

HILLCREST SOLAR PROJECT

December 13, 2019

Ohio Power Siting Board
Docketing Division
180 East Broad Street, 11th Floor
Columbus, Ohio 43215-3793
Attn: Grant Zeto

RE: **Case Nos. 17-1152-EL-BGN and 18-1267-EL-BGA
Hillcrest Solar I, LLC**

Notice of Compliance with Certificate Condition #22 – Hillcrest shall have a qualified environmental specialist on site during construction activities that may affect sensitive areas, as mutually agreed upon between Hillcrest and Staff and as shown on Hillcrest's final approved construction plan. Sensitive areas include, but are not limited to, areas of vegetation clearing, designated wetlands and streams, and locations of threatened or endangered species or their identified habitat. The environmental specialist shall be familiar with water quality protection issues and potential threatened or endangered species of plants and animals that may be encountered during the Project's construction.

Dear Mr. Zeto;

Hillcrest Solar I, LLC (“Hillcrest Solar”) is certified to construct a solar-powered electric generation facility in Brown County, Ohio in accordance with the orders issued by the Ohio Power Siting Board (“OPSB”) in the above-referenced cases.

Attached please find the following environmental monitoring documents regarding compliance with Certificate Condition #22 of the Opinion, Order and Certificate issued on February 15, 2018 in Case No. 17-1152-EL-BGN.

- Cardno Statement of Qualifications – Renewable Energy Services
- Kaitlin Hillier Master Resume 2019 – Environmental Monitor

The environmental monitor will be a qualified biologist. Our principal monitor will be Kaitlin Hillier, whose resume is attached. Other monitors may be used, if scheduling requires, but all monitors provided will be qualified biologists with similar resumes.

HILLCREST SOLAR PROJECT

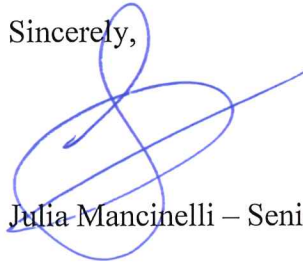
Environmental monitor will be present for initial training of the contractor prior to start of construction. Training will include an overview of sensitive species with potential to be present on site; sensitive habitat present on site; additional avoidance features present on site; and requirements established by the OPSB, county, state and federal laws.

Environmental monitors will also be available to conduct inspections when sensitive species are observed on site and to clear potential areas of sensitive habitat. These surveys will be conducted on an as-needed basis. If sensitive species surveys are needed, the environmental monitor will be available to perform surveys.

Stormwater Pollution Prevention Plan (SWPPP) compliance monitoring will also be conducted to ensure compliance with the National Pollutant Discharge Elimination System General Construction permit. SWPPP compliance monitoring will be conducted at least once every seven days or within 24 hours of a 0.5 inch or greater rain event. Details for SWPPP compliance monitoring and reporting forms are included in the SWPPP and permit.

We are available, at your convenience, to answer any questions you may have.

Sincerely,



Julia Mancinelli – Senior Manager - Environment

Attachments:

- Cardno Statement of Qualifications – Renewable Energy Service
- Kaitlin Hillier Master Resume 2019 – Environmental Monitor

Statement of Qualifications



Renewable Energy Services

Quick Facts

- > Founded in 1945
- > 6,000 global staff and 130 global offices
- > More than 100 offices in the Americas
- > ENR Top 30 in multiple industry categories
- > Served more than 50 major utility companies across the US. in last five years
- > Exceptional safety record under some of the most demanding circumstances



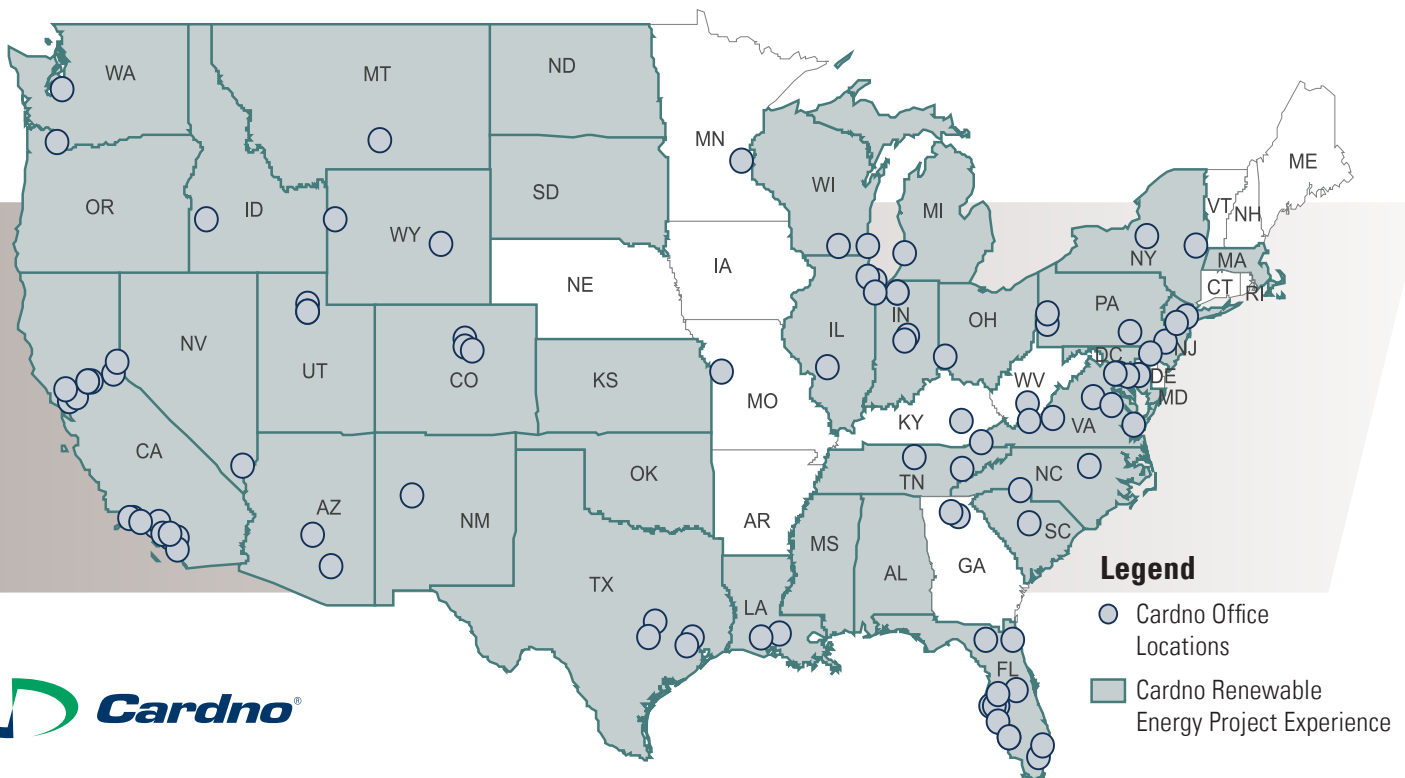
Cardno uses an interdisciplinary approach to solve problems that integrates the work of our scientific, economic, engineering, and regulatory experts to create effective solutions for complex environmental and natural resource management issues.

Our understanding of the complex requirements associated with environmental permitting and compliance for solar, wind and other projects, combined with natural resource economic principles, contributes to our success in assisting clients through the planning, permitting, and monitoring processes.

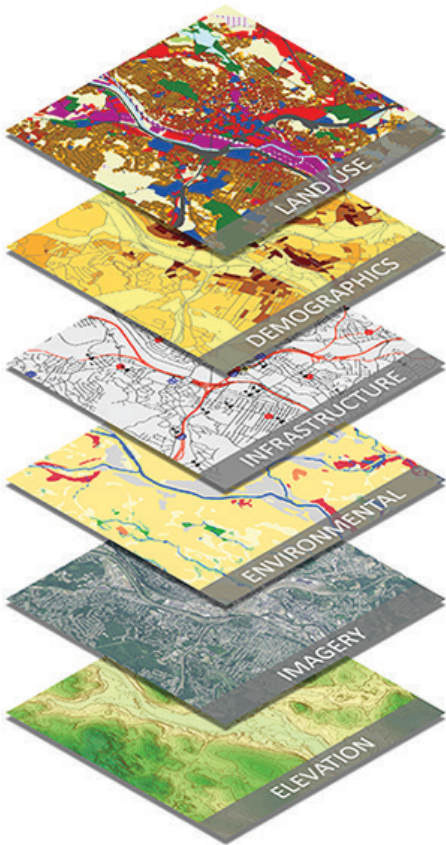
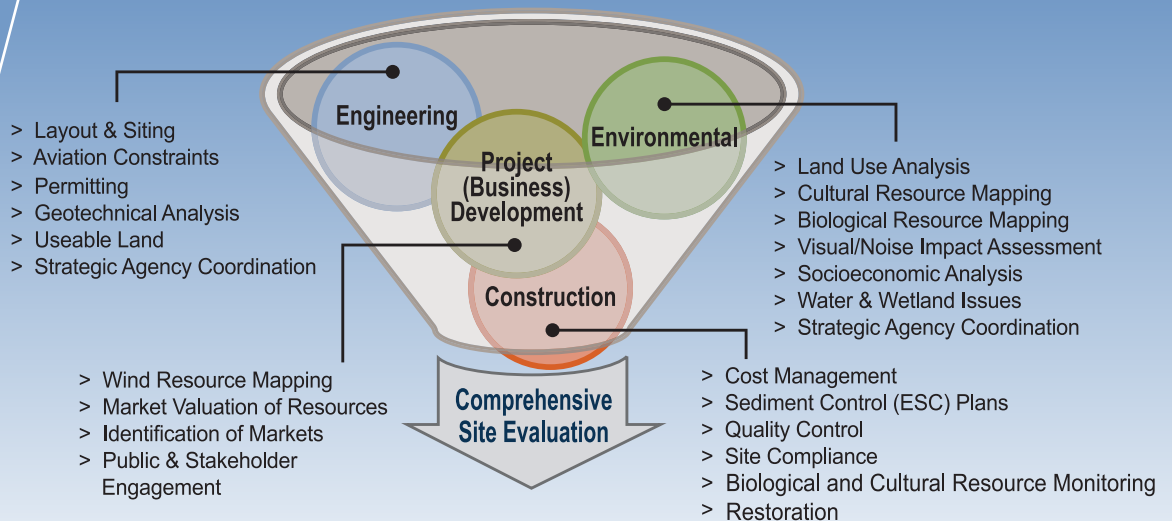
We create customized approaches, then deliver high-quality service and provide outstanding sustainable business solutions. Our staff is uniquely equipped to tackle the most complex environmental and natural resources management challenges – and provide inspiring outcomes.

In the last 5 years Cardno has:

- > Partnered with 30 renewable energy clients on more than 65 projects in 32 states
- > Supported all phases of development (from siting, permitting, construction, and post construction monitoring) for projects totaling over 7,400 MW
- > #8 on the Top 10 ENR Environmental Management Firms list

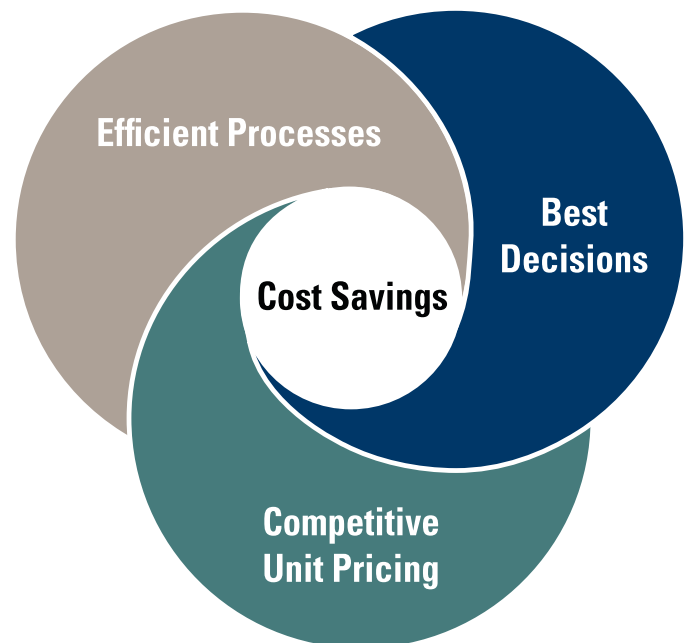


Critical Issues Analysis



Successful siting and permitting of renewable energy facilities is contingent upon the ability to identify and address critical issues as early as possible in the development process. As a leader in critical issues analyses (CIA), Cardno has conducted CIAs for renewable projects throughout North America, examining issues involving environmental resources (e.g., land use, biological mapping, socioeconomic analysis, and visual/noise assessments), engineering constraints (e.g., aviation constraints, land acquisition, and geotechnical analysis), construction oversight (e.g., cost management and quality control), and project/business development (e.g., wind resource mapping, market valuation or resources, and public and stakeholder engagement).

Cardno's proprietary Multi-Criteria Decision Analysis process is tiered, allowing us to determine the scale of impacts that need to be evaluated and at what time. Once Cardno completes a CIA, our clients will have a cost-effective comprehensive site evaluation that will help them make better business decisions going forward with the project. We understand that after review not all sites will meet their intended goals, which can have drastic impacts on project planning. For this reason Cardno strives to complete the CIA in a timely fashion, delivering quality products often in 30 working days or less.



Renewable Energy Services

Regulatory Support Services

Cardno has broad expertise in navigating local, county, and state laws and regulations that govern and protect environmental and cultural resources across the US. Cardno's team of consultants has the agency relationships and experience to negotiate the permitting process and keep projects on track. Over the past 20 years, we have helped clients efficiently clear environmental and cultural resource regulatory hurdles.

By combining biological and cultural expertise with strategic management, Cardno provides efficiencies that move projects ahead faster while reducing costs. Cardno has built strong and trusted working relationships with the US Environmental Protection Agency, US Army Corps of Engineers (USACE), US Fish and Wildlife Service, and other pertinent federal and state agencies, through our extensive work history with these regulatory agencies.

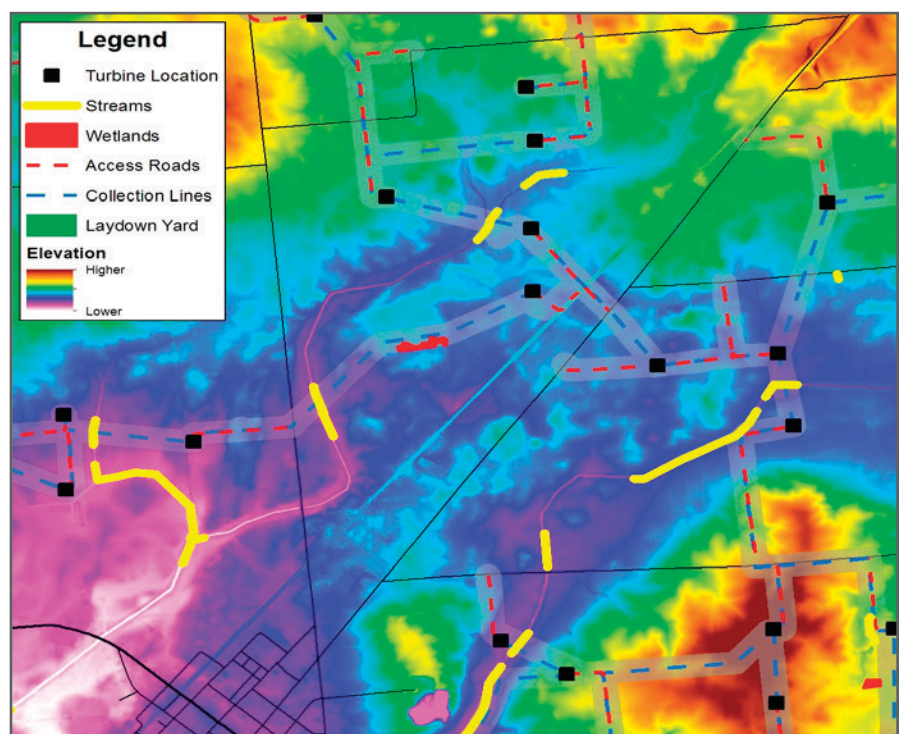
Select services include:

- > Strategic Agency Coordination
- > Feasibility Assessment and Site Selection
- > FAA Compliance & Clearance – Aviation Constraints
- > National Environmental Policy Act (NEPA) Compliance Documents
- > Environmental Impact Statement (EIS)
- > Environmental Assessment (EA)
- > State Environmental Compliance Docs
- > National Pollutant Discharge Elimination System (NPDES)
- > Economic Analyses
- > Land Use Analyses
- > Clean Water Act (Sec. 401, 402, 404) Permitting
- > Endangered Species Act (ESA) (Sections 7 & 10) Consultation
- > Transmission Line Assessments
- > Public and Stakeholder Participation Planning

Biological Support Services

Cardno has extensive experience in conducting various ecological surveys and services in support of our clients' permitting needs. We have worked extensively in support of applicants and regulators (third-party review), giving us a unique understanding of both the client and regulatory perspectives and end goals. This perspective allows us to better serve applicant clients by anticipating and preventing many of the data gaps that can cause project delays during EA/EIS analyses.

- > Individual/programmatic take permits
- > Avian and Bat Studies (Breeding Bird Surveys (BBS), migration, raptor nesting, and mortality)
- > Wetland Delineation, Mitigation, and Permitting
- > Rare, Threatened, and Endangered (RTE) Species Surveys
- > Habitat Conservation Plans
- > Photogrammetric Technologies
- > Potential Impact Index (PII)
- > Construction and Post-Construction Monitoring
- > Operations Monitoring
- > Adaptive Management
- > Statistical Sampling Design and Analysis
- > Mitigation and Restoration Design and Construction
- > Ecological Risk Assessment
- > Geographic Information Systems (GIS) Support
 - Desktop Assessment
 - Environmental Conditions Mapping
 - Vegetation Mapping
 - Wildlife Habitat Mapping





Cultural Support Services

Our cultural resources team has conducted numerous historic and archaeological investigations to meet client needs and comply with applicable historic preservation regulations. Archaeological monitoring is often recommended as a mitigation measure in sensitive areas, when a project is faced with a long construction timetable, and when requested by an agency or Indian tribe. Staff regularly consult with numerous agencies including the USACE, State SHPOs, and the Bureau of Land Management (BLM) in the development and implementation of monitoring plans. Several monitored projects have included the presence of contaminated sediments. Our archaeologists are 40-hour HAZWOPER certified and knowledgeable of construction and safety protocols.

- > Archival and Records Review
- > Predictive Modelling
- > Field Surveying and Testing
- > Data Recovery
- > Artifacts Analysis
- > Archaeological Monitoring
- > Historic Preservation Services
- > Native American Consultations
- > Ethnographic Services
- > National Historic Preservation Act (Section 106) Consultation

Civil Engineering and Construction Administration

Cardno's engineering and construction personnel have expertise in engineering design, cost analysis, research, and underground utility location. Cardno strives to deliver the highest standards of safety, construction, and budgetary goals. Select services include:

- > Road Design including Culverts and Roadside Drainage
- > Design of Pad Site Grading
- > Storm Water Design, Permitting, and Inspection
- > Flood Plain Use Permitting
- > Quality Control Inspections for Design Documents
- > Subsurface Utility Engineering/Utility locating
- > Phase I/II Environmental Investigations
- > NPDES/E.C. (Erosion Control) Inspection
- > Monthly Reporting
- > Project Closeout
- > Distributed Generation
 - NEPA for small-scale wind on Federal Properties
 - Renewable Energy Master Planning
 - Enhanced Use Lease Advisory
 - Power Purchase Agreement Advisory

Qualifications

Serving the Energy Industry

Cardno provides the experience, the in-depth technical expertise, and the diverse range of resources necessary to help clients achieve their development and operational goals. Cardno's objective is to provide the highest quality strategic and technical services possible to the renewable energy market. We have an established record of success working on all phases of renewable energy projects; from site identification and development through construction and post construction monitoring activities.

Cardno is at the forefront of developing innovative, strategic solutions that provide both environmental and economic best practices. We are committed to protecting the environment and natural resources while providing flexible and viable solutions that allow companies to grow, meeting bottom-line needs of all stakeholders. Cardno has provided environmental and natural resource management services to the government and the power industry for more than 25 years. Today, we use this vast experience to assist clients with meeting aggressive goals and to help plan and develop new options with alternative and renewable energy options.

We hold the following applicable licenses and certifications in several States:

- > CIESEC (Certified Inspector of Sediment & Erosion Control)
- > CESCL (Certified Erosion & Sediment Control Lead)
- > HAZWOPER (Hazardous Waste Operations & Emergency Response)
- > LPS (Loss Prevention System)
- > PE (Professional Engineer)
- > PLS (Professional Land Surveyor)
- > LEED AP (Leadership in Environmental and Energy Design Accredited Professional)

Example Projects



Client	Project Name	Location	Type
Apex Clean Energy	Dakota Range I	Southeast, SD	Wind
Apex Clean Energy	Republic Wind Energy Project	Seneca & Sandusky Counties, OH	Wind
Bonneville Power Administration	Boyer-Tillamook Transmission Line	Tillamook & Yamhill Counties, OR	Wind
Bonneville Power Administration	Grand Coulee-Creston Transmission Line Rebuild	Grant & Lincoln Counties, WA	Wind
BP Wind Energy	Mohave County Wind Energy Project	Mohave County, AZ	Wind
BP Wind Energy	Long Prairie Wind Energy Project	VanWert County, OH	Wind
Bureau of Land Management	Spring Valley Wind Energy Project	White Pine County, NV	Wind
California Wind Energy Association (CalWEA)	CalWEA Bird and Bat Mortality Estimation Research Grant	CA	Wind
Clear Creek Power	Highland Park Wind Energy Project	CO	Wind
Cobra Energy	Red Top Wind Energy Project	NM, TX	Wind
Cobra Energy	Spearville II Wind Energy Project	KS	Wind
Cobra Energy	Ironwood Wind Energy Project	Ford County, KS	Wind
Confidential	400MW Wind Energy Project	AZ	Wind
Confidential	273MW Wind Energy Project	Kittitas County, WA	Wind
Confidential	Wind Development Site Planning	Clinton County, MI	Wind
Confidential	GIS and Mapping Support	ND, SD, WY and OR	Wind
Confidential	500MW Wind Energy Project	Morrow & Umatilla Counties, OR	Wind
Confidential	200MW Wind Energy Project and Regulated Transmission Line	Sandusky County, OH	Wind
Confidential	70MW Wind Energy Project	Skamania County, WA	Wind
Confidential	5MW Wind Energy Project	Morrow County, OR	Wind
Dehlsen and Associates	Victory Springs Ranch Wind Energy Project	Kern County, CA	Wind
Department of Energy (DOE)	Energia Sierra Transmission	Mexico to CA	Wind
EDP Renewables	Timber Road I & II Wind Energy Projects	Paulding County, OH	Wind
EDP Renewables	Headwaters Wind Energy Project	Randolph County, IN	Wind
Environmental Solutions & Innovations (ESI)	Little Raccoon Wind Energy Project	Montgomery County, IN	Wind
EverPower	Scioto Ridge Wind Energy Project	Hardin County, OH	Wind
EverPower	Mason Dixon Wind Energy Project	Garrett County, MD	Wind
EverPower	Kimberly Run Wind Energy Project	Somerset County, PA	Wind
EverPower	Terrapin Hills Wind Energy Project	Somerset County, PA	Wind
Exelon Wind	Michigan Wind 3 Wind Energy Project	Sanilac County, MI	Wind
Exelon Wind	Seneca Wind Energy Project	Seneca County, OH	Wind
Exelon Wind	Swisher Wind Energy Project	Swisher County, TX	Wind
Goldwind	Musselshell Wind Energy Project	MT	Wind
Harney Electric Cooperative	North Steens 230kV Transmission Line	OR	Wind
Iberdrola Renewables	Manzana Wind – Raptor Use and Nesting Surveys	Kern County, CA	Wind
Iberdrola Renewables	Hardscrabble Wind Energy Project	Little Falls, NY	Wind
Iberdrola Renewables	Otter Creek Wind Energy Project	LaSalle County, IL	Wind
Iberdrola Renewables	Columbia Community Wind Energy Project	Columbia County, WI	Wind



Client	Project Name	Location	Type
Iberdrola Renewables	Blue Creek Wind Energy Project	VanWert County, OH	Wind
Invenergy	High Lonesome Wind Energy Project	WY	Wind
Invenergy LLC	Horse Lake Wind Energy Project	Lassan County, CA	Wind
Invenergy LLC	Big Otter Wind Energy Project	MT	Wind
Nordex USA, Inc.	Bourbon Wind Energy Project	Marshall & Kosciusko Counties, IN	Wind
Performance Services	Purdue Energy Park	Tippecanoe County, IN	Wind
RES Americas	Hatchet Valley Wind Energy Project	Shasta County, CA	Wind
Shell Wind Energy	Hermosa Wind Energy Project	WY	Wind
Silvey Wind Division	Mountain Air Wind Energy Project	Mountain Home, ID	Wind
Brightsource	Hidden Hills Solar Electric Generating System	Inyo County, CA	Solar
Confidential	Solar Energy Utility Scale Siting Analysis	CA	Solar
Confidential	Solar Array Native Seeding & Invasives Species Control	Southeast MI	Solar
Crossroads Solar Energy	Crossroads Solar Energy Drainage Master Plan	Maricopa County, AZ	Solar
Nova Consultants	Domino Farms Solar Array Seeding	Romulus, MI	Solar
Domino Farms Solar Array Seeding	Photovoltaic Energy Farm Development	FL	Solar
First Solar	Confidential Solar Energy 80 MW Project	TN	Solar
First Solar	Confidential Solar Energy 40 MW Project	MO	Solar
First Solar	Confidential Solar Energy 80 MW Project	AL	Solar
First Solar	Confidential Solar Energy 80 MW Project	MS	Solar
First Solar	Confidential Solar Energy Project	LA	Solar
Indiana Michigan Power Co. dba AEP	Deer Creek Solar Array Vegetation Demonstration	Marion, IN	Solar
Invenergy LLC	Grand Ridge Solar Farm	LaSalle County, IL	Solar
Imperium Development	Energy Park	Hillsborough County, FL	Solar
Konarka Technologies	Roll-to-Roll Solar Panel Manufacturing Facility	MA	Solar
Moapa Southern Paiute Solar Facility	Consolidated Biological Assessments for BLM	Las Vegas, NV	Solar
Open Road Renewables	Confidential Solar Energy Project	OH	Solar
Solar Industries	Southern California Solar Energy	CA	Solar



About Cardno

Cardno is a professional infrastructure and environmental services company, with expertise in the development and improvement of physical and social infrastructure for communities around the world. Cardno's team includes leading professionals who plan, design, manage and deliver sustainable projects and community programs. Cardno is an international company listed on the Australian Securities Exchange [ASX:CDD].

Cardno Zero Harm



Cardno is committed to a rigorous approach to safety in all our operations. Cardno Zero Harm – Every Job. Every Day means conducting our business in a way that protects our people, clients, visitors and members of the public from harm, and promotes our commitment to environmental responsibility. We are committed to achieving our 'Zero Harm' goal by continually improving our safety systems and vigilance at our workplaces through strong leadership, employee participation and practical action.

Kaitlin Hillier

Current Position

Staff Scientist

Discipline Area

- > Data Collection and Analysis
- > Field Research and Wetland Surveys
- > Regulatory and Permit Compliance
- > Ohio Rapid Assessment Method (ORAM)
- > Vegetation Index of Biotic Integrity (VIBI)
- > National Wetland Condition Assessment (NWCA) Procedures
- > Exotic and Native Tree, Shrub and Herbaceous Plant Identification
- > Geographic Information Systems

Years' Experience

7

Joined Cardno

2014

Education

- > MS, Environment and Natural Resources, Ohio State University, 2013
- > BS, Environmental and Plant Biology, Ohio University, 2011

Affiliations

- > Association of Wetland Managers
- > Society of Wetland Scientists
- > Botanical Society of America

Summary of Experience

Ms. Kaitlin Hillier provides support for watershed-related projects such as diagnostic and feasibility studies, permitting, mitigation, and restoration. She has conducted extensive fieldwork studying wetlands; assessing environments; conducting surveys; and identifying plant species and soils. Ms. Hillier is knowledgeable in National Wetland Condition Assessment (NWCA) procedures and the standardized Rapid Assessment Methods (ORAM) of wetland condition for both Ohio and the United States. Ms. Hillier's past project experience involves projects for the United State Geological Survey, Ohio Environmental Protection Agency, and EnviroScience Incorporated. She holds a Master's degree in Environment and Natural Resources from The Ohio State University and a Bachelor's degree in Environmental & Plant Biology from Ohio University.

Significant Projects

Great Parks of Hamilton County, Floristic Quality Assessment – Ohio

Cardno was contracted by Great Parks of Hamilton County (GPHC) to assess 308 previously established research plots located throughout two park properties within the GPHC park district. Cardno botanists conducted the Floristic Quality Assessment by locating each established plot and then identifying vegetation within each research plot down to species level and determining the absolute cover of each species within the ground stratum and shrub layer. The center of each mapped research plot was located utilizing a professional grade Trimble GeoXT GPS unit. Following the spring and fall field surveys, Cardno entered the data into the GPHC's Microsoft Access database. This data was collected for the GPHC in order to evaluate their current assets and schedule future maintenance activities throughout the parks. Ms. Hillier was the field lead in conducting vegetation surveys of the research plots.

Confidential Pipeline Project, Confidential Client – Multiple Counties, Illinois

Cardno completed environmental studies along 120 miles of NGL pipeline in Illinois for a confidential client covering over 200 wetlands in five counties. Multiple teams completed the wetland and stream delineations within a narrow three-week window. Reporting was completed quickly following fieldwork. Ms. Hillier assisted in conducting wetland delineations.

Great Parks of Hamilton County, Cover Mapping Project – Ohio

Cardno was contracted by the Great Parks of Hamilton County (GPHC) to assess two properties utilizing methods developed by GPHC and outlined in the Cover Mapping Guide: Hamilton County Park District. Cardno botanists surveyed two properties, totaling approximately 250 acres, using meander methods to identify the general cover types and dominant species within each unit. All "Woodlands" transects were traversed north-south and east-west and data points were established every 50 paces to further identify the dominant species within each strata as well as diameters of all trees, and an evaluation for any rare species. Cardno collected this data for the GPHC in order to evaluate their current assets and schedule future maintenance activities at the Miami Whitewater Forest. Ms. Hillier conducted field surveys to collect data for the cover mapping of approximately 250 acres; which involved laying transects, establishing data stations, and recording tree and herbaceous vegetation data.

- > Sigma Xi, Scientific Research Society, 2011
- > Alpha Omicron Pi, Vice President of Academics, Activities Chair and Historian, 2009–2011

Great Parks of Hamilton County, Floristic Quality Assessment – Ohio

Cardno was contracted by Great Parks of Hamilton County (GPHC) to assess 210 previously established research plots located throughout six park properties within the GPHC park district. Cardno botanists conducted the Floristic Quality Assessment by locating each established plot and then identifying vegetation within each research plot down to species level and determining the absolute cover of each species within the ground stratum and shrub layer. The center of each mapped research plot was located utilizing a professional grade Trimble GeoXT GPS unit. Following the spring and fall field surveys, Cardno entered the data into the GPHC's Microsoft Access database. This data was collected for the GPHC in order to evaluate their current assets and schedule future maintenance activities throughout the parks. Ms. Hillier assisted in conducting vegetation surveys of the research plots.

Confidential Energy Company – Indiana and Ohio

Cardno has a master contract with a major energy company for a variety of ecological services at their power generation facilities and along their transmission lines. Provided services consist of wetland delineations, line environmental assessments, endangered species survey and review, cultural resources survey and desktop reviews, storm water pollution prevention plans, work management plans, permitting and agency coordination, and mitigation design and construction. Ms. Hillier assisted in conducting wetland delineations and stormwater pollution prevention plans.

Indianapolis Power & Light, Petersburg Generating Station MATS Upgrades – Indiana

IPL Petersburg expansion plans include encroachment onto the floodplain of the White River as well as emergent and forested wetlands located in the floodplain. IPL required agency coordination, permitting, design, mitigation construction, for forested floodplain and wetland mitigation. Services provided included a regulated waters delineation, agency coordination and permitting, mitigation site location, mitigation design, and construction. In addition, the project includes up to ten years of ongoing maintenance and monitoring. Ms. Hillier conducted monitoring tasks such as herbaceous and tree sampling, vegetative inventories, hydrology documentation, data analysis, and invasive species control recommendations for needed wetland development. Data collected was provided to IPL and the regulatory agencies throughout the year.

Muscatatuck Bottomlands Turnkey Wetland Mitigation – Indiana

Cardno's interdisciplinary team of hydrologists, wildlife biologists, and restoration ecologists prepared and implemented a mitigation plan to reestablish and rehabilitate approximately 30 acres of high quality scrub-shrub and forested wetland habitat in the Muscatatuck Bottomlands located in Scott County, Indiana. The approach involved assessing and selecting a high quality mitigation site and preparing final approved restoration plans to satisfy all offsite, permittee-responsible, mitigation requirements. Cardno completed all wetland design, planning, construction and restoration activities in 2014 and is providing ongoing wetland maintenance and monitoring services through 2019. Ms. Hillier conducted monitoring tasks such as herbaceous and tree sampling, vegetative inventories, hydrology documentation, and invasive species control recommendations for needed wetland development. Data collected was analyzed and presented to the regulatory agencies annually.

Vectren, Inc., 345-kV Transmission Line, Phases I and II Ecological and Cultural Assessment – Indiana

Vectren contracted Cardno to mitigate the effects of a proposed 345 kV transmission line through the Weber Village Site (12-Gi-13) in Gibson County, Indiana. The Weber Village

Site is a prehistoric archaeological site that is listed on the National Register of Historic Places. The Weber Village was first reported in 1955, but had not been investigated since. In consultation with the Division of Historic Preservation and Archaeology, Cardno developed a research plan designed to minimize the impact to the site and build the understanding of this important site while mitigating the effects of the proposed transmission line. Cardno employed a variety of techniques, including geophysical survey, during the investigation. Analysis of the results is ongoing and contributes to a variety of technical, scholarly, and public outreach materials. Ms. Hillier conducted plant identification and herbaceous monitoring, data analysis, and report writing.

Dakota Access Pipeline Project (DAPL) – Illinois

Cardno was hired by Energy Transfer Partners, LP to assist with permitting the Illinois segment of a new interstate crude oil pipeline that passes through over 210 miles of Illinois to an existing terminal. Cardno provided comprehensive environmental studies and surveys to identify sensitive areas containing biological and cultural resources. Cardno biologists delineated wetlands, conducted stream and pond surveys; assessed threatened and endangered (T&E) species habitat; and conducted bat, listed plant, and mussel surveys. Cardno archaeologists and architectural historians conducted cultural resources surveys and reports. Cardno also provided strategic guidance on National Environmental Policy Act (NEPA) and Section 106 of the National Historic Preservation Act (NHPA) for the project. Ms. Hillier conducted plant identification, wetland delineations, and data analysis.

INDOT SR 641 Environmental Mitigation-Phases I-IV – Indiana

Cardno was hired by the Indiana Department of Transportation (INDOT) to help address a non-compliance violation received for a failed 150-acre wetland mitigation site along the Wabash River in Terre Haute, IN. As part of the non-compliance work, Cardno was hired to locate and permit additional mitigation sites to remedy a cease and desist order issued for Phases III & IV for violations associated with the unauthorized clearing of right-of-way. Within five months, Cardno located seven new mitigation sites in the watershed. Services provided by Cardno included identification of mitigation sites for more than 6,000 linear feet of stream and 45 acres of wetlands, developing mitigation plans, negotiating with agencies, developing NEPA documentation for three of the sites, securing DNR floodway permits and Rule 5 permits, managing the appraisal and acquisition, ROW engineering, and construction plan development through a sub consultant. All necessary permits were secured, and the cease and desist order was lifted, allowing the contractor to start work. Ms. Hillier conducted all monitoring tasks such as vegetative sampling, vegetative inventories, hydrology documentation, photo documentation, invasive species control recommendations, wildlife observations and stream stabilization assessments. Data collected was provided to Indiana DOT and the regulating agencies in ongoing formal reports.

Indiana DOT, SR 25 Hoosier Heartland Mitigation Monitoring and Maintenance Services – Indiana

Cardno is assisting the Indiana Department of Transportation (INDOT) Office of Environmental Services (OES) by providing wetland, stream, and riparian monitoring and associated maintenance on eight mitigation sites totaling approximately 15,875 LF of stream mitigation and 122 acres of wetland mitigation. Cardno provides site specific invasive species management, installation of live plant material, monitoring of native species development, coordination amongst agencies and landowners, as well as holistic long term solutions to erosion and overall habitat establishment. Ms. Hillier conducted plant identification and herbaceous monitoring, data analysis, and report writing.

Indiana DOT, Central Office On-Call Consulting Services – Indiana

Cardno is supporting the INDOT Office of Environmental Services by providing various environmental services through the central district on-call. Services provided under this on-call include Waters of the U.S. delineations, waterway permitting assistance, development of mitigation plans, NEPA documentation, maintenance, and monitoring of existing mitigation sites. This on-call provides support to various districts through central office with a predominant focus on the maintenance and monitoring of existing mitigation sites. Ms. Hillier conducted plant identification and herbaceous monitoring, data analysis, and report writing.

Previous Experience

Student Services – United States Geological Survey – Columbus, Ohio

Prior to joining Cardno, Ms. Hillier worked with the U.S. Geological Survey on a joint project with the Ohio Environmental Protection Agency that involved creating a Vegetation Index of Biotic Integrity (VIBI) for bryophytes. Primary roles included performing database administration and bryophyte plant identification. She contributed through a combination of fieldwork, laboratory work, equipment maintenance, data entry, and preliminary analyses. She contributed to the collection and assessment of bryophyte samples in wetlands.

Intern – Ohio Environmental Protection Agency – Columbus, Ohio

Prior to joining Cardno, Ms. Hillier performed vascular plant identification, surveying 15 wetlands across Ohio while assisting with the National Wetland Condition Assessment. She conducted extensive data collection and analysis involving vegetation, soils, wetland buffer, and water quality. Using the Ohio Rapid Assessment Method (ORAM) and Vegetation Index of Biotic Integrity (VIBI), she assessed wetlands and identified plants.

Biologist – EnviroScience Incorporated – Cuyahoga Falls, Ohio

Prior to joining Cardno, Ms. Hillier processed mussels in support of a survey conducted under a soon-to-be demolished bridge. She created underwater gridlines and gained experience with wetland delineations and marking boundaries with a GPS unit.

Intern – Ohio Environmental Protection Agency – Columbus, Ohio

Prior to joining Cardno, Ms. Hillier reviewed Section 401 permits prior to site visits, confirmed compliance with certification requirements, and recommended corrective actions on identifying noncompliance. She performed permit evaluations, plant identification, and field assessments at a variety of mitigation sites.

Certifications

- > Licensed Commercial Pesticide Applicator. Categories: Right-of-Way, Aquatics, Indiana, Michigan, Ohio
- > 40-Hour OSHA HAZWOPER Certification, 2015

Continuing Education

- > Grass Identification and Ecology, The Morton Arboretum, 2019.
- > Vegetation Index of Biotic Integrity, Midwest Biodiversity Institute, 2019
- > Ecological Training Course, Ohio Department of Transportation, 2018
- > Waterways Permits Training Course, Ohio Department of Transportation, 2018
- > Grasses, Sedge and Rush Identification Workshop, Institute of Botanical Training, 2018
- > Grasses, Sedges and Rushes Workshop, Lourdes University, 2017

- > 38-hour U.S. Army Corps of Engineers Wetland Delineation Training Program, Richard Chinn Environmental Training, Inc., 2016
- > 30-hour Wetland Flora Training Course, Institute of Botanical Training, LLC., 2015
- > Ohio Rapid Assessment Method (ORAM), Ohio Environmental Protection Agency, 2013

Presentations

- > Reconstructing a Pennsylvanian Age Species of the Filicalean Fern *Senftenbergia*, Midcontinent Paleobotanical Colloquium, University of North Carolina, Chapel Hill, North Carolina, 2011.
- > Evidence for the Filicalean Fern Genus *Senftenbergia* in Pennsylvanian Sediments of Western North America, Botanical Society of America Conference, St. Louis, Missouri, July 2011.

Publications

- > Results from the 2016 Indy Urban Biodiversity Survey, Marion County, Indiana. Compiled from the Science Team Reports and Assembled by Don Ruch. Indiana Academy of Science.
- > Results from the 2015 Hills of Gold Biodiversity Survey, Johnson County, Indiana. Compiled from the Science Team Reports and Assembled by Don Ruch. Indiana Academy of Science.
- > Hillier, K.G. and G.W. Rothwell. 2012. *Senftenbergia oregonensis* (Arnold) Comb. Nov., (Filicales); delimiting relationships among Paleozoic Tedeaceae. International Journal of Plant Sciences 173: 549-557

This foregoing document was electronically filed with the Public Utilities

Commission of Ohio Docketing Information System on

12/13/2019 1:07:58 PM

in

Case No(s). 17-1152-EL-BGN

Summary: Report Notice of Compliance with Certificate Condition 22 - Environmental Monitor electronically filed by Ms. Julia M Mancinelli on behalf of Hillcrest Solar I, LLC