

# Architecture, Engineering, and Environmental Services (AE&ES)

Building Milwaukee County's Future Together



NOTES:  
■ ALL LANE CLOSURES SHALL FOLLOW DETAIL CWS16, CWS17, CWS18  
■ ISDOT SHALL APPROVE ALL LANE CLOSURES.

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2146-14-70 ISDOT SIDEWALK EXTENSION,  
FUTURE PROJECT, BY OTHERS

REFER TO CWS31

CONSTRUCTION





## Executive Summary

The Architecture, Engineering, and Environmental Services (AE&ES) team is the cornerstone of Milwaukee County's commitment to delivering innovative infrastructure, promoting environmental stewardship, and providing exceptional operational support. We drive excellence in capital projects while ensuring cost efficiency and alignment with Milwaukee County's vision of achieving racial equity to become the healthiest county in Wisconsin.

From managing transformative capital programs to providing urgent technical expertise, AE&ES is a trusted partner that advances county priorities, promotes sustainability, and fosters inclusion.





## Introduction to AE&ES



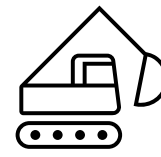
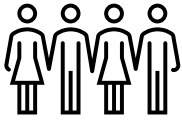
AE&ES serves as Milwaukee County's central resource for capital project management, environmental compliance, and technical expertise. Comprising over 40 dedicated professionals—including engineers, architects, surveyors, construction managers, and support staff—we offer solutions tailored to the county's unique infrastructure and operational needs.

## Working With AE&ES

### Key Advantages

- **Institutional Knowledge:** Decades of experience with Milwaukee County's unique assets and infrastructure history.
- **Direct Accountability:** Aligned with county priorities, providing seamless integration between leadership and project outcomes.
- **Cost Efficiency:** Reduces reliance on external consultants, resulting in significant taxpayer savings.
- **Sustainability Focus:** Embeds environmental stewardship and sustainable practices in all projects.
- **Equity and Inclusion:** Actively promotes participation of small and minority-owned businesses in alignment with the Office of Economic Inclusion (OEI).

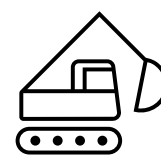
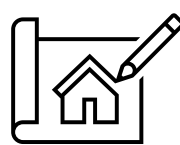




## Working With AE&ES

### Service Highlights

- **Capital Program Delivery:** Managing over 200 active capital projects, ranging from \$10,000 to over \$100 million.
- **Comprehensive Project Management:** End-to-end coordination, including planning, design, procurement, and construction oversight.
- **In-House Design Expertise:** Civil and airport engineering, architectural design.
- **Environmental Services:** Hazardous materials management, stormwater compliance, land conservation, and green building initiatives.
- **Facility Maintenance Support:** Technical guidance for smaller-scale projects in coordination with departmental maintenance teams.
- **Space Planning and Furniture Management:** Standardizing furniture procurement, managing surplus, and optimizing space utilization.
- **Surveying and Mapping:** Land surveys, certified maps, and regulatory compliance for capital projects and property acquisitions.
- **Disadvantaged Business Enterprise (DBE) Goals:** Promoting inclusion through active participation of small and minority-owned businesses.
- **Grant Funding Assistance:** Securing and managing funding for projects, particularly in transportation and environmental sectors.
- **Emergency and Urgent Support:** Rapid response to infrastructure issues, including structural damage assessments and critical repairs.



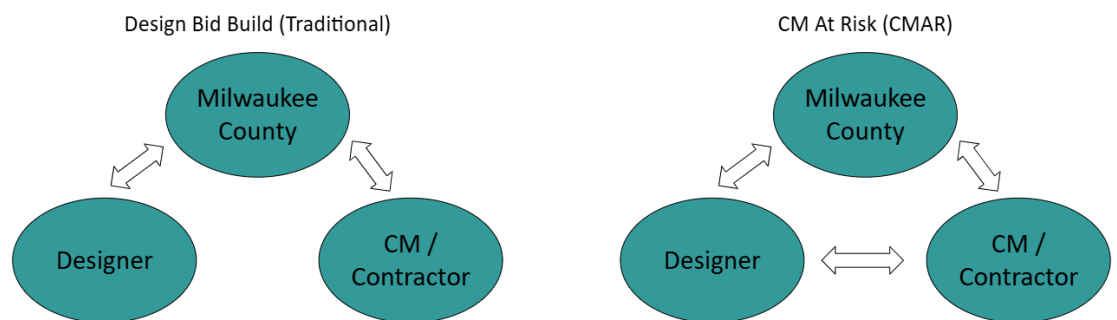


## Working With AE&ES

### Expertise in Delivery Methods and Consultant Partnerships

Our expertise in diverse project delivery methods and thorough understanding of public works bidding regulations allow us to tailor our approach to meet the unique needs of each project:

- **Design-Bid-Build (DBB):** Traditional method ensuring cost-effective delivery through competitive bidding.
- **Construction Manager at Risk (CMAR):** Reduces risks and expedites project schedules with a guaranteed maximum price.
- **Job Order Contracting (JOC):** Efficient execution of small to medium-sized construction projects through pre-qualified contractors.
- **Time and Materials (T&M):** Flexible solutions for urgent or unanticipated needs, allowing for quick mobilization.



### Consultant Partnerships

To support our projects and provide specialized expertise, AE&ES engages consultants through:

- On-Call Consultant Program
- Annual Consultant Program
- Requests for Proposals



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# Current Major Projects

## AE&ES is leading and supporting several transformative initiatives

- **\$Multi-Million Investing in Justice Project:** Replacing the existing Safety Building to enhance judicial services.
- **\$100+ Million Forensic Science Center:** Strengthening public safety infrastructure and forensic capabilities.
- **\$80 Million International Terminal:** Constructing a state-of-the-art international concourse designed to enhance customer experience, safety, security, and connectivity.
- **\$40 Million New Coggs Facility:** Expanding critical health and human services for the community.
- **\$30+ Million Vel Phillips Juvenile Justice Center:** Supporting juvenile justice reform and the closure of Lincoln Hills.
- **\$15+ Million: New North Shop Facility:** Enhancing MCDOT operational efficiency and service delivery.
- **\$20+ Million Zoo Rhino Exhibit and \$5+ Million Humboldt Penguin Exhibit:** Enhancing educational and recreational experiences at the Milwaukee County Zoo.

## Portfolio Overview

- **200+ Active Projects:** Managing a diverse range of capital projects across various departments.
- **Project Completion:** On track to close over 70 projects in 2025.
- **Budget Management:** Effectively overseeing a capital budget of over \$300 million.





AE&ES  
Units:  
Expertise  
and  
Capabilities

### Site Development Unit

- **Core Services:** Site design, land surveying, cost estimating, construction management, and grant assistance.
- **Recent Accomplishments:**
  - **Oak Leaf Trail Extensions:** Expanded recreational trails, enhancing community connectivity.
  - **McKinley Park Revitalization:** Upgraded parking, boat launch, and beach facilities.
  - **Road & Parking Lot Rehabilitation:** Improved infrastructure at Bender Park and KK Parkway.
  - **Innovation & Improvements:** Streamlined survey requests. Enhanced project tracking tools.



# AE&ES Units: Expertise and Capabilities

## Environmental Services Unit

- **Core Services:** Environmental compliance, hazardous substance control, brownfield property support, landfill management, stormwater management, sustainability initiatives, and county conservationist.
- **Recent Accomplishments:**
  - **Lead Pipe Assessments:** Tested every drinking water source in Milwaukee County facilities and identified replacements to improve water quality.
  - **Stormwater Compliance:** Achieved regulatory compliance through system modeling and improvements.
  - **Lake Michigan Bluff Stability:** Developed a tool to evaluate bluff safety and prioritize repairs.



AE&ES  
Units:  
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and  
Capabilities

## Airport Engineering Unit

- **Core Services:** Delivering airfield construction, airport system expertise, and project planning, with a focus on stakeholder collaboration and project success from start to finish.
- **Recent Accomplishments:**
  - **Airfield Modifications:** Major runway and taxiway upgrades for operational efficiency.
  - **Terminal Roof and Skylight Replacement :** Delivered a comprehensive solution that minimized passenger disruption while ensuring seamless flow and terminal access.





# AE&ES Units: Expertise and Capabilities

## Architecture Unit

- **Core Services:** From developing initial concepts and charters to troubleshooting existing issues, the Architecture Unit fills a vital role in delivering projects and improving facilities for all County departments. The team helps develop program, provide building code advice, review design documents and provide solutions to the many issues departments face over the course of construction and maintenance projects.
- **Recent Accomplishments:**
  - **Project Management Tools:** Implemented tools to improve project delivery, construction administration, and overall project quality control.
  - **Building Standards Library:** Created comprehensive guidelines to ensure consistency and quality across county facilities.



# AE&ES Units: Expertise and Capabilities

## Project Management Unit

- **Core Services:** Project and portfolio management, project delivery standards, client engagement.
- **Recent Accomplishments:**
  - **Streamlined Project Tracking.** Implemented project management tools to enhance scheduling, resource allocation, and real-time monitoring of project progress. This has led to increased efficiency and transparency across all projects.
  - **Centralized T&M Administration.** Centralized the administration of T&M contracts, streamlining processes and improving efficiency. This initiative standardized T&M procedures across departments, reduced administrative overhead, and helps to ensure consistent compliance with county policies and regulations.





# AE&ES Units: Expertise and Capabilities

## Capital and Operating Program Administration (COPA) Unit

- **Core Services:** Project management support, document processing, QA/QC, reporting, and project tracking.
- **Recent Accomplishments:**
  - **Contracting:** Held a kaizen event to improve contracting efficiency.
  - **Work Tracking:** Implemented Smartsheet tools for streamlined request intake.



In Process	(4)	In DocuSign	(24)
<p><b>WP0674011</b></p> <p>Underwood Creek Pkwy Rd Rplcmnt-Roundabout to Swan</p> <p>Max Saichek</p> <p><b>M</b> Max.Saichek@milwaukeeeco...</p> <p>Sandra Del Pizzo</p> <p><b>SD</b> Sandy Del Pizzo</p> <p>Sandra.DelPizzo@milwaukeeecoun tywi.gov</p> <p>Other, Specify in Notes</p>		<p><b>WJ0113</b></p> <p>CRC Disaster Recovery Back Up Power</p> <p>Contract now in DocuSign</p> <p><b>A</b> an.tran@milwaukeecountyw...</p> <p>Krista Burns</p> <p><b>KB</b> Krista Burns</p> <p>Krista.Burns@milwaukeecountywi .gov</p> <p>Contract</p>	

Example of Smartsheet work tracking system



# Key Initiatives Driving Operational Excellence

- **Enhancing Processes & Systems**
  - Adopt advanced project management tools.
  - Optimize contract and procurement procedures.
- **Strengthening Relationships**
  - Solicit feedback from business sponsors.
  - Enhance Department outreach.
  - Collaborate closely with Comptroller, Facilities Planning, OEI and other key partners.
- **Quality & Compliance**
  - Establish a robust QA/QC plan; update key procedures.
  - Ensure contract compliance.
- **Sustainability & Team Development**
  - Develop environmental training modules.
  - Invest in staff development, career growth, and effective project teams.



## Spotlight: Embracing Continuous Improvement through Kaizen:

Our recent Kaizen event united a cross-functional team to identify and eliminate inefficiencies in our contracting processes. Through collaborative problem-solving, we established process time requirements and developed standard work procedures, reducing contract process times by an estimated two weeks or more.

# Alignment with Milwaukee County's Vision and Goals



AE&ES actively supports Milwaukee County's mission to improve the quality of life through public service and its vision to achieve racial equity and become the healthiest county in Wisconsin.

## Intentional Inclusion

- **Reflecting Diversity:** Promoting diversity within our team and throughout our projects.
- **Supporting Minority Businesses:** Setting participation goals for minority and women-owned businesses on all projects.

## Bridging the Gap

- **Community Engagement:** Prioritizing stakeholder input to ensure projects meet community needs.
- **Collaborative Approach:** Breaking down silos across departments for cohesive service delivery.

## Investing in Equity

- **Upstream Investments:** Addressing root causes of health disparities through infrastructure improvements.
- **Sustainable Design:** Incorporating green building practices and environmental stewardship.
- **Accessible Infrastructure:** Designing projects that promote equitable access to public facilities and services.

## Conclusion



AE&ES is proud to be a vital partner in Milwaukee County's commitment to deliver equitable, innovative, and sustainable infrastructure solutions. Our dedicated team embraces a culture of continuous improvement, focusing on excellence, transparency, and collaboration. Together, we are building a resilient future for all Milwaukee County residents.





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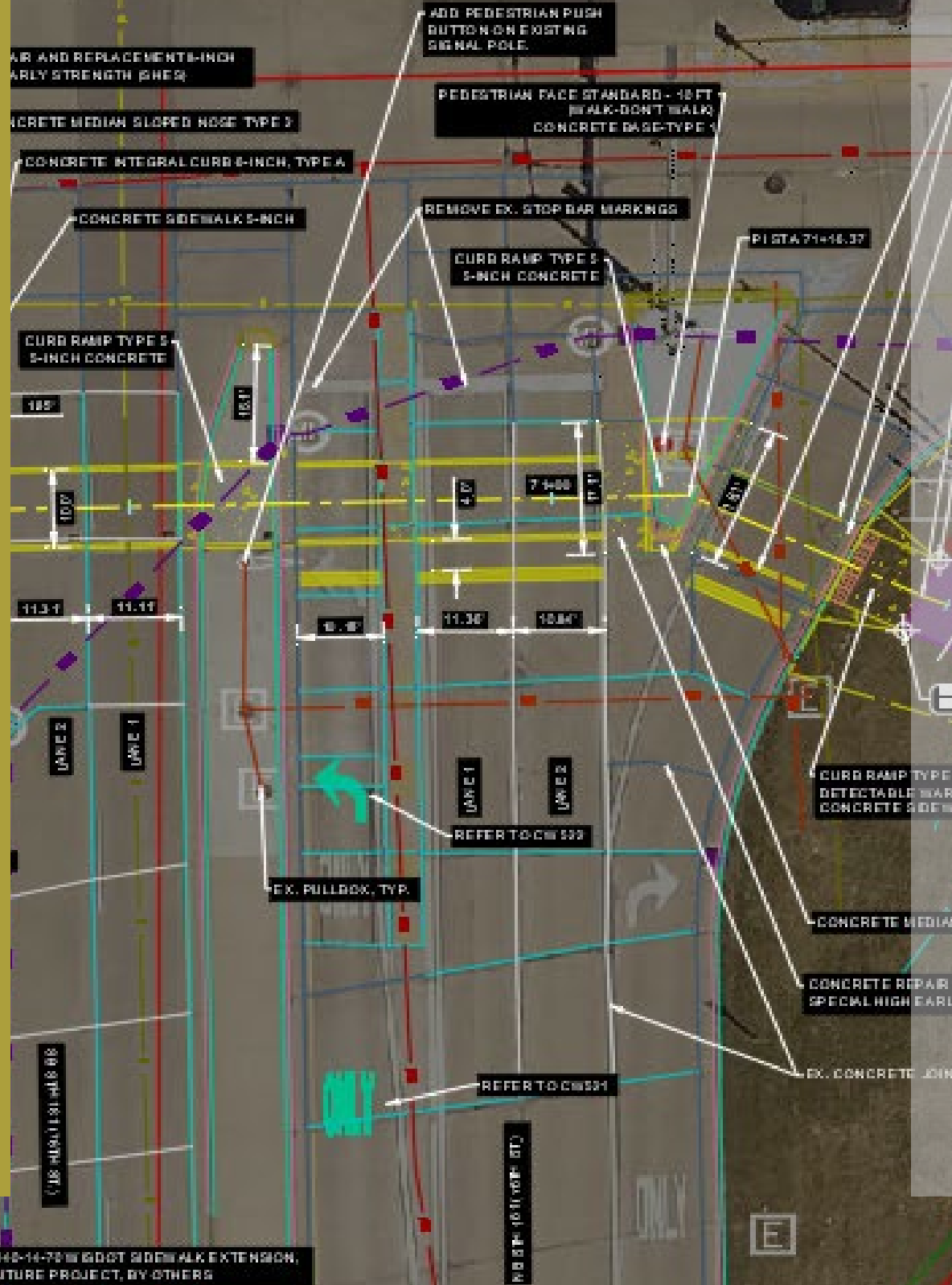
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Appendix A:  
 Org Chart and  
 Contact Info



# Architecture, Engineering, and Environmental Services Organization Chart and Contact Information December 2024

## AE&ES

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## COPA Unit

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## Project Management Unit

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## Airport Engineering Unit

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Principal Airport Engineer

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## Architecture Unit

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Principal Architect

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## Environmental Services Unit

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Principal Environmental Engineer

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## Site Development Unit

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