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ARCADIS
Infrastructure · Water · Environment · Buildings

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ENVIRONMENTAL

Date:
June 28, 2012

Contact:
Frederick M. Sellars

Phone:
978-322-4517

Email:
frederick.sellars@arcadis-us.com

Our ref:
CO001447

New York State Department of Environmental Conservation
625 Broadway
Albany, NY 12233-4500
Attn: Stephen Tomasik

United States Army Corps of Engineers
New York District
26 Federal Plaza
New York, NY 10278-0090
Attn: Steve Ryba, Regulatory Branch, Room 1937

Subject: Cricket Valley Energy Project, Dover, New York (Army Corps #2009-1043)

Dear Mr. Tomasik and Mr. Ryba:

On January 22, 2010, ARCADIS submitted a Joint Application Form and supporting information requesting authorization of wetland alteration associated with the Cricket Valley Energy (CVE) project in Dover, Dutchess County, New York. On April 7, 2011, an update to the application was submitted to include information highlighting elements of the project that had been changed since the January 22, 2010 submittal. The April 7, 2011 submittal represented CVE's continuation of refining project elements in response to New York State Department of Environmental Conservation (NYSDEC) and United States Army Corps of Engineers (USACE) comments to further mitigate wetland impacts resulting from the CVE project.

Since that time CVE has obtained an option to purchase approximately 57 additional acres to the south of the proposed project site. This adjacent parcel, formerly the location of the RASCO Materials facility (the former Rasco parcel), had not previously been available. It should be noted that the permanent project footprint remains unchanged as described in the April 7, 2011 submittal; however, previously disturbed portions of the former Rasco parcel are proposed to be used for temporary parking during the construction phase of the project.

This letter provides an update to previously submitted information and highlights those elements that have been changed since the April 7, 2011 submittal to reflect inclusion of the former Rasco parcel. The following includes a brief project description, a summary of wetland jurisdiction status, a review of alternatives considered to avoid and minimize wetland impacts, and a discussion of proposed project activities, including a proposed wetland restoration/creation and adjacent area restoration plan.

CVE previously submitted a copy of the Wetland Delineation report for the project development area on August 28, 2009, which includes representative photographs and background, as well as a copy of the Environmental Assessment Form that was submitted on November 4, 2009. On January 10, 2012 CVE also submitted materials in support of a request for a jurisdictional determination for the former Rasco parcel, including wetland data forms, representative photographs and signed seal survey drawings of surveyed wetlands. CVE is currently preparing the Final Environmental Impact Statement (FEIS) for NYSDEC review, including information to address the inclusion of the former Rasco parcel.

Project Description

The project is proposed within an approximately 57-acre portion (the Project Development Area) of the 193.5-acre property. The approximately 57-acre former Rasco parcel immediately south of the Project Development Area will predominantly remain undisturbed with the exception of temporary disturbance to approximately 13 acres; these 13 acres consist of waste material/debris from prior operations which require removal. Following removal, the 13-acre area will be used for temporary construction worker parking and laydown area, and, following construction, will be restored. Figure 1 illustrates the boundaries of the property, Project Development Area and former Rasco parcel on the Dover Plains, New York USGS quadrangle. The approximate center point of the Project Development Area is latitude 41.677027, longitude -73.580508.

The property is bounded to the north by an existing 345 kilovolt (kV) Consolidated Edison (ConEd) electric transmission corridor (an existing Iroquois natural gas pipeline right of way also extends along the ConEd corridor); to the east by State Route 22; and to the south by residential properties. To the west, the Project Development Area is bounded by an active Metro-North rail line. The property continues west from the rail line, bounded by the Swamp River on the northern portions and extending across the river in westerly and southerly portions. No project work is proposed west of the rail line. The property has been in industrial use since approximately 1942; the Project Development Area's primary building was largely destroyed by fire in 1996.

The Cricket Valley Energy project is a proposed nominal 1,000 megawatt (MW) natural gas-fired combined cycle energy facility, which will be constructed on the Project Development Area (which currently contains several abandoned industrial buildings). The project will utilize air cooling and a zero liquid discharge system;

therefore, operational impact to water resources will be limited to use of an on-site bedrock well system to supply a continuous summer demand of 60 gallons per minute (gpm), and a short-term supply of 120 gpm, discharge of stormwater (for storm events in excess of the 100-year storm), and domestic sewage to an onsite septic system. The project will utilize the existing driveway onto Route 22, and will interconnect with the ConEd 345 kV transmission line on-site. A short (approximately 500-foot) natural gas lateral will be required to interconnect to the existing Iroquois natural gas pipeline.

The approximately 13 acres of the former Rasco parcel proposed for waste material/debris removal and temporary construction worker parking and laydown represents an area that has been historically disturbed through placement of materials and debris. Of these 13 acres, approximately 5 acres are currently developed (previously used by RASCO Materials), approximately 6 acres is comprised of waste pile material (some containing overgrowth consisting of shrub and small diameter woody vegetation), and approximately 2 acres are characterized by re-growth in the form of small-diameter trees. Site clean-up and stabilization will occur prior to this temporary use, and stormwater management features will be included in the design to divert runoff from wetland resources and species habitat.

Wetland Jurisdictional Summary

In the Project Development Area, mapping indicated that NYSDEC-jurisdictional wetlands are located west of the railroad track, adjacent to the Swamp River (identified in project delineation reports as Wetlands 4 and 5). NYSDEC has determined that an additional on-site wetland (identified as Wetland 2) is state-jurisdictional. The two remaining on-site wetland resources (Wetlands 1 and 3) were determined not to be state-jurisdictional due to their isolated status.

On the former Rasco parcel, a NYSDEC jurisdictional wetland was delineated immediately east of the railroad track (identified as Wetland D {US 8}) with a direct hydrologic surface connection via a culvert under the tracks to adjacent Wetland 5. An additional 5 wetlands were delineated that were determined not to be state-jurisdictional and are designated as follows:

- Wetland A (US 5)
- Wetland B (US 6)
- Wetland C (US 7)
- Wetland E (US 9)
- Wetland F (US 4)

The United States Army Corps of Engineers (USACE) utilizes different jurisdictional criteria in reviewing wetland resources within the Project Development Area (Wetlands 4 and 5 have not been reviewed by the USACE, as no project work will occur west of the railroad track). Federal wetland jurisdiction was confirmed for Wetland 2 and a portion of Wetland 3. In addition, the onsite drainage swale was determined to be a federally jurisdictional intermittent stream. Wetland 1 and a portion of Wetland 3 were determined not to be federally jurisdictional.

On the former Rasco parcel, two of the six wetlands delineated were determined to be under federal jurisdiction. Wetland D (US 8) falls under both federal and state jurisdictions, while Wetland F (US 4) is federally regulated only. Note that, while Wetland F (US 4) is predominantly located on the former Rasco parcel and was not identifiable as a wetland resource without access to that parcel, it extends onto the Project Development Area as well.

Figures 2, 3, 4, and 5 present the surveyed wetland boundaries. The following table summarizes the jurisdictional resources within the approximately 57-acre Project Development Area and approximately 57-acre former Rasco parcel.

Wetland Resource	Parcel Location	State Jurisdictional?	Federally Jurisdictional?	Wetland Jurisdictional Area (Acres)
1	PDA	No	No	--
2	PDA	Yes	Yes	8.68
3A	PDA	No	No	--
3B	PDA	No	Yes	0.41
Drainage Swale	PDA	No	Yes	0.04
A (US 5)	FRP	No	No	--
B (US 6)	FRP	No	No	--
C (US 7)	FRP	No	No	--
D (US 8)	FRP	Yes	Yes	6.08
E (US 9)	FRP	No	No	--
F (US 4)	PDA & FRP	No	Yes	0.36 (0.03 acres in PDA)

PDA = Project Development Area
FRP = Former Rasco Parcel

Wetlands 4 and 5 are located west of the railroad track that is within the property but not within either the Project Development Area or former Rasco parcel. Note that state jurisdictional Adjacent Area (100 feet from the wetland boundary) associated with Wetlands 4 and 5 does extend onto the Project Development Area and former Rasco parcel, although no project activities are proposed in that area.

Alternatives Considered in the Project Development Area

Avoidance of impact to wetlands has been an important focus of the project site selection and design. The following narrative reviews alternatives considered to achieve that goal.

The Cricket Valley Energy site was selected based on detailed criteria that included proximity to energy infrastructure, appropriate zoning, and sufficient land to create a buffer and minimize aesthetic impacts to the surrounding community. The entire 193.5-acre site which includes the former Rasco parcel meets all of these criteria:

- Adjacent to a 345 kV electric transmission line owned by ConEd.
- Adjacent to a high-pressure natural gas pipeline owned by Iroquois Gas Transmission Company. An approximately 500-foot gas pipeline lateral will be constructed to the project site to interconnect with the existing 24-inch gas line.
- Industrially zoned. The site is one of three areas in Dover zoned for Manufacturing/Industrial purposes. It is specifically designated in the Dover Master Plan (referred to as the "Mica Plant") to be utilized for industrial purposes.
- Natural buffer. A 300- to 400-foot buffer of vegetation will be maintained between the project development site and New York State Route 22 to mitigate visual impacts. In addition, existing topography will be maintained as buffer.

Alternative sites were identified throughout the southeast region of New York State in addition to several local alternatives in the Town of Dover. However, these sites did not adequately meet the criteria outlined above. Sites identified adjacent to the electric transmission lines and gas pipeline did not offer the appropriate zoning or buffer. Sites identified with appropriate zoning were located further away from energy infrastructure and would require the construction of new off-site electric power lines and a longer natural gas pipeline. The impact to the surrounding community

resulting from the need for potentially significant off-site construction eliminated these sites from consideration.

Once the site was selected, alternative project configurations were considered. In early May 2009, the wetland field delineation of the Project Development Area was completed, and field sketches were immediately provided to project engineers for use in developing preliminary layout alternatives. In the fall of 2011, the wetland field delineation of the former Rasco parcel was completed. As a result of this 2011 delineation, a 0.03 acre wetland ditch extending from the 0.36-acre Wetland F (US 4) was added within the limits of the Project Development Area The primary design goals were to:

- Avoid wetland impact wherever possible;
- Avoid NYSDEC wetland adjacent area impact wherever possible;
- Utilize the existing developed footprint to the greatest extent possible;
- Minimize clearing of forested areas to the greatest extent possible;
- Avoid substantial earth movement where possible; and
- Maintain practical technical equipment orientation to facilitate construction and operations in an efficient, safe and least-impact manner.

The current orientation of facility components was selected in order to use the existing driveway; minimize wetland intrusion; keep equipment aligned to ensure safe, efficient operation and to facilitate maintenance; and position louder equipment (for example, the air-cooled condensers that include numerous fans) to the south and west of the site, away from residences. Figures 6 through 9 highlight the amount of wetland impact reduction as a result of the various design alternatives and on-going effort by CVE to reduce natural resource impacts.

A significant ancillary project element is the project substation. Figure 6 (Drawing M200, Rev. B) illustrates the size of a conventional substation that would serve the project, as compared to the size of a gas insulated switchgear (GIS) style substation. Although a GIS switchyard is $10-20 million more than the cost of the conventional design, wetland impact considerations resulted in selection of a GIS switchyard for the project.

The surveyed wetland boundaries were overlain on the proposed site plan and other ancillary elements (e.g., the detention basin, gas pipeline interconnection, and ConEd substation, also selected as a GIS design at significant cost in order to reduce footprint) were added (see Figure 7, Drawing M200, Rev. F). Additional work continued towards minimizing the footprint needed for features such as the GIS substation and the detention basin.

NYSDEC review of the originally flagged wetland increased the Wetland 2 boundary to encompass a previously disturbed area where historical uses of the site eliminated natural soils and had deposited yellow sawdust like material. With this narrow finger-like area included in the wetland designation, impact to this area by the project footprint could not be avoided. Consideration for shifting the footprint or moving project elements to avoid impact to the tip of Wetland 2 continued, as follows:

- The footprint was shifted south to the extent possible given southern property line and existing drainage ditch physical constraints;
- The administration/warehouse buildings were relocated to the east;
- Further reductions were made in the size of the combined project/ConEd switchyard and substation;
- Slopes were reduced in areas near wetlands to minimize grading effects; and
- Various configurations with the potential to reduce the size of the stormwater detention basin were considered but rejected due to project layout constraints and design needs.

Figure 8 illustrates a revised layout with its associated grading (Drawing C130, Rev. A). Constraints associated with the southern property line, as well as functional and safety needs for access and keeping various pieces of equipment co-located resulted in unavoidable impact to the fingerlike projection of Wetland 2 and its state-jurisdictional adjacent area.

With the addition of the Rasco parcel, the Project examined whether the project footprint could be further shifted to eliminate or reduce encroachment on Wetland 2. However, the presence of federally jurisdictional Wetland F (US 4) as well as the federally jurisdictional intermittent stream (stormwater drainage ditch) precluded this.

Figure 9 (M200 Rev S) illustrates the currently proposed layout, which demonstrates some additional wetland impact reduction as a result of project layout modifications.

Avoidance of Impacts to Jurisdictional Wetlands and Minimization of Temporary Impacts to Adjacent Area in Former Rasco Parcel

With the acquisition of the adjacent former Rasco parcel, in tandem with clean-up and restoration activities, CVE has the opportunity to provide for a significant amount of the necessary construction worker parking and laydown on an approximately 13-acre portion of this property. This temporary use will require some modification as an approximately 2-acre area of re-growth forest dominated by relatively small diameter trees (<3" dbh) will need to be cleared.

As shown on Figure 10, one non-jurisdictional wetland (Wetland B [US 6]) will be filled with gravel to accommodate parking, and another non-jurisdictional wetland (Wetland C {US 7}) will be converted to a sediment detention control facility as shown on Figure 11. These project features would follow excavations required to remove waste piles and debris that will eliminate artificial barriers currently impounding surface waters which likely resulted in the formation of these two wetlands. As illustrated in Figure 11, remaining wetlands would be protected as a result of the temporary stormwater management system directing flows away from wetlands through extended channels prior to discharge, allowing for greater residence time to improve water quality,

As a consequence of required disturbance to complete waste pile and debris removal, approximately 1.4 acres of regulated Adjacent Area will be impacted. The remaining regulated Adjacent Area will not have to be disturbed for temporary construction worker parking usage. Following use of this 1.4-acre regulated Adjacent Area for temporary parking during construction, the site will be restored and planted with indigenous trees, shrubs and native seed mixes as shown on the restoration plan for the former Rasco parcel included in Attachment 1.

Summary of Impacts to Wetland Resource Areas and Regulated Adjacent Areas

Although the project design minimizes impacts to wetland resources as much as possible, a small amount of impacts to wetland resource areas is unavoidable. A summary of impacts to jurisdictional wetland resource areas (both jurisdictional and non-jurisdictional) is provided below. A summary of impacts to regulated Adjacent

Area (Area within 100 feet of a NYSDEC-jurisdictional wetland) is provided in a separate table below. A discussion of the proposed project actions within the jurisdictional areas is provided below.

Jurisdictional Wetlands Impacts

(a) Wetland Number	(b) Jurisdictional Status	(c) Total Wetland Area (acres)	(d) Wetland Area Temporarily Disturbed and Restored (acres)	(e) Wetland Area Permanently Altered (acres)	(f) Wetland Area Permanently Lost (acres)	(g) New Wetland Area Created (acres)	(h) Total Wetland Net Loss (f) + (g)
Wetland 2	Federal and State	8.7	0.6	0.0	-0.05	0.05	0.0
Wetland 3B	Federal	.41	0.0	0.0	0.0	0.0	0.0
Drainage Swale (Intermittent Stream)	Federal	.04	.001	.003 (rip rap within stream)[1]	0.0	0.0	0.0
Wetland D (US 8)	Federal and State	6.08	0.0	0.0	0.0	0.0	0.0
Wetland F (US 4)	Federal	0.36	0.0	0.0	0.03	0.03	0.0

[1]See Attachment 1: Plate 3 – Conceptual Subsurface Sewage Disposal System and Stormwater Management Plan

Total Adjacent Area Impacts (see Wetland Restoration/Creation Plan Sheets 1 through 3 and Sheet 4 Former Rasco Parcel On-site Construction Laydown and Parking Area: Preliminary Restoration and Landscape Plan)

(a) NYSDEC-Regulated Resource	(b) Adjacent Area Temporarily Disturbed/Restored Due to Facility Construction and Bioretention Areas[2]	(c) Adjacent Area Temporarily Disturbed /Restored due to Waste Excavation[3]	(d) Total Adjacent Area Temporary Disturbance/ Restoration (b)+(c)	(e) Adjacent Area Permanently Lost (due to facility construction)[4]	(f) Adjacent Area selectively replanted outside of proposed limits of construction[5]
Adjacent Area to Wetland 2	0.6	0.4	1.0	0.8	1.8
Adjacent Area to Wetland D (US 8)	0.0	1.4	1.4	0.0	0.0

[2]See Attachment 1: Wetland Restoration/Creation Plans Sheet 3, Note 4.

[3]See Attachment 1: Wetland Restoration/Creation Plans Sheet 3, Note 5 and Sheet 4 Former Rasco Parcel On-site Construction Laydown and Parking Area: Preliminary Restoration and Landscape Plan

[4]Area within Existing Adjacent Area that will be filled due to plant construction

[5]See Attachment 1: Wetland Restoration/Creation Plans Sheet 3, Note 3.

Proposed Project Actions in Jurisdictional Areas

All state and federal jurisdictional wetland resource impact has been avoided by the project with the exception of limited impact to Wetland 2 and its associated state-jurisdictional 100-foot adjacent area, a portion of Wetland D (US 8) state-jurisdictional 100-foot adjacent area, some limited work within the intermittent stream channel and a small wetland ditch that is part of federally jurisdictional Wetland F (US 4) representing the northernmost terminus of this wetland.

Impacts associated with Wetland 2 and Wetland F (US 4) falls into three general categories: proposed wetland fill; proposed activities to address remediation and restoration of wetland quality; and proposed work within the state wetland adjacent area (of Wetland 2), including restoration and potential mitigation activities. Each is discussed below.

Intermittent Stream Impacts

The project's stormwater management system has been designed with three plunge pool/bioretention facilities in the northern portion of the Project Development Area, and a stormwater management basin – wet extended detention pond in the southern portion of the Project Development Area that will hold most stormwater rainfall (see Attachment 1, Plate 3). For storm events in excess of the 100-year frequency storm event, discharge from the stormwater management basin will occur into the intermittent stream (which is currently used for site stormwater discharge). No plans currently exist to modify the existing stormwater channel (a USACE-jurisdictional intermittent stream). However, in order to prevent erosion, it will be necessary to install rip-rap within the intermittent stream in the location of the proposed detention pond outlet (see Plate 3 inset). This small area of rip-rap (approximately 135 square feet, or 0.003 acre) is not anticipated to alter the flow of water or function of the intermittent stream. No other improvements are proposed within the federally jurisdictional intermittent stream channel.

Proposed Wetland Fill – Wetland 2 and Wetland F (US 4)

A total of 1,990 square feet (0.05 acre) of wetland fill is unavoidable for Wetland 2. In addition, a total of 1,195 square feet (0.03 acre) of Wetland F (US4) will be impacted as a result of required surface grading within this segment of the Project Development Area. Although numerous site configurations were explored, the footprint has been shifted as far south as possible to both avoid the USACE - jurisdictional Intermittent stream and significantly minimize impacts to federally

regulated Wetland F (US 4). The tip of the southerly fingerlike projection associated with Wetland 2, and northern most terminus ditch associated with Wetland F (US 4) cannot be avoided.

It should be noted that the quality of the impacted wetland segments of both Wetland 2 and Wetland F (US 4) is poor. Although wetland hydrology and vegetation is present, natural soils do not exist in this portion (and further north) of Wetland 2, nor were they observed along either lengths of two linear features representing ditches within Wetland F (US 4). Rather, soil material in Wetland 2 and both ditches within Wetland F (US 4) is comprised of a yellowish, non-toxic sediment that is not naturally occurring. Debris associated with various historical industrial uses of the site has been deposited and/or discharged into these wetlands and on the wetland banks as well, including a white slag material from previous magnesium extraction and processing activities that occurred on the site. As a part of project development, CVE intends to remove trash and debris from the wetland areas (and throughout the site), remove the "yellow material" from the impacted portion of the Wetland 2, create additional wetland and restore wetland adjacent area with selective plantings. The cleanup and restoration of these wetlands should improve wetland function and quality, while constituting work in wetland areas requiring approval, will also result in the creation of additional wetland area, as addressed below.

Wetland 2 Restoration and Creation and Adjacent Area Restoration

A wetland restoration/creation plan has been developed to compensate for both the permanent loss of the 0.08 acres of jointly regulated NYSDEC and USACE freshwater wetland and 0.8 acre of regulated Adjacent Area described above, as well as the temporary disturbance to approximately 2.4 acres of both Wetland 2 and Wetland D (US 8) regulated Adjacent Area. Narratives describing the wetland restoration/creation and adjacent area restoration plans complete with plan drawings, as well as a restoration monitoring plan have been provided in Attachment 1 to this letter.

The Restoration/Creation Plan involves the following activities:

- The creation of an Open Water area within the southernmost portion of Wetland 2 by excavation of non-native sediment, approximately 0.6 acres in size. The Open Water area will be allowed to revegetate.

- The creation of 0.08 acres of new wetland by extending the existing wetland limits to the east and west of the Open Water area. This area will be seeded and allowed to revegetate.

As a result of the newly created 0.08 wetland area, there will be no net loss of jurisdictional wetland.

In addition to the wetland restoration and creation, restoration activities within the Adjacent Area include the following:

- Restoration and replacement of 0.4 acres of Adjacent Area (Wetland 2) due to the excavation of waste material in the Project Development Area, and 1.4 acres of Adjacent Area (Wetland 4 [US 8]) within the former Rasco parcel following excavation of waste material and subsequent use of this area for temporary parking during construction.

- Restoration and replanting of approximately 0.6 acres of Adjacent Area that may be temporarily disturbed due to facility construction as well as around the bioretention basins. These areas will be planted with native tree/shrub species.

- Selective replanting of Adjacent Area between the proposed limits of construction ground disturbance and Wetland 2 (approximately 1.8 acres). Areas that are not currently densely vegetated will be selectively planted with appropriate tree/shrub species.

Plantings Adjacent to Wetland 1

In addition to the restoration of, and creation at the USACE- and NYSDEC-jurisdictional Wetland 2, CVE will replant areas between the project footprint and non-jurisdictional Wetland 1 with the same species and planting density proposed for the Wetland 2 Adjacent Area replanting to further protect this non-jurisdictional wetland.

Post-Construction Monitoring Plan

A post-construction monitoring and maintenance plan has been developed (See Attachment 1). The monitoring and maintenance plan includes monitoring for three calendar years (covering three growing seasons) to ensure that the creation and

restoration plan has achieved its regulatory and contractual commitments and goals. The plan includes both a qualitative and quantitative assessment to ensure the physical health and establishment of new vegetation at the site as well as the integrity of installed erosion matting, revetments, and herbivory fencing in the restoration area. The program includes annual reports and photo documentation as well as the recommendation and performance of corrective action, if necessary.

A revised Project Description and Purpose has been prepared to address these project refinements that have been made since the original submission of the Joint Application Form. This revision is provided as Attachment 2.

We appreciate your continued review of this wetland application, and hope that the information contained herein addresses all outstanding comments on the application. Please do not hesitate to contact me if you have any questions or require additional information.

Sincerely,

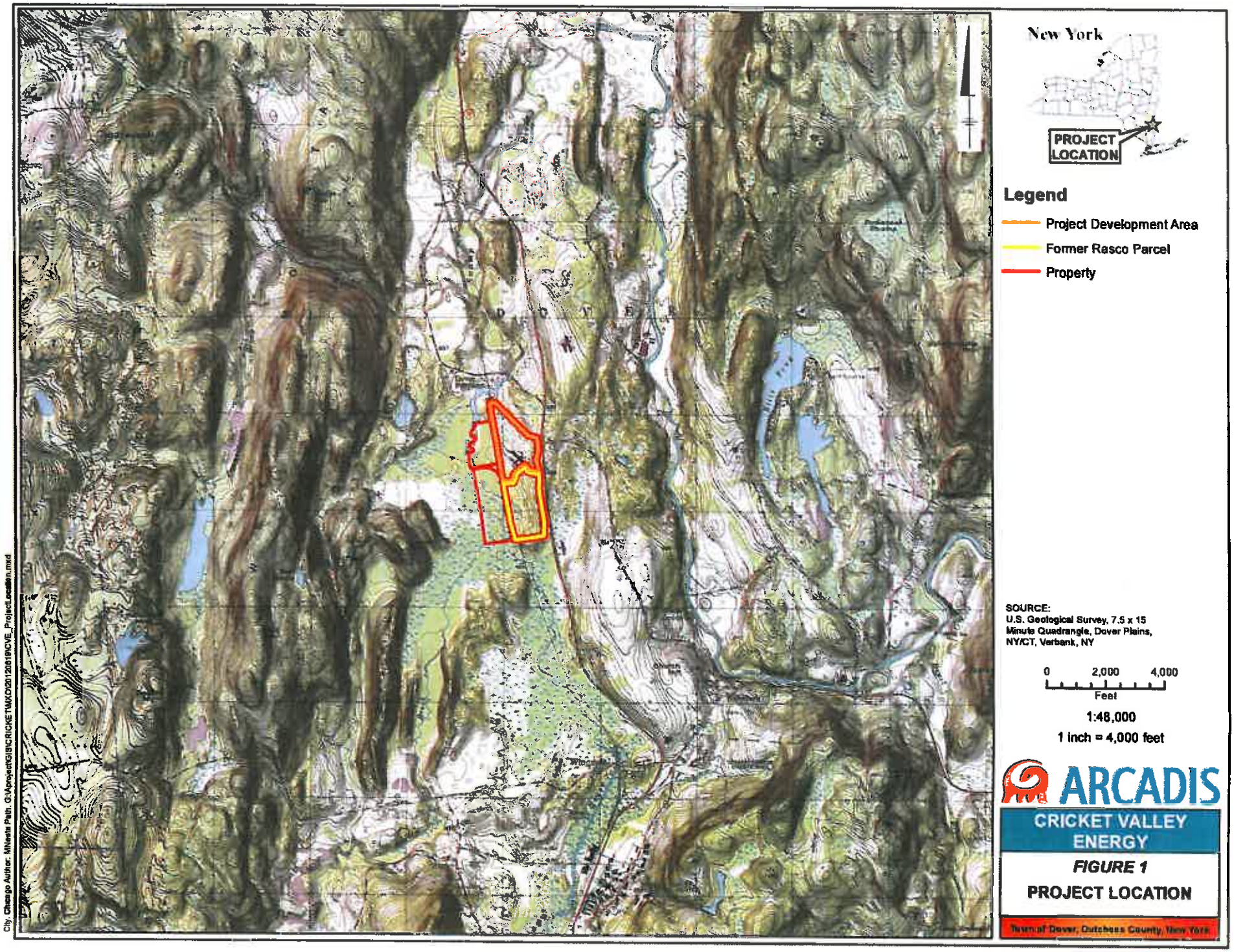
ARCADIS U.S., Inc.

Frederick M. Sellars
Vice President

Copies:
R. De Meyere, J. Ahrens, CVE
J. Schachter, Howlands Lake Partners
R. Courtien, Town of Dover
H. Gierloff, NYSDEC Region 3

ARCADIS

Figures



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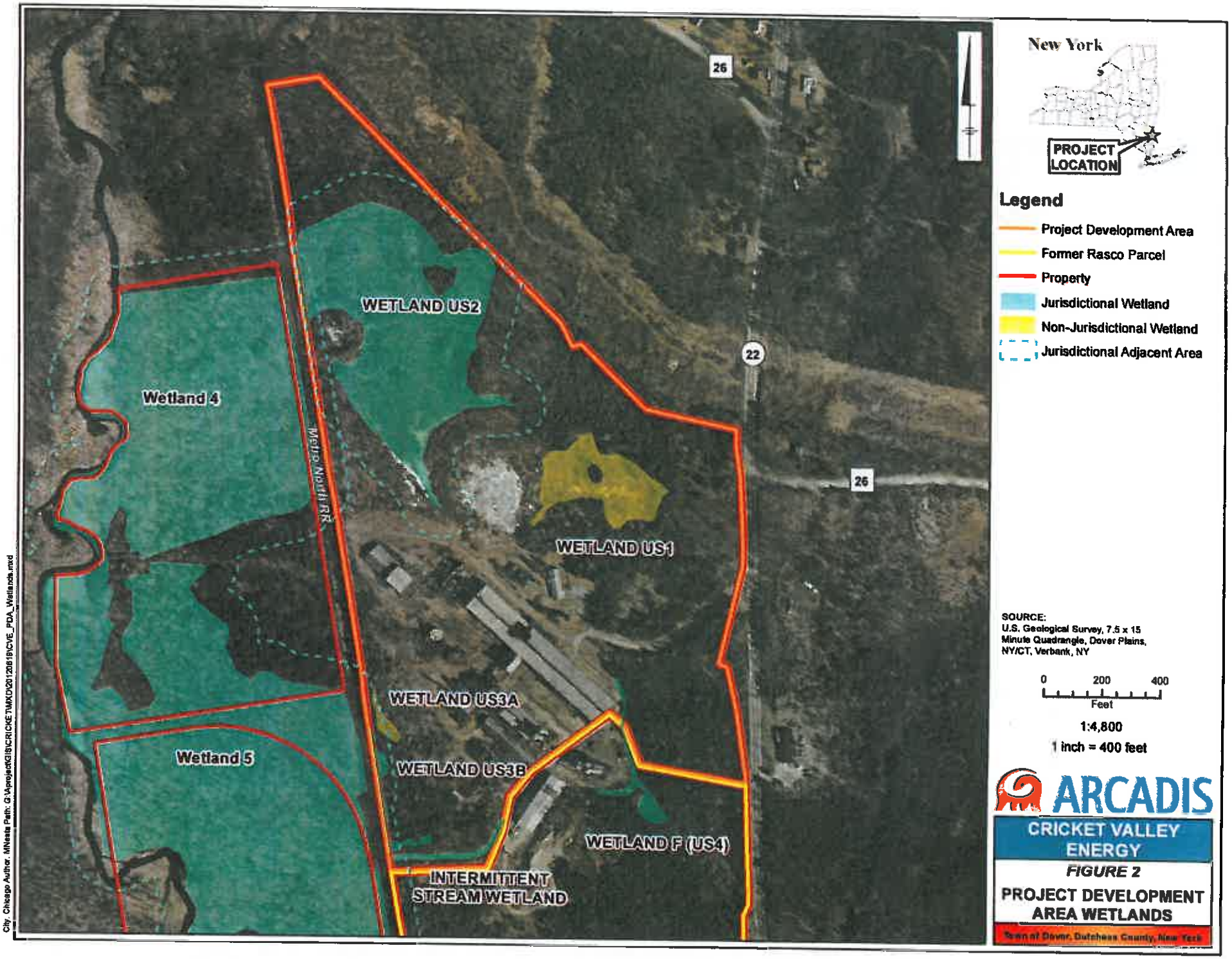

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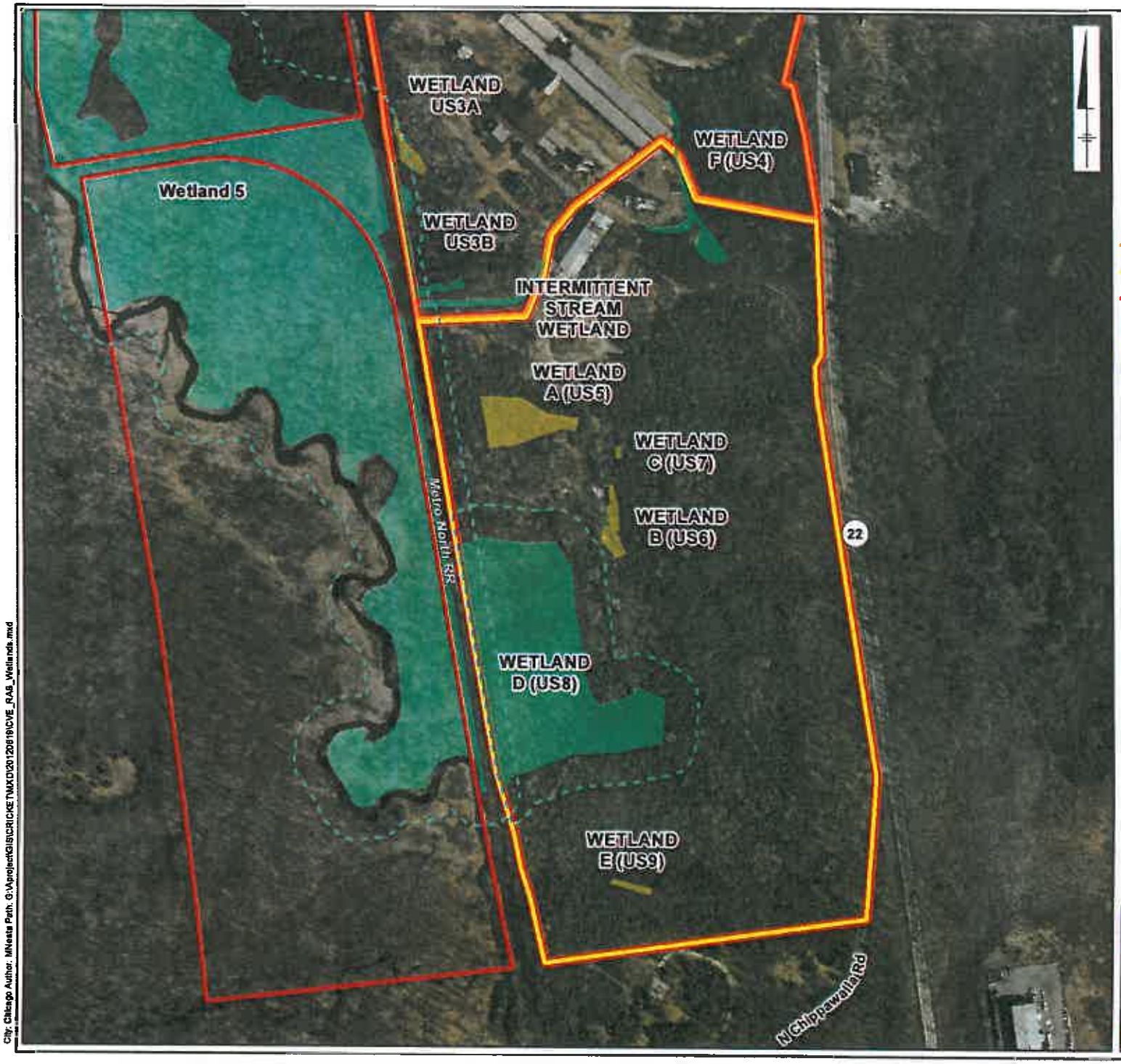

Legend

- Project Development Area
- Former Rasco Parcel
- Property
- Jurisdictional Wetland
- Non-Jurisdictional Wetland
- Jurisdictional Adjacent Area

SOURCE:
U.S. Geological Survey, 7.5 x 15 Minute Quadrangle, Dover Plains, NY/CT, Verbank, NY

0 200 400
Feet

1:4,800
1 inch = 400 feet

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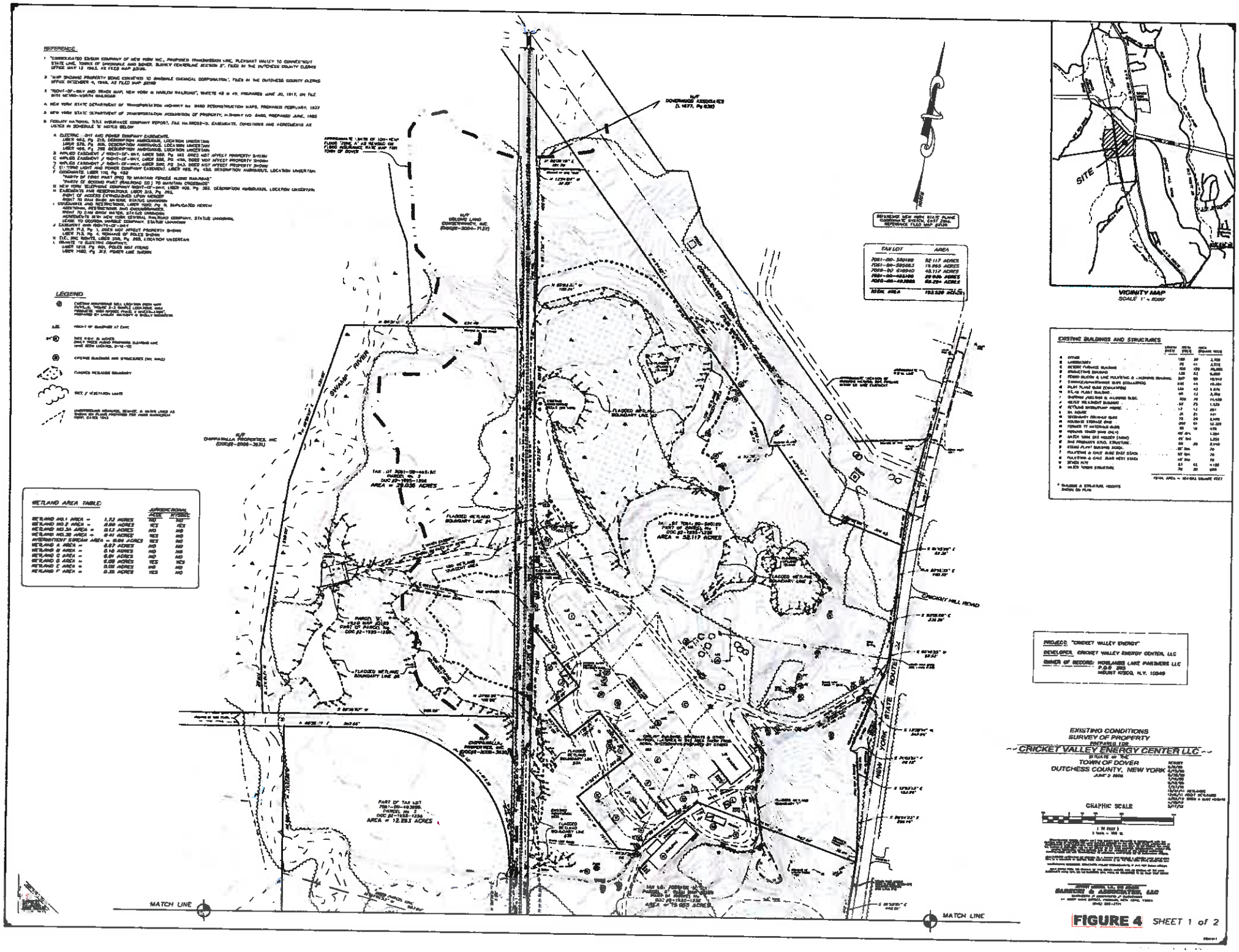
CRICKET VALLEY ENERGY

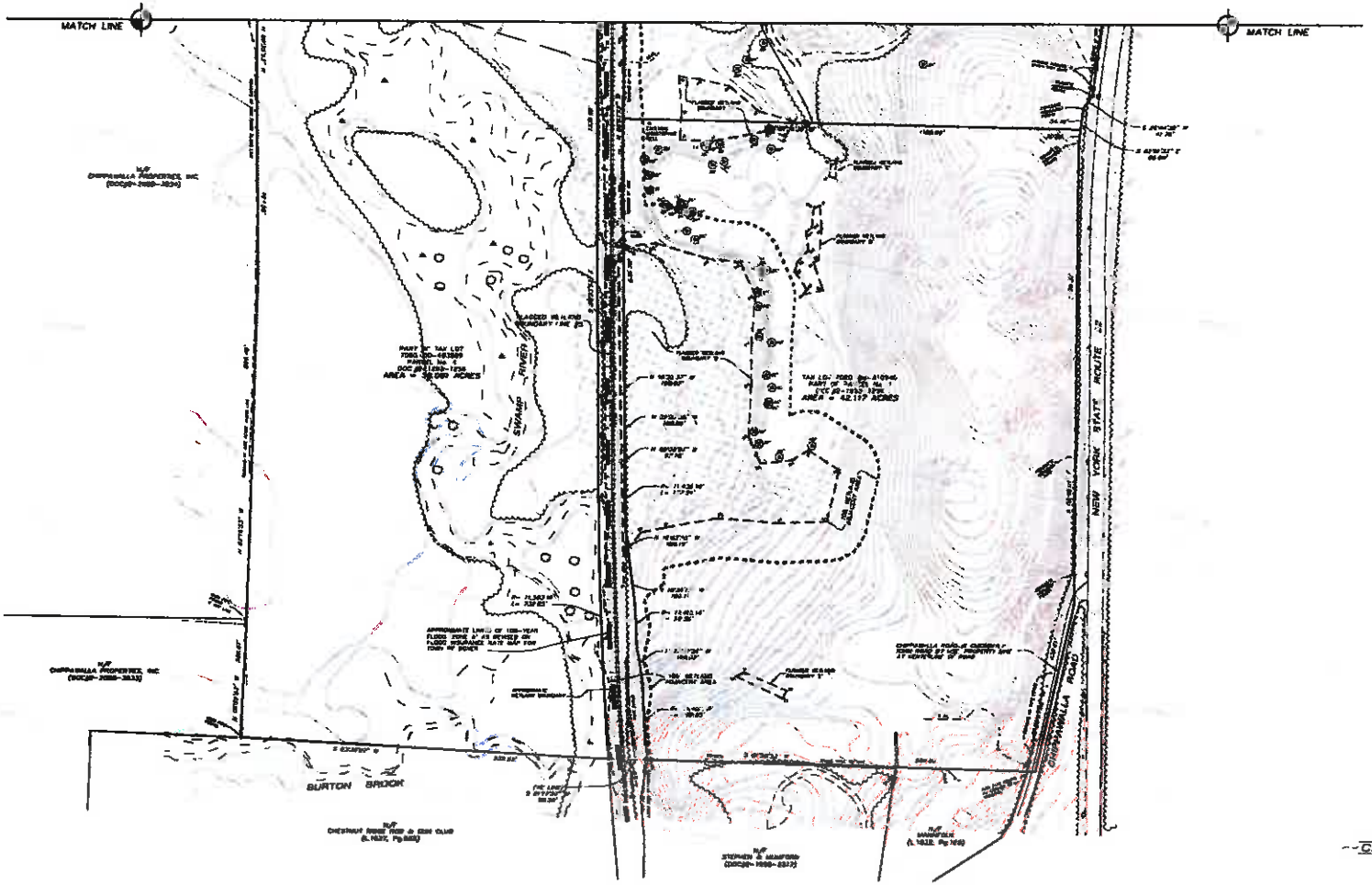
FIGURE 3

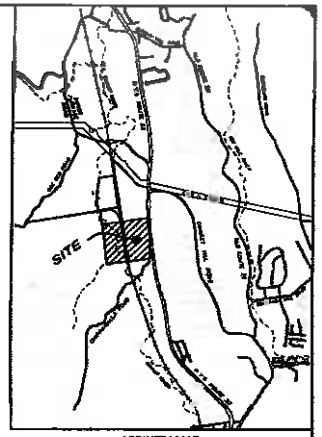
FORMER RASCO PARCEL WETLANDS

Town of Dover, Dutchess County, New York

City: Chicago Author: MNesta Path: G:\Aproject\GIS\CRICKET\MXD\20120819\CVE_RAS_Wetlands.mxd


REFERENCE
LEGEND
WETLAND AREA TABLE
TAX LOT
AREA
SITE
VICINITY MAP
SCALE 1" = 2000'
EXISTING BUILDINGS AND STRUCTURES
SWAMP RIVER
CRICKET HILL ROAD
NEW YORK STATE ROUTE 22
MATCH LINE
MATCH LINE
PROJECT: "CRICKET VALLEY ENERGY"
DEVELOPER: CRICKET VALLEY ENERGY CENTER, LLC
OWNER OF RECORD: HOLLAND LAKE PARTNERS LLC
EXISTING CONDITIONS
SURVEY OF PROPERTY
PREPARED FOR
CRICKET VALLEY ENERGY CENTER LLC
STATE OF NEW
TOWN OF DOVER
DUTCHESS COUNTY, NEW YORK
GRAPHIC SCALE
BARBER & ASSOCIATES, LLC
FIGURE 4 SHEET 1 of 2





VICINITY MAP
SCALE 1" = 2000

REFERENCE NEW YORK STATE PLANE COORDINATE SYSTEM, EAST ZONE
REFERENCE FILES MAP 23126

TAX LOT	AREA
7061-00-380180	52.117 ACRES
7061-00-385863	18.865 ACRES
7060-00-670849	42.117 ACRES
7061-00-463180	29.036 ACRES
7060-00-493889	30.294 ACRES
TOTAL AREA	193.329 ACRES

PROJECT: "CRICKET VALLEY ENERGY"
DEVELOPER: CRICKET VALLEY ENERGY CENTER, LLC
OWNER OF RECORD: HOMLANDS LAKE PARTNERS LLC
P.O.B. 205
MOUNT KISCO, N.Y. 10549

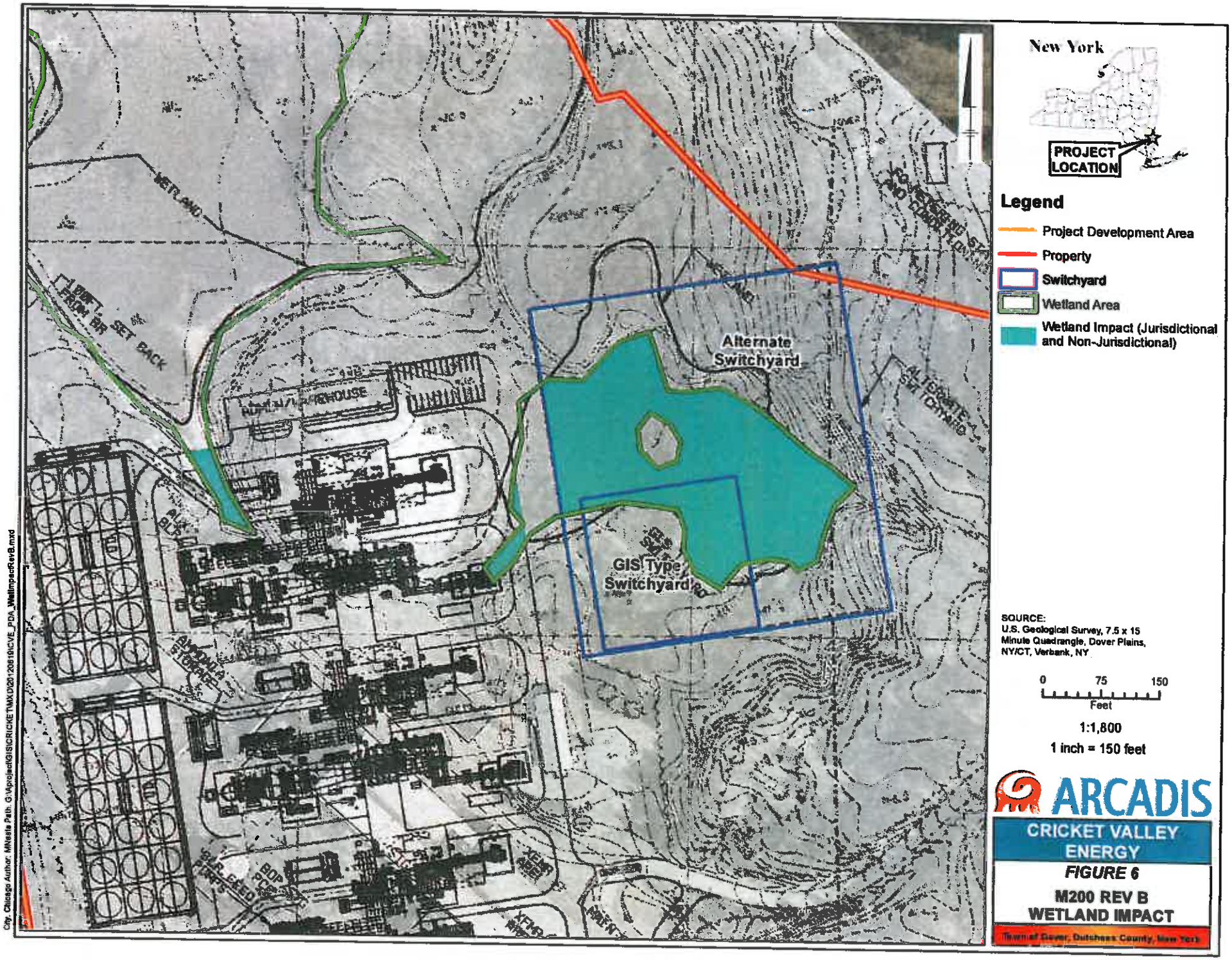
EXISTING CONDITIONS
SURVEY OF PROPERTY
PREPARED FOR
CRICKET VALLEY ENERGY CENTER LLC
SITUATE IN THE
TOWN OF DOVER
DUTCHESS COUNTY, NEW YORK
JUNE 3 2017

GRAPHIC SCALE

BARECKI & ASSOCIATES, LLC

FIGURE 5

SHEET 2 of 2



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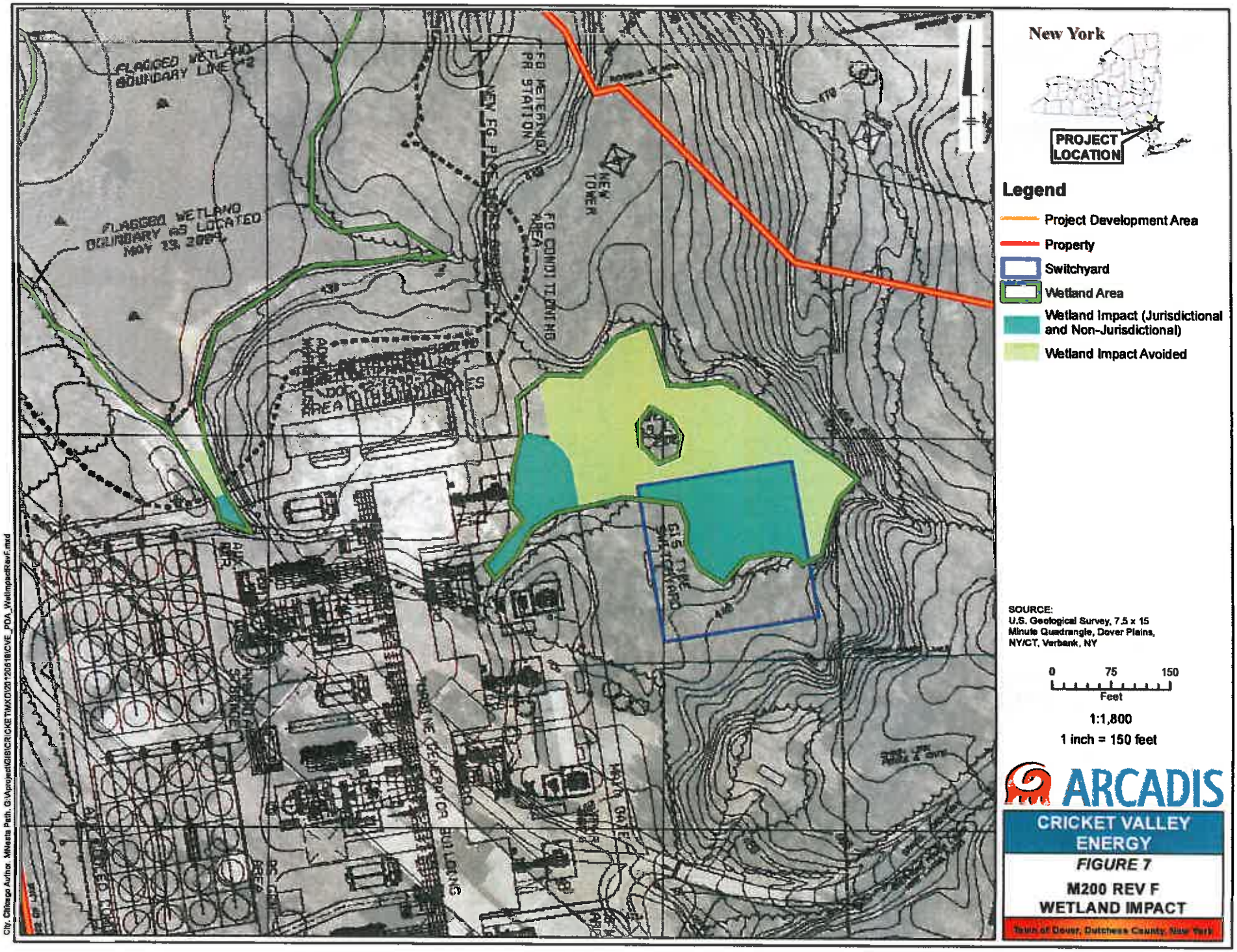

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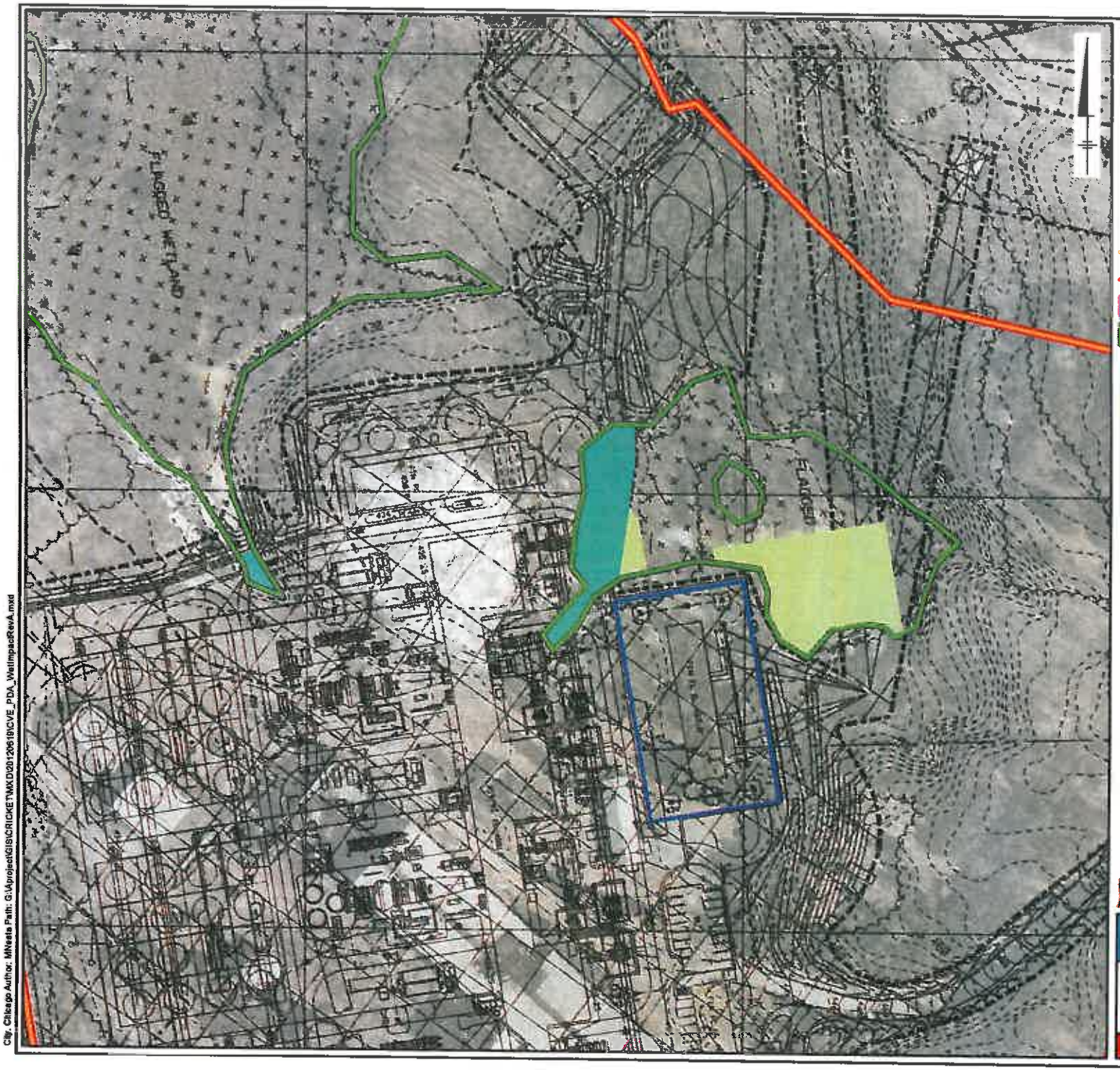

Legend

- Project Development Area
- Property
- Switchyard
- Wetland Area
- Wetland Impact (Jurisdictional and Non-Jurisdictional)
- Wetland Impact Avoided

SOURCE:
U.S. Geological Survey, 7 5 x 15 Minute Quadrangle, Dover Plains, NY/CT, Verbank, NY

0 75 150
Feet

1:1,800

1 inch = 150 feet

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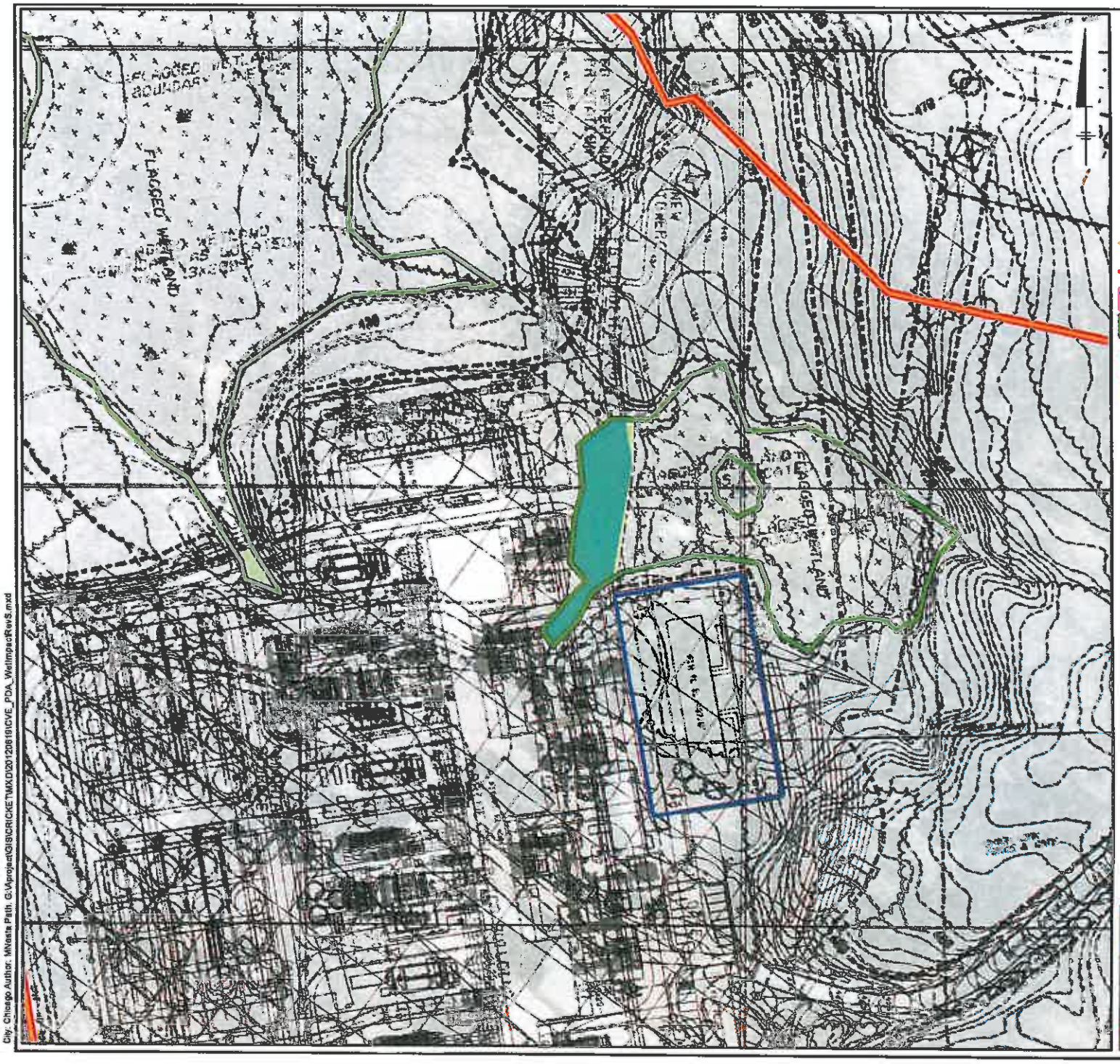
CRICKET VALLEY ENERGY

FIGURE 8

C130 REV A
WETLAND IMPACT

South of Dover, Dutchess County, New York

City, Chicago Author: MNesta Path: G:\Aproject\GIS\CRICKETWKD\20120618\CVE_PDA_WetImpactRevA.mxd



Legend

- Project Development Area
- Property
- Switchyard
- Wetland Area
- Wetland Impact (Jurisdictional and Non-Jurisdictional)
- Wetland Impact Avoided

SOURCE:
U.S. Geological Survey, 7.5 x 15 Minute Quadrangle, Dover Plains, NY/CT, Verbank, NY

0 75 150
Feet

1:1,800

1 inch = 150 feet

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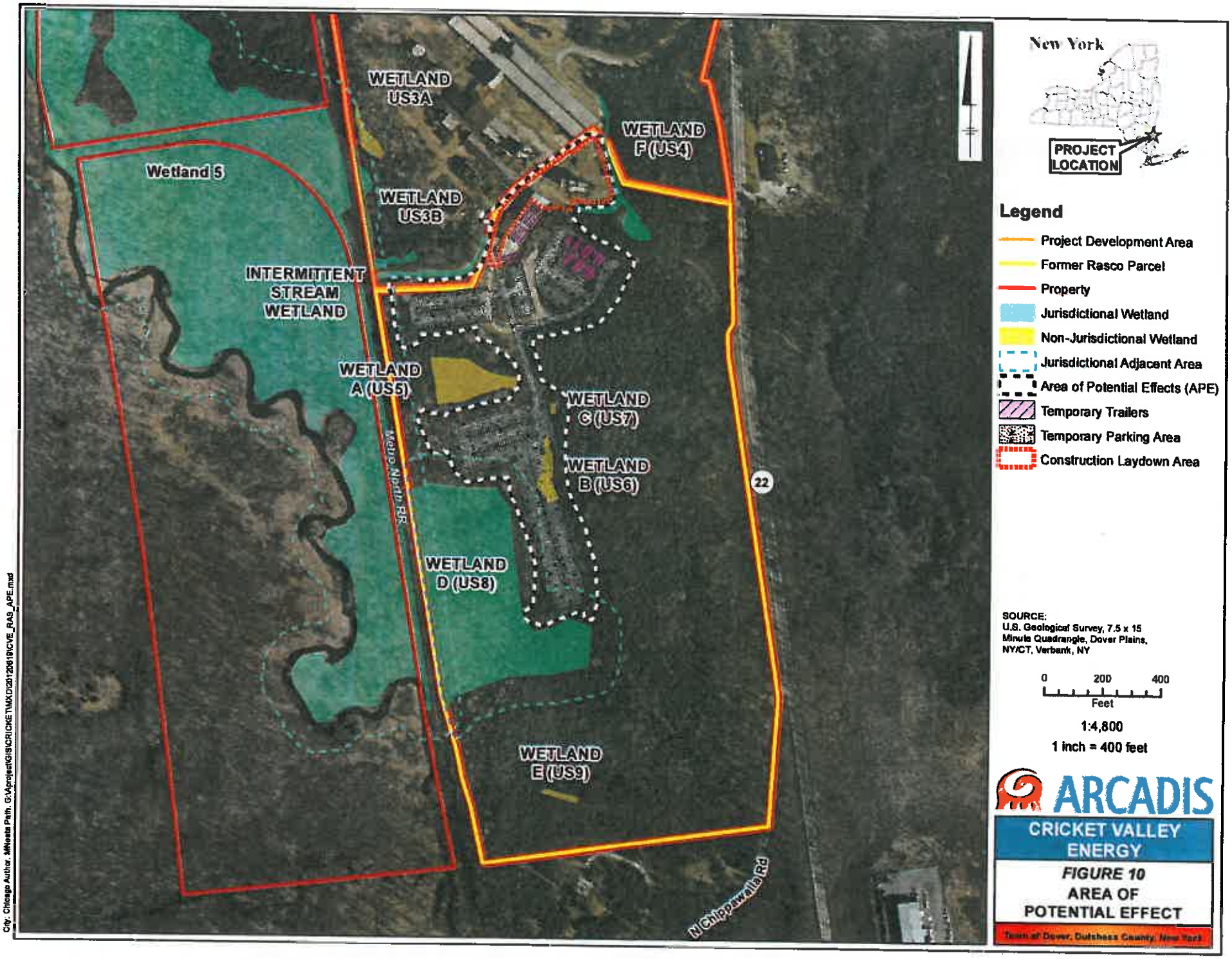
CRICKET VALLEY ENERGY

FIGURE 9

M200 REV S WETLAND IMPACT

Town of Dover, Dutchess County, New York

City: Chicago Author: MWeste Path: G:\Projects\GIS\CRICKET\MXD\20120619\CVE_PDA_WetImpactRevS.mxd



City: Chicago Author: MNesta Path: G:\Aproject\GIS\CRICKET\MXD\20120619\CVE_RAS_APE.mxd

New York

Legend

- Project Development Area
- Former Rasco Parcel
- Property
- Jurisdictional Wetland
- Non-Jurisdictional Wetland
- Jurisdictional Adjacent Area
- Area of Potential Effects (APE)
- Temporary Trailers
- Temporary Parking Area
- Construction Laydown Area
- Grading Plan

SOURCE:
U.S. Geological Survey, 7.5 x 15 Minute Quadrangle, Dover Plains, NY/CT, Verbank, NY

0 125 250
Feet

1:3,000

1 inch = 250 feet

ARCADIS

CRICKET VALLEY ENERGY

FIGURE 11

AREA OF POTENTIAL EFFECT GRADING PLAN

Town of Dover, Dutchess County, New York

City: Chicago Author: NNesta Path: G:\Aprojects\GIS\CRICKET\MXD\20120618\CVE_RAB_APE_Grading.mxd

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Attachment 1

Wetland Restoration/Creation and Adjacent Area Restoration Plan Narrative

Plan Drawings - Sheets 1, 2, 3 and 4
Plates 1, 2 and 3

Monitoring and Maintenance Plan

Cricket Valley Energy (CVE)

Area W2-A Wetland Restoration/Creation and Adjacent Area in Project Development Area and Former RASCO Parcel Wetland D (US 8) Adjacent Area Restoration Plan

To compensate for both the future permanent loss of approximately 0.08 acres of wetlands, (0.05 acres jointly regulated NYSDEC and USACE freshwater wetlands identified as Wetland 2 and 0.03 acres regulated by the USACE identified as Wetland F {US 4}), 0.8 acres of NYSDEC-regulated Adjacent Area, temporary disturbance to approximately 1.0 acres of Adjacent Area in the project development area, (Tables 1 and 2), as well as temporary disturbance to approximately 1.4 acres of Adjacent Area associated with Wetland D (US 8) in the former RASCO parcel, Cricket Valley Energy (CVE) proposes this Wetland Restoration/Creation and Adjacent Area Restoration Plan (the Plan). The Plan provides for improvements both within and beyond the limits of Wetland Restoration Work Area W2-A (Sheets 1, 2, 3 and 4; Plates 1, 2 and 3).

Area W2-A as designated for the purpose of this Plan, is a funnel-shaped section of NYSDEC Wetland 2 and comprised of both regulated freshwater wetlands (~0.6-acres) and Adjacent Area (~0.4-acres). Area W2-A is located in the southern portion of Wetland 2 and terminates at the base of the future CVE facility access road. The designation of this specific area represents proposed disturbance resulting from removing slag and debris resulting from the site's prior industrial uses, and not disturbance directly associated with facility construction (Sheet 1).

Wetland Restoration and Creation

The design for Area W2-A envisions restoring a significantly degraded wetland pocket in addition to the surrounding Adjacent Area (Sheet 2). The Adjacent Area surrounding this wetland has a moderate to steep slope comprised primarily of buried and exposed industrial waste materials. The dominant vegetative cover-type within Area W2-A is characterized by sparsely distributed and stunted *P. australis*. The predominant sediment/soil matrix in existing wetland Area W2-A is comprised of what appears to be residual sawdust-like waste product generated by the former on-site industrial operation. As part of future site clean-up activities, industrial waste materials will be removed, effectively lowering existing elevations and, therefore, providing an opportunity to create an open water area, as well as uniformly extending the existing wetland limits to the east and west to create 0.08 acres of emergent zone (Sheets 2 and 3).

Open water habitat is currently limited in Wetland W2 given the expanse of *P. australis*. Open water provides expanded opportunities for other wildlife species and wetland functions not now afforded within Wetland W2. The open water area below contour 420' will be allowed to naturally revegetate as based on existing hydrogeologic conditions within Wetland 2; it is anticipated that this zone will be submerged at depths ranging from 0.5 – 3 feet for the majority of the growing season. In time, the shallow depth of this wetland will encourage rooted, floating and emergent growth. Areas between contour 420'-424' (which will include the created 0.05 acres of emergent zone), are anticipated to experience natural, seasonally fluctuating water levels. This will result in relatively extended periods of exposed saturated substrate during the growing season's warmer/drier months. Therefore, the wetland areas between contour 420'-424' will be broadcast seeded with an appropriate wetland seed mix at a rate of 15 pounds per acre comprised of native herbaceous species to create the emergent area. It is anticipated that over time, an assemblage of plant species adapted to these saturated/flooded conditions will become recruited from the surrounding environment and become established in this wetland. In time, a natural distribution pattern of

P. australis interspersed with more desirable species should become established at least in some areas. Note that although *P. australis* is not generally viewed as "desirable" from a wildlife standpoint, it does provide important benefits such as sediment retention, water quality treatment, nutrient assimilation, and erosion control. In addition, some species of wading and passerine birds utilize *P. australis* stands for feeding and cover while aquatic mammals such as muskrat feed on the rhizomes in addition to using the above ground stems to create seasonal dens.

Adjacent Area Restoration – Project Development Area

Beyond the limits of Area W2-A, a total of approximately 0.9 acres comprised of additional Adjacent Area (~0.6-acres) and bordering upland area (~0.3-acres) may be temporarily disturbed, or may be immediately adjacent to areas temporarily disturbed, as part of facility and bioretention basin construction (Sheet 3). This 0.9 acre area is characterized by relatively steep to moderate slopes with vegetation consisting of mostly deciduous tree/shrub species at varying densities, as well as isolated specimens/small pockets of evergreens, predominantly red cedar. These disturbed areas will be restored by re-planting; vegetation will predominantly consist of shrub/tree species both within the 100-foot Adjacent Area limit (~0.6-acres) and bordering upland area (~0.3-acres). Some additional areas within a 1.8-acre portion of the Adjacent Area that are not currently wooded will be selectively replanted as shown on the attached Sheets and Plates.

The Plan specifies replanting with native shrubs and/or trees, except where not suitable from a site security and operations standpoint. For example and as shown on Sheet 3, areas immediately proximate to bioretention basin outlets will be stabilized and planted with native grasses and ground cover plants. Plates 1 and 2 illustrate a box culvert design consisting of erosion control matting seeded with a conservation mix and planted with shrubs transitioning to a naturally designed revetment consisting of logs and rootwads (tree trunk with roots attached) to be secured with boulders. In this instance within the Adjacent Area, the culvert outlet area includes a two-foot deep plunge pool that flows through a boulder lined overflow area prior to entering the wetland. The slopes on either side of both the plunge pool and overflow area will be stabilized with erosion control matting and both seeded with a conservation mix and planted with shrubs. Additionally, at the interface of these slopes, a row consisting of a combination of logs, boulders and rootwads will be installed to function as revetment (Plate 2). As illustrated in the design for the box culvert, areas where woody species cannot be planted would be designed for planting with herbaceous species and stabilized with erosion matting and seeded at a rate of 15 pounds per acre. This approach will maximize erosion control and flow attenuation while also preventing the advancement of woody roots which could potentially compromise bioretention basin function or the integrity of the outlet structure.

Although not specifically depicted as part of this Plan, areas where visibility, safety, access and/or overhead clearances necessitate will be planted accordingly with species that are suitable from a height or crown cover perspective. This would include areas immediately proximate to developed areas that could potentially be damaged by advancing roots. broken limbs and fallen trees as well as impede security, maintenance, access/egress and structural function.

Likewise, advancing woody roots similarly could be an impediment to underground piping and electric banks if located too close to such installations. Tree limbs can also be a hindrance if located in the vicinity of plant fencing. Site security issues would include facilitating site access/egress to potential

trespassers via tree branches overhanging the fence line, impede maintenance/cleaning outside the perimeter fence thereby reducing line-of-sight to security personnel as well as increase potential damage to fencing itself resulting from fallen limbs and/or toppled trunks. To mitigate potential perimeter fencing security issues, shrubs and trees would be planted a minimum distance of 15 feet from the fence line. These areas would be planted and stabilized, however, with suitable ground cover species.

Adjacent Areas proximal to the limit of disturbance and located beyond both Area W2-A and temporary construction areas (~1.8 acres), will be targeted for selective re-planting to either mitigate unanticipated impacts resulting from site construction or, introduce new specimens to increase vegetative density (and thus wetlands protection) in areas of relative open canopy (Sheet 3).

For areas between the limits of development and non-jurisdictional Wetland 1, restoration will mimic that specified for Wetland 2. Similar to Wetland Restoration Work Area W2-A, grading of soils will be followed by application of an appropriate wetland seed mix at a rate of 15 pounds per acre to restore emergent area with native herbaceous species.

Planting Details – Species Types and Densities

Native tree/shrub species will be installed in the Adjacent Areas and bordering upland areas as designated at a density of 436 specimens per acre (Sheet 3). Achieving this density will be the result of spacing specimens proposed for planting within 10-feet of each other and orienting them on center. Table 3 summarizes candidate tree/shrub species proposed for planting. Others can be proposed if available and suitable for local site conditions or, to introduce additional diversity and wildlife values. To stabilize soil and promote native vegetative growth between specimens, areas will be broadcast seeded with an upland seed mix at a rate of 15 pounds per acre comprised of native herbaceous species.

It should be noted that species shown in Table 3 represent an example of specimens that could potentially be planted and by no means represents an exhaustive list of candidate shrub and trees to be included in the final planting plan. Although these species are commonly available in the native plant nursery market, circumstances beyond the control of the contractor performing this work could potentially exclude the selection of a particular species for restoration planting. Examples of such circumstances include, but are not limited to:

- Particular species out of regional stock from multiple nursery suppliers
- Particular species is in stock but plants are not of the size specified for planting
- Particular species is in stock but plants are not free of disease (e.g. cedar-apple rust afflicting red cedar) and, therefore, need to be rejected
- Planting work occurs in the fall and therefore precludes the use of Fall Transplant Hazard species (i.e., red cedar, white pine and gray birch).

Therefore, prior to completion of construction and in advance of initiating the planting component of restoration work, the list of species in Table 3, if necessary, can be expanded to replace species not accommodated by the scheduled planting season and/or if for whatever reason healthy specimens are not available from regional nursery supplier(s).

Adjacent Area Restoration – Former RASCO Parcel

Sheet 4 provides the detailed drawing illustrating restoration and enhancement measures proposed following cessation of required temporary construction worker parking and laydown areas. Included as part of this larger area is the 1.4-acre regulated Adjacent Area associated with NYSDEC Wetland D. The regulated Adjacent Area will be seeded with a New England roadside matrix upland seed mix at a rate of 35 pounds per acre and include grasses, wildflowers and shrubs species. A total of 150 shrubs representing two species will be planted within five select concentration areas shown on Sheet 4. Eighty-five speckled alder (*Alnus rugosa*) shrubs will be exclusively planted in three areas, while the remaining two areas will contain a total of 65 spicebush (*Lindera benzoin*) shrubs. A total of 45 trees representing five species will also be planted and somewhat evenly distributed throughout the regulated Adjacent Area. These tree species include 17 red maple (*Acer rubrum*),15 eastern red cedar (*Juniperus virginiana*, 8 quaking aspen (*Populus tremula)*, 3 blackgum (*Nyssa sylvatica*) and 2 black oak (*Quercus velutina*). The entirety of the former RASCO parcel, which includes the 1.4-acre regulated Adjacent Area, will not be used as part of the CVE project once it becomes operational.

Jurisdictional Wetlands Impacts

(a)	(b)	(c)	(d)	(e)	(f)	(g)	(h)
Wetland Number	**Jurisdictional Status**	**Total Wetland Area (acres)**	**Wetland Area Temporarily Disturbed and Restored (acres)**	**Wetland Area Permanently Altered (acres)**	**Wetland Area Permanently Lost (acres)**	**New Wetland Area Created (acres)**	**Total Wetland Net Loss (f) + (g)**
Wetland 2	Federal and State	8.7	0.6	0.0	-0.05	0.05	0.0
Wetland 3B	Federal	.41	0.0	0.0	0.0	0.0	0.0
Drainage Swale (Intermittent Stream)	Federal	.04	.001	.003 (rip rap within stream)[1]	0.0	0.0	0.0
Wetland D (US 8)	Federal and State	6.08	0.0	0.0	0.0	0.0	0.0
Wetland F (US 4)	Federal	0.36	0.0	0.0	0.03	0.03	0.0

[1]Plate 3 – Conceptual Subsurface Sewage Disposal System and Stormwater Management Plan

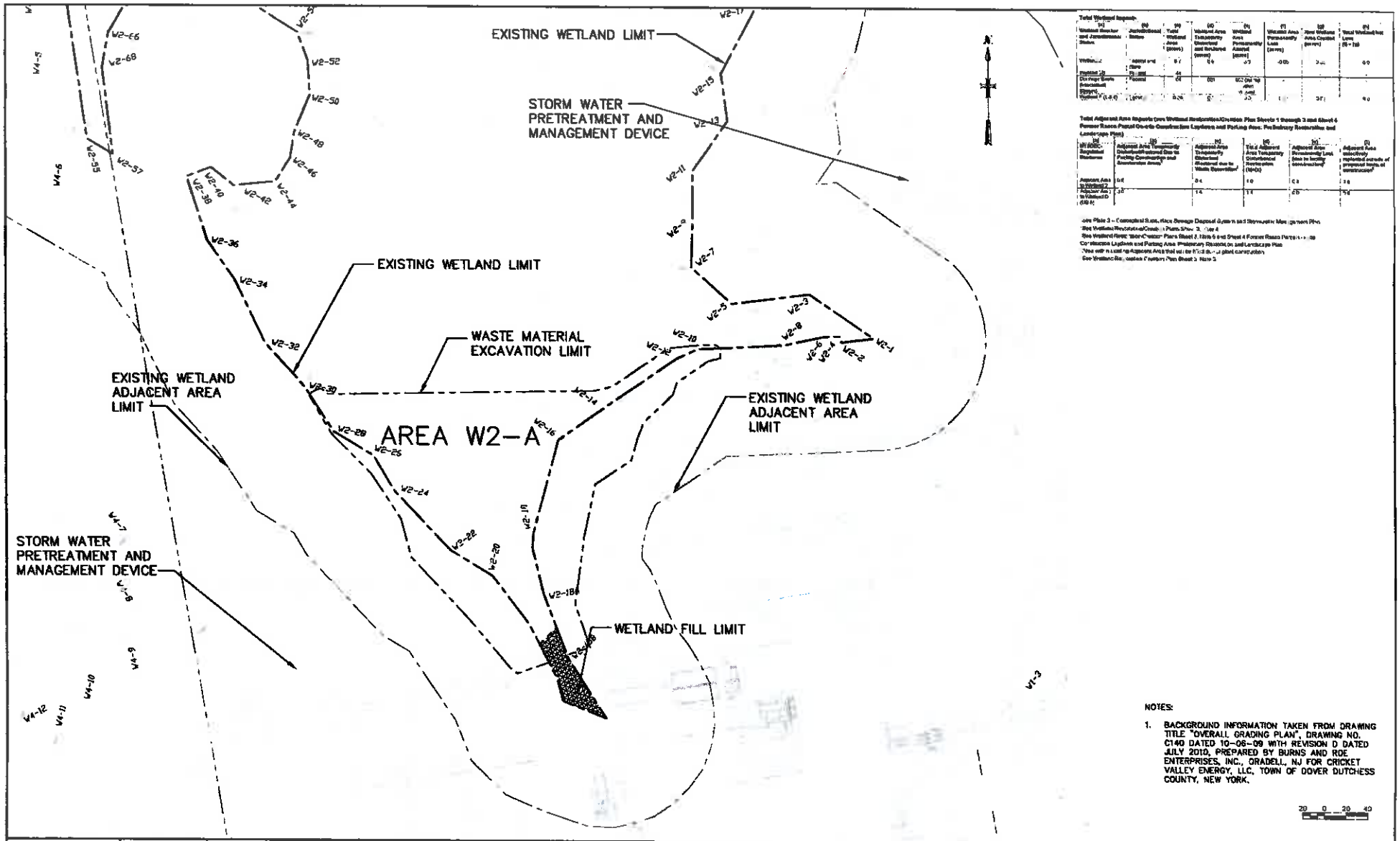
Total Adjacent Area Impacts (see Wetland Restoration/Creation Plan Sheets 1 through 3 and Sheet 4 Former Rasco Parcel On-site Construction Laydown and Parking Area: Preliminary Restoration and Landscape Plan)

(a)	(b)	(c)	(d)	(e)	(f)
NYSDEC-Regulated Resource	**Adjacent Area Temporarily Disturbed/Restored Due to Facility Construction and Bioretention Areas[2]**	**Adjacent Area Temporarily Disturbed /Restored due to Waste Excavation[3]**	**Total Adjacent Area Temporary Disturbance/ Restoration (b)+(c)**	**Adjacent Area Permanently Lost (due to facility construction)[4]**	**Adjacent Area selectively replanted outside of proposed limits of construction[5]**
Adjacent Area to Wetland 2	0.6	0.4	1.0	0.8	1.8
Adjacent Area to Wetland D (US 8)	0.0	1.4	1.4	0.0	0.0

[2]See Wetland Restoration/Creation Plans Sheet 3, Note 4.
[3]See Wetland Restoration/Creation Plans Sheet 3, Note 5 and Sheet 4 Former Rasco Parcel On-site Construction Laydown and Parking Area: Preliminary Restoration and Landscape Plan
[4]Area within Existing Adjacent Area that will be filled due to plant construction
[5]See Wetland Restoration/Creation Plans Sheet 3, Note 3.

Table 3
Candidate Tree/Shrub Species for Area W2-A Wetland Restoration/Creation and Adjacent Area Restoration Plan

Contour (feet)	Latin Name	Common Name	Regional Ind. Status	National Ind. Status	Vegetative Layer
424-438	*Betula populifolia*	gray birch	FAC	FAC	Tree
424-438	*Juniperus virginiana*	eastern red cedar	FACU	FACU-;FACU	Tree
424-438	*Prunus serotina*	black cherry	FACU	FACU	Tree
424-438	*Rhus typhina*	staghorn sumac	UPL	NI	Shrub
424-438	*Pinus strobus*	white pine	FACU	FACU	Tree
424-438	*Acer negundo*	box elder	FAC+	FAC, FACW	Tree
424-438	*Populus tremula*	quaking aspen	FACU	FACU, FAC+	Tree
424-438	*Acer rubrum*	red maple	FAC	FAC	Tree
424-438	*Gleditsia triacanthos*	honey locust	FAC-	FACU, FAC	Tree



NOTES:

1. BACKGROUND INFORMATION TAKEN FROM DRAWING TITLE "OVERALL GRADING PLAN", DRAWING NO. C140 DATED 10-06-09 WITH REVISION D DATED JULY 2010, PREPARED BY BURNS AND ROE ENTERPRISES, INC., ORADELL, NJ FOR CRICKET VALLEY ENERGY, LLC, TOWN OF DOVER DUTCHESS COUNTY, NEW YORK.

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REVISIONS			
NO.	BY	DATE	REMARKS

DES. AMR
DWN. CS
CKD. DC

CRICKET VALLEY ENERGY, LLC
TOWN OF DOVER, DUTCHESS COUNTY, NEW YORK

CRICKET VALLEY ENERGY

EXISTING WETLAND AND FUTURE WORK LIMITS

SCALE: 1" = 40'

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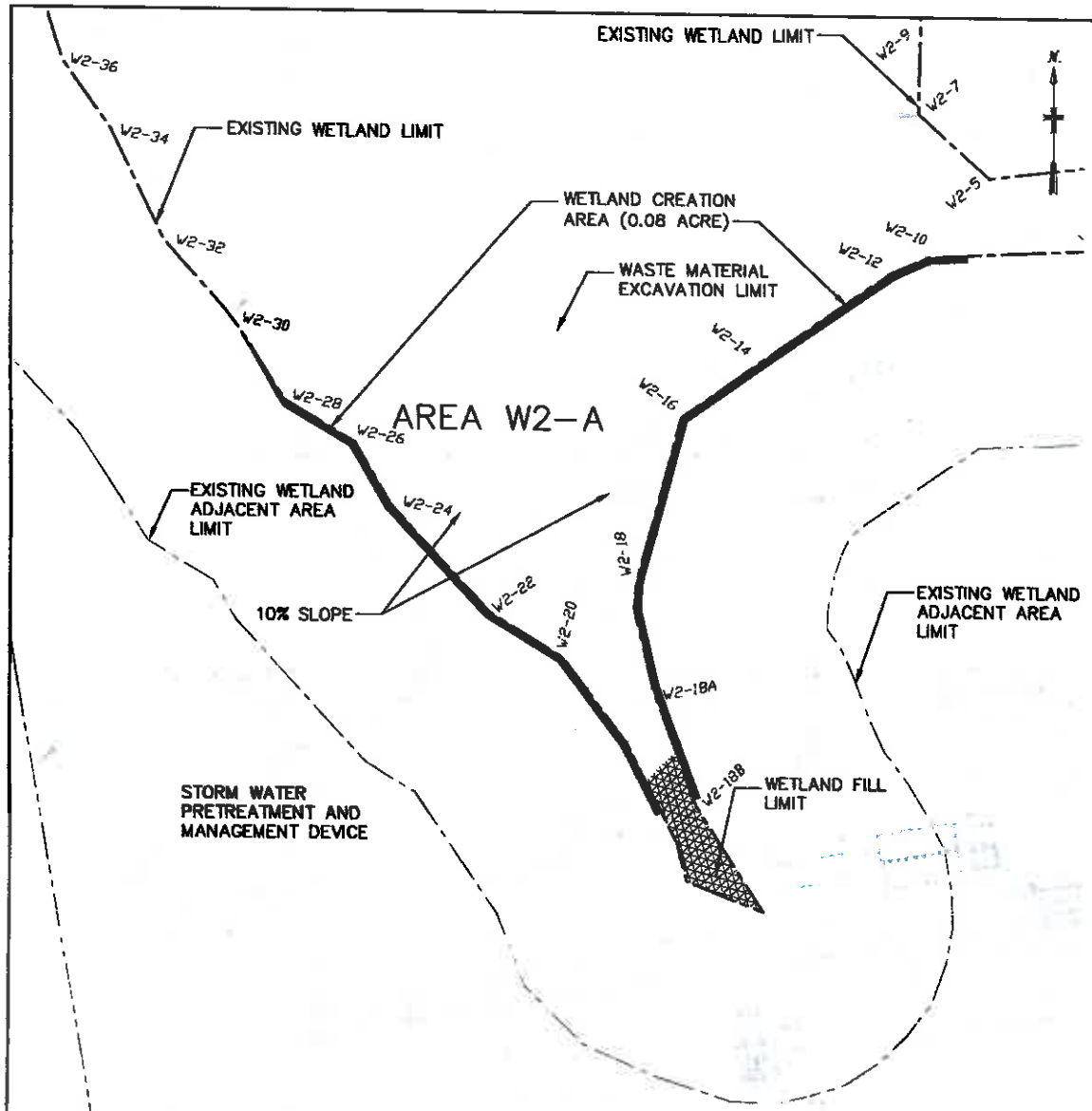
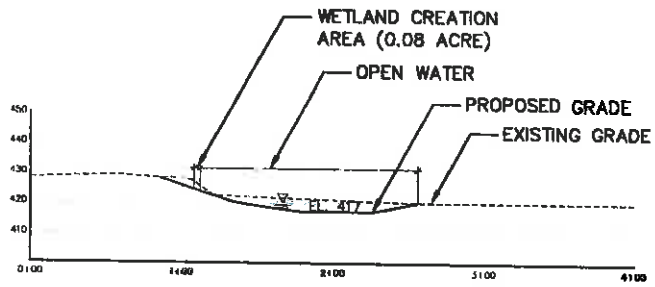
DATE APRIL 2011

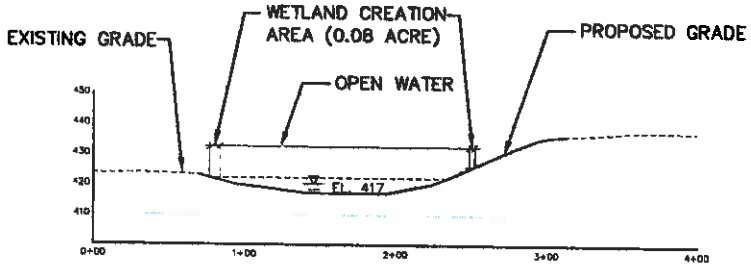
SHEET 1 OF 3

CAD REF. NO.





SECTION A–A'
SCALE: HORI. 1" = 40
VERT. 1" = 20'



SECTION B–B'
SCALE: HORI. 1" = 40'
VERT. 1" = 20'

LEGEND:

X 417	PROPOSED SPOT ELEVATION
———	PROPOSED 10' CONTOUR
- - - -	PROPOSED 1' AND 2' CONTOUR
	EXISTING AND FUTURE FEATURES
— — —	EXISTING WETLAND LIMIT

NOTES:

1. BACKGROUND INFORMATION TAKEN FROM DRAWING TITLE "OVERALL GRADING PLAN", DRAWING NO. C140 DATED 10–06–09 WITH REVISION D DATED JULY 2010, PREPARED BY BURNS AND ROE ENTERPRISES, INC., ORADELL, NJ FOR CRICKET VALLEY ENERGY, LLC, TOWN OF DOVER DUTCHESS COUNTY, NEW YORK.

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REVISIONS

NO.	BY	DATE	REMARKS

DES AMR
DRN CS
CKD DC

CRICKET VALLEY ENERGY, LLC
TOWN OF DOVER, DUTCHESS COUNTY, NEW YORK

CRICKET VALLEY ENERGY

WETLAND AREA W2–A RESTORATION PLAN

SCALE: 1" = 30'

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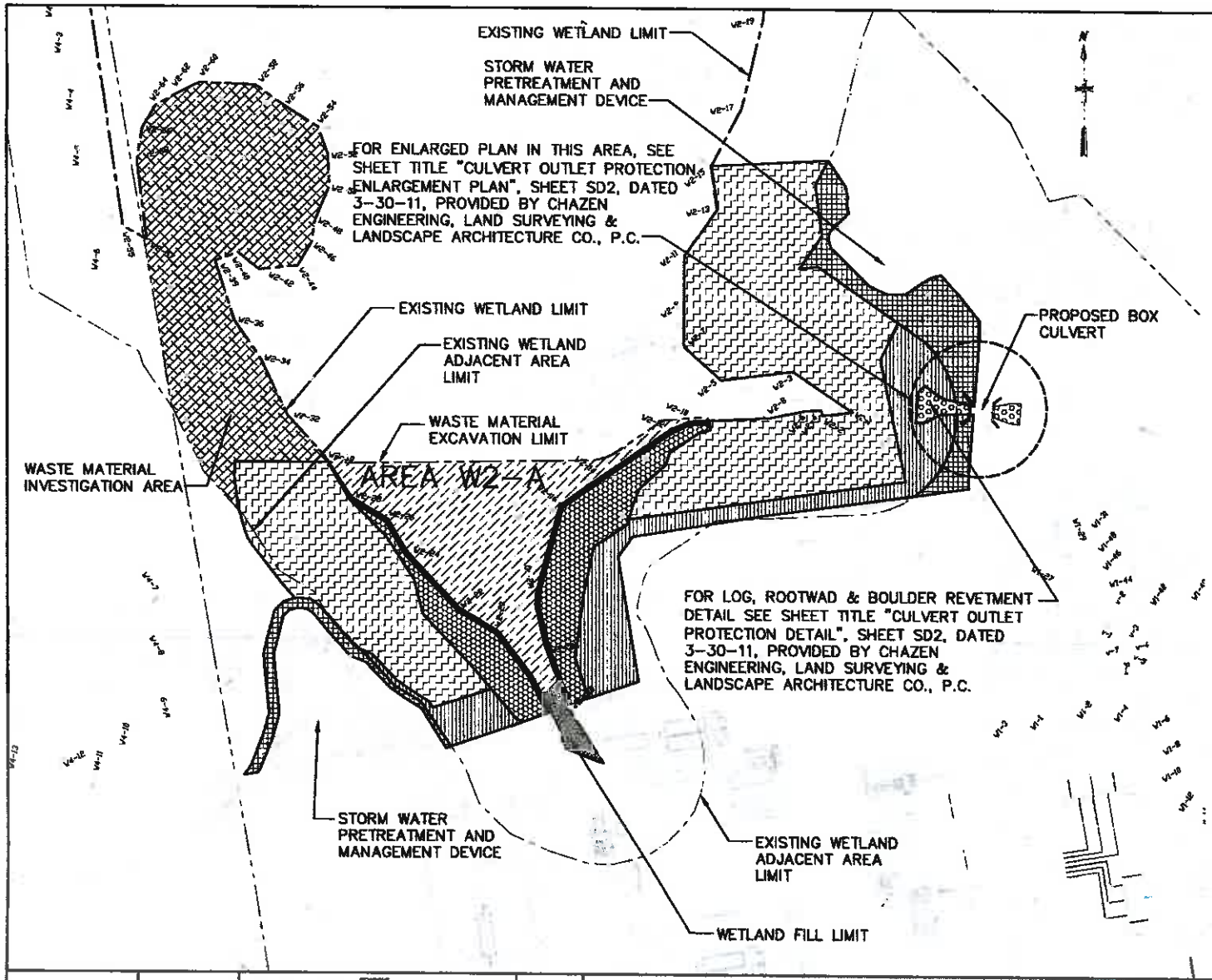
DATE APRIL 2011

SHEET 2 OF 3

CAD REF. NO.



LEGEND

- OPEN WATER (SEE NOTE 1)
- WETLAND CREATION AREA (SEE NOTE 2)
- WETLANDS ADJACENT AREA TO BE EVALUATED FOR SELECTIVE RESTORATION/REPLANTING (SEE NOTE 3)
- WETLANDS ADJACENT AREA TO BE RESTORED/REPLANTED (SEE NOTE 4)
- WETLANDS ADJACENT AREA TO BE RESTORED/REPLANTED DUE TO WASTE EXCAVATION (SEE NOTE 5)
- WETLAND FILL AREA
- BORDERING UPLAND AREA (SEE NOTE 6)
- WASTE MATERIAL INVESTIGATION AREA (SEE NOTE 6)

NOTES:

1. Open Water (Refer to Sheet 2 of 3 for Cross-Section): Open Water area to be created within Area W2-A by excavation of non-native sediment, approximately 0.6 acres in size. From approximately contour 420' - 424', area to be broadcast seeded with an appropriate wetland seed mix at a rate of 15 pounds per acre. Open Water area allowed to naturally revegetate.
2. Wetland Creation Area: Total of 0.08 acres of emergent zone created along the perimeter of Area W2-A (from approximate Flag W2-10 to Flag W2-30) to be broadcast seeded with an appropriate wetland seed mix at a rate of 15 pounds per acre.
3. Wetlands Adjacent Area to be evaluated for Selective Restoration/Replanting: Areas of existing shrub/tree cover on moderate slopes outside the proposed limits of construction ground disturbance (approximately 1.8 acres). Areas not currently densely vegetated will be selectively planted with appropriate tree/shrub species. Re-vegetation with appropriately sized native tree/shrub species would be completed at the rate of 436 specimens per acre (10' x 10' on center).
4. Wetlands Adjacent Area to be Restored/Replanted Due to Facility Construction: Represents approximately 0.9 acres of both wetland Adjacent Area (0.6 acres) and bordering upland area (0.3 acres) immediately adjacent to areas proposed to be disturbed by facility construction as well as around proposed bioretention basins to be replanted/restored with native tree/shrub species at a rate of 436 specimens per acre (10' x 10' on center). Area within/around swales/outlet structures to be stabilized and seeded at a rate of 15 pounds per acre.
5. Wetlands Adjacent Area to be Restored/Replanted Due to Waste Excavation: Represents approximately 0.4 acres of wetland Adjacent Area proposed to be restored by waste debris removal and excavation; to be replanted/restored with native tree/shrub species at a rate of 436 specimens per acre (10' x 10' on center).
6. WASTE MATERIAL INVESTIGATION AREA:

Represents existing area of suspected industrial material within the wetland adjacent area subject to future characterization.

NOTE:

1. BACKGROUND INFORMATION TAKEN FROM DRAWING TITLE "OVERALL GRADING PLAN", DRAWING NO. C140 DATED 10-08-09 WITH REVISION D DATED JULY 2010, PREPARED BY BURNS AND ROE ENTERPRISES, INC., ORADELL, NJ FOR CRICKET VALLEY ENERGY, LLC, TOWN OF DOVER DUTCHESS COUNTY, NEW YORK.

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TOWN OF DOVER, DUTCHESS COUNTY, NEW YORK

CRICKET VALLEY ENERGY

PLANTING AREA PLAN

SCALE: 1" = 50'

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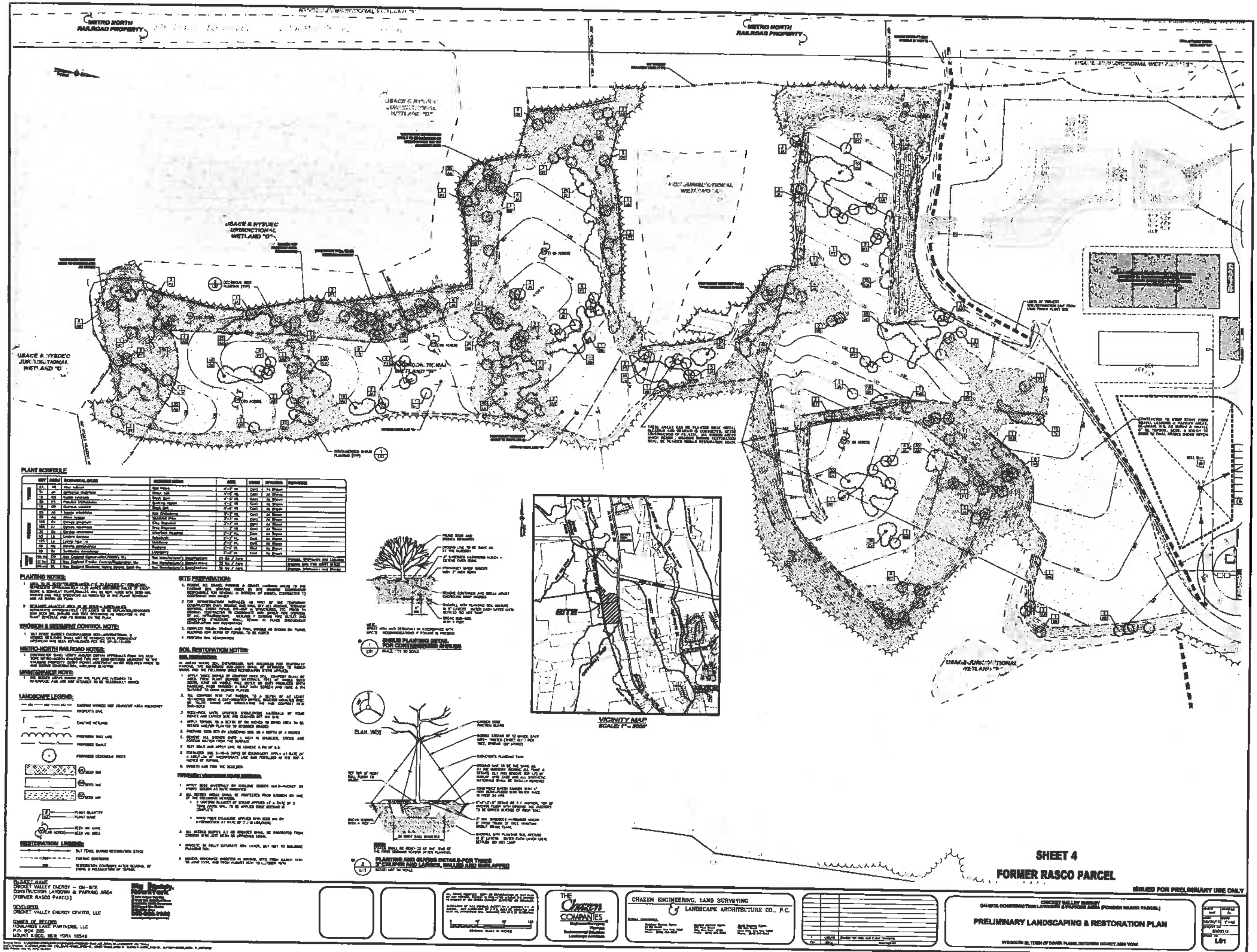
SHEET 3 OF 3

CAD REF. NO.


METRO NORTH RAILROAD PROPERTY
METRO NORTH RAILROAD PROPERTY
PLANT SCHEDULE
PLANTING NOTES:
SITE PREPARATION:
EROSION & SEDIMENT CONTROL NOTE:
METRO-NORTH RAILROAD NOTES:
MAINTENANCE NOTE:
SOIL RESTORATION NOTES:
LANDSCAPE LEGEND:
RESTORATION LEGEND:
SHRUB PLANTING DETAIL FOR CONTAINERIZED SHRUBS
PLAN VIEW
PLANTING AND GUYING DETAILS FOR TREES 3" CALIPER AND LARGER, BALLED AND BURLAPPED
VICINITY MAP
SITE
SHEET 4
FORMER RASCO PARCEL
ISSUED FOR PRELIMINARY USE ONLY
PROJECT NAME
CRICKET VALLEY ENERGY - ON-SITE CONSTRUCTION LAYDOWN & PARKING AREA (FORMER RASCO PARCEL)
DEVELOPER
CRICKET VALLEY ENERGY CENTER, LLC
OWNER OF RECORD
HOWLANDS LAKE PARTNERS, LLC
P.O. BOX 285
MOUNT KISCO, NEW YORK 10549
THE Chazen COMPANIES
CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE CO., P.C.
PRELIMINARY LANDSCAPING & RESTORATION PLAN
L01

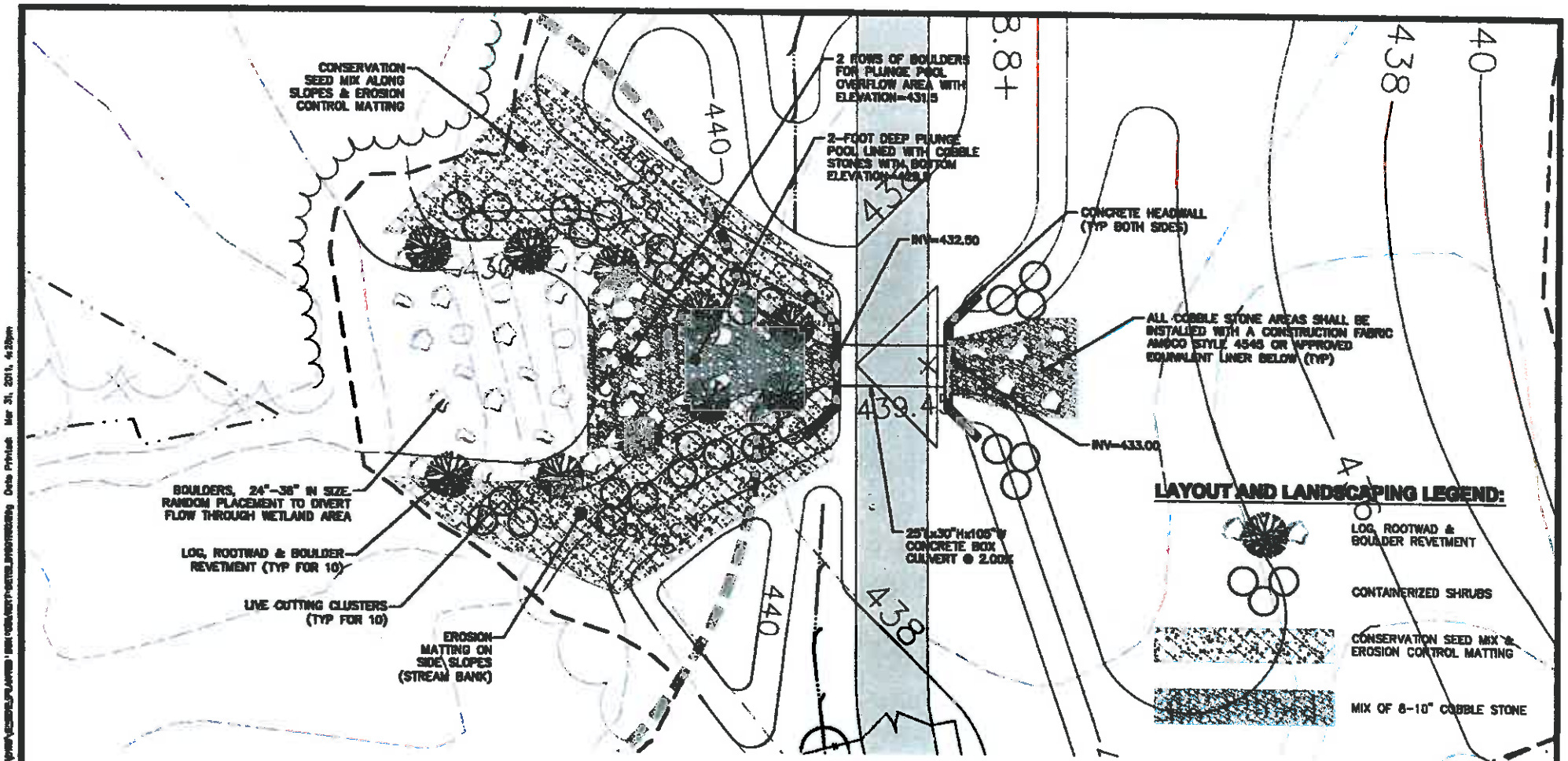


PLATE 1

CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE CO., P.C.

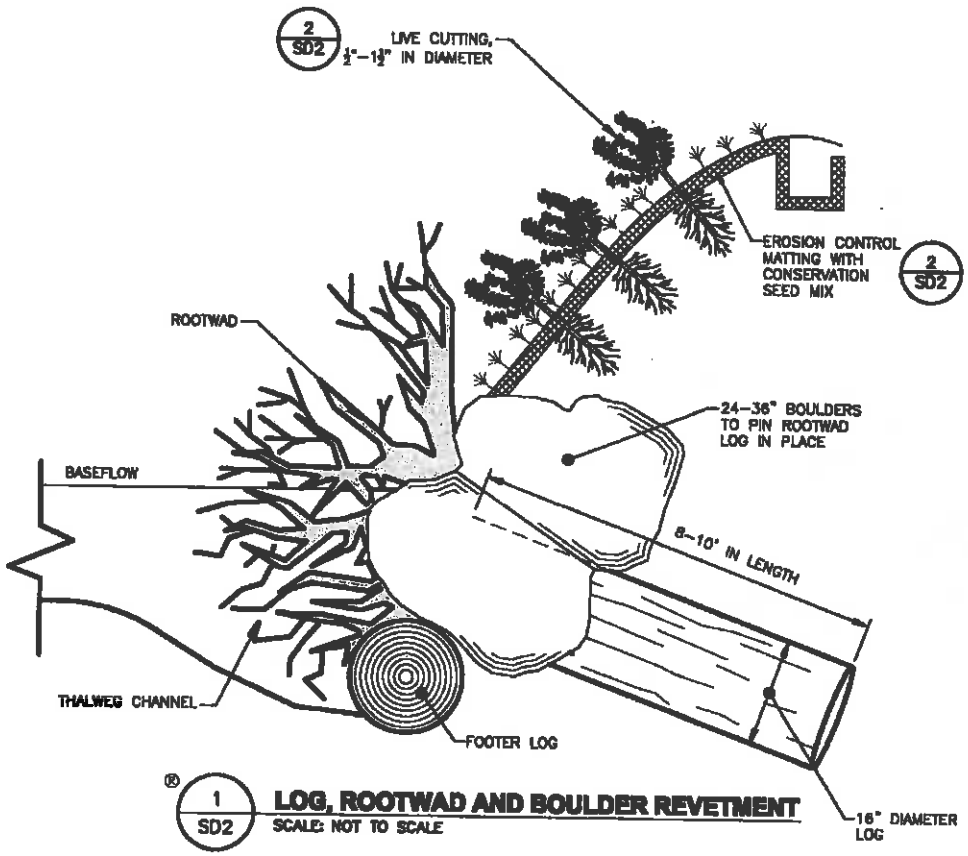
Office Locations:

CRICKET VALLEY ENERGY

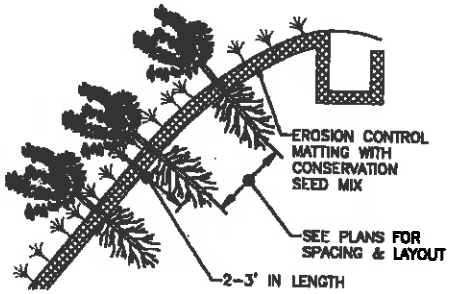
CULVERT OUTLET PROTECTION ENLARGEMENT PLAN

TOWN OF DOVER, DUTCHESS COUNTY, NEW YORK

drawn	checked
MMF	CL
date 3/30/11	scale 1"=20'
project no. 81001.00	
sheet no. SD2	



® 1 SD2 **LOG, ROOTWAD AND BOULDER REVETMENT**
SCALE: NOT TO SCALE



® 2 SD2 **LIVE CUTTING & SLOPE STABILIZATION**
SCALE: NOT TO SCALE

PLATE 2

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CHAZEN ENGINEERING, LAND SURVEYING
& LANDSCAPE ARCHITECTURE CO., P.C.

Office Locations:

Dutchess County Office:
21 Fox Street
Poughkeepsie, New York 12601
Phone: (845) 454-3980

Capital District Office:
547 River Street
Troy, New York 12180
Phone: (518) 273-0055

North Country Office:
108 Glen Street
Glens Falls, New York 12801
Phone: (518) 812-0513

CRICKET VALLEY ENERGY

CULVERT OUTLET PROTECTION DETAILS

TOWN OF DOVER, DUTCHESS COUNTY, NEW YORK

drawn MMF	checked CL
date 3/30/11	scale AS NOTED
project no. 81001.00	
sheet no. SD2	

Drawing Name: S:\5\81000-81099\81001.00\DWG\DWG\2_SD2_OUTLET PROTECTION DETS_81001.00.dwg Date Printed: Apr 01, 2011, 8:00am

STANDARD NOTES FOR NON RESIDENTIAL SEWAGE:

1. THE DESIGN, CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND GENERALLY ACCEPTED ENGINEERING PRACTICE IN EFFECT AT THE TIME OF CONSTRUCTION WHICH MEETS:
   - "DEPT OF ENVIRONMENTAL CONSERVATION TREATMENT PLANTS INTERMEDIATE SIZED SEWAGE FACILITIES"
   - "RECOMMENDED STANDARDS FOR SEWAGE TREATMENT WORKS, (TEN STATES)"
   - NEW YORK STATE DEPARTMENT OF HEALTH AND DUTCHESS COUNTY DEPARTMENT OF HEALTH POLICIES, PROCEDURES AND STANDARDS.
   - DUTCHESS COUNTY DEPARTMENT OF HEALTH SANITARY CODE, ARTICLE III AND ARTICLE VIII.
   - DUTCHESS COUNTY DEPARTMENT OF HEALTH CLASSIFICATION OF ARTIFICIAL LITTER.
2. THIS PLAN IS APPROVED AS MEETING THE APPROPRIATE AND APPLIED TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES FOR ARRANGEMENT OF SEWAGE DISPOSAL AND TREATMENT AND WATER SUPPLY FACILITY.
3. SUPPLY COMPLETION OF THE FACILITIES, THE TRENCH WORKS SHALL BE CONCRETE TESTED AND CERTIFIED COMPLETE TO THE DUTCHESS COUNTY HEALTH DEPARTMENT BY THE NEW YORK STATE LICENSED PROFESSIONAL ENGINEER. COMPLETION CERTIFICATION OF PART OF THE FACILITIES SHALL BE PLACED NEW SEWAGE UNITS ACCEPTED BY THE DUTCHESS COUNTY HEALTH DEPARTMENT.
4. APPROVAL OF ANY PLAN(S) OR AMENDMENT THERETO SHALL BE VALID FOR A PERIOD OF ONE (1) YEARS FROM THE DATE OF APPROVAL. FOLLOWING THE EXPIRATION OF SAID APPROVAL, SITE PLAN(S) SHALL BE RE-SUBMITTED TO THE COUNTY DEPARTMENT OF HEALTH FOR CONSIDERATION OF RE-APPROVAL. RE-PROVISION OF REVISED SUBMITTAL OF PLANS AND THE ASSOCIATED DOCUMENTS SHALL BE SUBJECT TO COMPLIANCE WITH THE TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES IN EFFECT AT THE TIME OF RE-SUBMISSION.
5. ALL WELLS AND SEWAGE DISPOSAL AREAS TO WITHIN 100 FEET OF THE PROPOSED WELLS AND SEWAGE AREAS SHOWN ON THIS PLAN ALONG WITH ANY OTHER ENVIRONMENTAL HAZARDS IN THE AREA THAT MAY AFFECT THE DESIGN AND FUNCTIONAL ABILITY OF THE SEWAGE AREAS.
6. AND FOOTING OR ROOF DRAINS SHALL BE DISCHARGED INTO THE SEWAGE TREATMENT SYSTEM OR WITHIN 25 FEET OF ANY WELL.
7. THERE SHALL BE NO VEHICULAR TRAFFIC OVER THE SEWAGE DISPOSAL SYSTEM PRIOR TO CONSTRUCTION. THE AREA OF THE SYSTEM SHALL BE GRADED SUCH AS TO REPEL SURFACE RUNOFF.
8. SEWAGE DISPOSAL SYSTEMS SHALL NOT BE INSTALLED IN WET OR FROZEN SOIL.
9. ALL REQUIRED EROSION & SEDIMENT CONTROL AND STORM WATER POLLUTION PREVENTION, WATER QUALITY & QUANTITY CONTROL STRUCTURAL, PERMANENT AND TEMPORARY, ARE SHOWN ON THE PLANS.
10. THE DESIGN SHALL BE NOTIFIED PRIOR TO THE BACK FILL OF ANY COMPLETED SEWAGE DISPOSAL SYSTEM SO THAT A FINAL INSPECTION MAY BE PERFORMED.
11. THE DESIGN SHALL BE NOTIFIED WRITTEN PRIOR TO ANY CHANGE IN PROJECT USE. CHANGES MAY REQUIRE RE-APPROVAL BY THE DESIGN.
12. THE UNDERSIGNED OWNER OF THE PROPERTY KNOWN STATE TAX PARCEL AND FAMILIAR WITH THE SITE MAP, ITS CONTENTS AND ITS LIMITS AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

STANDARD NOTES FOR WATER SYSTEMS:

1. THE DESIGN, CONSTRUCTION AND INSTALLATION SHALL BE IN ACCORDANCE WITH THIS PLAN AND GENERALLY ACCEPTED STANDARDS IN EFFECT AT THE TIME OF CONSTRUCTION WHICH MEETS:
   - "RECOMMENDED STANDARDS FOR WATER WORKS (TEN STATES)"
   - RURAL WATER SUPPLY, NEW YORK STATE DEPARTMENT OF HEALTH
   - NEW YORK STATE DEPARTMENT OF HEALTH AND DUTCHESS COUNTY DEPARTMENT OF HEALTH POLICIES, PROCEDURES AND STANDARDS.
   - DUTCHESS COUNTY DEPARTMENT OF HEALTH SANITARY CODE, ARTICLE III AND ARTICLE VIII.
   - DUTCHESS COUNTY DEPARTMENT OF HEALTH CLASSIFICATION OF ARTIFICIAL LITTER.
2. THIS PLAN IS APPROVED AS MEETING THE APPROPRIATE AND APPLIED TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES FOR AREAS WITHIN OF NEW SEWAGE DISPOSAL AND TREATMENT AND WATER SUPPLY FACILITY.
3. UPON COMPLETION OF THE FACILITIES, THE TRENCH WORKS SHALL BE CONCRETE TESTED AND CERTIFIED COMPLETE TO THE DUTCHESS COUNTY HEALTH DEPARTMENT BY THE NEW YORK STATE LICENSED PROFESSIONAL ENGINEER. COMPLETION CERTIFICATION OF PART OF THE FACILITIES SHALL BE PLACED NEW SEWAGE UNITS ACCEPTED BY THE DUTCHESS COUNTY HEALTH DEPARTMENT.
4. APPROVAL OF ANY PLAN(S) OR AMENDMENT THERETO SHALL BE VALID FOR A PERIOD OF ONE (1) YEARS FROM THE DATE OF APPROVAL. FOLLOWING THE EXPIRATION OF SAID APPROVAL, SITE PLAN(S) SHALL BE RE-SUBMITTED TO THE COUNTY DEPARTMENT OF HEALTH FOR CONSIDERATION OF RE-APPROVAL. RE-PROVISION OF REVISED SUBMITTAL OF PLANS AND THE ASSOCIATED DOCUMENTS SHALL BE SUBJECT TO COMPLIANCE WITH THE TECHNICAL STANDARDS, GUIDELINES, POLICIES AND PROCEDURES IN EFFECT AT THE TIME OF RE-SUBMISSION.
5. ALL WELLS AND SEWAGE DISPOSAL AREAS TO WITHIN 100 FEET OF THE PROPOSED WELLS AND SEWAGE AREAS SHOWN ON THIS PLAN ALONG WITH ANY OTHER ENVIRONMENTAL HAZARDS IN THE AREA THAT MAY AFFECT THE DESIGN AND FUNCTIONAL ABILITY OF THE SEWAGE AREAS.
6. THE UNDERSIGNED OWNER OF THE PROPERTY KNOWN STATE TAX PARCEL AND FAMILIAR WITH THE SITE MAP, ITS CONTENTS AND ITS LIMITS AND HEREBY CONSENT TO ALL SAID TERMS AND CONDITIONS AS STATED HEREON.

SEPTIC TANK DESIGN:

AVERAGE DAILY FLOW = 400 GPD
TANK SIZE = 1.5 X 400 = 600 GPD = 500 GAL
USE 1,000 GAL. TYPE TANK

WASTEWATER GENERATION:

EMPLOYEES 30
WASHING & COOKING RATE = 10 GPD PER EMPLOYEE
SHOWERS WITHDRAWS LOADING 30 X 2 = 60 GPD
DESIGN FLOW (30 EMPLOYEES X 10 GPD/EMPLOYEE) =
(2 X 25 = 50 SHOWERS) = 50 GPD
WORKS AND WASTE 2 X 200 SUPERVISION OF FLOW GAUGE
WATER CONSUMPTION FACILITIES ARE USED
WATER CONSUMPTION = 300 GPD X 0.8 = 400 GPD

SOIL RESTORATION NOTES:

1. AREAS WHERE SOIL DISTURBANCE HAS OCCURRED ON U.S. OF BUILDINGS AND PAVEMENT AREAS, THE DISTURBED SUB-SOILS SHALL BE SCARIFIED, TO ROUGH GRADE AND THE FOLLOWING SOILS RESTORATION STEPS APPLIED:
   - TOPSOIL SHALL BE REPLACED TO COMPACT OVER SOIL. COMPOST SHALL BE ADDED FROM PLANT SEWAGE MATERIALS FREE OF WEEDS AND SEEDS. WHEN AVAILABLE FREE WATER OR DEEP PRODUCED WHEN HARDER THAN A HALF INCH (1/2") DEEP AND HAVE A PH SUITABLE TO GROW TURFGRASS PLANTS.
2. SOIL SHOULD BE TESTED TO A DEPTH OF AT LEAST 12 INCHES, WITH A CAT-WOVEN RIPPER, TRACTOR MOUNTED DISC OR TILLER, DRAWN AND CHISELLING AIR AND COMPACT INTO SUB SOILS.
3. ROCK PICK UNDERLAID STONES/ROCK MATERIALS OVER INCHES AND LARGER THAN ARE CLEARED OFF THE SITE.
4. APPLY TOPSOIL TO A DEPTH OF SIX INCHES.

SEPTIC TANK DESIGN:

AVERAGE DAILY FLOW = 400 GPD
TANK SIZE = 1.5 X 400 = 600 GPD = 500 GAL
USE 1,000 GAL. TYPE TANK

WASTEWATER GENERATION:

EMPLOYEES 30
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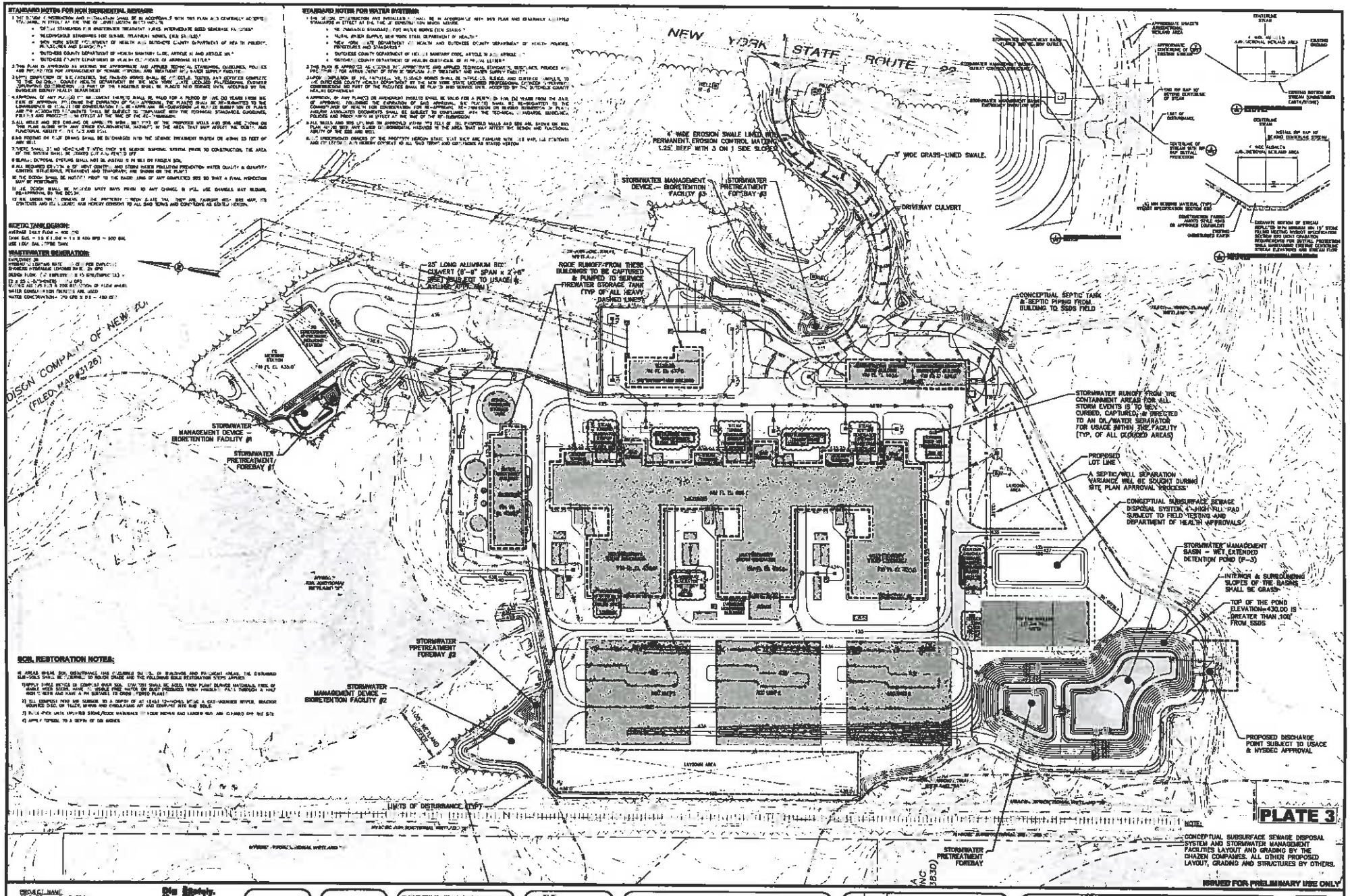

ISSUED FOR PRELIMINARY USE ONLY

PROJECT NAME
CRICKET VALLEY ENERGY

DEVELOPER
CRICKET VALLEY ENERGY CENTER, LLC.

OWNER OF RECORD
HOMLANDS LAKE PARTNERS, LLC
P.O. BOX 285
MOUNT KISCO, NEW YORK 10549

Rio Associates
New York

THE Chazen COMPANIES
Engineers Planners Environmental Scientists Landscape Architects

CHAZEN ENGINEERING, LAND SURVEYING & LANDSCAPE ARCHITECTURE CO., P.C.

CRICKET VALLEY ENERGY

CONCEPTUAL SUBSURFACE SEWAGE DISPOSAL SYSTEM AND STORMWATER MANAGEMENT PLAN

TOWN OF DOVER, DUTCHESS COUNTY, NEW YORK

SP2

Cricket Valley Energy (CVE)

Area W2-A Wetland Restoration/Creation and Adjacent Area in Project Development Area and Former RASCO Parcel Wetland D (US 8) Adjacent Area Restoration Monitoring and Maintenance Plan

After restoration is complete, the wetland restoration area W2-A, it's associated NYSDEC regulated Adjacent Area, as well as NYSDEC Wetland D (US 8) regulated Adjacent Area would be monitored and maintained for three calendar years, covering three growing seasons, to document that the restoration plan for the CVE project has achieved applicable regulatory, landscaping, and contractual requirements. The following tasks would be included as part of the Wetland Restoration/Creation and Adjacent Area Monitoring and Maintenance Plan.

- Qualitative Assessment
  - Inspect physical health (e.g., vigor, disease, pests) of vegetation upon arrival to site and prior to planting (*one time upon delivery of stock to site*)
  - Inspect physical health and establishment of planted vegetation
  - Inspect integrity of installed matting and fencing and physical condition of site
  - Photo-documentation
- Quantitative Shrub/Tree Survival
  - Record all dead shrub/trees
  - Record all instances of disease, infestation and significant hebivory
  - Photo-documentation
- Develop Annual Reports
- Recommend and Perform Corrective Actions

Qualitative Assessment

Qualitative assessment events would occur twice a year as follows:

- One event would occur in early spring (April)
- One event would occur in late summer and overlap with the Quantitative Shrub/Tree Survival monitoring event (September)

The spring monitoring event would be conducted to document physical damage such as erosion to slopes as well as plant specimen losses due to uprooting or other physical damage (e.g., heavy ice or snow load). The fall monitoring event

would be conducted to document if any structural items need to be secured, stabilized, repaired or replaced to withstand the upcoming winter. In addition, plants that may have been severely stressed because of drought, insect damage or excessive herbivory over the summer would be identified for replacement with an in-kind or similar specimen. Findings would be photographed and recorded in a dedicated field log book to document the conditions observed and later on, to document whether recommended corrective actions were performed properly by the landscaping/restoration contractor. Location of photographs would be recorded using GPS and shown on the Restoration base plan.

The purpose of the qualitative assessment event is to evaluate the physical health and establishment of planted vegetation as well as the integrity of installed erosion matting, revetments, and hebivory fencing in the restoration area. The following is a list of the likely items that would be inspected, and if applicable, repaired or corrected as necessary by the landscaping/restoration contractor. Note that this is not an exhaustive list and is only meant as a general guideline as to what would be inspected:

- Silt fencing damage as evidenced by tears in the fabric or downed fence posts.
- Erosion control matting not properly anchored or dislodged.
- Integrity of log, rootwad and boulder revetment.
- Evidence of erosion and/or deposition of sediment in the wetland down-gradient of culverts, on steep slopes, and outlets to bioretention basins.
- Herbivory and waterfowl fencing damage as evidenced by fraying or tears in the webbing, holes in the fencing, or downed support posts.
- Planted trees not maintaining an upright growth position as evidenced by falling over, tipping, exposed root balls or damaged stakes and support wires.
- Unauthorized disposal of construction debris and fill in restoration areas.
- Human disturbance (e.g., stealing/uprooting of plants).
- Absence of plants (groundcover, shrubs, trees) and bare areas due to fire, erosion (washout) or potentially attributable to the non-functioning structural items previously listed (not plant dormancy).
- Evidence of herbivory to plants (e.g., deer, rabbit).
- Evidence of physical animal disturbance (e.g., burrowing, trampling).
- Evidence of insect damage.
- Evidence of plant disease (e.g., cedar-apple rust fungus)
- Damage due to water, erosion fire or ice.

Qualitative Assessment Corrective Action/Reporting

For each monitoring event, an assessment for the need of corrective actions/repairs would be based on numerous factors including the integrity of the plantings and whether the corrective action/repair could have a detrimental effect on the vegetation. For all corrective actions/repairs deemed necessary, a schedule would be developed for implementation. Minor repairs, such as re-tying loosened lines, may be completed in the field during the actual monitoring event as long as such corrective actions would not have a detrimental effect on vegetation, and the repairs primary function is to protect plantings from potential physical or biological damage. Some corrective actions that may be recommended could include, but are not limited to:

- Repair and/or replacement of silt fencing.
- Re-anchoring and/or replacement of erosion control matting.
- Repair and/or replacement of herbivory and/or waterfowl fencing.
- Replanting of fallen or tipping trees and/or repair/replacement of stakes and support wires.
- Removal of debris.
- Re-grading of areas if elevations have noticeably changed and appear likely to inhibit plant propagation due to erosion or deposition of soils.
- Re-seeding of bare areas where germination has not occurred following initial seeding, or have been impacted by erosion.

If plant growth and/or propagation appear to be significantly impacted at the time of the qualitative monitoring, some corrective actions (including re-planting and re-seeding) could be recommended for completion prior to conducting the Quantitative Shrub/Tree Survival monitoring.

A letter report would be developed following each qualitative monitoring event for submittal to NYSDEC. The report would include a description of the assessment and findings, a summary and recommendations section, and a proposed schedule for any recommended corrective actions. This report would also include field logs/forms, photo-log documenting findings, and photo locations on a Restoration base plan.

Quantitative Tree Survival

The purpose of the quantitative tree survival monitoring event is to document diseased and/or dead shrub/trees potentially needing to be replaced either in the same, or at a proximal location. Plant survival and overall health can be attributed to a variety of factors that do not include the initial quality of specimens

provided by the nursery and/or the physical handling of individuals by workers during initial planting. Unforeseeable environmental and physical stressors also exist that potentially decrease the probability of survival. These could include a variety of factors that either individually or synergistically contributes to a plants overall health and survivability. Examples of such factors include:

- Adequate precipitation and infiltration to root systems
- Drought
- Roadway salt concentrations in soil
- Frequency of maintenance performed on plant specimens
- Human and/or mechanical harm
- Herbivory

Quantitative Tree Survival Monitoring would occur simultaneously with the late summer Qualitative Monitoring. Shrubs and trees would be recorded as dead if no live stems are observed. Dead shrubs and trees would be photographed and located via GPS and shown on the Restoration base plan. The overall percent survival rate for trees would be calculated by dividing the total number of shrubs and trees planted by the total number of dead shrubs and trees. If the percent survival rate is below 90%, all dead specimens would be removed and replaced with live specimens. In addition, survival rates would also be calculated on a per species planted basis by using the same equation except the total number of both planted and dead specimens would represent only one species. The purpose of this second frequency calculation is to ascertain if a particular species is not suitable or adapted to growing in the Adjacent Area and therefore should be considered for replacement with similar or hardier species documented to have a better survival rate.

After each Quantitative Tree Survival monitoring event, a written report that includes a description and results of the assessments, as well as a summary and recommendation section, would be completed. The report would include field logs/forms, Restoration base plan showing dead shrubs and trees (if any),photo locations, frequency calculations, photolog documenting findings and a summary of recommended corrective actions. Copies of the final report would be submitted to NYSDEC as stipulated in the wetlands permit for the site.

ARCADIS

Attachment 2

NYSDEC/USACOE Joint Application – Revised Project Description and Purpose

NYSDEC/USACOE Joint Application - Revised Project Description and Purpose

The proposed project is an approximately 1,000 megawatt natural gas-fired combined-cycle electric generating facility that will utilize dry cooling and zero liquid discharge. It will be located generally within the footprint of existing industrial developed area, and has been sited to avoid wetland impact to the greatest extent practicable. Wetland impact will be limited to approximately 0.08 acre (approximately 3,185 square feet) of impact to degraded wetland (Wetland 2 0.05 acres - federal and state jurisdiction and Wetland F {US 4} 0.03 acres - federal jurisdiction) associated with the project footprint and an additional estimated 0.49 acres (21,265 square feet) of impact associated with cleanup and restoration activities. Approximately 2.4 acres (104,544 square feet) of state-jurisdictional wetland adjacent area associated with Wetland 2 (1.0 acre) and Wetland D (US 8) (1.4 acres) will also be altered, with some minor additional adjacent area potentially affected by wetland restoration activities. Rip-rap will be placed along approximately 0.06 acre (2,500 square feet) of intermittent stream for erosion protection. See the cover letter for additional detail.

JOINT APPLICATION FORM

For Permits/Determinations to undertake activities affecting streams, waterways, waterbodies, wetlands, coastal areas and sources of water supply.

New York State

You must separately apply for and obtain separate Permits/Determinations from each involved agency prior to proceeding with work. Please read all instructions.

US Army Corps of Engineers (USACE)

APPLICATIONS TO

1. NYS Department of Environmental Conservation

Check all permits that apply:

- ☐ Stream Disturbance
- ☐ Excavation and Fill in Navigable Waters
- ☐ Docks, Moorings or Platforms
- ☐ Dams and Impoundment Structures
- ☑ 401 Water Quality Certification
- ☑ Freshwater Wetlands
- ☐ Tidal Wetlands
- ☐ Coastal Erosion Management
- ☐ Wild, Scenic and Recreational Rivers
- ☐ Water Supply
- ☐ Long Island Well
- ☐ Aquatic Vegetation Control
- ☐ Aquatic Insect Control
- ☐ Fish Control
- ☐ Incidental Take of Endangered/Threatened Species

☐ I am sending this application to this agency.

2. US Army Corps of Engineers

Check all permits that apply:

- ☑ Section 404 Clean Water Act
- ☐ Section 10 Rivers and Harbors Act
- ☐ Nationwide Permit(s) - Identify Number(s): _____

Preconstruction Notification - ☐ Y / ☐ N

☑ I am sending this application to this agency.

3. NYS Office of General Services

Check all permits that apply:

- ☐ State Owned Lands Under Water
  - ☐ Utility Easement (pipelines, conduits, cables, etc.)
  - ☐ Docks, Moorings or Platforms

☐ I am sending this application to this agency.

4. NYS Department of State

Check if this applies:

- ☐ Coastal Consistency Concurrence

☐ I am sending this application to this agency.

5. Name of Applicant (use full name)

Cricket Valley Energy Center LLC

Mailing Address: 31 Milk Street, Suite 1001

Post Office City: Boston

State: MA Zip Code: 02109

Telephone (daytime):

Email: bdemeyere@advancedpowerna.com

Applicant must be:

- ☐ Owner
- ☑ Operator
- ☐ Lessee

(check all that apply)

Taxpayer ID (If applicant is NOT an individual): 27-0605498

6. Name of Facility or Property Owner (if different than Applicant): Howland Lake Partners, LLC

Mailing Address: P.O. Box 285

Post Office City: Mount Kisco

State: NY Zip Code: 10549

Telephone (daytime): 914-666-2144

Email:

7. Contact/Agent Name

Lynn Gresock

Company Name: ARCADIS

Mailing Address: Two Executive Drive, Suite 303

Post Office City: Chelmsford

State: MA Zip Code: 01824

Telephone (daytime): 978-322-4520

Email: lynn.gresock@arcadis-us.com

8. Project / Facility Name

Cricket Valley Energy Project

Property Tax Map Section / Block / Lot Number: 7061-00-580190/585063/465190; 7060-00-610940/493989

Project Location - Provide directions and distances to roads, bridges and bodies of waters:

Approximately the intersection of Route 22 and Cricket Hill Road, on the west side of Route 22.

Street Address, if applicable: 2241 NY Route 22

Post Office City: Dover State: NY Zip Code: 12522

Town / Village / City: Dover

County: Dutchess

Name of USGS Quadrangle Map: Dover Plains, NY

Stream/Water Body Name: Swamp River

Location Coordinates: Enter NYTMs in kilometers, **OR** Latitude/Longitude

NYTM-E	NYTM-N	Latitude	Longitude
		41.677027	-73.580508

For Agency Use Only DEC Application Number: USACE Number:

JOINT APPLICATION FORM - PAGE 2 OF 2

Submit this completed page as part of your Application.

9. **Project Description and Purpose:** Provide a complete narrative description of the proposed work and its purpose. Attach additional page(s) if necessary. Include: description of current site conditions and how the site will be modified by the proposed project; structures and fill materials to be installed; type and quantity of materials to be used (i.e., square ft of coverage and cubic yds of fill material and/or structures below ordinary/mean high water) area of excavation or dredging, volumes of material to be removed and location of dredged material disposal or use; work methods and type of equipment to be used; pollution control methods and mitigation activities proposed to compensate for resource impacts; and where applicable, the phasing of activities. **ATTACH PLANS ON SEPARATE PAGES.**

The proposed project is an approximately 1,000 megawatt natural gas-fired combined-cycle electric generating facility that will utilize dry cooling and zero liquid discharge. It will be located generally within the footprint of existing industrial developed area, and has been sited to avoid wetland impact to the greatest extent practicable. Wetland impact will be limited to approximately 0.08 acre (approximately 3,185 square feet) of impact to degraded (Wetland 2 0.05 acres - federal and state jurisdiction and Wetland F (US 4) 0.03 acres - federal jurisdiction) associated with the project footprint and an additional estimated 0.49 acres (21,265 square feet) of impact associated with cleanup and restoration activities. Approximately 2.4 acres (104,544 square feet) of state-jurisdictional wetland adjacent area associated with associated with Wetland 2 (1.0 acre) and Wetland D (US 8) (1.4 acres) will also be altered, with some minor additional adjacent area potentially affected by wetland restoration activities. Rip-rap will be placed along approximately 0.06 acre (2,500 square feet) of intermittent stream for erosion protection. See the cover letter for additional detail.

Proposed Use: ☑ Private ☐ Public ☐ Commercial	Proposed Start Date: Q2 2013	Estimated Completion Date: Q2 2016
Has Work Begun on Project? ☐ Yes ☑ No If Yes, explain.		
Will Project Occupy Federal, State or Municipal Land? ☐ Yes ☑ No If Yes, please specify.		

10. List Previous Permit / Application Numbers (If any) and Dates:

Dover Special Permit Application and Environmental Assessment Form, which includes a list of anticipated permit requirements.

11. Will this project require additional Federal, State, or Local Permits including zoning changes? ☑ Yes ☐ No If yes, please list:

See Atachment D for the completed Environmental Assessment Form, which includes a list of anticipated permits required.

12. **Signatures.** If applicant is not the owner, both must sign the application.

I hereby affirm that information provided on this form and all attachments submitted herewith is true to the best of my knowledge and belief. False statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law. Further, the applicant accepts full responsibility for all damage, direct or indirect, of whatever nature, and by whomever suffered, arising out of the project described herein and agrees to indemnify and save harmless the State from suits, actions, damages and costs of every name and description resulting from said project. In addition, Federal Law, 18 U.S.C., Section 1001 provides for a fine of not more than $10,000 or imprisonment for not more than 5 years, or both where an applicant knowingly and willingly falsifies, conceals, or covers up a material fact; or knowingly makes or uses a false, fictitious or fraudulent statement.

Signature of Applicant	Robert De Meyere Printed Name	Vice President Title	7/2/2012 Date
Signature of Owner	Jonathan Schachter Printed Name	Member Title	6/29/12 Date
Signature of Agent	Lynn Gresock Printed Name	Consultant Title	7/2/12 Date

For Agency Use Only

DETERMINATION OF NO PERMIT REQUIRED

_____ (Agency Name) has determined that No Permit is required from this Agency for the project described in this application. Agency Project Number _____

Agency Representative: Name (printed) _____ Title _____

Signature _____ Date _____

New York State
Department of Environmental Conservation

PERMISSION TO INSPECT PROPERTY

By signing this permission form for submission with an application for a permit(s) to the Department of Environmental Conservation ("DEC"), the signer consents to inspection by DEC staff of the project site or facility for which a permit is sought and, to the extent necessary, areas adjacent to the project site or facility. This consent allows DEC staff to enter upon and pass through such property in order to inspect the project site or facility, without prior notice, between the hours of 7:00 a.m. and 7:00 p.m., Monday through Friday. If DEC staff should wish to conduct an inspection at any other times, DEC staff will so notify the applicant and will obtain a separate consent for such an inspection.

Inspections may take place as part of the application review prior to a decision to grant or deny the permit(s) sought. By signing this consent form, the signer agrees that this consent remains in effect as long as the application is pending, and is effective regardless of whether the signer, applicant or an agent is present at the time of the inspection. In the event that the project site or facility is posted with any form of "posted" or "keep out" notices, or fenced in with an unlocked gate, this permission authorizes DEC staff to disregard such notices or unlocked gates at the time of inspection.

The signer further agrees that during an inspection, DEC staff may, among other things, take measurements, may analyze physical characteristics of the site including, but not limited to, soils and vegetation (taking samples for analysis), and may make drawings and take photographs.

Failure to grant consent for an inspection is grounds for, and may result in, denial of the permit(s) sought by the application.

Permission is granted for inspection of property located at the following address(es):

2241 NY Route 22, Dover, NY Property Tax Map #'s: 7060-00-493989, 7061-00-465190, 7061-00-580190, 7061-00-585063, 7060-00-610940

*By signing this form, I affirm under penalty of perjury that I am authorized to give consent to entry by DEC staff as described above. I understand that false statements made herein are punishable as a Class A misdemeanor pursuant to Section 210.45 of the Penal Law.**

Howlands Lake Partners, LLC *Jonathan Schachter, Member*		6/29/12
Print Name and Title	Signature	Date

*The signer of this form must be an individual or authorized representative of a legal entity that:

- owns fee title and is in possession of the property identified above;
- maintains possessory interest in the property through a lease, rental agreement or other legally binding agreement; or
- is provided permission to act on behalf of an individual or legal entity possessing fee title or other possessory interest in the property for the purpose of consenting to inspection of such property.