



WETLAND PERMIT APPLICATION

October 12, 2021

Cheshire Inland Wetlands and Watercourses Commission
c/o Planning and Development
84 South Main Street
Cheshire, Connecticut 06410
Attn: Ms. Suzanne Simone, Environmental Planner

RECEIVED
Town of Cheshire
OCT 13 2021
Planning Dept.

Re: Proposed Cheshire Solar Facility
Hanwha Aerospace USA
5 McKee Place

Dear Ms. Simone,

On behalf of C-TEC Solar ("C-TEC"), All-Points Technology Corporation, P.C. ("APT") is pleased to submit this Wetland Permit Application to the Cheshire Inland Wetlands and Watercourses Commission ("Commission") for a proposed photovoltaic ("PV") Solar Facility ("Solar Facility") to be installed on the Hanwha Aerospace USA industrial facility at 5 McKee Place in Cheshire, Connecticut ("Site"). Three (3) copies of the following application materials are enclosed:

- Application for Inland Wetlands and Watercourses Permit and State Reporting Form;
- Wetland Inspection Report; and,
- Site Photographs.

Also enclosed is the wetland application fee check for \$440. Please note that three (3) copies of the full size project site plans are being provided under separate cover.

The Hanwha Aerospace USA-owned subject property is located along the north and west side of Knotter Drive and the south side of McKee Place with access to the existing industrial facility provided by both roads. C-TEC proposes the installation of a ± 1.04 MW DC solar-based electric generating facility consisting of PV module technology that will provide renewable electricity to the industrial facility. The proposed ± 4.21 -acre project area will consist of installation of ground mounted racking system to support PV panels within a relatively level primarily maintained lawn area that will also require ± 1.56 acres of vegetation/tree removal. Due to the level nature of the proposed Solar Facility area, minimal grading activities are required with no grading work proposed in the existing maintained lawn area. Access to the proposed Solar Facility will utilize the existing paved access and parking area located along the northeast side of the existing Hanwha Aerospace USA building.

A Connecticut registered Soil Scientist with APT conducted an inspection of the Site on August 24, 2021, to determine the presence or absence of wetlands and watercourses on the Site. Wetland resources were identified in proximity to the Solar Facility to the north (pond across McKee Place), to the east (associated

with a narrow drainage feature along Knotter Drive), and to the south (associated with a forested swamp). Wetland boundaries are identified on the referenced project Site plans. Details of the wetland delineation and identified wetland resources are contained within the attached Wetland Inspection Report.

The proposed Solar Facility is located primarily within an existing cleared and maintained lawn area that includes a recreational field. The eastern side of the proposed Solar Facility will require some clearing and grubbing of an area containing young trees and shrubs (± 0.7 acre) in order to accommodate the proposed development. The proposed Solar Facility's fenced limits will not encroach into wetlands or the associated 50-foot Upland Review Area. The eastern limits of the Solar Facility's fence will be just outside of the 50-foot Upland Review Area with the associated limit of disturbance ("LOD") located right along the Upland Review Area in certain areas for the installation of erosion and sedimentation controls. Limits of clearing ("LOC") that do occur within the Upland Review Area (± 1.2 acres) and a portion of the nearby southern wetland limits (± 0.25 acre) are necessary to eliminate shadow effect on the Solar Facility. The work will include careful tree removal activities within the Upland Review Area and southern wetlands and will not involve any stump removal or grubbing in order to minimize ground disturbance; existing understory of shrubs and herbaceous plants will remain. For the area of tree removal proposed within the southern wetland area, additional restrictions will be implemented with no equipment allowed and only hand clearing of trees to occur within wetlands. Appropriate erosion controls will be installed prior to tree removal activities to further protect wetland resources even though minimal soil disturbance is anticipated within the 50-foot Upland Review Area and wetlands clearing areas.

The proposed solar development area is considered to cause negligible disturbance in terms of erosion and sediment transport due to minimal soil disturbance proposed due to the level nature of the project area. The net area of disturbance for this project is ± 4.21 acres, although actual soil disturbance will only be a fraction of that total LOD project area. Based on a review of the CTDEEP General permit for the discharge of stormwater for construction activities, for projects between one to five acres of disturbance, the project shall adhere to the erosion and sediment control regulations of the local municipality (Town of Cheshire). The project satisfies the minimum requirements as outlined in the Town of Cheshire soil erosion and sediment control regulations which follow the Connecticut Guidelines for Erosion and Sediment Control, 1985 (superseded 2002).

Thank you for your consideration of this wetland permit application. If you have any questions regarding the above-referenced information, please feel free to contact me by telephone at (860) 552-2033 or via email at dgustafson@allpointstech.com. We look forward to discussing this project with the Commission at the October 19, 2021 meeting.

Sincerely,

All-Points Technology Corporation, P.C.



Dean Gustafson
Professional Soil Scientist

Enclosures

cc: Michael Morrison, C-TEC Solar
Kevin McCaffrey, APT
Jin Tao, APT

**Application for Inland Wetlands
and Watercourse Permit & State
Reporting Form**

INLAND WETLANDS COMMISSION - CHESHIRE, CONNECTICUT

APPLICATION FOR INLAND WETLANDS AND WATERCOURSES PERMIT

Pursuant to the General Statutes of the State of Connecticut, and all subsequent amendments thereto, the undersigned hereby makes application for approval of permit (Inland Wetlands and Watercourses) for a parcel of land having approximately 12 wetland acres, which is part of a tract of land having 39.24 acres, located on (street name) 5 McKee Place. Said parcel is generally shown on the current Assessor's Map Plate No(s). 9. Lot No(s). 7 and is located in a(n) I-1 zone district.

This permit application is part of a: () Subdivision, () Resubdivision, () Site Plan, () Special Permit, () Zone Change, () Earth Removal, Filling or Regrading, ☒ Other ground mounted PV solar facility

The undersigned warrants the truth of all statements contained herein and in all supporting documents according to the best of his knowledge and belief.

By signing this application, the applicant permits Commissioners and agents of the Commission to enter upon and inspect the property, at reasonable times, both before and after a final decision has been issued.

Applicant's Name C-TEC Solar, LLC Date October 12 2021

(Print of Type)

Applicant's Address (Home) Attn: Michael Morrison, Commercial Project Coordinator

(Office) 1 Griffin Road South, Suite 200, Bloomfield, CT 06002

Applicant's Signature Michael Morrison

Telephone Number (Home) _____ (Office) 860.580.7174 ext 121

E-mail michael.morrison@ctecsolar.com Fax No. 860.580.7915

Owner's Name (Print of Type) Hanwha Aerospace USA

Owner's Address 5 McKee Place, Cheshire, CT 06410

Owner's Signature [Signature]

Engineer's Name (Print of Type) All-Points Technology Corp., P.C. (APT)

Engineer's Address 567 Vauxhall Street Ext. Suite 311, Waterford, CT 06385

Engineer's Signature [Signature]

Agent, if other than applicant, to be contacted with regard to this application:

Name Dean Gustafson PSS APT Address same as above

Telephone Number 860.552.2033 Fax Number 860.663.0935

E-mail dgustafson@allpointstech.com

SEE ATTACHED SHEETS FOR THE INFORMATION NECESSARY TO COMPLETE THIS APPLICATION

APPLICATION FOR INLAND WETLANDS AND WATERCOURSES PERMIT

Purpose and description of the proposed activity (including the area of wetlands or watercourses to be disturbed); alternatives considered and why the proposal to alter wetlands set forth in this application was chosen: C-TEC Solar, LLC proposes a ground mounted PV solar facility within an existing open field located in the eastern portion of the industrial facility. The solar facility will provide renewable energy to support the existing industrial facility. No direct wetland impacts will occur with the fenced solar facility which is also located beyond the 50-foot upland review area. Selective tree removal within wetlands (0.25 AC) and 50-foot upland review area (1.2 AC) are required due to shade impacts.

Applicant's interest in the land: ☐ Owner, ☐ Tenant, ☐ Lessee, ☐ Partner,

☒ Other solar developer for property owner

Please attach a list of adjacent property owners

Check in full payment of minimum application fee - see attached fee schedule - (payable to Collector - Town of Cheshire). An additional fee shall be required if significant wetland activity is determined upon acceptance of the application. The Commission may, at its option, refund this application fee for a non-regulated activity.

NOTE: In order to expedite the review of this application, and avoid unnecessary delay, it is important that the applicant and the land surveyor and/or professional engineer who shall prepare the maps and other plans shall carefully review the Inland Wetlands Regulations to be certain that the plans comply with all requirements contained therein. Applications must be received by the Town Planner's Office by 4 p.m. the Wednesday prior to the next regularly scheduled meeting of the Inland Wetlands Commission in order for the application to be included on the filed agenda and taken up by the Commission for discussion, action or otherwise.

Per Section 7.11. of the Inland Wetlands and Watercourses Regulations, three copies of all application materials (including maps) shall be submitted with the original application to comprise a complete application or as is otherwise directed, in writing, by the Commission.

OFFICE USE ONLY

Date Filed _____

Date Presented to Inland Wetlands Commission _____

Mandatory Action Date _____

Public Hearing Date _____

Final Action and Date _____

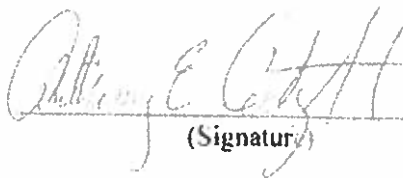
APPENDIX C

This form is to be completed **ONLY** when applicant is **NOT** the owner.

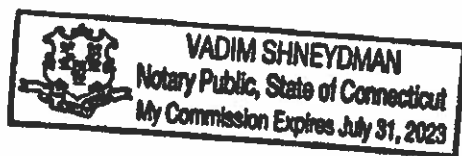
I, Hanwha Aerospace USA
(Name of Owner) hereby acknowledge the application to the Inland

Wetlands Commission of the Town of Cheshire by C-TEC Solar, LLC

I consent and agree to its being filed with said Commission


(Signature)

Sworn to before me this 12 day of October, 2021



Vadim SHNEYDMAN
(Name typed or printed)

Commissioner of the Superior Court
Notary Public
My commission Expires: 07/31/2023



Statewide Inland Wetlands & Watercourses Activity Reporting Form

Please complete and mail this form in accordance with the instructions
if completing by hand - please print and use the [pdf version](#)
Incomplete or incomprehensible forms will be mailed back to the municipal inland wetlands agency

PART I: Must Be Completed By The Inland Wetlands Agency

1. DATE ACTION WAS TAKEN: year: [Click Here for Year](#) month: [Click Here for Month](#)
2. CHOOSE ACTION TAKEN (see instructions for code): [Click Here to Choose a Code](#)
3. WAS A PUBLIC HEARING HELD (check one)? yes ☐ no ☐
4. NAME OF AGENCY OFFICIAL VERIFYING AND COMPLETING THIS FORM:
(type name) _____ (signature) _____

PART II: To Be Completed By The Inland Wetlands Agency Or The Applicant

5. TOWN IN WHICH THE ACTIVITY IS OCCURRING (type name): Cheshire
does this project cross municipal boundaries (check one)? yes ☐ no ☒
if yes, list the other town(s) in which the activity is occurring (type name(s)): _____
6. LOCATION (click on hyperlinks for information): USGS quad map name: Southington or [quad number](#): 65
[subregional drainage basin number](#): 5202
7. NAME OF APPLICANT, VIOLATOR OR PETITIONER (type name): C-TEC Solar
8. NAME & ADDRESS OF ACTIVITY / PROJECT SITE (type information): 5 McKee Place
briefly describe the action/project/activity (check and type information): temporary ☒ permanent ☐ description: PV Solar Facility to provide renewable electricity to Hanwha Aerospace USA facility; select tree removal in 0.25 acre wetlands
9. ACTIVITY PURPOSE CODE (see instructions for code): D
10. ACTIVITY TYPE CODE(S) (see instructions for codes): 1, 2, 12, 14
11. WETLAND / WATERCOURSE AREA ALTERED (see instructions for explanation, type acres or linear feet as indicated):
wetlands: 0.00 acres open water body: 0.00 acres stream: 0.00 linear feet
12. UPLAND AREA ALTERED (type acres as indicated): 1.20 acres
13. AREA OF WETLANDS / WATERCOURSES RESTORED, ENHANCED OR CREATED (type acres as indicated): 0.00 acres

DATE RECEIVED:

PART III: To Be Completed By The DEEP

DATE RETURNED TO DEEP:

FORM COMPLETED: YES NO

FORM CORRECTED / COMPLETED: YES NO

Wetland Inspection Report



WETLAND INSPECTION

September 14, 2021

APT Project No.: CT481570

Prepared For: C-TEC Solar
1 Griffin Road South, Suite 200
Bloomfield, Connecticut 06002

Site Name: Cheshire Solar

Site Address: 5 McKee Place, Cheshire, Connecticut

Date of Investigation: 8/24/2021

Field Conditions: **Weather:** sunny, mid 80's
Soil Moisture: moist

Wetland/Watercourse Delineation Methodology¹:

☒ Connecticut Inland Wetlands and Watercourses

Municipal Upland Review Area: **Wetlands:** 50 feet **Watercourses:** 50 feet

The wetlands inspection was performed by²:

Matthew Gustafson, Registered Soil Scientist

Enclosures: Wetland Delineation Field Form & Wetland Inspection Map

This report is provided as a brief summary of findings from APT's wetland investigation of the referenced Study Area that consists of proposed development activities and areas generally within 200 feet.³ If applicable, APT is available to provide a more comprehensive wetland impact analysis upon receipt of site plans depicting the proposed development activities and surveyed location of identified wetland and watercourse resources.

¹ Wetlands and watercourses were delineated in accordance with applicable local, state and federal statutes, regulations and guidance.

² All established wetlands boundary lines are subject to change until officially adopted by local, state, or federal regulatory agencies.

³ APT has relied upon the accuracy of information provided by C-TEC Solar regarding the location and limits of the Study Area for the purposes of identifying wetlands and watercourses.

Attachments

- Wetland Delineation Field Form
- Wetland Inspection Map

Wetland Delineation Field Form

Wetland I.D.:	Wetland 1	
Flag #'s:	WF 1-01 to 1-10 and WF 1-11 to 1-42	
Flag Location Method:	Site Sketch <input checked="" type="checkbox"/>	GPS (sub-meter) located <input checked="" type="checkbox"/>

WETLAND HYDROLOGY:

NONTIDAL ☒

Intermittently Flooded <input type="checkbox"/>	Artificially Flooded <input checked="" type="checkbox"/>	Permanently Flooded <input type="checkbox"/>
Semipermanently Flooded <input type="checkbox"/>	Seasonally Flooded <input checked="" type="checkbox"/>	Temporarily Flooded <input type="checkbox"/>
Permanently Saturated <input type="checkbox"/>	Seasonally Saturated/seepage <input checked="" type="checkbox"/>	Seasonally Saturated/perched <input type="checkbox"/>
Comments: Wetland 1 consists of a complex of a permanently flooded open water feature to the north, artificially flooded (drainage swale), intermittently flooded (southern interior areas), and seasonally saturated seep (bordering southern wetland) areas.		

TIDAL ☐

Subtidal <input type="checkbox"/>	Regularly Flooded <input type="checkbox"/>	Irregularly Flooded <input type="checkbox"/>
Irregularly Flooded <input type="checkbox"/>		
Comments: None		

WETLAND TYPE:

SYSTEM:

Estuarine <input type="checkbox"/>	Riverine <input type="checkbox"/>	Palustrine <input checked="" type="checkbox"/>
Lacustrine <input type="checkbox"/>	Marine <input type="checkbox"/>	
Comments: None		

CLASS:

Emergent <input checked="" type="checkbox"/>	Scrub-shrub <input checked="" type="checkbox"/>	Forested <input checked="" type="checkbox"/>
Open Water <input checked="" type="checkbox"/>	Disturbed <input checked="" type="checkbox"/>	Wet Meadow <input type="checkbox"/>
Comments: Southern core wetland areas are dominated by mature hardwood forest with transitional areas surrounding the central drainage swale dominated by scrub/shrub and emergent vegetation. Areas bordering the northern open water resource are dominated by scrub/shrub habitats. All of these vegetation cover types have been either historically or routinely managed.		

WATERCOURSE TYPE:

Perennial <input type="checkbox"/>	Intermittent <input checked="" type="checkbox"/>	Tidal <input type="checkbox"/>
Watercourse Name: Unnamed – drainage ditch feature regulated as intermittent watercourse.		
Comments: None		

Wetland Delineation Field Form (Cont.)

SPECIAL AQUATIC HABITAT:

Vernal Pool Yes <input type="checkbox"/> No <input checked="" type="checkbox"/> Potential <input type="checkbox"/>	Other <input type="checkbox"/>
Vernal Pool Habitat Type: None	
Comments: None	

SOILS:

Are field identified soils consistent with NRCS mapped soils?	Yes <input checked="" type="checkbox"/>	No <input type="checkbox"/>
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DOMINANT PLANTS:

Weeping Willow (<i>Salix babylonica</i>)	Specked Alder (<i>Alnus rugosa</i>)
Fox Grape (<i>Vitis labrusca</i>)	Silky Dogwood (<i>Cornus amomum</i>)
Jewelweed (<i>Impatiens capensis</i>)	Purple Loosestrife* (<i>Lythrum salicaria</i>)
Multiflora Rose* (<i>Rosa multiflora</i>)	Eastern Cottonwood (<i>Populus deltoides</i>)
Red Maple (<i>Acer rubrum</i>)	Green Ash (<i>Fraxinus pennsylvanica</i>)
American Elm (<i>Ulmus americana</i>)	Sensitive Fern (<i>Onoclea sensibilis</i>)
Tussock Sedge (<i>Carex stricta</i>)	Skunk Cabbage (<i>Symplocarpus foetidus</i>)
Northern Arrow-wood (<i>Viburnum recognitum</i>)	

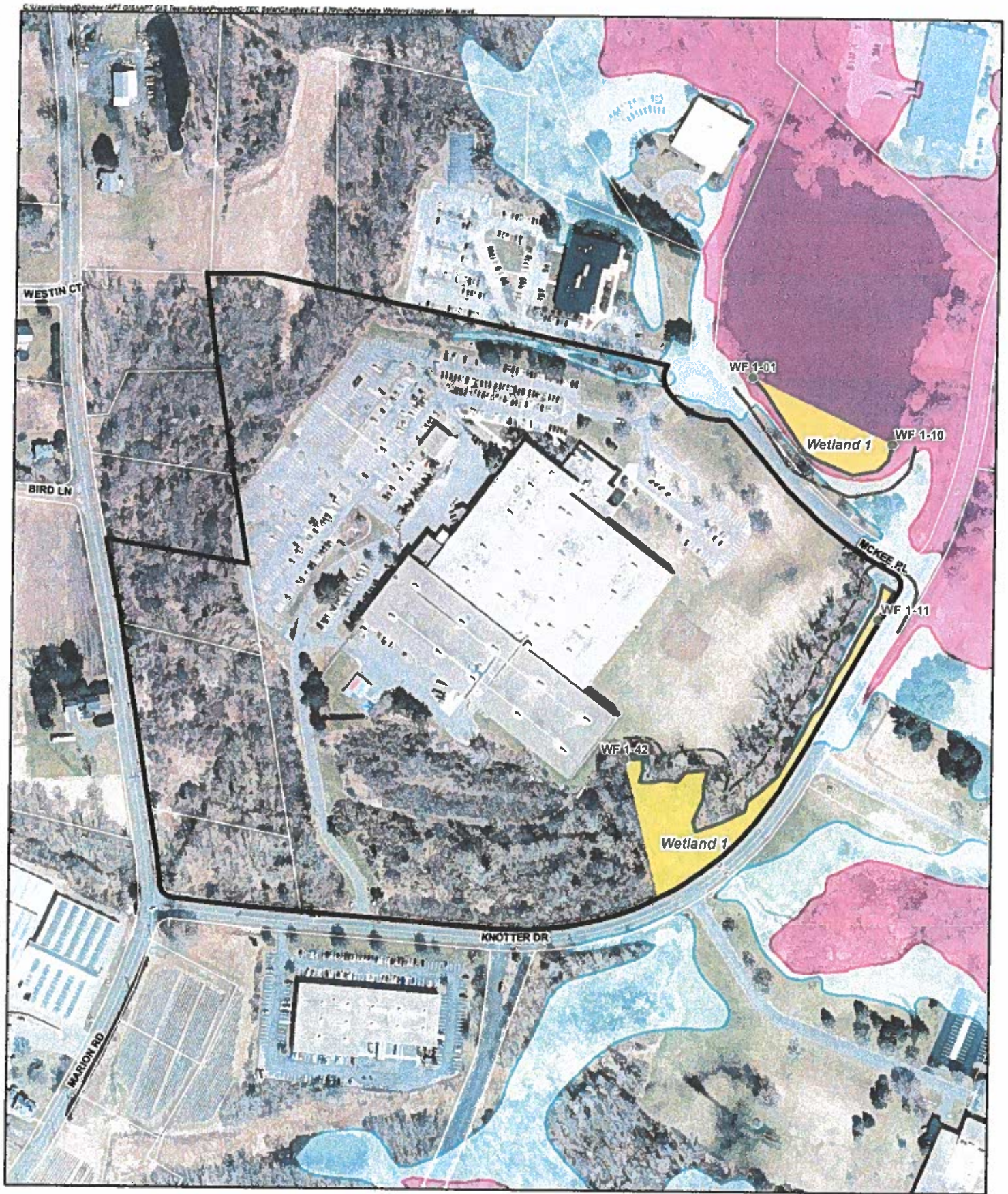
* denotes Connecticut Invasive Species Council invasive plant species

GENERAL COMMENTS:

The subject property is improved with a large industrial building with associated paved parking areas that occupies the majority of the property. All-Points Technology Corp., P.C. ("APT") understands that C-TEC Solar proposes to construct a solar energy generation facility ("Facility") within an existing well-maintained open field area generally located between the industrial building to the northwest and Knotter Drive to the southeast, south of McKee Place. The location of the proposed Facility consists of maintained lawn in uplands with an existing paved access drive to the north providing access to the Facility location. Wetlands, identified as Wetland 1, are located to the north, east and south of the proposed Facility. A forest patch is located in the southern portion of the property with a narrow forested area associated with a drainage swale feature located along Knotter Drive starting from the intersection with McKee Place. An open water pond is located on the north side of McKee Place.

Wetland 1 primarily consists of a narrow anthropogenic drainage swale draining south from the pond located north of McKee Place (wetland flags WF 1-11 to 1-28) with other components consisting of the pond (WF 1-01 to 1-10) to the north and a broader bordering wetland feature to the south (WF 1-28 to 1-42). The drainage swale consists of a 5- to 8-foot-wide channel with historically filled bottom and 4- to 6-inches of flow observed at the time of inspection. At WF 1-28, the drainage swale transitions to a relatively broad forested swamp with soil profiles containing evidence of historic floodplain (alluvium) deposition.

The Town of Cheshire Inland Wetlands & Watercourses Commission ("IWWC") regulates activities in wetlands and watercourses and uplands within 50 feet of these resources (known as the "Upland Review Area"). Work activities will not directly impact wetlands or watercourses, but construction activities associated with the proposed Facility are anticipated to be located within the 50-foot Upland Review Area to Wetland 1 and therefore would be regulated by the IWWC, requiring a wetland permit. APT is available to review the civil design plans to evaluate possible wetland impacts and wetland permit requirements with the IWWC. Following this review, APT recommends contacting the IWWC Agent to verify wetland permit requirements for the proposed Facility.



Legend

- Site
- Wetland Flag
- 50-Foot Upland Review Area
- Delineated Wetland Boundary
- Approximate Wetland Area
- 100-Year Flood Zone
- 500-Year Flood Zone
- Floodway*
- Approximate Parcel Boundary

Map Notes

*Legend item not located within mapped area
 Base Map Source: 2019 CT Aerial Imagery (CTECO)
 Map Scale 1 inch = 300 feet
 Map Date: August 2021



Wetland Inspection Map

Proposed Solar Energy Facility
 5 McKee Place
 Cheshire, Connecticut



Site Photographs



Photo 1: View of proposed solar facility looking southwest at maintained lawn.
Hanwha Aerospace USA facility in right side of photo.



Photo 2: View of northern side of proposed solar facility looking west. Access provided from
paved access and parking area behind tree to the right of the building.



Photo 3: View of eastern side of proposed solar facility looking southwest.



Photo 4: View of north end of forested wetland located south of proposed Solar Facility looking south.