threatened and special concern species and significant natural communities in Connecticut. The locations of species and natural communities depicted on the maps are based on data collected over the years by CTDEEP staff, scientists, conservation groups, and landowners. In some cases an occurrence represents a location derived from literature, museum records and/or specimens. These data are compiled and maintained in the NDDB. The general locations of species and communities are symbolized as shaded (or cross-hatched) areas on the maps. Exact locations have been masked to protect sensitive species from collection and disturbance and to protect landowner's rights whenever species occur on private property.

No Threatened, Endangered, or Special Concern species or critical habitats are known to occur at the Site. APT reviewed the most recent CTDEEP NDDB mapping (July 2013) to determine if any such species or habitats occur within the vicinity of the subject parcel. A shaded area encompasses a large portion of the CT Studio Property, including the Site. Previous investigations identified six species of interest on the CT Studio Property, as summarized below. Please note that these species were **not** identified specifically within the Site area under consideration herein and are, therefore, not considered significant with respect to the Fuel Cell Project. The information is provided for reference.

Grassland Bird Habitat

A 4.5±-acre grassland patch (of which 3.5± acres occur within Studios Project development area) extends into the southeast corner of the Site. This grassland habitat patch was found in 2006 to support a probable breeding pair of grasshopper sparrow (*Ammodramus savannarium*), a State Endangered bird. Given the relatively small size of suitable habitat, it is possible that it does not consistently support grasshopper

sparrow on an annual basis. Nevertheless, the Town of South Windsor has negotiated with CTDEEP, and with the participation of CT Studios, to provide suitable mitigation. This mitigation includes enhancement and management of existing Town-owned open space at Wapping Park on Clark Street.

Tiger Beetle Habitat

A portion of the CT Studio Property contains confirmed habitat for the pine barrens tiger beetle (a.k.a., big sand tiger beetle; *Cicindela Formosa generosa*), a State Species of Special Concern. Potential impacts to this habitat have been mitigated off-site through a CTDEEP-approved plan that included collection of pine barrens tiger beetle larvae from the area during the spring and fall of 2009. The larvae have been successfully translocated to a mitigation site located off the CT Studio Property.

Brown Thrasher Habitat

Several brown thrashers (*Toxostoma rufum*), which are a State Species of Special Concern, were observed primarily within the Connecticut Light & Power ("CL&P") electrical transmission line corridor during bird surveys in 2006. The brown thrasher prefers shrub habitat adjacent to open grasslands, a habitat that exists in abundance within the transmission corridor south of subject parcel and the Site.

Rare Plants

Three plants were previously identified as potentially occurring on the Studios Project property and field surveys were performed in 2006 to determine their existence: Barratt's sedge (*Carex barrattii*) – State Endangered, clustered sedge (*Carex cumulate*) – State Threatened and climbing fern (*Lygodium palmatum*) – State Special Concern. Barratt's sedge grows in seasonally saturated, acidic sandy wetlands and can be found in open wetland depressions along ponds.[2] The preferred habitat for climbing fern is consist of areas that are moist/wet with sandy acidic soils that are rich in humus but poor in nutrients in shady conditions with preference for some sunlight. It can commonly be found in low thickets, open swamps, along banks of streams, or in ravines with regenerating woodlands and powerline corridors also providing habitat.[3] The habitats for Barratt's sedge and climbing fern do not exist on or in proximity to the Site. Clustered sedge grows in dry sandy or rocky soil.[4] Previous investigations of the Studios Project property did not reveal any clustered sedge.

Water Supply Areas

There are no public water supply wells within a two-mile radius of the Site. The subject parcel is not located within an Aquifer Protection Area. Properties in the vicinity of the subject parcel

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[2] Sharp, P.C., 2001. Carex barrattii *Schwein. & Torr. Barratt's Sedge Conservation and Research Plan.* Framingham, Massachusetts: New England Wildflower Society.

[3] 2002; Ferns of New England, Vol. 6, No.3.; New England Wild Flower Society. Feb. 12, 2009; Climbing Fern Fact Sheet; NHESP.

[4] Gleason, H.A. and Cronquist, A., 2nd Ed. 1998. Manual of Vascular Plants of Northeastern United States and Adjacent Canada. Bronx, New York: New York Botanical Garden.

are supplied potable water by the Metropolitan Water District ("MDC") via the local water distribution system which extends along Chapel Road. No private water supply wells are known to exist on the subject parcel or in the immediate area.

Water Quality

Groundwater beneath the Site and within the majority of the subject parcel is classified by CTDEEP as "GA, GAA may not meet current standards".

> A "GA/GAA" classification indicates groundwater within the area is presumed to be suitable for human consumption without treatment and may represent a potential public drinking water supply. Designated uses in GA/GAA-classified areas include existing private and potential public or private supplies of drinking water and base flow for hydraulically-connected surface water bodies. The groundwater in the mapped area does not currently meet the GA/GAA standards. Based upon review of publicly available information, an abutting property at the corner of Chapel Road and John Fitch Boulevard has had subsurface contamination as a result of release incidents involving chlorinated volatile organic compounds ("VOCs"). This condition has likely contributed to the "GA, GAA may not meet current standards" groundwater classification beneath the Site.

The groundwater beneath the remainder of the subject parcel and the Studios Project Property has been classified as "GA."

> A "GA" classification indicates groundwater within the area is presumed to be suitable for human consumption without treatment. Designated uses in GA-classified areas include existing private and potential public or private supplies of drinking water and base flow for hydraulically-connected surface water bodies.

The subject parcel and Site are located within the Connecticut Main Stem Regional Drainage Basin and in the Podunk River Subregional Basin. The Podunk River is located approximately 1,200 feet west of the Site. The Podunk River flows southward from the vicinity of the subject parcel and discharges to the Connecticut River.

Scenic Areas

Based on information contained in the Town of South Windsor's 2013 Plan of Conservation and Development, the preservation of scenic areas and scenic views is encouraged, however, no specific areas or viewsheds are identified. Main Street, located approximately 3,000 feet to the west, is the only locally-designated scenic road in South Windsor. No State-designated scenic roads are located within South Windsor or proximate to the Site.

Historic and Archaeological Resources

APT reviewed information at the State Historic Preservation Office to determine whether the Site holds potential historic and/or architectural significance. No reported archaeological sites exist at the Site, although documented sites are identified farther south on the subject parcel.

The nearest historic resources proximate to the Site are the Windsor Farms Historic District (its eastern boundary is located approximately 850 feet west of the Site) and the Elmore Houses on Ellington Avenue, over one mile (5,400± feet) to the east. These resources are listed on the National Register of Historic Places; a very small section of the Windsor Farms Historic District that is not listed nationally is recognized by the Town as a Local Historic District.

Natural Resources

Bedrock in the vicinity of the subject parcel and Site is identified as Portland Arkose of the Lower Jurassic Formation. Portland Arkose is described as a reddish-brown to maroon micaceous arkose and siltstone and red to black fissile silty shale. No exposed bedrock was observed at the Site or on the subject parcel. Surficial materials in the vicinity are identified as sand overlying finds. Soils in the vicinity of the Site are identified as Windsor loamy sand and Manchester gravelly sandy loam.

Floodplain Areas

APT reviewed the United States Federal Emergency Management Agency ("FEMA") Flood Insurance Rate Map ("FIRM") for the area. A FIRM is the official map of a community on which FEMA has delineated both the special hazard areas and risk premium zones applicable to the community. Based on this review, the area of the subject parcel and Site are located outside of the 100-year and 500-year floodplains within a designated Zone X which is defined as an area of minimal flooding (*FIRM PANEL #09003C0386F, dated September 26, 2008*).

Recreational Areas

There are no recreational areas directly abutting the subject parcel or within one mile of the Site.

Seismic Areas

The USGS-National Earthquake Reduction Program has developed a series of maps that depict the estimated probability that certain levels of ground shaking from an earthquake will occur within a given period of time. USGS takes into account the seismic history of an area and the expected decrease in intensity with distance from the epicenter. Based on a review of USGS National Earthquake Reduction Program maps and information obtained by the Weston (MA) Observatory (a geophysical research laboratory), there are no significant seismic areas located at the subject parcel or the general region.

Noise

The subject parcel is currently vacant but is located in the I-291 Corridor Development zone. According to the Town of South Windsor Zoning classifications, the subject parcel, the abutting properties to the east along Chapel Road, and those located across the street to the north are all classified as Industrial zones. Existing noise levels emanating from the subject parcel are below those established from an Industrial Emitter Zone to an Industrial Receptor Zone (70dBA), as established by the South Windsor Noise Control regulations (*South Windsor Code, Article III,* §§ *50-61 through 50-69*). Contributing factors for noise generation in the area are traffic noises generated from the adjacent railroad, John Fitch Boulevard highway corridor, nearby I-291 and the surrounding local businesses. Based on Site data collected for a Noise Level Study (attached to the Petition as Exhibit 10), the existing background noise levels range from 45.5dBA to 65.6dBA.

Lighting

Because the subject parcel is vacant, no lighting facilities are currently located at the Site. The general area is developed with commercial businesses. Street illumination and security lighting associated with existing industry are present along Chapel Road and John Fitch Boulevard.

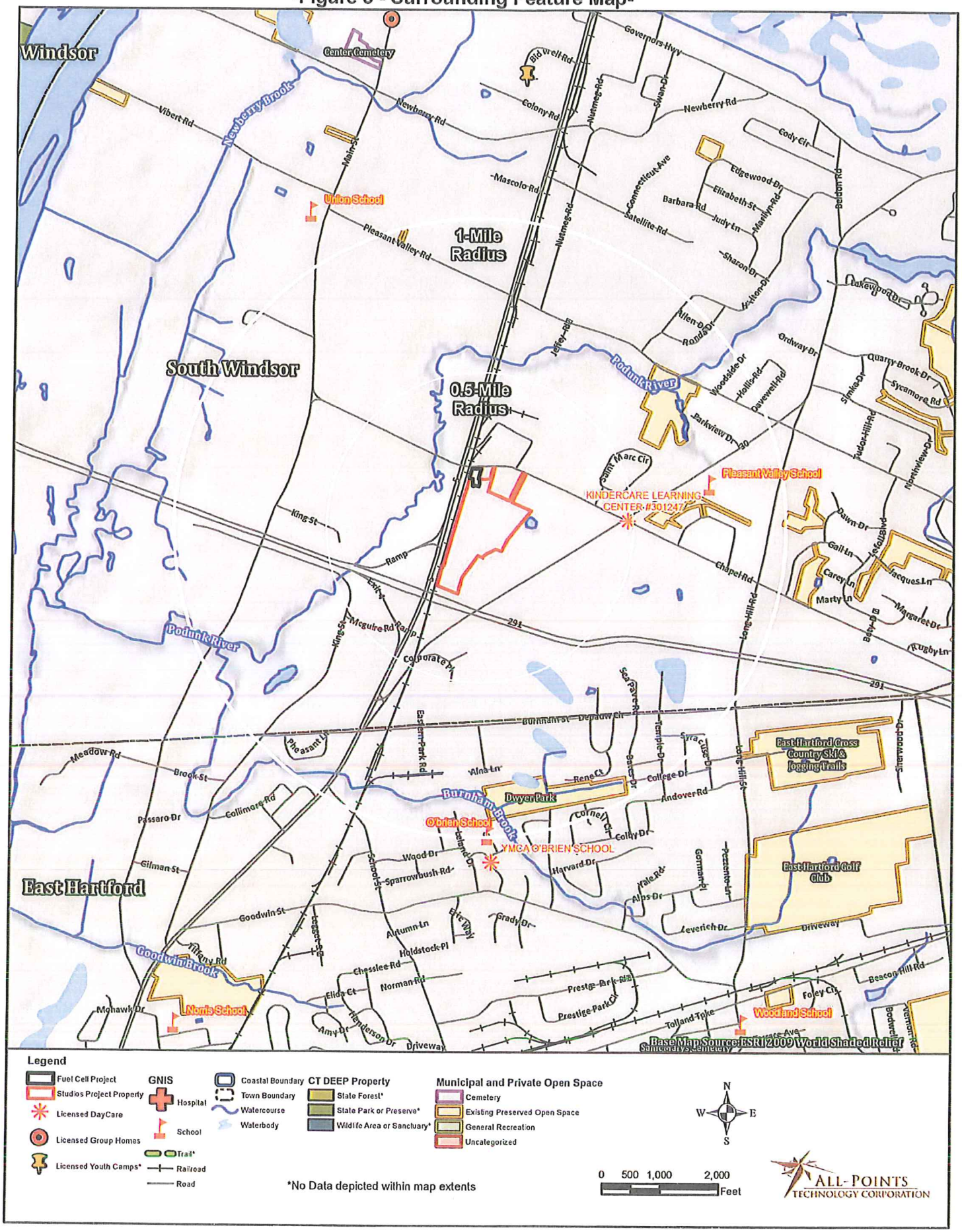
Coastal Zone Management Areas

The Town of South Windsor is not located within the Coastal Area or Coastal Boundary, as defined by the Coastal Management Act, CGS § 22a-94(a).

Other Surrounding Features

Figure 5, *Surrounding Features Map* depicts the locations of non-residential development and other resources in the general vicinity of the Site.

-Figure 5 - Surrounding Feature Map-



Effects on the Environment

The purpose of this section is to describe future conditions on the subject parcel with the development of the Fuel Cell Project. The Fuel Cell Project would not have any long-term adverse effects on the existing environment and ecology, nor would it affect the scenic, historic and recreational values of the vicinity. A *Proposed Conditions Map* is included as Figure 6.

Proposed Fuel Cell Project Development

When developed, the Site will include a ±15,400 square foot gated, gravel compound containing two fuel cell generators and associated support infrastructure enclosed within an eight-foot tall, chain link fence. Twin custom-designed FuelCell Energy fuel cells (based on their DFC3000 system), each producing 2.49 MW, will be located within the fenced compound on two, staggered concrete pads (measuring a total of ±7,450 square feet). Each fuel cell generation system will include two fuel cell modules, main process components, electric balancing system, and water treatment unit. The fuel cell generators will share a desulphurization system and system switch gear, both also located within the compound. The system will be fueled by natural gas, which is available to the Site from John Fitch Boulevard.

A fuel cell switching gear will be located southeast of the fuel cells within a separate fenced compound area. The potential exists that a 250 kilowatt ("kW") diesel standby generator and electric load control center may be installed, should the Fuel Cell Project be approved by CTDEEP under the Microgrid Grant and Loan Pilot Program. The standby generator would be used to start up the fuel cells in the absence of utility power during a "blackstart" condition.

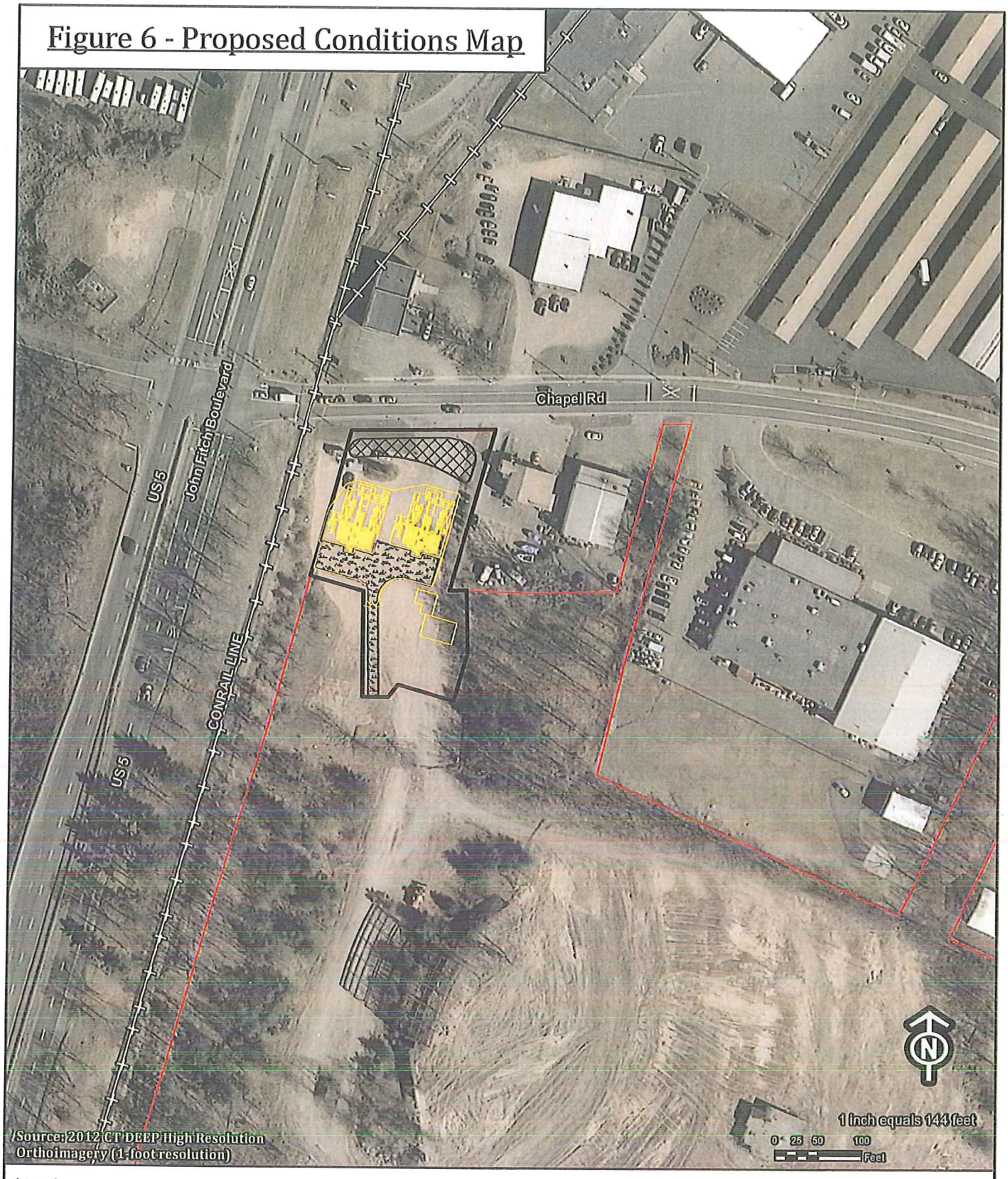
A 7-foot tall earthen berm will be constructed north of the fuel cell facility to obstruct direct access from Chapel Street and provide noise and visual dampening. The berm will be planted with a mix of evergreen and deciduous native shrubs and undersown with a New England conservation/wildlife seed mix. These naturalistic plantings will provide a no-maintenance vegetative cover for the berm that provides both good erosion control and wildlife habitat value.

The proposed development of the Fuel Cell Project, in conjunction with the Studios Project, would not have any long-term adverse effects on the existing environment and ecology, nor would it affect the scenic, historic and recreational values of the vicinity.

Public Health and Safety

The Fuel Cell Project would be designed to applicable industry, State, and local codes and standards and would not pose a safety concern or create undue hazard to the general public. The fuel cell facility would not consume any raw materials, would not produce any by-products and would be unmanned during normal operating conditions. Applicable signage would be installed alerting the general public of the dangers of high voltage associated with the Fuel Cell

Figure 6 - Proposed Conditions Map



Legend

- Railroad
- Proposed Project Infrastructure
- Fuel Cell Project
- Area of Grading for Burm
- Gravel Access and Parking Area
- Studios Project Property

Fuel Cell Project
245 Chapel Road
South Windsor, Connecticut

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Facility, as well as an eight-foot tall chain-link. There are no plans to store fuels or hazardous materials at the facility.

Local, State, and Federal Land Use Plans

The Fuel Cell Project is consistent with local, State, and federal land use plans. The Fuel Cell Project is not located within an Aquifer Protection Zone and it supports the State's energy policy by developing a renewable energy resource while not having a substantial adverse environmental effect. Although local land use application processes do not specifically apply to the Fuel Cell Project, it has been designed to meet the intent of local land use regulations. According to the Town of South Windsor Zoning Regulations, the Property lies within the I-291 Corridor Development Zone, a designation specifically intended to accommodate a wide variety of land uses including commercial, office/business, hotel/motel, conference center, service and light industry. Pursuant to Section 4.4 of the South Windsor Zoning Regulations, the Fuel Cell Project would, in combination with the Studios Project, promote high-quality development of the I-291 Corridor Zone with respect to building and site design, environmental sensitivity and fulfillment of the community health, safety and welfare interests.

Existing and Future Development

The Fuel Cell Project would benefit the community by serving as an economic driver for the planned Studios Project. The net benefit is improved electrical service for existing and future development in the Town through enhanced capacity.

Roads

Access to the compound area will be via a 12-foot wide gravel access road extending generally northward off the CT Studios Property's main drive to the southern limit of the compound area. Current access from Chapel Street will be blocked by the presence of an earthen berm that will extend the length of road frontage and rise to seven feet in height.

Access to other portions of the subject parcel will be available from a new driveway originating off Chapel Road further east of the Site. Two additional entrances to the CT Studio Property will be developed off John Fitch Boulevard and Ellington Road (Route 30). The interior road system associated with the Studios Project will provide access to the fuel cell facility entrance.

Wetlands

No wetlands or watercourses will be affected by the proposed Fuel Cell Project. The nearest wetland resource to the Site is approximately 400 feet to the west, separated by John Fitch Boulevard. The nearest wetland or watercourse resource to the Site on the Studios Project property, a man-made pond located approximately 950 feet to the southeast, will not be affected by stormwater runoff from the proposed project.

Wildlife and Vegetation

The majority of the proposed Fuel Cell Project is located within existing developed areas general void of vegetation associated with paved and gravel access and parking for the former drive-in theater. Small areas of forest (±2,700 square feet) and old field (±1,000 square feet) vegetative cover types will be displaced by the proposed Fuel Cell Project. Only three trees (greater than 6 inches diameter at breast height ["DBH"]) will require removal to accommodate the proposed development; tree survey information is depicted on the separately bound Site Plans. Considering the small size and fragmentation of these habitat patches and the high level of human activity surrounding the Fuel Cell Project, wildlife habitat will not be significantly affected by the proposed development. Planting of the earthen berm with a naturalistic shrub/field habitat will help mitigate any minor wildlife impacts associated with the proposed Fuel Cell Project.

Rare Species

The Fuel Cell Project would avoid impact to habitats supporting State-listed species found in other areas of the Studios Project property. Therefore, no mitigation is required since State-listed species would not be directly impacted by the Fuel Cell Project. A NDDB review request has been submitted to CTDEEP to determine if the proposed Fuel Cell Project, which is located primarily within an existing developed area, would affect rare species. CTDEEP's response had not been received as of the date of this report; NDDB review response correspondence will be forwarded upon receipt.

Water Supply Areas

There are no public water supply wells located in the vicinity of the Site. Potable water is supplied to properties within the Site vicinity by the local MDC distribution system. Should the 250 kW standby generator be installed as part of the Fuel Cell Project, its diesel fuel tank would be double-walled to protect against the possibility of a leak or releases. No additional liquid fuels are associated with the Fuel Cell Project. Based on these design considerations, the Fuel Cell Project would have no adverse environmental effect on any water resources.

Water Quality

The fuel cell facility will be unmanned and no potable water uses are planned. The fuel cells do require a reliable and stable water supply for operations. Water consumption associated with the Fuel Cell Project will be made available through the MDC local water supply system and provided via existing lines either beneath John Fitch Boulevard or Chapel Road.

During full power operation, the overall water consumption associated with a FuelCell Energy DFC3000 fuel cell is estimated at approximately 13,000 gallons/day. The unit only consumes water while it is filling its water storage tank. When the tank is full, the facility does not draw any water, except when the system is back flushing. While filling the tank, the power plant

typically draws about 12 gallons per minute ("gpm"). During this same time, it is discharging water at about 6 gpm.

Average wastewater discharge from the water treatment system is approximately 6,500 gallons/day assuming full power operation. CTS has coordinated with the Town of South Windsor to tie into the sewer system that extends beneath Chapel Road immediately north of the Site. The system also periodically back flushes to recharge some of the water treatment components. During the back-flushing process, the unit can draw and discharge up to 30 gpm. Backwash discharges from the system, comprised of the water supply along with any suspended matter removed from the pretreated water, will also be discharged directly to the sanitary sewer system.

In its existing condition, the Site (43,274 square feet) is approximately 70% covered in gravel or paved surfaces. Development of the Fuel Cell Project would result in a new condition of only 42% impervious surfaces, a 12,500± square foot reduction in impervious surfaces. The existing and proposed conditions were evaluated using TR-55 methodology. As presented, the proposed conditions provide for equal or decreased rates and volumes for the stormwater runoff from the Fuel Cell Project site for the 2, 5, 10, 25, 50 and 100 year storm events analyzed. Considering the reduced traffic associated with the proposed Fuel Cell Project, versus the current use of the area, a reduction of sediment transport should be expected as the increase in pervious surfaces occur on the down gradient portion of the site just prior to the creation of offsite runoff. This site design meets the current standards for stormwater management as applicable, particularly:

1. The CTDEEP's "2004 Connecticut Stormwater Quality Manual" and it's "General Permit for the Discharge of Stormwater and Dewatering Wastewaters from Construction Activity";
2. The Connecticut General Statutes; and,
3. The Connecticut Department of Transportation's Drainage Manual.

Additionally, once the Studios Project is completed, the area where the Fuel Cell Project Site discharges will be a stormwater management area designed to handle all stormwater throughout the entire CT Studios Property. All runoff from the Fuel Cell Project Site will enter the Studios Project stormwater management system and receive additional flow attenuation and water quality improvements due to the planned Best Management Practices incorporated in the current Studios Project stormwater management design.

Air Quality

The only emissions source associated with the Fuel Cell Project will be two custom-modified FuelCell Energy DFC3000 direct fuel cells, using the molten carbonate fuel cell technology to produce electricity from hydrogen that is directly generated from natural gas. Because there is no combusting of fuel, virtually no harmful emissions are generated by the fuel cells. This results in power production that is almost entirely absent of nitrogen oxide, sulfur dioxide,

particulate matter carbon monoxide ("CO"), and volatile organic compounds VOCs, which are emitted in significantly higher amounts by conventional fossil fuel-fired power plants on an equivalent electricity output basis. The modified fuel cells also have a low carbon footprint. Fuel cells operating on natural gas generally release less CO2 than combustion-based power generation due to the high efficiency of the fuel cell power generation process.

The proposed Fuel Cell Project was reviewed for applicability of and compliance with EPA and CTDEEP regulations for permitting and control of air pollutant emissions from stationary sources. Based on estimated potential emission levels, the Fuel Cell Project will not be classified as a Major Stationary Source with respect to Prevention of Significant Deterioration (PSD) or nonattainment New Source Review regulations, nor will it trigger CTDEEP minor source permitting regulations. The Fuel Cell Project will not be in any of the listed source categories under EPA New Source Performance Standards (NSPS – 40 CFR Part 60), it will not emit any of the pollutants or fall under any of the source categories regulated by National Emissions Standards for Hazardous Air Pollutants (NESHAP – 40 CFR Part 61) and will not be classified as a new or existing Major Stationary Source of HAPs or otherwise be subject to any of the NESHAPs for Source Categories (40 CFR Part 63). Additionally, the Fuel Cell Project will not trigger any requirements under the EPA Acid Rain Program or Mandatory Greenhouse Gas Reporting requirements. Based on a review of potentially-applicable CTDEEP air pollution regulations, the Fuel Cell Project will only be subject to generally-applicable regulations that limit visible and odorous emissions at the subject parcel boundaries. Based on the nature of proposed operations, the Fuel Cell Project is not expected to cause visible or odorous emissions at the property boundaries.

An Air Quality Report prepared by M.I. Holzman & Associates, LLC, is attached to the Petition as Exhibit 9.

Scenic Areas

No scenic areas would be physically or visually impacted by development of the Fuel Cell Project. No views of the Fuel Cell Project would be achievable from along portions of Main Street, South Windsor's lone locally-designated scenic road.

Historic and Archaeological Resources

No known archaeological sites exist at the Site. The nearest historic resources proximate to the Site, the Windsor Farms Historic District and the Elmore Houses, will not have views of the Fuel Cell Project. As a result, no impacts to historic/cultural resources are anticipated. A review request has been submitted to the State Historic Preservation Office ("SHPO") for confirmation of this opinion. The SHPO's response had not been received as of the date of this report but will be forwarded upon receipt.

Natural Resources

No adverse effects are anticipated on natural resources occurring at and/or nearby the subject parcel. Vegetative clearing and earthwork is required for construction of the Fuel Cell Project. However, no impacts to wetlands, water courses or significant habitat would occur.

Floodplain Areas

The Site is located entirely outside of the 100-year and 500-year floodplains. Therefore, no special design elements are necessary with respect to flooding concerns.

Recreational Areas

No recreational areas would be impacted by the Fuel Cell Project.

Seismic Areas

The Fuel Cell Project would meet or exceed the State Building Code, which includes seismic loading, wind loading, and snow and ice loadings, among others.

Noise

After the Fuel Cell Project is constructed and in service, the combined noise level at the closest property line applicable to the two fuel cells and stand-by diesel generator will be 68dB which is below the Industrial Emitter Zone to Industrial Receiver Zone noise level as established by South Windsor Code, Article III, § 50-65(2) and the CTDEEP Noise Zone Standards, §22a-69-3.5. In addition, the noise level from each fuel cell and the diesel generator meet the performance standard established by South Windsor Code, Article III, § 50-65(3) as they do not emit noise in excess of 80-dBA at any time.

The Noise Level Study prepared by Fuss & O'Neill Manufacturing Solutions, LLC, is attached to the Petition as Exhibit 10.

Lighting

The fuel cell facility would have low-level lighting for safety and security purposes. These lights would be recessed or activated manually to minimize visual effects at night. No existing residences are located in the vicinity of the Site. Additional lighting capability would exist in the compound to allow for work at night under abnormal or emergency conditions.

Coastal Zone Management Areas

No Coastal Zone Management Areas would be affected by the Fuel Cell Project.

Other Surrounding Features

No adverse effects are anticipated to the facilities identified in Figure 5, primarily because of their sufficient distance from the Fuel Cell Project and/or the presence of the existing transportation and utility infrastructure corridor.

Visibility

Once completed, the Fuel Cell Project would not be highly visible from public locations. The general area of the Chapel Road and John Fitch Boulevard intersection offers limited direct lines of sight into the subject parcel however the creation of the earthen, landscaped berm will substantially soften views of the Fuel Cell Project.

Partial views would occur from portions of the adjacent roads, railway and nearby commercial properties. Existing views from this area include utility infrastructure (telephone pole, overhead wires, etc.) that exceed the proposed heights of the fuel cells (which would rise to a maximum height of 24± feet above grade).

Only one residence lies within 1,000 feet of the Site. The nearest home is located approximately 910 feet west of the Fuel Cell Project on the north side of Chapel Road across the Podunk River. The ground elevation drops between these two areas with an intervening high point (John Fitch Boulevard). This topographic feature results in obstructing the line of sight towards the fuel cell facility from the residence.

Views of the Site from locations beyond the immediate area of the Chapel Road/John Fitch Boulevard intersection are shielded by buildings, vegetation or both. The combination of distance and slight variations in topography further obscures sight lines along these roads as the distance increases away from the intersection. Motorists driving northbound on John Fitch Boulevard would have passing views of at least a portion of the Fuel Cell Project within 200 feet of its intersection with Chapel Road. Travelling south on John Fitch Boulevard, the Site is visible beginning at a point 500± feet to the north of the intersection. Along Chapel Road, limited views of the Fuel Cell Project may be achieved for a length of perhaps 300 feet east of the intersection and extending approximately 400 feet to the west. In total, the entire viewshed of the Fuel Cell Project will encompass about 12 acres, including the subject parcel.

Four photographs of existing conditions and corresponding simulations of the Fuel Cell Project are presented in Appendix A. The four locations depicted represent the extent of visibility into the Site from publicly-accessible areas in immediate vicinity of the Site.

Conclusion

As demonstrated from in this EA, the Fuel Cell Project will not have a substantial adverse effect on the environmental. Additionally, the Fuel Cell Project will comply with CTDEEP air and water quality standards. Therefore, it is our opinion that no Certificate of Environmental Compatibility and Public Need is required.

Appendix A

Photo-simulations

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION
1	CHAPEL ROAD	SOUTH

ALL-POINTS TECHNOLOGY CORPORATION

SIMULATION

PHOTO	LOCATION	ORIENTATION
1	**CHAPEL ROAD**	**SOUTH**

ALL-POINTS TECHNOLOGY CORPORATION

DOCUMENTATION

PHOTO	LOCATION	ORIENTATION
2	INTERSECTION OF JOHN FITCH BOULEVARD AND CHAPEL ROAD	SOUTHEAST

ALL-POINTS TECHNOLOGY CORPORATION

SIMULATION

PHOTO	LOCATION	ORIENTATION
2	**INTERSECTION OF JOHN FITCH BOULEVARD AND CHAPEL ROAD**	**SOUTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

DOCUMENTATION

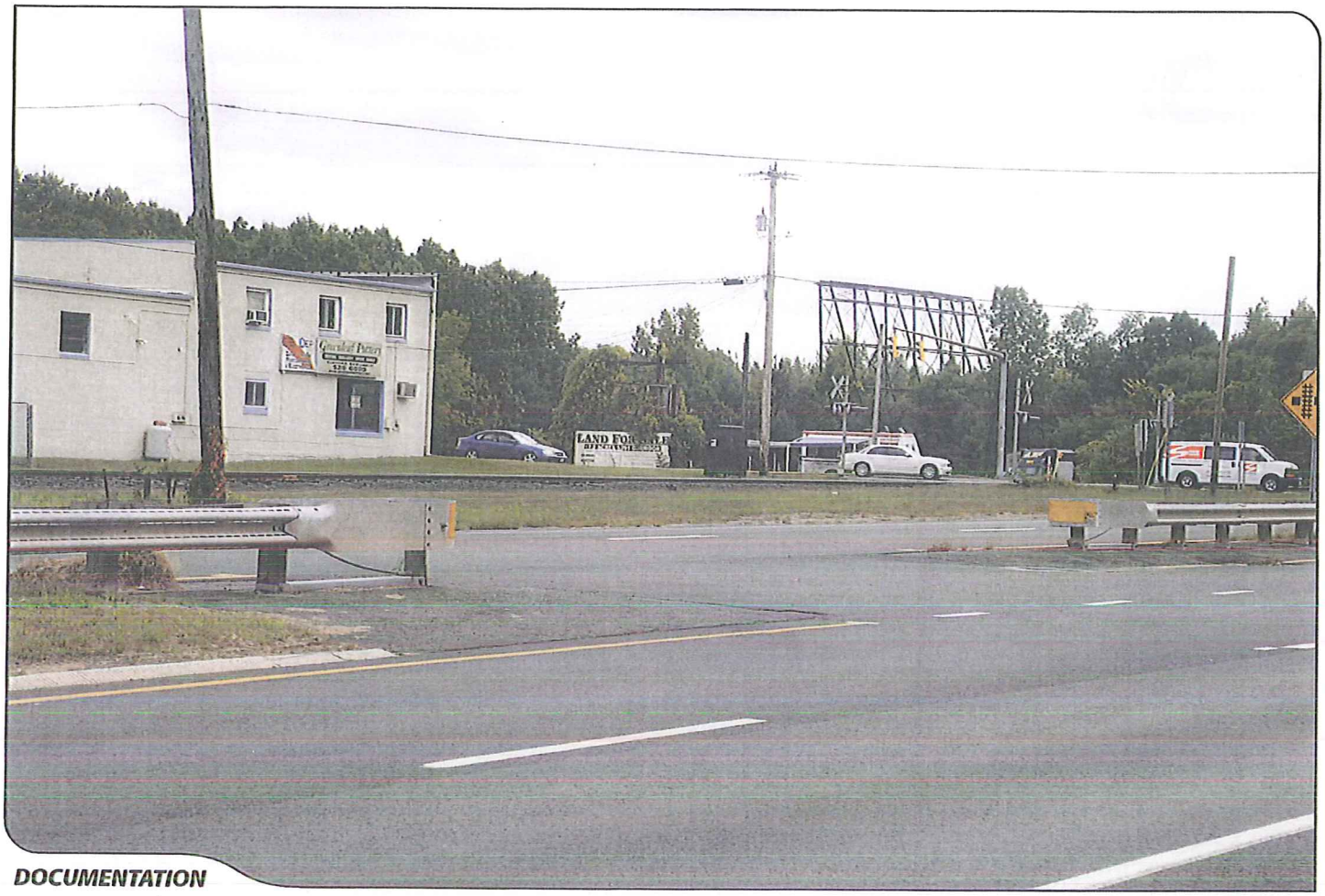
PHOTO	LOCATION	ORIENTATION
3	CHAPEL ROAD	SOUTHWEST

ALL-POINTS TECHNOLOGY CORPORATION

SIMULATION

PHOTO	LOCATION	ORIENTATION
3	**CHAPEL ROAD**	**SOUTHWEST**

ALL-POINTS TECHNOLOGY CORPORATION



DOCUMENTATION

PHOTO	LOCATION	ORIENTATION
4	**JOHN FITCH BOULEVARD**	**SOUTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION

SIMULATION

PHOTO	LOCATION	ORIENTATION
4	**JOHN FITCH BOULEVARD**	**SOUTHEAST**

ALL-POINTS TECHNOLOGY CORPORATION