

PARTNERS IN PROGRESS...®

your conduit for delivering confidence



Civil & Environmental Consultants, Inc.

THE CEC ADVANTAGE

What sets CEC apart is that we put ourselves in our clients' shoes and make recommendations from their strategic vantage point. These are the real differentiators:

INSIDER EXPERIENCE

CEC understands the nuanced characteristics of public sector work from the inside, having strategically added professionals who previously worked for governments and public agencies to drive us to deliver services from their unique perspective.

HOLISTIC APPROACH

Projects are viewed at the macro level, with CEC providing broader services and thinking that not only address outlined project needs, but also consider ancillary aspects and multifaceted project pressures like public outreach and funding assistance. This approach also allows for greater flexibility in adapting to unexpected changes.

ADVANCED TECHNOLOGY

To support a customized approach and provide even greater benefit to projects both large and small, CEC utilizes industry-leading technologies and equipment, such as advanced Geographic Information Systems (GIS) software, 3D laser scanners using terrestrial LiDAR scanning, and small Unmanned Aerial Systems (drones) that capture HD images and video.

ECONOMIC MASTER PLANNING

CEC identifies and utilizes non-traditional economic and social inputs. By incorporating factors such as market projections, stakeholder engagements, financial models, and governance strategies, the Economic Master Plan becomes a realistic, responsive guideline to move a project forward expeditiously and successfully.

STAKEHOLDER INPUT

Public projects often have many stakeholders, and a consulting firm should afford enough flexibility in the implementation of a project to listen and incorporate public input. CEC is well versed in seeking and implementing stakeholder input on public sector projects.

CLIENT ADVOCACY

CEC navigates complex project permitting programs using industry expertise and professional working relationships with local, state, and federal regulators. As an advocate for the client's vision and project goals, CEC is willing to challenge regulators to think outside the box.



1: Interior and exterior 3D laser-scanning survey services were provided during the planning and design process for a luxury urban redevelopment housing complex in Ohio.

2: Public participation was coordinated to develop a 10-acre riverfront fishing park on the site of a former hydroelectric plant in Beaver County, Pennsylvania.

3: A complete water treatment plant optimization study was performed for a municipality in southwest Ohio in an effort to better prepare for emergency situations.

PUBLIC SERVICES

Aging infrastructure in need of repair, updates, and maintenance is top of mind for many state and local governments. Regulatory requirements to correct substandard infrastructure and the pressure to secure the necessary funding for the upgrades are among the challenges public agencies face. Often they do not have resources available to pursue funding sources, such as grants, low- or zero-interest loans, and tax-increment financing plans.

INFRASTRUCTURE RESOURCES

Support for public service and utility directors includes assisting with grant writing and project funding administration, identifying potential new revenue sources, and developing cost-efficient and effective ways to address infrastructure problems. CEC has a proven performance in obtaining environmental permits and clearances, and ultimately correcting infrastructure deficiencies. CEC strives for its services to meet tightening regulatory controls while minimizing rate increases.

SOLID WASTE SUPPORT

CEC has helped municipal managers of waste and landfill operators with services ranging from addressing airspace issues and performing operational efficiency reviews, to creating equipment replacement plans and maintenance programs. In addition, CEC provides comprehensive landfill design, permitting, and construction services.

WATER/WASTEWATER SUPPORT

CEC's water expertise includes distribution system upgrades to address capacity and pipe degradation issues, intake design, and hydraulic modeling. Wastewater expertise includes collection system I&I evaluations, system design and construction, and treatment process improvements with long-term options for improvements rather than short-term permit variances.

TRANSPORTATION SUPPORT

CEC provides departments of transportation and municipal governments with on-call ecological, environmental, and traffic engineering services to support large-scale traffic and transportation improvement projects, bridge and highway construction activities, and maintenance, streetscape, and green infrastructure enhancements.



1: More than 3,000 linear feet of conveyance culvert was inspected to assess structural condition and ability to convey stormwater flows beneath a busy shopping center in Pittsburgh, Pennsylvania.

2: On-site construction quality assurance (CQA) was provided during the liner, soil, and concrete installation at a new oil and gas waste county landfill in west Texas.

3: Construction staking, environmental, and CQA services were provided to help TDOT replace an aging truss bridge in north central Tennessee.

ECONOMIC & COMMUNITY DEVELOPMENT

Governments strive to identify economic development drivers that create and retain jobs and generate tax dollars to fund infrastructure, schools, parks, public safety, etc. This requires an environment that is attractive to businesses and site selectors making location decisions, which ultimately leads to a high demand for shovel-ready, marketable properties—even in locations where available land is scarce.

ECONOMIC MASTER PLANNING

CEC's unique brand of planning addresses important factors such as workforce quality, site availability and access, utility infrastructure, tax incentives and inducements, and overall quality of life for incorporation into economic development solutions.

Global economic master planning experience is combined with site development engineering expertise to identify innovative, practical solutions to complex land planning challenges. CEC's master planning services help identify creative solutions to catalyze the greatest return on each business opportunity in today's competitive economic environment.

DIRECT INVOLVEMENT

CEC is engaged at the local level through active involvement with economic development organizations. In addition, CEC assists with marketing properties by communicating critical information about topography, ecological resources, physiographic features, and utility infrastructure. This support includes providing market research and developing conceptual land use plans that help prospects envision the end use of a property.

CEC is also experienced in working with watershed associations, parks and recreation organizations, and nonprofits to improve public spaces and implement sustainable design principles and ecological restoration to improve the overall quality of life.



1: Master planning, civil, geotechnical, surveying, wetlands permitting, and environmental services were provided for the development of a 223-acre technology park in Marshall Township, Pennsylvania.

2: Planning, survey, civil engineering, and landscape architecture services were provided to an Indianapolis redevelopment organization to transform a historic but languishing ballpark into unique luxury apartments.

3: Green infrastructure design such as vegetated swales, pervious paving, and rain barrels will help decrease the nonpoint source pollution for this borough in Westmoreland County, Pennsylvania.

Faced with funding challenges, regulatory uncertainties, and pressures from stakeholders, public officials need immediate access to reliable, comprehensive services and cost-effective solutions that can be applied to virtually any issue that may be encountered.

CEC responds swiftly and efficiently to inquiries, challenges, and short- and long-term planning needs, and will work hand-in-hand with municipal, county, state, and federal officials to provide tailored and innovative services that work within spending thresholds.

From coordinating access agreements with property owners to engaging in public outreach with concerned citizens groups, CEC is equipped to manage all of the details for public sector projects and problem solving. CEC's multi-disciplined and integrated approach to planning, engineering, design, construction, and consulting helps public sector clients navigate the challenges of their infrastructure and economic development projects, and allows for proactive solutions that benefit the public.



CEC OVERVIEW

Civil & Environmental Consultants, Inc. (CEC) provides comprehensive market-oriented consulting services that advance the strategic business objectives of our clients. CEC is recognized for its innovative design solutions and integrated expertise in air quality, civil engineering, ecological sciences, environmental engineering and sciences, manufacturing infrastructure services, survey/geospatial, waste management, and water resources.

Our Public Sector Market Group is a diverse team of engineers, scientists, and professionals who serve as our conduit to the latest thinking and advancements in the public sector, providing clients with concise, timely information and regulatory updates to facilitate informed decision-making.

CIVIL ENGINEERING

Dam and Impoundment Design,
Permitting, and Inspection
Hydrologic and Hydraulic Modeling for
Flood Routing
Erosion & Sedimentation Controls and
NPDES Permitting
Pavement Analysis and Maintenance
Construction Services
Geotechnical Engineering Services
Infrastructure Inspection and Repair
ADA Compliance

ECOLOGICAL

Threatened & Endangered Species
Assistance
Cultural Resource Investigations
Aquatic Ecology Studies (e.g., Benthic
Macroinvertebrates, Fisheries, and
Mollusks)
Wetland and Stream Delineation, Impact
Assessment, Permitting, and Mitigation
Design
Soil and Revegetation Studies
National Environmental Policy Act (NEPA)
Documentation and Clearances
Section 4(f) and 6(f) Evaluations
Public Outreach and Agency Coordination

ENVIRONMENTAL

GIS and Data Management
Site Inventories for Brownfields
Redevelopment
Phase I and II Environmental Assessments
Site Remediation
Property Condition Assessments
Well Drilling and Abandonment Assistance
AST and UST Compliance, Maintenance,
and Removal
SPCC Plan Development
Air Quality Sampling, Testing, and
Modeling

PLANNING

Economic Master Plans
Business Attraction Strategies
Site Selection Studies
Site Capacity Studies
Business/Industrial Park Master Plans
Infrastructure Master Plans
Facility Master Plans
Design/Development Guidelines
Site Reuse Planning
Corporate Asset Disposition Planning
Mining Reclamation Planning
Sustainability Planning
Stakeholder Engagement

SURVEY/GEOSPATIAL

Bathymetric Surveys
Unmanned Aerial Systems (UAS)
Inspections
Volumetric Surveys
Route Surveys
LiDAR Scanning
As-Built Surveys
Topographic Surveys
Boundary Surveys
ALTA/NSPS Surveys
Highway Surveys

TRANSPORTATION

Engineering and Permitting
Roadway, Bridge, and Intersection Design
Trip Generation Studies
Traffic Impact Studies
Traffic Signal Design
Traffic Signal and Auxiliary Turn Lane
Warrant Evaluations
Travel Time/Delay Studies
Parking Design/Studies
Highway Occupancy Permitting
Public Outreach and Agency Coordination
NEPA Clearances through DOT and FHWA
Reporting

WASTE MANAGEMENT

Site Remediation and Waste Treatment
Solid and Hazardous Waste Management
Landfill Design and Permitting
Landfill Gas Management System Design
and Permitting
Leachate Management/Treatment Facility
Design and Permitting
Transfer Station Design and Permitting
Materials Recovery Facility Design and
Permitting
Post-closure Design and Development
Construction and Demolition Debris
Management

WATER/WASTEWATER RESOURCES

Water Treatability Studies
Water System Modeling and Distribution
Design
Wastewater Collection and Treatment
Facility Design and Construction
Passive and Active AMD Treatment Plant
Design
Surface and Ground Water Baseline and
Impact Studies
Floodplain Administration Assistance
Municipal Separate Storm Sewer System
(MS4) Permit Compliance Assistance
MS4 Stormwater Management Program
Development, Site Plan Review, and Staff
Training
Capital Improvement Plan Prioritization
Municipal Engineering Services and/or
Supplementation

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