

Pennsylvania Department
of General Services

Department of Transportation
Pittsburgh Tunnels

TEN's Response to
Request for Quotes

for a

Guaranteed Energy Savings Project

Volume I:
Technical Submittal

DGS GESA 2025-2

September 30, 2025-2:00 p.m.

TEN-1501 Reedsdale Street-Pittsburgh, PA 15233



Quote Signature

Offeror's Representations and Authorizations. Offeror by signing on the signature page and submitting its Quote understands, represents, acknowledges, and certifies that:

1. All information provided by, and representations made by, the Offeror in the Quote are material and important and will be relied upon by the Issuing Office in awarding the contract(s). Any misstatement shall be treated as fraudulent concealment from the Issuing Office of the true facts relating to the submission of this Quote. A misrepresentation shall be punishable under 18 Pa. C.S. § 4904.
2. No attempt has been made or will be made to induce any firm or person to refrain from submitting a Quote on this contract, or to submit a Quote higher than this Quote, or to submit any intentionally high or noncompetitive Quote or other form of complementary Quote.
3. The Quote is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive Quote.
4. To the best knowledge of the person signing the Quote for the Offeror, the Offeror, its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four (4) years been convicted or found liable for any act prohibited by State or Federal law in any jurisdiction, involving conspiracy or collusion with respect to bidding or proposing on any public contract, except as disclosed by the Offeror in its Quote.
5. To the best of the knowledge of the person signing the Quote for the Offeror and except as otherwise disclosed by the Offeror in its Quote, the Offeror has no outstanding, delinquent obligations to the Commonwealth including, but not limited to, any state tax liability not being contested on appeal or other obligation of the Offeror that is owed to the Commonwealth.
6. The Offeror is not currently under suspension or debarment by the Commonwealth, or any other state, or the federal government. If the Offeror has received, within three years of the issuance of this RFQ, a Notice of Default from the Commonwealth, other state or the federal government, then the Offeror shall submit, as part of the Technical Submission, seven copies of a written explanation of why such Notice of Default was issued. This written explanation shall not exceed 1 sheet (2 pages) and shall not count towards the sheet and page limit established for the Technical Submission of the Quote.
7. The Offeror has not, under separate contract with the Issuing Office, made any recommendations to the Issuing Office concerning the need for the services described in the Quote or the specifications for the services described in the Quote.
8. Each Offeror, by submitting its Quote, authorizes all Commonwealth agencies to release to the Commonwealth information related to liabilities to the Commonwealth including, but not limited to, taxes, unemployment compensation, and workers' compensation liabilities.

Appendix A

9. Until the awarded GESA Contractor receives a fully executed and approved written contract from the Issuing Office there is no legal and valid contract, in law or in equity, and the GESA Contractor should not begin to perform.
10. The total energy savings projected in the final scope of work will be at least 95% of the savings projected in the Quote and that the project will be self-funded over the financial term of the project (maximum term of 18 years.)
11. Offeror agrees and certifies in accordance with the enclosed Commonwealth of Pennsylvania:
 - o Nondiscrimination/Sexual Harassment Clause
 - o Tax Liability Certification
 - o Americans Disabilities Act
 - o GESA Contractor Integrity Provisions
 - o GESA Contractor Responsibility Provisions
 - o Environmental Statement
 - o Compliance with State and Federal Statutes, Rules and Regulations
 - o Non-Collusion Affidavit

I am authorized to sign this Quote on behalf of the Offeror, and I agree and state that The Efficiency Network, Inc. (TEN) (Name of Firm) understands and acknowledges that the above representations are material and important and will be relied upon by the Department of General Services in awarding the contract(s) for which this Quote is submitted. I understand, and my firm understands, that any misstatement shall be treated as fraudulent concealment from the Department of General Services of the true facts relating to the submission of this Quote.



Signature

Troy Geanopulos

Print Name Legibly

CEO

Title

NONCOLLUSION AFFIDAVIT

State of Pennsylvania _____:

DGS Project Number: GESA 2025-2


County of Allegheny _____: s.s.

I state that I am the CEO (Title) of The Efficiency Network, Inc. (TEN) (Name of Firm) and that I am authorized to make this affidavit on behalf of my firm, and its owners, directors, and officers. I am the person responsible in my firm for the prices(s) and the amount of this Quote.

I state that:

1. The price(s) and amount of this Quote have been arrived at independently and without consultation, communication or agreement with any other contractor, Offeror, or potential Offeror.
2. Neither the price(s) nor the amount of this Quote, and neither the approximate price(s) nor approximate amount of this Quote, have been disclosed to any other firm or person who is an Offeror or potential Offeror, and they will not be disclosed before the Quote submission date.
3. No attempt has been made or will be made to induce any firm or person to refrain from proposing on this contract, or to submit a Quote higher than this Quote, or to submit any intentionally high or noncompetitive Quote or other form of complementary Quote.
4. The Quote of my firm is made in good faith and not pursuant to any agreement or discussion with, or inducement from, any firm or person to submit a complementary or other noncompetitive Quote.
5. The Efficiency Network (TEN) (Name of Firm) its affiliates, subsidiaries, officers, directors, and employees are not currently under investigation by any governmental agency and have not in the last four years been convicted or found liable for any act prohibited by state or federal law in any jurisdiction, involving conspiracy or collusion with respect to proposing and/or bidding on any public contract, except as follows:

I state that The Efficiency Network (TEN) (Name of Firm) understands and acknowledges that the above representations are material and important and will be relied upon by the Department of General Services in awarding the contract(s) for which this Quote is submitted. I understand, and my firm understands, that any misstatement in this affidavit is and shall be treated as fraudulent concealment from the Department of General Services of the true facts relating to the submission of this Quote.



(Signature)
Troy T. Beansopoulos

(Signatory's Printed Name)
Notary Public
CEO

(Signatory's Title)

SWORN TO AND SUBSCRIBED
BEFORE ME THIS 10th DAY OF August
2025.


My Commission Expires 08/22/2026

Commonwealth of Pennsylvania - Notary Seal
MEGAN SOWERS, Notary Public
Allegheny County
My Commission Expires August 22, 2026
Commission Number 1339653

Appendix B



WORKER PROTECTION AND INVESTMENT CERTIFICATION FORM

A. Pursuant to Executive Order 2021-06, *Worker Protection and Investment* (October 21, 2021), the Commonwealth is responsible for ensuring that every worker in Pennsylvania has a safe and healthy work environment and the protections afforded them through labor laws. To that end, contractors and grantees of the Commonwealth must certify that they are in compliance with Pennsylvania's Unemployment Compensation Law, Workers' Compensation Law, and all applicable Pennsylvania state labor and workforce safety laws including, but not limited to:

1. Construction Workplace Misclassification Act
2. Employment of Minors Child Labor Act
3. Minimum Wage Act
4. Prevailing Wage Act
5. Equal Pay Law
6. Employer to Pay Employment Medical Examination Fee Act
7. Seasonal Farm Labor Act
8. Wage Payment and Collection Law
9. Industrial Homework Law
10. Construction Industry Employee Verification Act
11. Act 102: Prohibition on Excessive Overtime in Healthcare
12. Apprenticeship and Training Act
13. Inspection of Employment Records Law

B. Pennsylvania law establishes penalties for providing false certifications, including contract termination; and three-year ineligibility to bid on contracts under 62 Pa. C.S. § 531 (Debarment or suspension).

CERTIFICATION

I, the official named below, certify I am duly authorized to execute this certification on behalf of the contractor/grantee identified below, and certify that the contractor/grantee identified below is compliant with applicable Pennsylvania state labor and workplace safety laws, including, but not limited to, those listed in Paragraph A, above. I understand that I must report any change in the contractor/grantee's compliance status to the Purchasing Agency immediately. I further confirm and understand that this Certification is subject to the provisions and penalties of 18 Pa. C.S. § 4904 (Unsworn falsification to authorities).

Signature <i>MGM</i>	Date 08.12.25
Troy Geanopoulos	
Name (Printed)	
CEO	
Title of Certifying Official (Printed)	
The Efficiency Network, Inc.	
Contractor/Grantee Name (Printed)	

BOP-2201
Published: 02/07/2022

RESPONSIVENESS CHECKLIST

RFQ Project Number	DGS GESA 2025-2
Offeror's Name	The Efficiency Network, Inc. (TEN)
Office of Chief Counsel Rep:	Date:
Bidding Unit Representative	Date:

Mandatory Submittal Requirements

Indicate in the spaces provided if the Quote meets each of following mandatory Quote requirements. Any Quote that has a "No" checked will be rejected as non-responsive.

Mandatory Requirements	Yes	No
Offeror appears on DGS' list of plan holders	✓	-
Technical, ECM/Cost, SDB/VBE submittals included and separately sealed	✓	-
If Offeror is a Joint Venture:	-	✓
• Joint Venture Agreement submitted	-	-
• Entity Authorization to Enter into Joint Venture is included	-	-
Non-Collusion Affidavit properly completed and notarized	✓	-
• If Joint Venture, one Non-Collusion Affidavit for each entity	-	-
Quote Signature properly completed and signed	✓	-
Technical Quote contains no project specific cost submission information	✓	-
SDB Participation Submission (SDB-2) completed	✓	-
SDB Utilization Schedule (SDB-3) completed	✓	-
• If SDB goal not met in part or full, Good Faith Efforts Waiver Request completed	-	-
VBE Participation Submission (VBE-2) completed	✓	-
VBE Utilization Schedule (VBE-3) completed	✓	-
• If VBE goal not met in part or full, Good Faith Efforts Waiver Request completed	-	-
Worker Protection and Investment Form (Appendix T) properly completed and signed	✓	-

Transmittal Letter

September 30, 2025

Ms. Becky Tomlinson
Procurement Specialist 3
DSG Energy Management Office
401 North Street, Room 403
Harrisburg, PA 17120

RE: TEN Response to Request for Quotes for a Guaranteed Energy Savings Project | Pennsylvania Department of Transportation's Pittsburgh Tunnels | DGS GESA 2025-2

Dear Ms. Tomlinson:

The Efficiency Network, Inc. (TEN) is pleased to submit this response to the Pennsylvania Department of Transportation (PennDOT) request for quotes (RFQ) for a guaranteed energy savings act (GESAs) project issued by the Pennsylvania Department of General Services (DGS). This response includes energy efficiency solutions for PennDOT's Pittsburgh Tunnels.

TEN is a nationally accredited energy services company (ESCO) headquartered in Pittsburgh, strategically located within a few miles of all three tunnels. With 100% of our business dedicated to ESCO-specific work, we bring unmatched local expertise and commitment to energy transformation projects for the Commonwealth and for Pittsburgh.

TEN has successfully delivered nearly \$500 million in guaranteed performance contracts and can be counted by our customers on to deliver the best value, highest quality project, in the safest manner while minimizing the impact on the transportation network. TEN's customers find us to be an approachable, flexible organization focused on customer satisfaction and responsiveness. Our project team and our entire senior leadership team are focused on the needs of PennDOT across the project lifecycle.

**TEN has never failed
to meet an energy
savings guarantee.**

On behalf of TEN, thank you for the opportunity to submit this proposal for the PennDOT Pittsburgh Tunnels project. We confirm our response aligns with all terms included in RFQ DGS GESA 2025-2, and we acknowledge Bulletins 1-3. Our response will remain valid for 180 calendar days from the quote submission deadline. TEN is a pre-qualified vendor with DGS (Vendor No. 406246), and I am authorized to bind TEN to the provisions of this GESAs contract.

We value our ongoing partnership with the Commonwealth and are eager to deliver meaningful results through this initiative. Should you have any questions, please do not hesitate to contact me directly.

Sincerely,



Troy Geanopulos | Chief Executive Officer | 1501 Reedsdale Street, Suite 401, Pittsburgh, PA 15233 |
(412) 576-5002 | troy.geanopulos@tensaves.com

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Executive Summary

TEN is pleased to submit this response to PennDOT’s Request for Quotes for a GESA project, issued by the Pennsylvania DGS. Our proposal presents a comprehensive solution for the Pittsburgh Tunnels, designed to deliver **maximum value through energy savings, infrastructure modernization, and operational reliability**—all executed with an unwavering commitment to safety and minimizing impact on traffic flow. As a Pennsylvania-based ESCO strategically headquartered in Pittsburgh—just minutes from the project site—TEN offers unmatched proximity, responsiveness, and local insight. Our team combines robust in-house capabilities with a carefully selected group of consultants and contractors who bring direct experience with PennDOT and the Pennsylvania Turnpike. This ensures that we will execute each aspect of the project with precision, safety, and efficiency. TEN is fully prepared to deliver a transformative project that not only addresses deferred maintenance but also enhances tunnel operations, reduces long-term costs, and supports PennDOT’s mission to keep Pennsylvania moving—safely and sustainably.

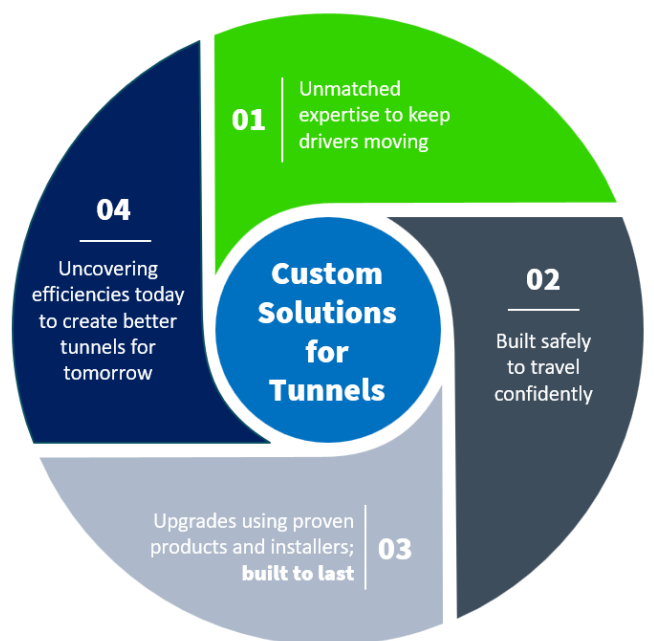
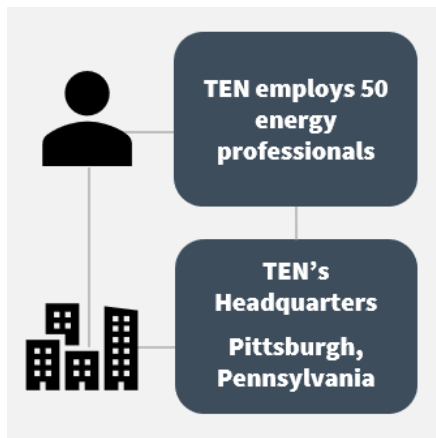
Our energy savings only solution achieves all stated objectives in a **budget-neutral project which fully pays for itself through savings** and includes many core energy conservation measures (ECMs) plus other ECMs that will further enhance the project financials. By including energy related cost savings (ERCS), we believe PennDOT can complete even more work, include more ECMs, and further improve PennDOT’s facilities and operations.

TEN has pre-selected and assembled an experienced team with direct tunnel and GESA project expertise, strategically selected to deliver a seamless, high-value solution across all three tunnels. Our approach is rooted in collaboration—from design through execution—ensuring that every phase of the project is coordinated, efficient, and aligned with PennDOT’s operational priorities.

This initiative stands apart from typical PennDOT projects by focusing on transportation infrastructure itself, rather than facilities – and we recognize that the approach to the work is equally unique. These tunnels are vital highway assets, and any lane closures or construction activities will have immediate and measurable impacts on regional traffic flow. That’s why our team is engineered to avoid costly errors and delays through proactive planning, precise execution, and deep familiarity with tunnel operations.

PROJECT HIGHLIGHTS

- **Nationally accredited ESCO** with significant roadway experience; headquartered in Pittsburgh
- Contracting team specifically **experienced in these Pittsburgh Tunnels**.
- **WSP design consultant** that chairs the Illuminating Engineering Society’s committee on tunnel lighting



TEN's Team of Tunnel Experts

TEN <i>Prime contractor</i>	Project leadership, coordination, delivery
WSP <i>Design consultant</i>	Tunnel lighting expertise, design, technical oversight
Thoroughbred Electric <i>Electrical subcontractor</i>	Electrical systems installation, integration
McKamish, Inc. <i>Mechanical subcontractor</i>	Mechanical systems, including ventilation and tunnel-specific infrastructure
Mosites Construction <i>Roadway subcontractor</i>	Highway construction, structural work, traffic flow management
TEN <i>Construction team</i>	Scheduling, safety, quality control, PennDOT coordination

This project demands excellence. The project must be delivered safely, with durable products, thoughtful design, and expert installation that reduce energy and maintenance costs while minimizing disruption—both

during construction and for years to come. TEN's resume includes both national and regional roadway experience, including LED streetlighting upgrades for the City of Pittsburgh and Duquesne Light Company (DLC). Our team includes experts in electrical, mechanical, and highway construction with direct experience working on the tunnels proposed in this RFQ.

Our design consultant, WSP, installed the original fixtures and led the recent PA Turnpike tunnel LED upgrades. They also chair the Tunnel Lighting Committee for the Illuminating Engineering Society (IES).

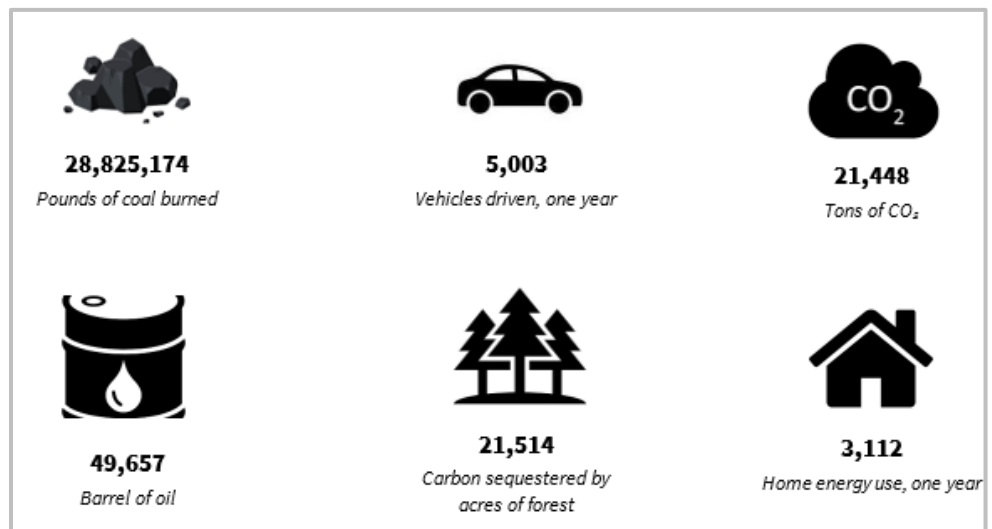


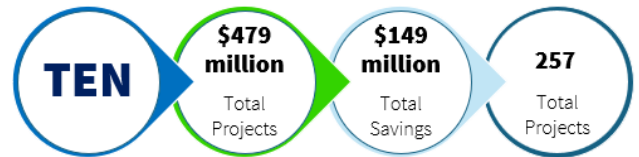
Figure 1: Potential environmental impact of PennDOT's project

Table 1: TEN’s Customized Approach to PennDOT’s Project

<p>Tailored Communications: TEN will implement a well-aligned plan that matches PennDOT’s communication strategies, ensuring regular engagement in coordination with the agency, and informative and transparent communication with DGS.</p>	<p>Result: Better coordination, less confusion, reduced interruptions, better risk mitigation, and escalation</p>
<p>Safety Focused: TEN has partnered with some of the Commonwealth’s leading tunnel experts, assembling a team specifically for their proven record in delivering transportation projects safely.</p>	<p>Result: Enhanced public safety, reduced risk, and peace of mind</p>
<p>Cross-Disciplinary, Customized Solutions: TEN’s team of specialized mechanical, electrical, and lighting experts deliver an integrated approach – from design through delivery – that are constructable today and engineered to maximize energy savings and last for decades.</p>	<p>Result: Fewer unexpected issues and associated shutdowns, reduced operational disruptions and costs, and lower maintenance costs through the tunnel lifecycle</p>
<p>Transparent Pricing: TEN is prepared to manage project costs using direct purchase of equipment, facilitating a transparent competitive procurement process on PennDOT’s behalf, and validating pricing based on our team’s direct experience delivering solutions for these tunnels.</p>	<p>Result: Subcontractors with the right resources and experience, equipment uniformity across tunnels, and solutions at the right price</p>

Snapshot of TEN

TEN is a subsidiary of Duquesne Light Holdings, Inc. (DLH), a community partner in Western Pennsylvania since 1884. TEN is a lean company with a low cost structure backed by the solid financial foundation from DLH with \$5 billion in assets and investment grade credit. As one of only 19 ESCOs qualified under the U.S. Department of Energy IDIQ ESPC contract, TEN is a proven provider of GESA services based on the rigorous qualifications and scrutiny of the federal government.



TEN • QUALIFIED • ACCREDITED • CERTIFIED

Logos displayed include: Pennsylvania Department of General Services, U.S. Department of Energy, NAESCO (National Association of Energy Service Companies), Maryland Department of General Services, Maryland Clean Energy Center, and DMME (Virginia Department of Mines Minerals and Energy).

Project Management Team Overview

Section 2-5.1

CUSTOMER QUOTE: GREATER JOHNSTOWN CAREER/TECHNOLOGY CENTER

"I have been a Director for over 20 years, and I've never seen this level of customer service. TEN understands our needs and has been committed to a successful delivery of our project. It is exactly the right way to do business."

John Augustine, Administrative Director, Greater Johnstown Career and Technology Center

◆ Main Project

Total Use=2540 Hrs.

2-5.1(A): Project Team Organizational Chart

TEN’s project team is illustrated below in Figure 2. David Robb, Greg Lok, P.E., CMVP, CEM, Matt Morris, DBIA®, EIT, LEED AP®, and Wayne Chase, EIT, CMVP, LEED AP® all facilitate in lead roles during the solution development and IGA, pre-construction, construction, and post-construction phases, respectively.

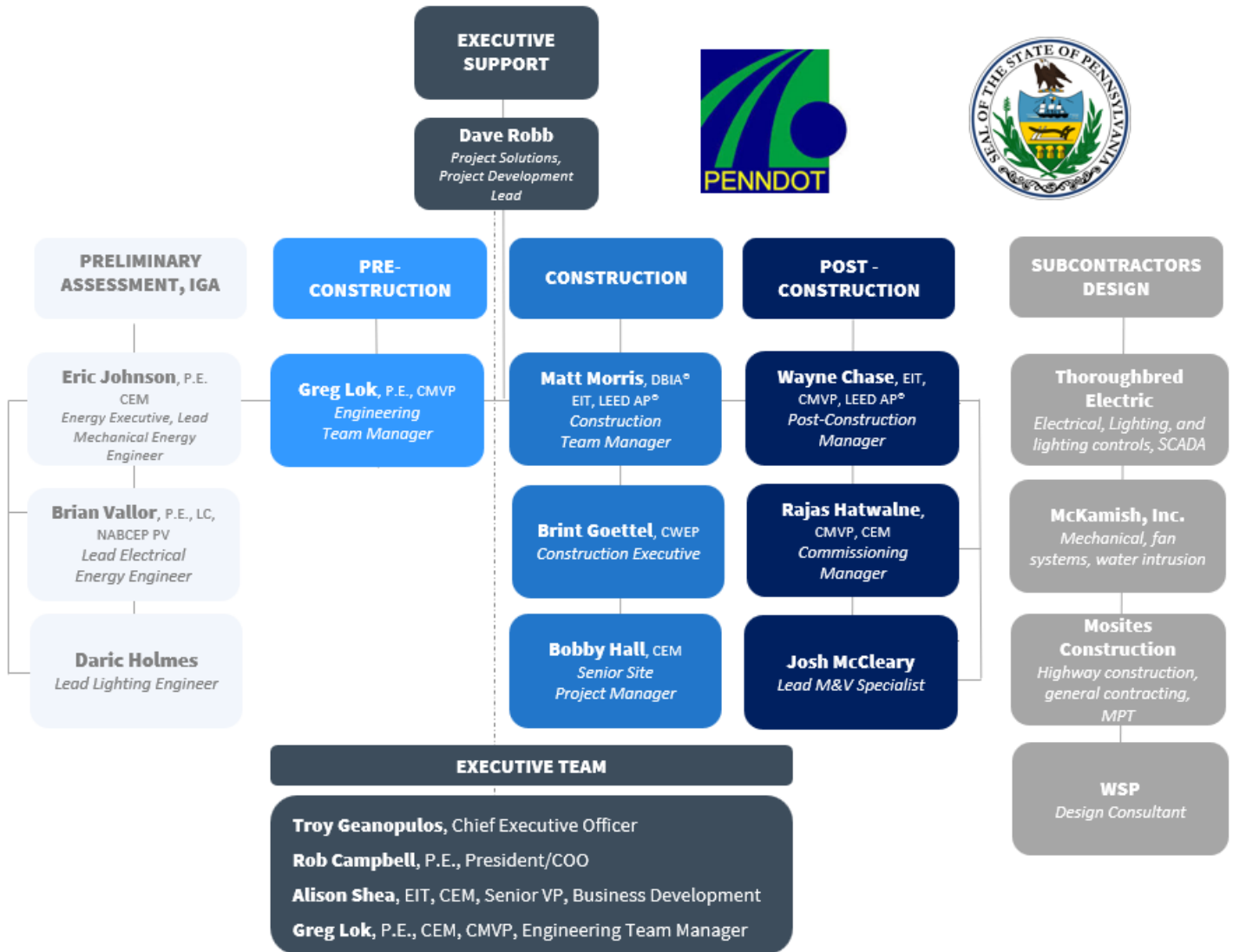


Figure 2: TEN’s Organizational Chart for Pittsburgh Tunnels

2-5.1(B): Project Management Responsibilities

The individuals assigned to lead roles have experience delivering projects and working together seamlessly on Commonwealth GESA projects, including the State Correctional Institution, Houtzdale; Wernersville State Hospital; the Pennsylvania State Capitol Complex; and Penn State campuses projects. The TEN team has also completed LED streetlighting upgrade projects for the cities of Pittsburgh, Cleveland, Harrisburg, Bethlehem, Portland, and Duquesne Light Company. Each role and their interrelationships are described below and in Section 2.5.2-A, Logistics and Execution Strategy.

TEN Key Personnel for PennDOT’s Project

- David Robb, Project Solutions Manager and Project Development Lead:** Dave serves as program manager for TEN’s DGS GESA response team. For this project, Dave is responsible for leading team activities during the project development and IGA phases, specifically solution development to align with PennDOT specifications, coordination of resources, and communication internally and with the agency, district/tunnel staff, and DGS. Dave has over 30 years of energy-related experience and has significant experience in this role on other DGS GESA projects. Dave will remain engaged in a supporting role during construction and post-construction to make sure the project delivery aligns with PennDOT’s and DGS’ expectations. Dave worked on the following DGS projects: Thaddeus Stevens College, Keystone Pennsylvania Judicial Center (PJC), the Pennsylvania Capitol Complex, State Correctional Institution, Houtzdale, and Wernersville State Hospital.
- Greg Lok, P.E., CMVP, CEM, Engineering Team Manager:** Greg manages TEN’s engineering group responsible for design and ECM cost and savings development. Greg and his team will have lead roles during the IGA and pre-construction phases and provide a supporting role during construction and post-construction to make sure that project delivery aligns with design. Greg worked on DGS projects including Thaddeus Stevens College, Keystone PJC, the Pennsylvania Capitol Complex, SCI Houtzdale, and Wernersville State Hospital.
- Eric Johnson, P.E., CEM, Energy Executive and Lead Mechanical Energy Engineer:** Eric will lead engineering activities during IGA and pre-construction including ECM, scope, and subcontractor scope development. He will be responsible for coordinating the work of the supporting engineers to ensure consistency in design. As lead mechanical energy engineer, he will develop mechanical, water intrusion, and controls ECMs. Eric will support the construction team during project delivery, ensuring project delivery meets design intent.
- Brian Vallor, P.E., LC, NAPCEP PV, Lead Electrical Energy Engineer:** Brian will support Eric, and will be responsible for developing electrical-related ECMs. Brian will help the construction team during project delivery to ensure project delivery meets design intent for those ECMs under his lead. Brian worked on projects at Wernersville State Hospital and the University of Pittsburgh.
- Daric Holmes, Senior Project Lighting Designer:** Daric will develop the tunnel lighting, auxiliary lighting, and lighting controls solution with our tunnel design lighting consultant, Michael Maltezos from WSP. Michael also chairs the IESNA Tunnels and Underpasses Lighting Committee, and Daric has 29 years of experience auditing, designing, and implementing lighting solutions like those for this project. Daric has supported projects at the Pittsburgh International Airport, City of Pittsburgh Streetlighting, Thaddeus Stevens College, Keystone PJC, the Pennsylvania Capitol Complex, SCI Houtzdale, and Wernersville State Hospital.
- Matt Morris, DBIA®, EIT, LEED AP®, Construction Team Manager:** Matt manages TEN’s construction group and is directly responsible for construction leadership oversight. Matt and his team will have leading roles during construction, will oversee the project safety plan, and will also support project development to ensure design concepts are constructable and that scopes of work and bid specifications are accurate. Matt worked on DGS projects at the Pennsylvania Capitol Complex, SCI Houtzdale, and Wernersville State Hospital.



- **Brint Goettel, CWEP, Construction Executive:** Brint will lead project construction management. He will be responsible for coordinating the tunnel work with Bobby Hall to ensure consistency in delivery and safety. Brint is responsible for managing program-wide subcontractor selection, project schedule, cost, logistics, quality of delivery, safety, and construction communication including regular monthly meetings with the larger DGS, agency, and Pittsburgh Tunnels group. With eight years of experience at TEN, Brint is particularly skilled at organizing and maintaining the timelines of TEN’s most complex projects.
- **Bobby Hall, CEM, Senior Site Project Manager:** Bobby will work as the senior site project manager, and will be responsible for managing logistics, schedule, and coordination of work at the tunnels. He will establish and lead site project manager communication and communication plans. Bobby is a master electrician and his experience includes oversight of TEN’s major electrical system focused projects.
- **Rajas Hatwalne, CMVP, CEM, Commissioning Manager:** Rajas will lead TEN’s commissioning efforts during project closeout. Rajas will work closely with and in a supporting role to the engineering team during development and construction and will be responsible for all commissioning-related documentation and communication post-construction. Rajas worked on DGS projects including Thaddeus Stevens College, Keystone PJC, the Pennsylvania Capitol Complex, SCI Houtzdale, and Wernersville State Hospital.
- **Wayne Chase, EIT, CMVP, LEED AP®: Post-Construction Manager:** Wayne manages TEN’s post-construction services, which include measurement and verification (M&V), training, commissioning, and operations and maintenance (O&M) services. Wayne and his team will have lead roles during post-construction and will provide a supporting role during development and construction to ensure pre- and post-measurements, and M&V strategies align with PennDOT and DGS preferences on reporting project performance. Wayne worked on DGS projects including Thaddeus Stevens College, Keystone RJC, the Pennsylvania Capitol Complex, SCI Houtzdale, and Wernersville State Hospital.
- **Josh McCleary, Lead M&V Engineer:** Josh will support Wayne with all M&V pre- and post-construction activities.

EMPLOYEE SPOTLIGHT: BOBBY HALL

Bobby has 26 years of ESCO experience in diverse fields including airfields, military bases, hospitals, and commercial buildings.

At TEN, Bobby manages TEN’s Allegheny County Airport Authority/Pittsburgh International Airport’s taxiways and runway (airfield) lighting, a complex logistical environment between the Airport, ACAA, FAA, and air traffic controllers to install airfield lighting.

Bobby’s customer-focused expertise is an asset at TEN’s City of Pittsburgh’s Streetlighting project. He helped the City select equipment and controls systems, and he went one step further by demonstrating each system to the customer before selection.

TEN’s Team of Tunnel Subcontractors

Table 2 is a list of TEN’s subcontractors for this PennDOT project.

Table 2: List of Subcontractors for PennDOT Pittsburgh Tunnels Project

Subcontractors		Specialty
1.	Thoroughbred Electric	Electrical, lighting, lighting controls, SCADA
2.	McKamish, Inc.	Mechanical, fan systems, water intrusion
3.	Mosites Construction	Highway construction, general contracting, MPT

Subcontractor Selection Process

For this project, TEN has strategically pre-selected key local subcontractors based on their proven quality, extensive experience with tunnel and highway infrastructure, and proximity of resources to the tunnels. This deliberate approach is designed to secure the most capable and dependable partners on behalf of PennDOT, ensuring that the project benefits from deep regional expertise and team efficiency. By engaging these subcontractors early, the team will collaborate seamlessly from design through construction, enabling greater insight, proactive problem-solving, and alignment throughout the project lifecycle. This integrated delivery model will help resolve potential issues during the design phase rather than during construction, significantly reducing the risk of tunnel shutdowns and traffic disruptions caused by avoidable errors. For any other subcontractors, our approach is to secure the right price from the most experienced subcontractors through competitive material pricing and direct subcontractor negotiation, and then to provide transparent pricing for PennDOT to aid in decision making. TEN will assume the risk for cost overruns associated with non-material changes to the scope during construction, and PennDOT retains the right of final contractor selection among the pre-qualified bidders.

Small Diverse Business and Veteran Business Enterprise Participation

As an independent ESCO without any bias to use in-house sources for portions of the project scope, TEN can help PennDOT and DGS maximize small diverse business (SDB) and veteran business enterprise (VBE) participation. We strategically develop scope packages to create opportunities for SDB and VBE entities. For this project, we plan to purchase materials directly through an SDB stocking distributor and leverage our majority subcontractors to flow down scopes like traffic control to MBE entities. TEN maintains a list of pre-qualified SDB/VBE contractors and we engage with local business organizations including ASA and Procore Network. TEN has a flawless history of meeting specified SDB/VBE goals, exceeding 60% participation when that was a key objective of the GESA program.

	Safety	Financial	References	Ethical Standards	Bonding, Insurance
Table 3: TEN's Subcontractor Qualification Approach	<ul style="list-style-type: none"> • EMR less than 1 • Review of OSHA 300 logs • Established safety programs in place or needed 	<ul style="list-style-type: none"> • Status of lines of credit • Types and sizes of projects • Positive financial ratings and reports 	<ul style="list-style-type: none"> • Positive contractor references • Positive customer references • Customer type experience • Relevant project experience 	<ul style="list-style-type: none"> • Compliance with TEN's ethical standards • Ethics certification statements • Non-negotiable ethics terms 	<ul style="list-style-type: none"> • Bonding capacity • Maximum project size • Maximum project aggregate size • Compliance with TEN's insurance requirements

2-5.1(C)-1: Key Project Assignments

Table 4 identified the detailed responsibilities associated with each project role. Individuals assigned to each role are identified by name above in Section 2-5.1(A), Project Team Organizational Chart.

Table 4: TEN’s Assignment of Duties by Role for PennDOT’s Tunnel Project

Tasks Team Members	Project Solution Manager	Lead Mechanical Engineer	Project Designer	Lead Electrical Engineer	Construction Executive	Project Manager	Post- Construction	M&V, Cx
Preliminary Assessment and Selection								
Energy Use Intensity	-	✓	✓	✓	-	-	-	-
Preliminary Audit	✓	✓	✓	✓	✓	-	-	-
Identify Initial ECMs	✓	✓	✓	✓	✓	-	-	-
Estimate Initial Costs	✓	✓	✓	✓	✓	-	-	-
Prepare Savings Calculations	✓	✓	✓	✓	-	-	-	-
Scopes of Work Narratives	✓	✓	✓	✓	✓	-	-	-
Development								
Energy Use Intensity	-	✓	✓	✓	-	-	-	✓
Investment Grade Audit	✓	✓	✓	✓	✓	✓	-	-
Scopes of Work	✓	✓	✓	✓	✓	✓	-	✓
Estimate Final Costs	✓	✓	✓	✓	✓	-	-	
Finalize Savings Calculations	✓	✓	✓	✓	-	-	-	✓
Prepare Cash Flow	✓	-	-	-	-	-	-	-
Delivery								
Select Subcontractors	✓	✓	✓	✓	✓	✓	-	-
Project Management	-	-	-	-	✓	✓	-	-
Subcontractor Oversight	-	-	-	-	✓	✓	-	-
Conduct Training	-	✓	✓	✓	✓	✓	✓	✓
Schedule	✓	-	-	-	✓	✓	-	-
Post-Construction								
M&V	-	✓	✓	-	✓	-	-	✓
O&M Support	✓	-	-	-	✓	✓	✓	✓
Ongoing Training	✓	✓	✓	✓	✓	✓	✓	✓

2-5.1(C)-2: Percentage of Time Key Personnel Assigned

Table 5 specifies the key project team members’ years of experience, and the percentage of time each team member will spend on this project during the audit, construction, and post-construction phases.

Table 5: Percentage of Time that Key Personnel are Assigned to this Project

Key Personnel Roles for PennDOT Tunnels		Years of Experience	Audit Phase	Construction Phase	Post-Construction
1.	David Robb <i>Project Solutions Manager, Project Development Lead</i>	30	40%	5%	20%
2.	Greg Lok, P.E., CMVP, CEM <i>Engineering Team Manager</i>	29	10%	5%	5%
3.	Eric Johnson, P.E., CEM <i>Energy Executive, Lead Mechanical Energy Engineer</i>	30	75%	15%	25%
4.	Daric Holmes <i>Designer for Lighting and Lighting Controls</i>	29	80%	15%	5%
5.	Brian Vallor, P.E., LC, NABCEP PV Associate <i>Electrical Energy Engineer</i>	19	80%	15%	5%
6.	Matt Morris, DBIA®, EIT, LEED AP® <i>Construction Team Manager</i>	21	10%	15%	5%
7.	Brint Goettel, CWEP <i>Construction Executive</i>	8	25%	100%	25%
8.	Bobby Hall, CEM <i>Senior Site Project Manager</i>	26	15%	100%	25%
9.	Wayne Chase, EIT, CMVP, LEED AP® <i>Post-Construction Manager</i>	30	10%	5%	25%
10.	Rajas Hatwalne, CMVP, CEM <i>Commissioning Manager</i>	15	10%	25%	50%
11.	Josh McCleary <i>Lead M&V Specialist</i>	2	10%	30%	50%

2-5.1(C)-3: Construction, Repairs, Service, and Emergencies

- **Construction Management Capabilities:** TEN will maintain an onsite presence throughout the construction phase. Our team includes a construction executive, Brint Goettel, with oversight of and working in close coordination with the site project manager Bobby Hall. Neil Derr will work as the safety program manager in all tunnels. All three are directly employed by TEN with significant experience and ability as described in Table 6, TEN Construction Management Capabilities for PennDOT Tunnels, on the following page.
- **The project managers will share onsite supervision** to align with day and night shift work, while Brint will facilitate as the primary point of contact for the PennDOT tunnel managers and maintain responsibility for project-wide logistics, schedule management, and broad team communication and engagement with PennDOT and DGS. TEN is proposing this project management strategy to make sure PennDOT receives expertise in all areas of the project – general contracting and construction management, mechanical construction and site supervision, and electrical construction and site supervision.

TEN had **zero OSHA recordable incidents** in 2024 in over 79,000 hours worked by TEN and its subcontractors.

Table 6: TEN Construction Management Capabilities for PennDOT Tunnels

Construction Team Manager	Construction Executive	Senior Site Project Manager	Safety Manager
Matt Morris, DBIA®, EIT, LEED AP®	Brint Goettel, CWEP	Bobby Hall, CEM	Neil Derr
21 years Experience	8 years Experience	26 years Experience	7 years Experience
State Correctional Institution Houtzdale	Pittsburgh International Airport	Pittsburgh International Airport	Wernersville State Hospital




- **Construction Phase Repairs:** TEN’s construction team will provide any necessary repairs to installed systems during construction. The site project manager will manage directly, and he will respond to and assess all reported issues. We will also provide emergency contact directories for use when reporting issues outside of normal construction hours, in addition to direct access to the site project manager by cell phone.
- **TEN’s Active Warranty Services:** TEN offers active warranty services during the normal one-year warranty period. In addition to correcting any warranty issues PennDOT may report, an active warranty includes regular meetings with each tunnel manager twice per year. TEN will include a list of operational warranty concerns for proactive assessment. This will provide an added layer of protection and ensure warranty communication is in place across the district, the agency, and DGS.
- **Post-Construction Warranty Services:** TEN will warranty work free from defects for one year after acceptance unless otherwise specified or agreed to. We can provide extended warranties on specific equipment when desired. The construction executive will manage all warranty calls post-construction with 24/7/365 accessibility. Working with PennDOT’s input, requests will be prioritized based on urgency.



Safety is our Priority









All TEN’s project managers are certified by OSHA for construction site safety.

Table 7: TEN’s Warranty Services Dispatch Timeframes

Urgent 	Addresses: Service interruption problem of system outage or other major system failure that involves the loss or significant interruption or slowdown of any service to the facility Response: Expedited response within two hours of notification
Priority 	Addresses: Minor failure or intermittent failures that involve any service other than a loss of connectivity Response: Priority response within four hours of notification
Routine Maintenance 	Addresses: Requests for maintenance to properly preserve the equipment's life Response: Normal response within ten business days

- **Ongoing Regular Services:** TEN does not require a maintenance contract. After the project is completed, we will provide PennDOT with O&M manuals, as-built drawings, training, and a customized preventive maintenance plan that supports in-house upkeep. If PennDOT prefers that TEN or our subcontractors provide ongoing services, either comprehensively or on any specific equipment, we will identify the best value source using our proven approach. For this project, TEN is sourcing qualified local contractors for construction which will ensure continuity between installation and maintenance and avoid any disconnects experienced in the past. TEN will also maintain a service log at the agency’s maintenance office.

Table 8: TEN’s O&M Sourcing Approach

TEN’s O&M Expertise		TEN will...
	EXPERIENCE	Verify all service contractors on your behalf
	LICENSES CERTIFICATIONS	Make sure the contractor holds all required licenses and certifications
	REPUTATION REFERENCES	Screen and check references from prior clients
	WORKMANSHIP	Check quality control processes and work guarantees
	SAFETY STANDARDS	Evaluate safety record, protocols, and training
	RESPONSE TIME AVAILABILITY	Confirm availability and historical response times
	COST VALUE OF MONEY	Support you with value-based criteria for all options
	INSURANCE BONDING	Confirm through a rigorous qualification screening that each contractor is insured and bonded; TEN verifies this annually

2-5.1(D): Staffing Commitment Statement

TEN is Committed to Designing and Building PennDOT’s Project

TEN commits that the personnel identified as the project team for the DGS GESA 2025-2 project will not be changed without prior written authorization by DGS.

Work Plan for this Project

Section 2-5.2

CUSTOMER QUOTE: CITY OF PITTSBURGH STREETLIGHTING

“TEN’s coordination was exceptional and they did a great job navigating the logistics and complexities of urban streetlight upgrades for the City of Pittsburgh Streetlighting Project. Their strong ties with Pittsburgh contractors resulted in seamless execution and on-time responsiveness and availability. Their attention to public safety - particularly in high traffic areas - was outstanding. TEN delivered the project with minimal disruption to commuters while keeping crews safe and the project on track.”

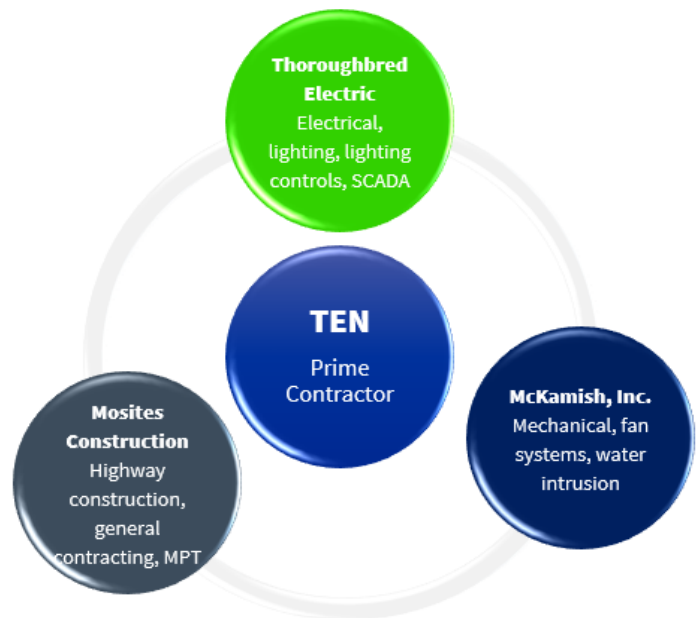
Joe Statler, Senior Manager, Streetlighting/Unmetered Services, Duquesne Light Company

2-5.2(A): TEN’s Work Plan and Approach

Tunnel and transportation experience, highest quality installation, and best in class safety are critical to the success of this project. The impact on local traffic patterns, coordination of nightly lane closures, overall maintenance and protection of traffic (MPT) management allow no margin for error. Best value for this project is measured by doing it right the first time and minimizing long-term repairs and subsequent tunnel shutdowns. To ensure project success, we have pre-selected our contractor team to include companies and personnel with prior experience working in these tunnels, and sources that have completed similar successful tunnel projects for the PA Turnpike and municipalities across the Commonwealth.

Our team knows how to execute the work and develop solutions with these tunnels in mind. Our design consultant project lead is an expert in tunnel lighting design, has been engaged in most of the recent Pennsylvania tunnel lighting upgrades, and has relevant and specifically familiarity with the three tunnels included in this project. Given the critical nature of this project, a conventional standardized GESA approach is insufficient. TEN is proposing a tailored design and construction approach, illustrated in Figure 3, PennDOT Tunnels-Focused Approach, page 14.

TEN’s TEAM OF TUNNEL EXPERTS



Development and IGA Work Approach

TEN’s methodology during this phase of work focuses on long-term solutions, quality of design, reduced maintenance, and maximum savings – designed to withstand time. Unique elements include:

<p>STRATEGIC DEPLOYMENT OF ENGINEERING RESOURCES</p> <ul style="list-style-type: none"> Dedicated engineering teams formed around specific disciplines, leveraging the broader stakeholder group through a collaborative design-assist approach. 	<ul style="list-style-type: none"> Specialized Expertise: Purpose-built team that include specialists with deep, individual expertise in tunnel lighting design, fan systems, MPT planning, tunnel codes, and advanced controls including lighting and SCADA.
<ul style="list-style-type: none"> Standardized ECM Scopes: Leveraging GESA, the design will focus on standardization of systems, equipment, and installation methods across all three tunnels—an advantage not achievable through traditional design-build delivery. The IGA will document the approach and include detailed ECM assessments, scope, and financial analysis. 	<ul style="list-style-type: none"> Quality, Lifecycle, and Maintenance Consideration: The TEN team will approach design with focus on identifying regional maintenance contractors. We will align design decisions to reflect local expertise and service availability.

Construction Phase Work Approach

We recognize that this project is unlike other GESA projects. Our approach to construction is heavily based on aligning our in-house GESA expertise with the transportation and tunnel experience of our subcontractor team – with a focus on safety, the right products, quality of installation, and efficient coordination of work. Our team has relevant

experience and familiarity designing and delivering work in tunnels and performing work to align with MPT specifications governed by Pub 213. TEN's team is experienced with the unique code requirements associated with wiring, conduit, and fixtures associated with tunnels.

TEN Recommendations

Coordination of work is essential. Our team has direct experience performing work in these tunnels and we have studied the project logistics in detail. We have a project specific plan in mind for storage and laydown. We recommend:

1. **Completing each tunnel project sequentially** to minimize regional traffic impact and to make sure that the most experienced trades people are uniformly assigned to each tunnel.
2. **Coordinating nightly shutdowns in close collaboration with PennDOT.** TEN's team is prepared to address the unique nuances associated with the Liberty Tunnel detours and Fort Pitt lane closures, specifically on the city side of Fort Pitt, which are outside of the normal Pub 213 standards.
3. **Planning to avoid shutdowns during high traffic instances, like sporting events.** We recognize that the work schedule will have to reflect the needs of the community.

We have strategically structured our team to include two layers of project management. This approach offers PennDOT the benefit of project management expertise across all areas of general contracting, mechanical trades, and electrical trades. It also maintains TEN-direct project management during the day and night shifts. TEN will measure success through the following outcomes:

Work Plan Success Metrics



Safety as highest priority



Well coordinated execution
Minimize disruption to operations



No reported incidents
MPT-specific safety plan in place



Coauthored shutdown schedules,
premium materials, installation that
withstands time



Meet or beat schedules by
establishing, managing, maintaining
daily/weekly schedules

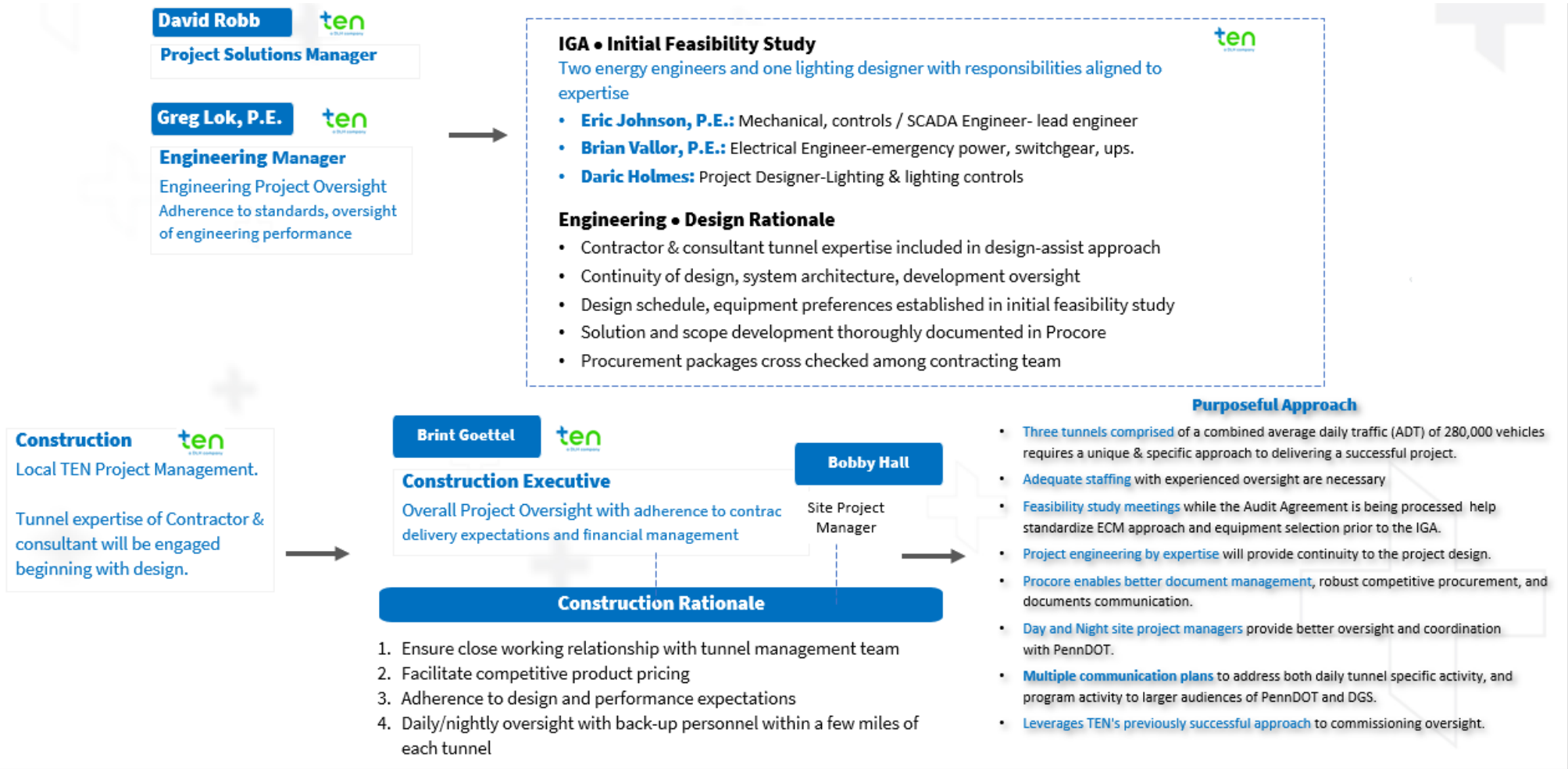


Figure 3: PennDOT IGA and Construction-Focused Approach

ECM Development Minimum Scope of Work

TEN understands the design requirements and a detailed description of the ECMs required in the design phase, by location, is captured in Table 9.

Table 9: PennDOT’s ECM List

General Core ECMs					
All Tunnels					
ECM 1	Convert all lighting to LED	✓	ECM 2	Update, modernize SCADA system	✓
Fort Pitt Tunnels					
ECM 3	Install emergency power systems	✓	ECM 4	Update CO monitoring system	✓
ECM 5	Investigate, repair standpipe water intrusion	✓	ECM 6	Replace, commission supply, exhaust fans	✓
Squirrel Hill Tunnels					
ECM 7	Replace electrical switchgear	✓	ECM 8	Update CO monitoring system	✓
ECM 9	Investigate, repair standpipe water intrusion	✓	ECM 10	Replace, commission supply, exhaust fans	✓

2-5.2(A)-1: Knowledge of Design Process

TEN has completed projects for the Commonwealth and we have a thorough understanding of the DGS process. The design process includes two functional areas combined with a variety of coordination/collaboration activities (Figure 4).

- **Project Startup and Design Kickoff:** TEN is prepared to start work upon notice of selection. In collaboration with PennDOT, we will identify stakeholders from DGS and PennDOT. Working with the tunnel managers and the energy consultant, we will co-author a communication plan to use Procore as a single source for project documentation.
- **TEN will document operational issues,** scope of work, equipment, and subcontractor options and preferences. TEN will work with PennDOT to carefully develop a coordination plan for design and to identify any construction considerations during design. Agreement to site coordination, points of contact, site/operational constraints, lay down areas, material supply logistics, etc., will be discussed to align with the three tunnels in this project. During the period between selection and audit agreement signature, TEN is uniquely proposing an abbreviated feasibility study and strategy session for this project specifically. The goal of this approach is to work with PennDOT to better identify the agency ECM, scope, equipment, and supplier preferences early in the process to help manage the IGA timeline and result in a more customized IGA and solution.

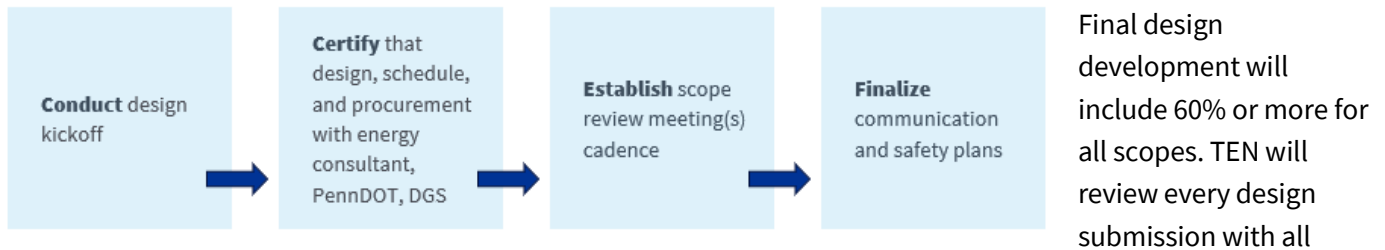


Figure 4: TEN’s Design Process

- **Investment Grade Audit and Pre-Construction Design:** The IGA will be led by the project solutions manager, David Robb, and supported by the engineering team manager, project engineers, and lead designers, all serving in different capacities working collaboratively to address tunnel mechanical, electrical, SCADA controls, LED lighting and lighting controls, and emergency power. The team will work with members of TEN’s energy engineering team for utility analysis. Procure will be used for document and communication recordkeeping and transmittal.

Our PennDOT Tunnels-Focused Approach (Figure 3, page 14) leverages early collaboration by engaging all stakeholders—including trusted local contractors—at the initial design phase. This proactive model customizes and optimizes project scope from the outset, addressing design, constructability, and site-specific maintenance challenges that impact long-term durability. In contrast to design–bid–build, our model reduces the likelihood of costly change orders and mixed results. The final IGA report will describe in detail current conditions, identify opportunities, provide savings projections, and include the IPMVP-compliant M&V protocol, and guaranteed maximum pricing for all ECMs. Final guaranteed savings will be no less than 95% of projected savings, and total project cost will remain within 10% of the quoted amount.

- **Design with Adherence to DGS GESA Project Design Manual:** Pre-construction design begins as soon as we receive notice of selection. TEN’s construction executive is very involved in the IGA to assess constructability and safety as part of the final IGA report recommendations. In cases where needed, 30-35% schematic design may be completed during the IGA for competitive material and labor procurement to determine final pricing and savings guarantees. Once we receive notice to proceed with construction, we will complete all pre-construction activities including:



Final design development will include 60% or more for all scopes. TEN will review every design submission with all stakeholders including PennDOT’s energy consultant(s). Designs and calculations will be reviewed by the project energy executive, our energy team manager, and TEN’s chief operating officer to ensure accuracy and quality control. The final package will include, when appropriate, equipment specifications, drawings, regulatory approvals and permits, and any site or utility reports; this information will form the basis for final material selection and subcontractor award.

2-5.2(A)-2: Potential Design Issues

Table 10 lists some of the potential design issues we believe may exist and our approach to mitigating and solving.

Table 10: Potential Complications and Areas to Minimize Risk









Potential Design Concerns		TEN’s Proposed Solutions
1.	Design timeline. Many design alternatives	TEN’s approach is designed to address this specific issue. TEN’s pre-IGA feasibility study will be used to facilitate early decision-making and establish PennDOT preferences.
2.	Design consistency. Code considerations	TEN will use a design-assist strategy with the Engineer-of-Record and implementation team. The integrated approach optimizes consistency through real-time selection of equipment, approaches, code requirements, among other considerations.

Potential Design Concerns	TEN's Proposed Solutions
3. Inconsistent equipment types. Access to maintenance and services	TEN will: 1) select systems that have shown reliability, durability for the environmental exposures, <u>AND</u> easy parts availability; 2) competitively establish material pricing from major and PennDOT approved manufacturers.

2-5.2(A)-3: Project Management and Execution

TEN has provided an organized approach described in Section 2-5.1, Project Management Overview, to overall project coordination and management including overlapping activities and deep oversight. Philosophically, our approach to project management is based on the approach listed in Table 11.

Table 11: TEN's Project Management Approach

<p>CLEAR ASSIGNMENT RESPONSIBILITIES</p> 	IGA program-wide project management is led by TEN's project development lead who coordinates all internal and external resources, IGA schedule, progress meetings, and document preparation. Construction program-wide project management is led by TEN's construction executive who has been engaged throughout the proposal and IGA process to facilitate a seamless transition from the IGA through final design and construction.
<p>ACCURATE REPORTING</p> 	The senior site project manager, and any additional site project managers that may be called on to manage all project construction activities. TEN uses Procore to quickly and efficiently report progress, concerns, and work scheduled to be performed the following day. This real-time communication will be shared with our construction team manager and PennDOT and DGS project representatives to monitor quality control.
<p>TIMELY DELIVERY</p> 	We provide a well-planned and practical schedule as a guiding star for coordinating work including timing for key decisions and critical path key milestones and activities.
<p>ENGINEERING CONSTRUCTION</p> 	TEN's construction team is engaged during the development phase of the project to make sure the constructability of all proposed solutions, and to collaborate and co-develop the scopes of work that are competitively bid (or negotiated with price reasonableness). The approach provides transparent hand-off from design to construction, quality control, procurement efficiency, and timely delivery.
<p>PROCURE CONSTRUCTION</p> 	TEN uses Procore to organize the many steps in the GESA process and to facilitate instant communication and feedback within the multiple disciplines of our internal team, design consultants, and subcontractors. Procore also helps to streamline and ensure continuity through the project lifecycle. Customers have the option of traditional client communication or project visibility through Procore access.
<p>COMMUNICATION</p> 	Each project has a customized communication plan based on reflecting stakeholders, communication format and cadence, and escalation. We have found Procore to be an effective and organized tool for identifying and resolving open items, communicating access needs, and informing project team members on progress and coordination needs.
<p>SAFETY</p> 	Safety is in TEN's DNA, and safety is measured against key performance indicators that are reported monthly. TEN's safety manager is responsible for collaborating with the team to develop a customized safety plan to align with the specific details associated with each project.
<p>COMMISSIONING</p> 	TEN specifies acceptance procedures for all work, including a detailed commissioning plan outlining activities, participants and roles, schedule, key performance indicators, and testing. TEN's commissioning manager and the construction executive will work closely with PennDOT and the energy consultant to agree on the work quality and performance prior to final turnover.

2-5.2(A)-4: Construction Details

TEN will prepare detailed scope packages and project schedules for all work. The major quote packages listed in the bullets below include scopes of work that include early savings drivers, long lead time equipment, or extended design and permitting requirements. Those items noted in bold require early construction packages to meet critical path key milestones based on lead times.

<ul style="list-style-type: none"> Generators, electrical system upgrades 	<ul style="list-style-type: none"> Tunnel light fixtures, lighting controllers, panels
<ul style="list-style-type: none"> SCADA system components 	<ul style="list-style-type: none"> Fans systems

Long Lead Time Items

Table 12 lists ECM estimated lead times. Where minimum quality or specific equipment preferences are established, and long lead time risk exists, TEN will competitively procure major equipment pricing during the IGA to expedite procurement.

Table 12: ECM Equipment Lead Times

ECMs		Equipment	Estimated Lead Time
ECMs	1	Replace HID tunnel lighting with LED	Fixtures • 8-10 weeks
	2, 4, 8	Update SCADA and CO monitoring system	Controls • 8 weeks
	3, 7	Install emergency power, switchgear	Generators, transfer switches, switchgear • Generators: 24 weeks • Switchgear: 40-50 weeks
	6, 10	Replace, commission supply, exhaust fans	Fans, motors • 16-24 weeks

Construction Delivery

The construction process is not always linear. Final design and construction activities can overlap and run concurrently as the individual ECM implementation timeline depends on the complexity of the ECM, seasonality of construction, site activities, material procurement timelines, HVAC needs, and any opportunity to maximize construction period savings. Figure 5 represents the anticipated timeline associated with this project.

2.5.2(A)-5: Critical Material and Equipment

TEN has identified several long lead time items above in Table 12, ECM Equipment Lead Times. Based on an estimated notice to proceed by July 1, 2026, the anticipated lead times for some of these items may create a conflict in the desired schedule. TEN may recommend ordering the equipment listed below under a Letter of Intent (LOI) rather than waiting for final contract signatures.

The LOI will permit TEN and the design team to complete design documents concurrent with the contract authorization process and allow for permit submission and site work quickly after final contract signature. At SCI Houtzdale, this process allowed TEN to mobilize within two weeks of contract signature.

• Emergency generators	• Tunnel lighting fixtures
• Transfer switches	• Fan and motor systems
• Switchgear	• SCADA components and controls

2-5.2(A)-6: Construction Challenges and Solutions

Active highway and confined spaces projects can present unique safety, coordination, and material handling challenges. We have identified the following potential construction issues and potential paths to mitigate the risks (Table 13).



Figure 5: TEN's Phases of Construction for PennDOT's Tunnels Project

Table 13: Potential Construction Issues

Potential Construction Issues		TEN's Proposed Solutions
1.	Site and Motorist Safety	Ensure that emergency procedures are in place, that everyone is trained and oriented in safety requirements, and that everyone understands what to do and where to go in case of emergency. TEN will leverage SOPs already developed and tested by our tunnel experienced team members that are designed for both worker and motorist safety.
2.	Loss of Critical Systems	Work will be phased to avoid universal loss of any critical and/or safety related systems or equipment like lighting. Systems will be tested and verified to make sure they are back online and operational each morning, or alternate solutions will be deployed.
3.	Execution Plan and Challenges	TEN will work collaboratively with PennDOT and tunnel staff to develop a work execution plan that minimizes closure impact, and to monitor the schedule daily with all parties.
4.	Issue Resolution	TEN's resource plan with onsite project management and construction executive oversight promotes quick response to issues and clear escalation. We regularly perform site walks with our in-house engineering and commissioning teams to ensure the project is being constructed as designed.
5.	Closeout	Commissioning and training plans will be agreed to during the IGA. Close-out meetings will start early in construction, documented, and communicated to all stakeholders. Closeout meetings will continue until the project is approved by the consultant, funding agency, and DGS.

2-5.2(A)-7: Construction Plan-Site Operations

TEN personnel will be on site whenever work is taking place, and we will establish a site plan and operations narrative for PennDOT review and approval.

- **Site Operations:** Where possible, TEN’s team will complete mechanical, electrical, and control work in mechanical spaces during normal business hours as long as this work does not affect life safety systems. We will schedule work in the tunnel tubes during nightly lane closures, and equipment changeovers will be scheduled in advance to minimize disruption and to allow for adequate preparation by all parties.
- **Coordination:** Our approach to pre-selecting a tunnel experienced contractor team and leveraging that team for design-assist involvement during project development expedites construction planning and execution by resolving constructability issues in advance. In addition to an approved MPT plan, we will provide signage, detailed drawings, and maps showing our work areas and when construction activities can be expected. The team will review work schedules and communication strategies daily and weekly.
- **Lay Down Areas:** TEN’s team has already assessed each of the tunnel sites for potential storage and lay down areas have been identified. For each tunnel there are staging locations available or the materials will be brought in and out of the tunnels daily.
- **Working in Roadway and Tunnel Environments:** TEN’s team (electrical, mechanical, highway, design) is experienced delivering similar and recent projects in other PA turnpike and municipal tunnels and has experience with previous work in all three PennDOT tunnels. This experience is crucial to a safe and successful project. The right team is the first and best step in avoiding the unique occupied environment challenges associated with this project. All members of our team have worked together on tunnel projects and are experienced delivering work following a safe MPT plan.

2-5.2(A)-8: Construction Coordination

TEN has a structured approach to communications, coordination, and meeting cadence for this project. During the development and IGA kickoff meeting, we will co-author a communication schedule that best serves all stakeholders. Our approach begins with early identification of all key stakeholders – including representatives from PennDOT, DGS, district and tunnel staff, and consultants. We will then implement a consistent meeting schedule that spans project initiation through closeout. We propose a multi-faceted communication plan for the PennDOT project including:

- **Development progress meetings** led by the project solutions manager. These weekly meetings will provide updates on all development activities, including site visits, documentation requests, reviews, and approvals. The goal is to maintain open communication between the TEN team, the agency, and consultants.
- **Construction progress meetings** led by the construction executive. These weekly meetings will focus on coordination between TEN, PennDOT facility managers, and subcontractors. Topics will include district specific work schedules, subcontractor coordination, documentation, and approvals. Participants will include TEN’s site

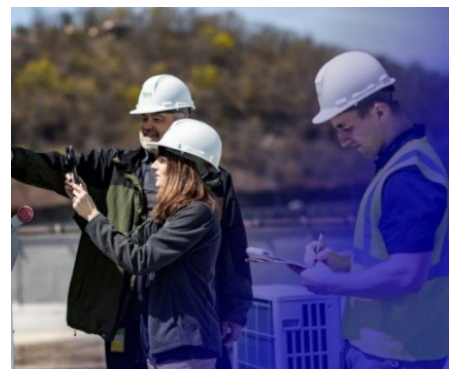


Figure 6: TEN’s construction management team views consistent and accurate communication as a core value.

project manager, tunnel facility manager(s), subcontractors, and agency consultants, with visibility and oversight from the agency point of contact, DGS’ point of contact, and TEN’s construction executive.

- **Project-wide executive progress meetings** led by either the project solutions manager or the construction executive (depending on the project phase). These monthly meetings will provide updates to PennDOT and the DGS’ project points of contact, and TEN’s management team to address any escalated issues.

In all cases, TEN’s team meeting minutes, documents, and communication will be managed and distributed via Procore with any other agency preferences. Procore access will be provided to all stakeholders identified during the project kickoff.

2-5.2(A)-9: Project Safety Plan, Management, Monitoring

TEN’s in-house safety manager will develop a customized project safety plan during the IGA phase. This safety plan will be in addition to and in coordination with each tunnel’s MPT plan. Safety is in the DNA of DLH and TEN. Key performance indicators are measured monthly, and safety is an inherent part of the normal course of business - meetings begin with a safety topic, and incidents are reported to the executive leadership team on the day they occur. All TEN project managers are certified by OSHA for construction site safety and reporting, and we hold our subcontractors to the same standards. All subcontractors are evaluated for their safety record before becoming part of the TEN team. TEN’s construction executive and site project managers are directly responsible for onsite safety procedures including:



<ul style="list-style-type: none"> • Reviewing the scope of safety and accident prevention procedures including regular reporting of accidents and safety issues. 	<ul style="list-style-type: none"> • Reviewing subcontractor emergency and safety plans and procedures.
<ul style="list-style-type: none"> • Observing and monitoring compliance with OSHA, the Commonwealth, and local and state laws and regulations. 	<ul style="list-style-type: none"> • Organizing and participating in periodic site inspections with a minimum of one per month per project.
<ul style="list-style-type: none"> • Reviewing and approving all site-specific safety manuals required for every subcontractor. 	<ul style="list-style-type: none"> • Responding to PennDOT’s general and specific safety concerns with the project.
<ul style="list-style-type: none"> • Holding safety orientation with subcontract employees working on the site to ensure they understand all safety, coordination, access, and communication requirements for the project. 	<ul style="list-style-type: none"> • Adhering to PennDOT’s safety requirements
<ul style="list-style-type: none"> • Scheduling and attending foremen’s toolbox safety meetings and evaluating effectiveness. 	

2-5.2(A)-10: Quality Assurance/Quality Control Plan

TEN’s quality assurance/control plan (QA/QC) focuses on the quality of materials, delivery, and safety (Table 14).

Table 14: TEN’s Engineering and Construction’s Quality Control Process

		Tasks	Reviewing Teams
1.	Initial design concepts <i>Engineering</i>	<ul style="list-style-type: none"> • Ideation and best practice input • Energy savings multi-user verification • ECM feasibility assessment 	<ul style="list-style-type: none"> • Construction • M&V • PennDOT
2.	IGA scope and costs <i>Engineering</i>	<ul style="list-style-type: none"> • Cost and savings multi-user verification • Constructability validation • Equipment standardization 	<ul style="list-style-type: none"> • Construction • M&V • TEN Management • Consultant
3.	Final design documents <i>Engineering</i>	<ul style="list-style-type: none"> • Multi-user construction submittal reviews • Equipment/material specification compliance review 	<ul style="list-style-type: none"> • Construction • M&V • PennDOT • Consultant
4.	Substantial completion <i>Construction</i>	<ul style="list-style-type: none"> • Operational functional testing daily rather than by ECM • Life-safety systems verified daily and ongoing • Customer concierge meetings • Execute commissioning plan 	<ul style="list-style-type: none"> • Engineering • M&V • Consultant • PennDOT

Inspections and Reporting

TEN will conduct routine and regular inspections during construction to ensure compliance with the scope, standards, and schedule. Site specific project managers and members of the engineering team, together with PennDOT representatives, staff, or consultants, will participate in all inspection activities. Progress will be recorded, tracked, and shared with all stakeholders using Procore. TEN will include any forms, testing reports, pictures, minutes, notes, and communications as part of the documents made available to the team. When issues of non-conformance to quality standards are discovered, the construction executive will engage all parties to discuss corrective actions, prevention, documentation, and tracking progress of the resolution.

2-5.2(A)-11: Closeout Process

- **Training:** It is important that onsite personnel have a complete and full understanding of the project objectives, and equipment operation needed to meet and sustain those objectives. TEN provides onsite training focused on new equipment maintenance requirements and operational instructions. Training is conducted during equipment startup, commissioning, or at project completion. For PennDOT, due to the unique logistic circumstances, TEN’s approach includes customized training for each tunnel. All training will be coordinated by the site project manager, delivered in collaboration with TEN’s post-construction manager, and manufacturer factory representatives, when applicable. Training will be video recorded for future review.
- **O&M Plan:** TEN’s site project managers will assemble comprehensive O&M manuals for each tunnel after project completion. Manuals will include as-built drawings, training materials, startup and commissioning documents, equipment operation manuals, and all project warranties.

- **Occupancy Permits:** TEN will facilitate all code required permits and inspections for needed legal compliance throughout the project. When appropriate, we verify that buildings have existing occupancy permits, and we will work with the agency and DGS to vet all occupancy permitting changes over the life of the project. TEN will also work with DGS, leveraging their direct lines of communication to make sure the Pennsylvania Department of Labor and Industry has all necessary paperwork to help DGS follow the Uniform Construction Code.
- **Project Commissioning:** TEN has a robust commissioning program designed to ensure that our work is fully tested and commissioned upon completion, and to provide retro-commissioning services as a fundamental ECM when an opportunity exists. TEN's in-house commissioning manager, Rajas Hatwalne, CMVP, CEM will oversee commissioning-related services. If requested by DGS, TEN will also work with third-party commissioning agents. During final project commissioning, TEN will specify functional checklists and acceptable measures and acceptance procedures. This information will be recorded in a detailed commissioning plan designed to outline activities, participants and roles, schedule, KPIs, and testing. TEN uses the CX Alloy platform to document and track the commissioning progress. For large equipment, such as generators or large boilers and chillers, TEN prefers to use approved factory start-up firms on the equipment to ensure that proper function, training, and warranties are maintained. For ongoing and final commissioning, TEN uses Procore to continuously document deficiencies and track activity. These activities will be discussed during regular close-out/commissioning meetings.
- **Project Acceptance and Close-out:** TEN's site project manager will work in conjunction with PennDOT and DGS to ensure that all work is performing as designed. Deficiencies will be identified, tracked, corrected, and reported using Procore. All new activities initiated during commissioning will be completed before project acceptance. The project acceptance date marks the start of workmanship warranties and the savings measurement period.
- **Measurement and Verification:** M&V will be led by TEN's lead M&V specialist, Josh McCleary. Any construction period savings will be delivered in a construction period M&V report. Annual verification of savings will begin immediately after project close-out, with M&V reports delivered annually to PennDOT and DGS.

RFQ Project Schedule

Section 2-5.3

CUSTOMER QUOTE: UNIVERSITY OF PITTSBURGH

“TEN has been a great energy partner for the University of Pittsburgh. Their team consistently brings innovative ideas that optimize our projects. What sets TEN apart is their attention to detail and a hands-on approach that is critical when working on our large, complex urban campus.”

Scott Bernotas, Vice Chancellor, Facilities Management, University of Pittsburgh

2-5.3(A)-1: Possible Scheduling Issues

TEN has identified the following potential scheduling issues associated with this project in Table 15.

Table 15: Potential Scheduling Issues and Solutions for PennDOT’s Pittsburgh Tunnels Project

Potential Scheduling Issues		TEN Solutions
1.	Completion	Daily and weekly review of work and schedule based on work breakdown structure (WBS) to ensure later goals are met. Liberty Tunnel work is modeled to occur first due to the fewest ECMs and shortest lead times and Squirrel Hill last to allow for the long switchgear lead time.
2.	Closure Coordination	Daily workplans with clear instructions reviewed prior to work commencement. Use tested standard operating procedures already developed by subcontractor team. Weekly and monthly schedule reviews with PennDOT and tunnel staff.
3.	Long Lead Times	Early approval of critical items for expedited delivery, including detailed fabrication and delivery activities in the schedule to track material procurement activities.
4.	Traffic Incidents	Include non-working days in the schedule for contingency. Address re-routing, coordination, etc. in emergency and safety plans that address accidents, environmental, or other changes in traffic patterns that impact planned shutdowns.

2-5.3(A)-2: Preliminary Project Schedule

Figure 7 contains an executive level graphic project schedule. In Volume II, ECM/Cost Submittal, we have modeled the cashflow using a 12-month construction period as specified; however, we anticipate an 18-month construction period based on the anticipated final scope of work.

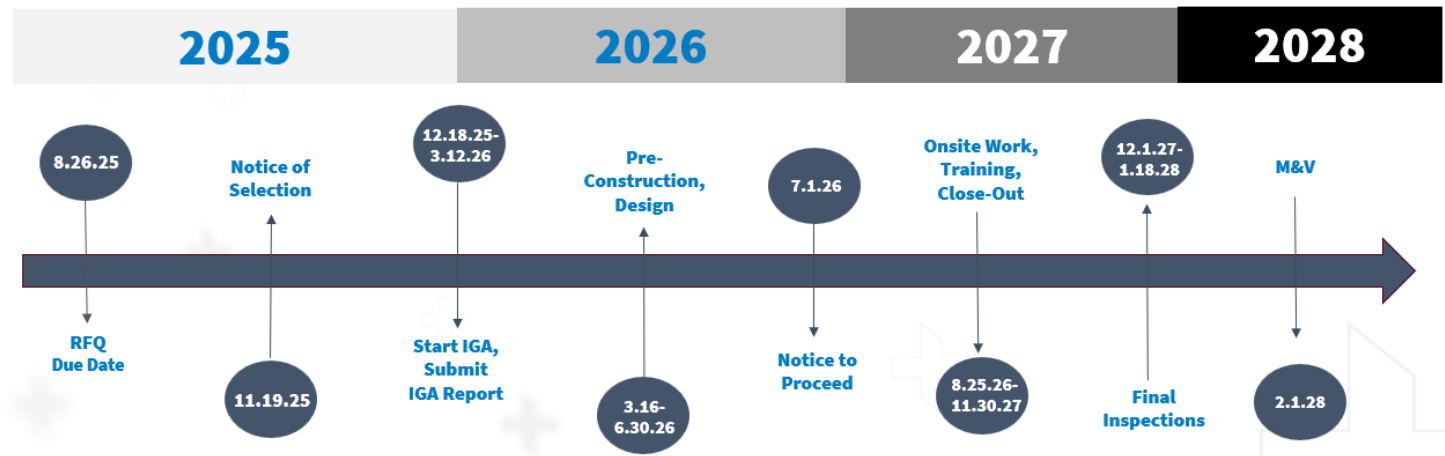


Figure 7: TEN’s executive level graphic schedule

Additional Opportunities for Innovation, Schedule Compression, Flexibility

There are many ways PennDOT and TEN can work together to compress the project schedule, if desired.

- **Construction kick-off meeting** details can be addressed during the IGA to expedite movement to final design and construction after the GESA has been fully executed.
- **Prior to GESA contract execution**, TEN plans to pre-negotiate subcontracts, material purchase orders, and disposal agreements for items that do not require further final design, for immediate issuance upon signed

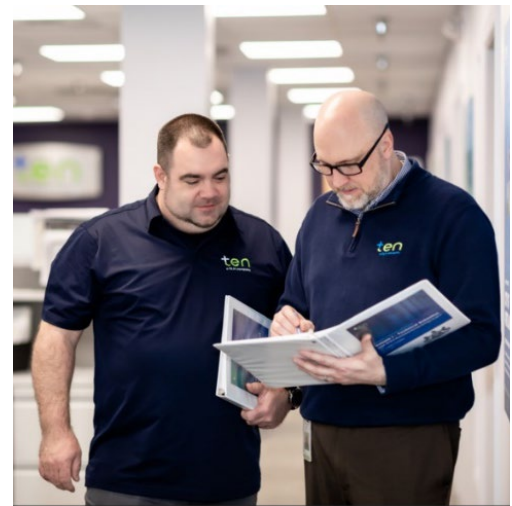
contract. Periodic material deliveries and installation can then begin within two weeks of GESA contract execution for readily available material such as lighting.

- **Standardize ECM products**, where possible, accelerate design reviews and commissioning.
- **Concurrent commissioning and M&V activities** can be employed to compress the installation schedule.

2-5.3(A)-3: Construction Coordination

Construction is best managed by transparent and frequent communication and will include TEN, DGS, PennDOT, tunnel managers, subcontractors and material suppliers, local utilities, and permitting jurisdictions such as L&I, and the Pennsylvania Department of Environmental Protection (PA DEP). Our team uses Procore to manage communication, provide access to information and data, and to provide real time information to improve the execution of the work.

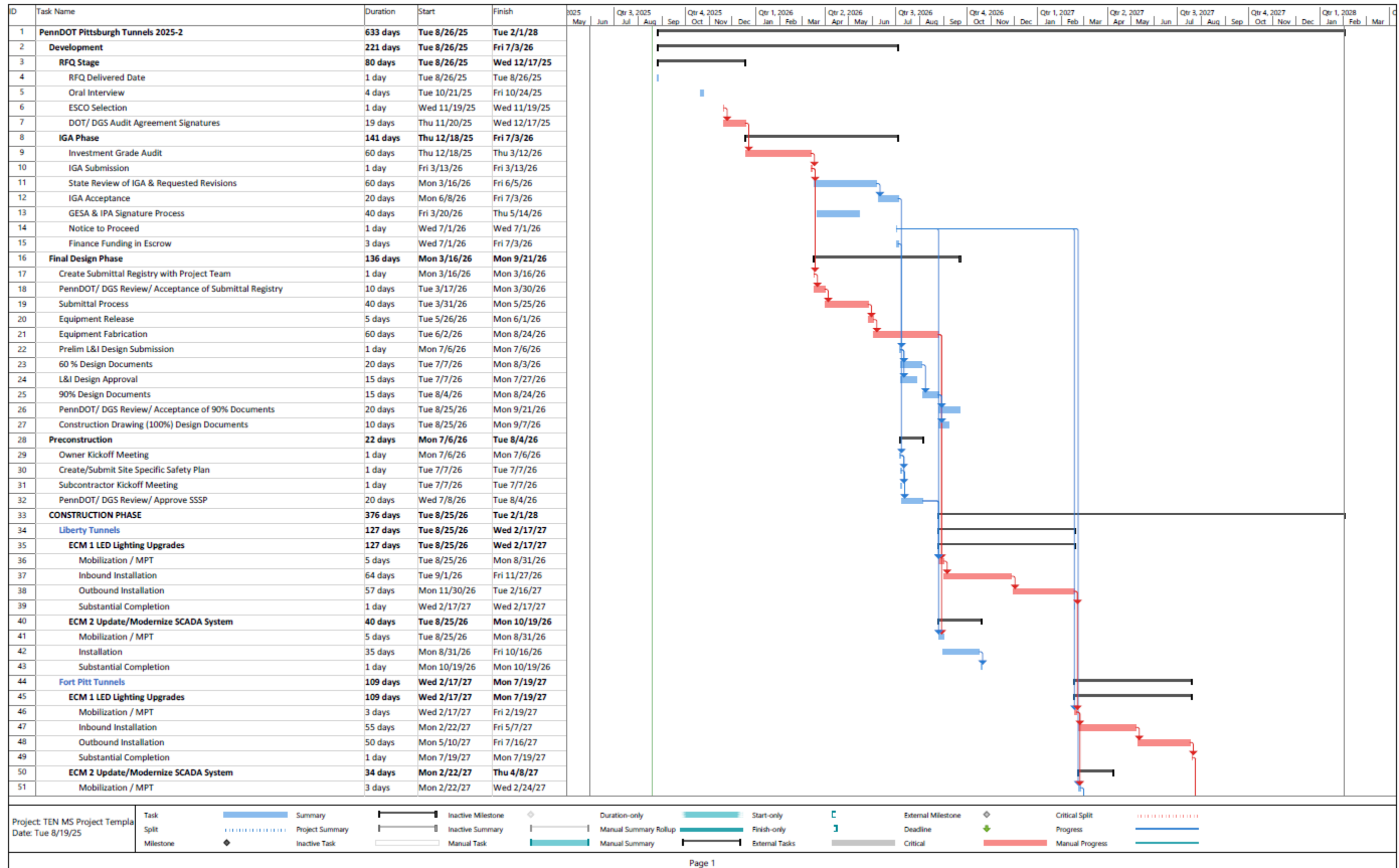
- **Utility Coordination:** Our energy engineering team will identify, investigate, and coordinate all applications to participate in utility rebate programs, if available. TEN's project management team will coordinate with local utilities during project construction. We recognize that utility-related coordination can impact the project schedule by as much as three or more months and must be carefully planned. We have successfully coordinated utilities on projects where electrical services were upgraded, land clearing permits for solar projects, and work with PA DEP on air permits for boiler installations.
- **Subcontractor Coordination** is the responsibility of TEN's project management team. Subcontractor schedules and critical path items will be incorporated into the project CPM schedule and two-week look ahead schedules. The site project manager will communicate schedules, safety considerations, and logistics during weekly meetings, and distribute meeting minutes to all parties via Procore. Daily reports are uploaded into Procore and are accessible by all team members. Construction executive oversight ensures schedules are met, costs are maintained, risks are identified early, and a mitigation plan is established and managed aggressively.
- **Equipment Supplier Coordination** is the responsibility of the site project manager with support from the construction executive. Equipment submittal review periods and delivery lead times are integrated into the CPM schedule. Because TEN is equipment and vendor agnostic, we have forged strategic partnerships with a diverse pool of vendors and suppliers and can hand select equipment and vendor sources that meet the technical requirements and align with the project schedule. Equipment production time and shipping periods are considered during sourcing and then monitored closely once the order is placed.
- **Funding Agency Tunnel Facility Coordination** occurs at every stage in the process. PennDOT personnel, tunnel staff, and DGS staff will be identified as stakeholders, invited to all coordination and site meetings, and provided with Procore access to all project documents and communications.



***Figure 8:** TEN's energy engineers will collaborate to identify, investigate, and coordinate all aspects of utility grant rebate programs for PennDOT.*

Figure 9:

TEN's
Project
Gantt
Chart



Qualifications Forms

Section 2-5.4

CUSTOMER QUOTE: ACRISURE STADIUM

"Acrisure Stadium is a pillar of Pittsburgh's sports and entertainment culture. For all of our heating and cooling needs, we rely on TEN. Their expert team ensures our fans stay comfortable at every event, delivering exceptional service with professionalism."

James Sacco, Vice President, Operations and Stadium Management, PSSI/Acrisure Stadium

2-5.4(A)-1(a): GESA Contractor Qualification

Our team has collectively audited, evaluated, and implemented nearly \$500 million in guaranteed energy savings projects over the past 13 years. Our portfolio of clients includes state and municipal governments, major universities, health systems, museums, commercial facilities, and the U.S. government. TEN has completed successful GESA projects for the PA DGS, the State Correctional Institution, Department of Human Services, and Pittsburgh International Airport.

TEN’s project team includes nearly 50 energy professionals based in Pennsylvania with extensive experience delivering guaranteed energy savings projects throughout the Commonwealth. TEN has a solid record delivering and guaranteeing projects like those described below in Section 2-5.4.4.A-1(b), Offeror’s Financial Ability to Provide Guarantee.

Management Team Qualifications

TEN’s leadership team includes the individuals listed in Table 16 and captured in the following pages. TEN’s organizational chart in Section 2-5.1(A) also provides additional project team information.

Table 16: *TEN’s Executive Team*

TEN Executive Team		Years Experience
1.	Troy Geanopulos	30 years
2.	Rob Campbell, P.E.	38 years
3.	Alison, Shea, EIT, CEM	35 years
4.	Matt Morris, DBIA®, EIT, LEED AP®	21 years
5.	Greg Lok, P.E., CMVP, CEM	29 years
6.	Wayne Chase, EIT, CMVP, LEED AP®	30 years



Troy Geanopolus

Chief Executive Officer

As CEO, Troy drives business strategy and operational excellence. Troy brings 30 years of energy-services industry experience and knowledge to meet customer needs and anticipate future-ready solutions. A native of Pittsburgh, Troy is an alumnus of Dickinson College.

Education

- B.A., English
Dickinson College

Affiliations

- Entrepreneurial Leadership Forum, Tepper School of Business
- U.S. Green Building Counsel Member
- Green Building Alliance Member

WORK HISTORY

The Efficiency Network (TEN) | CEO | 2012-Present

Since TEN's inception, Troy has been responsible for TEN's overall business strategy and operating results. He has led the creation of a dynamic company culture where customer satisfaction is paramount. With the mindset of perpetual change, Troy is very focused on understanding customer needs and providing solutions to address those needs efficiently.

CLT Efficient Technologies and Constellation New Energy | President and Senior Vice President, Business Development | 2000-2012

As President of CLT Efficient Technologies and then Senior Vice President of Sales at Constellation New Energy (post-acquisition of CLT), Troy was responsible for developing product offerings and business development strategies to position CLT and Constellation New Energy as regional leaders in the energy efficiency industry.

PROJECT HISTORY

Troy has been involved in every project completed at TEN since its inception in 2012; a representative sample of his projects are below.

- [Allegheny County Airport Authority/Pittsburgh International Airport](#) | \$14.4 million
- [City of Pittsburgh Streetlighting](#) | \$7.5 million
- [Pennsylvania State Capitol Complex](#) | \$18 million
- [Wernersville State Hospital](#) | \$11.2 million
- [Housing Authority of the County of Lawrence](#) | \$5.4 million
- [State Correctional Institution, Houtzdale](#) | \$31.1 million
- [Community College of Allegheny County](#) | \$3.8 million



Rob Campbell, P.E., MBA

President and Chief Operating Officer

Rob will be responsible for ensuring PennDOT’s project is designed, constructed, and performs to the expectations of the customer. This involves assigning resources and project personnel including subcontractors to ensure engineering and construction timelines are met. Rob will have regular involvement directly in decision-making impacting the success of this project.

Education

- M.B.A. with honors
Carnegie Mellon University
- B.S., Mechanical Engineering
University of Toronto

Certifications

- Registered professional engineer (P.E.), Ontario

Affiliations

- Association of Professional Engineers of Ontario

WORK HISTORY

The Efficiency Network (TEN) | President and Chief Operating Officer | 2012-Present

Rob is currently responsible for the operations of the organization, ensuring all of TEN’s projects are engineered, constructed, and perform to meet and exceed customers’ expectations. Rob provides direction and leadership to support other departmental leaders to focus on ensuring operational excellence in project innovation, development, and delivery.

Constellation NewEnergy | Vice President, Business Operations | 2009-2011

Rob reported directly to the president and was assigned to assess, recommend, and integrate best practices throughout the organization. Greater responsibility was soon granted to provide improved leadership to a failing project management group. Through succession planning discussions, Rob was chosen to be the next in line to succeed the company’s president.

CLT Efficient Technologies Group | Chief Operating Officer | 2006-2009

Rob had overall P&L responsibility for all aspects of the company. He integrated the strategic plan through development and execution of the business plan and established and managed internal operational and financial controls to improve company productivity and profitability.

PROJECT HISTORY

Rob has been involved in every project completed at TEN since its inception in 2012. A representative sample of his projects include:

- Allegheny County Airport Authority/Pittsburgh International Airport | \$14.4 million
- City of Pittsburgh Streetlighting | \$7.5 million
- Pennsylvania State Capitol Complex | \$18 million
- Wernersville State Hospital | \$11.2 million
- Housing Authority of the County of Lawrence | \$5.4 million
- State Correctional Institution, Houtzdale | \$31.1 million
- Community College of Allegheny County | \$3.8 million



Alison Shea, EIT, CEM

Senior Vice President, Business Development

Alison has 35 years of sales leadership and project management experience delivering energy solutions to private and public sector customers. Under Alison’s guidance, TEN’s business and project development teams develop deep, customer-centric relationships, helping clients reach their energy and sustainability goals.

Education

- B.S., Mechanical Engineering
Virginia Polytechnic Institute and State University

Certifications

- Engineer-in-Training (EIT)
- Certified Energy Manager (CEM)

Affiliations

- National Association of Women in Construction Member
- Association of Energy Engineers (AEE) Member
- Mechanical Contractors Association Member
- Women in Mechanical Industry Member

WORK HISTORY

The Efficiency Network (TEN) | Senior Vice President, Business Development | 2024-Present

- Leading business and project development teams develop deep, customer-centric relationships, helping clients reach their energy and sustainability goals.

Limbach Company, LLC | Vice President, Sales | 2020-2023

- Driving strategic shift toward owner direct B2B sales as part of the company vision
- Direct responsibility for market strategy and forecasting and achieving order intake, margin, and revenue targets
- Sales performance manager, coach, and recruiter; experience creating and growing a sales organization
- Implemented programs and strategies for rebuilding and growth; responsible for 13% sales growth

Siemens Industry, Inc. | Regional Sales Manager | 2012-2020

- Experience leading sales and operations development and implementation teams to deliver projects that meet programmatic, operational, financial, and C-level customer performance key performance indicators
- Collaborative source matter expert regionally, nationally across multiple business units
- Produced 5% YOY sales OI growth through proven and new services
- Consistent over performer and Siemens Presidents Circle of Excellence recipient
- Recognized spokesperson and source matter resource to national sales leadership organizations, trade organizations and industry



Matthew Morris, DBIA®, EIT, LEED AP®

Construction Team Manager

Matt manages TEN's construction group and is directly responsible for construction leadership oversight. Matt and his team will have leading roles during construction, will oversee the project safety plan, and will also support project development to ensure design concepts are constructable and that scopes of work and bid specifications are accurate.

Education

- B.S., Civil Engineering
University of Pittsburgh
- Certificate, Construction Management
University of Pittsburgh

Certifications

- Design-Build Professional (DBIA®)
- Engineer-in-Training (EIT)
- LEED Certified Professional (LEED AP®)
- TEN Virginia Contractors License Holder
- TEN National Association of State Contractor's Licensing Agencies (NASCLA) Contractor Holder
- OSHA 10-hour certification
- First Aid and CPR Trained
BSA Wilderness First Aid Certified

WORK HISTORY

The Efficiency Network (TEN) | Vice President, Construction | 2024-Present

- Leads all project management and construction efforts for TEN
- Ensures competitive procurement of all project scopes
- Ensures compliance with TEN processes and industry best practices
- Supports the development of all project managers in their career development

The Efficiency Network (TEN) | Director, Construction | 2022-2024

- Assigned project team members
- Provided leadership oversight of all construction activities
- Supported project team with large and complex issues
- Managed strategic subcontractor partnerships
- Ensured project compliance with TEN processes

Massaro Construction | Senior Project Manager | 2018-2022

- Led project team member responsible for project budget and schedule performance
- Developed project estimates
- Managed all subcontracts and subcontractor performance
- Responsible for multiple project financials (P&L)

Mascaro Construction | Project Manager | 2008-2018

- Managed multiple projects
- Developed scopes and budgets
- Managed project teams and subcontractors

Whiting Turner Contracting Company | 2002-2008

- Project engineer
- Project controls
- Schedules
- Meeting management
- Subcontractor issues

PROJECT HISTORY

Matt has worked on every TEN project since 2021. A representative list of his projects include:

- Allegheny County Airport Authority/Pittsburgh International Airport
- City of Pittsburgh Streetlighting
- Wernersville State Hospital
- Pennsylvania State Capitol Complex
- State Correctional Institution, Houtzdale
- School District of Philadelphia GESA 2 Phase 1
- Temple University's Boiler Project



Greg Lok, P.E., CMVP, CEM

Engineering Team Manager

Greg manages TEN's engineering group responsible for design and ECM cost and savings development. Greg and his team will have lead roles during the IGA and pre-construction phases of this project; they will provide a supporting role during construction and post-construction to ensure that project delivery aligns with design.

WORK HISTORY

The Efficiency Network (TEN) | Vice President, Engineering and Design | 2013-Present

- Leads engineering team responsible for design and implementation of ECMs
- Overall technical design and savings risk responsibility of engineering design at TEN
- Business and growth strategies for ESCO industry
- Leads research and application of innovative technologies and service offerings
- Supports sales, development, construction, and post-construction project needs
- Responsible for over \$80 million annual ESCO revenue for TEN

Constellation/CLT Efficient Technologies Group | Executive Director of Project Development | 2006-2013

- Led engineering and development team for non-federal and public housing group
- Managed over 30 resources across the nation and five regional offices
- Responsible for over \$250 million annual ESCO revenue for MUSH and public housing markets

PROJECT HISTORY

- [State Correctional Institution, Houtzdale](#) | VP, Engineering/Design | \$31.1million
- [Wernersville State Hospital](#) | VP, Engineering/Design | \$11.2 million
- [Pennsylvania State Capitol Complex](#) | VP, Engineering/Design | \$18 million
- [Thaddeus Stevens College of Technology](#) | VP, Engineering/Design | \$2.7 million
- [Keystone Pennsylvania Judicial Center](#) | VP, Engineering/Design | \$3 million
- [Allegheny County Airport Authority/Pittsburgh International Airport](#) | VP, Engineering/Design | \$14.4 million

Education

- B.Sc., Mechanical Engineering
Queen's University

Certifications

- Registered Professional Engineer (P.E.): Delaware, Kentucky, Maine, Maryland, Massachusetts, Ohio, Ontario, Pennsylvania, Texas, Virginia, West Virginia
- Certified Energy Manager (CEM)
- Certified Measurement and Verification Professional (CMVP)

Professional Organizations

- Association of Energy Engineers (AEE) Member
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Member
- Green Building Alliance (GBA) Member
- National Association of Energy Services Companies (NAESCO) Member



Wayne Chase, EIT, CMVP, LEED AP®

Post-Construction Manager

Wayne manages TEN's post-construction services, which include measurement and verification, training, commissioning, and O&M services. Wayne and his team will have lead roles during post-construction and will provide a supporting role during development and construction to ensure pre- and post-measurements, and M&V strategies align with PennDOT and DGS preferences on reporting project performance

Education

- M.B.A.
Syracuse University
- B.S., Electrical Engineering
Clarkson University

Certifications

- Engineer-in-Training (EIT)
- Certified M&V Professional (CMVP) Certification
- LEED Certified Professional (LEED AP®)

Affiliations

- Association of Energy Engineers (AEE) Member

WORK HISTORY

The Efficiency Network (TEN) | Director, Post-Construction Services | 2019-Present

- Performs energy savings calculations, proposal development, and measurement and verification plans and reports on savings performance.
- Guarantee performance period services including operation and maintenance, warranty repair, and replacement services

ENGIE Services | Risk Manager | 1999-2019

- Reviewed and approved all customer proposals, construction contracts, and change orders by analyzing and reporting on the financial risk of each project's energy savings guarantee and pricing for post-construction M&V services for all projects in the U.S.

PROJECT HISTORY

- [State Correctional Institution, Houtzdale](#) | Post-Construction Manager | \$31.1 million
- [Wernersville State Hospital](#) | Post-Construction Manager | \$11.2 million
- [Pennsylvania State Capitol Complex](#) | Post-Construction Manager | \$18 million
- [Thaddeus Stevens College of Technology](#) | Post-Construction Manager | \$2.7 million
- [Allegheny County Airport Authority/Pittsburgh International Airport](#) | Post-Construction Manager | \$14.4 million

2-5.4(A)-1(b): Offeror’s Financial Ability to Provide Guarantee

DLH and TEN’s Financial Statements: TEN’s most recently audited financial statement is included in Appendix A. Financial statements for Duquesne Light Holdings (DLH), TEN’s parent company, are available through Intralinks. To obtain access to Intralinks and the private financials of DLH, please click the link below, complete the form, and submit.



Link to DLH Financials: <https://www.duquesnelight.com/company/about/investors/contact-us>

Bonding Information: TEN’s single project bonding capacity is \$60 million with an aggregate limit of \$200 million. TEN’s surety is Wayne McVaugh, Federal Insurance Company, 436 Walnut Street, Philadelphia, PA 19106.

Insurance Information: TEN has provided our certificate of insurance in Appendix B. This certificate shows commercial general liability insurance of not less than \$1 million per occurrence; comprehensive automotive liability insurance of not less than \$1 million; and worker’s compensation insurance following the Worker’s Compensation Act of the Commonwealth of Pennsylvania.

Table 17: TEN’s Representative List of Project Guarantees

TEN Project Guarantees		
1.		• Department of Human Services, Wernersville State Hospital * \$11.2 million-PA DGS GESA 2021-2
2.		• State Correctional Institution, Houtzdale \$31.1 million-PA DGS GESA 2018-1
3.		• Pennsylvania State Capitol Complex \$18 million-PA DGS GESA 2017-1
4.		• Keystone/Pennsylvania Judicial Center \$3 million-PA DGS Small GESA 1
5.	 ALLEGHENY COUNTY AIRPORT AUTHORITY	• Allegheny County Airport Authority \$14.4 million-Pittsburgh International Airport Airfield Lighting
6.	 THE SCHOOL DISTRICT OF PHILADELPHIA	• School District of Philadelphia \$40 million-GESA-2

*Note: See Appendix C for recommendation letter from Wernersville State Hospital regarding TEN’s work at their facilities.

2-5.4(A)-1(c): Offeror’s Resource Availability-Capacity

Table 18: TEN’s Capacity Calculation

Capacity Calculation		
1.	Three-year sales (average)	\$61.4 million
2.	Three-year committed backlog (average)	\$20.2 million
Capacity		\$41.2 million

2-5.4(A)-1(d): Offeror’s Statement of Readiness and Commitment of Resources

All staff identified in this RFQ are available and are committed to the project based on the anticipated schedule described in the RFQ. Any changes to staff will be made only with approval from PennDOT.

2-5.4(A)-1(e): Offeror’s Notification of Default and Debarment

TEN is not in default; however, TEN received a notice of default from DGS on January 19, 2023 for chiller performance on the Pennsylvania State Capitol Complex project. TEN worked with the Department on resolving operational challenges and subsequently received a “no longer in default” letter on July 17, 2024. TEN is in receipt of no other notices of default and has never been debarred.

2-5.4-2: Design-Consultants Qualifications Forms

2-5.4-2(a): TEN's Experience on GESA Projects

TEN has robust in-house design capabilities including in-house mechanical and electrical certified professional engineers (P.E.s) identified in our project team described in Section 2-5.1, Project Management Team Overview. Using in-house resources will help expedite the evaluation, design, and construction schedule and decisions. TEN employees have audited and performed the design components of the work described thus far in conjunction with our tunnel experienced contractor/consultant team. During the entire process, TEN's energy engineers and more specifically TEN's professional engineers (Eric Johnson, P.E.; Brian Vallor, P.E.; Greg Lok, P.E.) have leadership roles in the oversight of ECM design.

Given the specialized design needs of this tunnel project, TEN has selected WSP (formerly Parsons Brinckerhoff) as our design consultant based on their strong history in MEP and transportation projects, including extensive tunnel work worldwide and deep familiarity with PennDOT standards. Leading the effort is Michael Maltezos, a nationally recognized expert in tunnel lighting and chair of the Illuminating Engineering Society (IES) Tunnels and Underpasses Lighting Committee. He previously represented the manufacturer of the existing fixtures and has led the design of LED lighting upgrades for the PA Turnpike, municipal tunnels, and other major U.S. projects. Our established partnership with WSP and combined expertise will streamline and expedite delivery of this unique set of ECMs. A summary of our design team's qualifications follows.

2-5.4-2(b): TEN's Individual Qualifications

On the following pages, TEN has provided key design team member resumes.

2-5.4-2(c): TEN's Statement of Readiness and Commitment of Resources per the RFQ Project Schedule

TEN is using in-house design personnel in combination with the design consultant WSP. All staff identified in this RFQ are available and are committed to the project based on the anticipated schedule described in the RFQ. Any changes to staff will be made only with approval from PennDOT.

2-5.4-2(d): TEN's Notification of Default or Debarment

Neither WSP nor TEN are in default; however, TEN received a notice of default from DGS on January 19, 2023 for chiller performance on the Pennsylvania State Capitol Complex project. TEN worked with the Department on resolving operational challenges and subsequently received a "no longer in default" letter on July 17, 2024. TEN is in receipt of no other notices of default and has never been debarred.



Greg Lok, P.E., CMVP, CEM

Engineering Team Manager

Greg manages TEN's engineering group responsible for design and ECM cost and savings development. Greg and his team will have lead roles during the IGA and pre-construction phases of this project; they will provide a supporting role during construction and post-construction to ensure that project delivery aligns with design.

WORK HISTORY

The Efficiency Network (TEN) | Vice President, Engineering and Design | 2013-Present

- Leads engineering team responsible for design and implementation of ECMs
- Overall technical design and savings risk responsibility of engineering design at TEN
- Business and growth strategies for ESCO industry
- Leads research and application of innovative technologies and service offerings
- Supports sales, development, construction, and post-construction project needs
- Responsible for over \$80 million annual ESCO revenue for TEN

Constellation/CLT Efficient Technologies Group | Executive Director of Project Development | 2006-2013

- Led engineering and development team for non-federal and public housing group
- Managed over 30 resources across the nation and five regional offices
- Responsible for over \$250 million annual ESCO revenue for MUSH and public housing markets

PROJECT HISTORY

- [State Correctional Institution, Houtzdale](#) | VP, Engineering/Design | \$31.1million
- [Wernersville State Hospital](#) | VP, Engineering/Design | \$11.2 million
- [Pennsylvania State Capitol Complex](#) | VP, Engineering/Design | \$18 million
- [Thaddeus Stevens College of Technology](#) | VP, Engineering/Design | \$2.7 million
- [Keystone Pennsylvania Judicial Center](#) | VP, Engineering/Design | \$3 million
- [Allegheny County Airport Authority/Pittsburgh International Airport](#) | VP, Engineering/Design | \$14.4 million

Education

- B.Sc., Mechanical Engineering
Queen's University

Certifications

- Registered Professional Engineer (P.E.): Delaware, Kentucky, Maine, Maryland, Massachusetts, Ohio, Ontario, Pennsylvania, Texas, Virginia, West Virginia
- Certified Energy Manager (CEM)
- Certified Measurement and Verification Professional (CMVP)

Professional Organizations

- Association of Energy Engineers (AEE) Member
- American Society of Heating, Refrigerating, and Air-Conditioning Engineers (ASHRAE) Member
- Green Building Alliance (GBA) Member
- National Association of Energy Services Companies (NAESCO) Member



Eric Johnson, P.E., CEM

Energy Executive and Lead Mechanical Energy Engineer

Eric will lead engineering activities during IGA and pre-construction including ECM, scope, and subcontractor scope development. He will be responsible for coordinating the work of the supporting engineers to ensure consistency in design. As lead mechanical energy engineer, he will develop mechanical, water intrusion, and controls ECMs. Eric will support the construction team during project delivery, ensuring project delivery meets design intent.

Education

- B.A.E., Architectural Engineering
- Penn State University

Certifications

- Registered professional engineer (P.E.) in Pennsylvania, Maryland, Ohio, and Washington, DC
- Certified Energy Manager (CEM)

Affiliations

- American Society of Heating, Refrigerating and Air Conditioning Engineers (ASHRAE) Member
- Association of Energy Engineers (AEE) Member
- TEN Internal Procure Development Group

WORK HISTORY

The Efficiency Network (TEN) | Senior Project Engineer | 2014-Present

- Analyze building systems
- Completes engineering and economic evaluation of energy cost reduction measures developed scopes of work for selected ECMs
- Conceptual design of ventilation and thermal systems for research laboratories, central campus utility plants, and district-wide building automation systems
- Performs project cost estimating
- Mentors engineers to provide enhanced service for customers

Constellation | Senior Project Engineer | 2007-2014

- Assessed the economic value of each project
- Developed ECMs to be evaluated
- Authored the scopes of work for the selected ECMs
- Determined savings for various improvements
- Mentored lower-level engineers to provide enhanced service for customers

Siemens Building Technologies | Senior Project Engineer | 2001-2007

- Assessed the economic value of each project
- Developed ECMs to be evaluated
- Authored the scopes of work for the selected ECMs
- Determined savings for various improvements

PROJECT HISTORY

- Allegheny County Airport Authority/Pittsburgh International Airport | Senior Project Engineer | \$14.4 million
- Pennsylvania State Capitol Complex | Senior Project Engineer | \$18 million
- University of Pittsburgh (multiple phases) | Senior Project Engineer | \$12.6 million
- Penn State University (multiple phases) | Senior Project Engineer | \$13.3 million
- Acrisure Stadium | Senior Project Engineer and Manager | \$532,000



Daric Holmes

Senior Project Lighting Designer

Daric will develop the tunnel lighting, auxiliary lighting, and lighting controls solution with our tunnel lighting consultant, Michael Maltezos from WSP Engineers. Daric has 29 years of experience auditing, designing, and implementing lighting solutions like those for this project.

Education

- U.S. Marine Corp

Affiliations & Certifications

- Association of Energy Engineers (AEE) Member
- Illumination Engineering Society (IES) Member
- OSHA 30-hour outreach certification
- OSHA 10-hour and Hazcom training
- PennDOT certified flagger training
- Self/manually propelled and boom-supported elevating work platform lift operator safety training
- Scaffold erecting competent person training

WORK HISTORY

The Efficiency Network (TEN) | Senior Project Designer | 2014-Present

- Responsible for onsite energy audits for commercial, industrial, and institutional buildings
- Provides savings analysis and quantifies building systems and energy consumption through the collection of site, system, and any other required
- Develops and designs building system energy efficiency projects and related savings opportunities at customer facilities

Constellation New Energy | Principal Program Manager | 2000-2014

- Accountable for all assigned project auditing activities. He ensured that the worksite data was collected in an effective and efficient manner, maintained daily communications with other auditing team members, collected site data, and developed energy efficient lighting and water upgrades

PROJECT HISTORY

- [Allegheny County Airport Authority/Pittsburgh International Airport](#) | Lead Lighting Designer, Airfield Lighting | \$14.4 million
- [City of Pittsburgh Streetlighting](#) | Lead Lighting Designer | \$7.5 million
- [Wernersville State Hospital](#) | Senior Project Designer | \$11.2 million
- [State Correctional Institution, Houtzdale](#) | Senior Project Designer | \$31.1 million
- [Pennsylvania State Capitol Complex](#) | Senior Project Designer | \$18 million
- [University of Pittsburgh Campus Wide](#) | Senior Project Designer | \$12.6 million
- [Carnegie Museum of Natural History](#) | Senior Project Designer | \$1 million

Capabilities Summary for WSP

WSP is one of the world’s top professional engineering firms with unrivaled expertise in transportation tunnels including significant highway experience across Pennsylvania and with PennDOT. Additionally, some of their key lighting staff have experience with PennDOT’s last lighting upgrade and recent LED tunnel lighting upgrades completed throughout Pennsylvania and nationally. For PennDOT’s project, WSP will provide design assistance for tunnel project ECMs.

WSP

Experience with GESA Projects

Armstrong Tunnel Rehabilitation Project	
<i>Date:</i>	2023-2025
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	Allegheny County Department of Public Works
<i>Contact:</i>	Stephen Shanley; Director, ACDPW; (412) 350-5877
<i>Amount:</i>	\$13 million
<i>Description:</i>	Tunnel rehabilitation project
<i>Status:</i>	Substantially complete
Addison Tunnel Upgrades Project	
<i>Date:</i>	2022-2024
<i>Location:</i>	Dallas, Texas
<i>Owner:</i>	North Texas Toll Authority (NTTA)
<i>Contact:</i>	NTTA Procurement Services: Maria Rangel; (214) 461-2000
<i>Amount:</i>	\$10 million
<i>Description:</i>	Tunnel lining and tunnel lighting upgrades
<i>Status:</i>	Complete
I-579 Urban Open Space CAP Project	
<i>Date:</i>	2018-2021
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	City of Pittsburgh
<i>Contact:</i>	Facilities Director; (412) 393-0200
<i>Amount:</i>	\$30 million
<i>Description:</i>	Urban Park “Cap” over I-579
<i>Status:</i>	Complete
Ted Williams Tunnel – Boston	
<i>Date:</i>	2018-2022
<i>Location:</i>	Boston, Massachusetts
<i>Owner:</i>	MassDOT
<i>Contact:</i>	John Fallon, MassDOT: john.fallon@state.ma.us

<i>Amount:</i>	\$32 million
<i>Description:</i>	New LED tunnel lighting and infrastructure upgrades
<i>Status:</i>	Complete
Allegheny Tunnel Lighting Improvement Project	
<i>Date:</i>	2018-2022
<i>Location:</i>	Somerset, Pennsylvania
<i>Owner:</i>	Pennsylvania Turnpike Commission
<i>Contact:</i>	Charles Holupka, Project Manager, (717) 939-9551, ext. 5520
<i>Amount:</i>	\$20 million
<i>Description:</i>	Tunnel rehabilitation project
<i>Status:</i>	Complete
Tuscarora Tunnel Rehabilitation Project	
<i>Date:</i>	2022-2024
<i>Location:</i>	Willow Hill, Pennsylvania
<i>Owner:</i>	Pennsylvania Turnpike Commission
<i>Contact:</i>	Charles Holupka, Project Manager, (717) 939-9551, ext. 5520
<i>Amount:</i>	\$120 million
<i>Description:</i>	Tunnel lining and tunnel lighting upgrades
<i>Status:</i>	Complete
SR 520 Westside – Montlake Lid	
<i>Date:</i>	2019-2025
<i>Location:</i>	Seattle, Washington
<i>Owner:</i>	WSDOT
<i>Contact:</i>	Brittany Grenard, (425) 620-6038
<i>Amount:</i>	\$455 million
<i>Description:</i>	Urban Park “Cap” over SR-520
<i>Status:</i>	Completed
Chesapeake and Thimble Shoal Tunnels	
<i>Date:</i>	2017-2022
<i>Location:</i>	Virginia Beach, Virginia
<i>Owner:</i>	Chesapeake Bay Bridge and Tunnel Authority (CBBTA)
<i>Contact:</i>	Tim Holloway, CBBTA, tholloway@cbbt.com
<i>Amount:</i>	\$22 million
<i>Description:</i>	New LED tunnel lighting and infrastructure upgrades
<i>Status:</i>	Complete
Lehigh Tunnel Lighting Improvement Project	
<i>Date:</i>	2018-2022
<i>Location:</i>	Lehigh, Pennsylvania

<i>Owner:</i>	Pennsylvania Turnpike Commission
<i>Contact:</i>	Charles Holupka, Project Manager, (717) 939-9551, ext. 5520
<i>Amount:</i>	\$120 million
<i>Description:</i>	Tunnel lining and lighting rehabilitation project
<i>Status:</i>	Complete
Berry Street Tunnel Improvement Project	
<i>Date:</i>	2016-2020
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	Port Authority of Allegheny County
<i>Contact:</i>	Jim Walter, Project Manager, (610) 488-9232
<i>Amount:</i>	\$40 million
<i>Description:</i>	Tunnel lining and tunnel lighting upgrades
<i>Status:</i>	Complete
Squirrel Hill Tunnel Rehabilitation Project	
<i>Date:</i>	2012-2014
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	PennDOT
<i>Contact:</i>	Kevin Heilman, keheilman@pa.gov , (412) 366-0581
<i>Amount:</i>	\$50 million
<i>Description:</i>	Tunnel lining and tunnel lighting upgrades
<i>Status:</i>	Complete
Liberty Hill Tunnel Rehabilitation Project	
<i>Date:</i>	2010-2012
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	PennDOT
<i>Contact:</i>	William Lester, wlester@pa.gov , (412) 429- 5052
<i>Amount:</i>	\$92 million
<i>Description:</i>	New tunnel lighting and infrastructure upgrades
<i>Status:</i>	Complete
Fort Pitt Hill Tunnel Rehabilitation Project	
<i>Date:</i>	2001-2002
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	PennDOT
<i>Contact:</i>	William Lester, wlester@pa.gov , (412) 429-5052
<i>Amount:</i>	\$62 million
<i>Description:</i>	New tunnel lighting and infrastructure upgrades
<i>Status:</i>	Complete

WSP's Superintendent's Qualifications

WSP: Michael N. Maltezos, MIES

<i>Responsibilities:</i>	Vice President and Project Manager
<i>Time with firm:</i>	2 years
<i>GESA project experience:</i>	No
<i>Education/technical training:</i>	A.A, St. Petersburg College, Clearwater, Florida B.S.P.A., St. Petersburg College, 2026 expected graduation
<i>Other relevant information:</i>	Over 35 years' experience in electrical engineering, construction engineering, project/program management, business development, marketing, and lighting design/management. Member at national levels of professional societies including the American Society of Civil Engineers (ASCE) and the Illuminating Engineering Society of North America (IESNA) and current chairman of the IESNA Tunnels and Underpasses Lighting Committee.

WSP: Louis Ruzzi, P.E., S.E.

<i>Responsibilities:</i>	Vice President and Structural Engineer
<i>Time with firm:</i>	5 years
<i>GESA project experience:</i>	No
<i>Education/technical training:</i>	B.S., Structural Engineering, University of Pittsburgh, Johnstown Registered Professional Engineer (P.E.) and Structural Engineer (S.E.) in Pennsylvania
<i>Other relevant information:</i>	Responsible for all structural design and project management in the Appalachian District. He manages multi-discipline teams, direct reports, and subconsultants, and coordinates efforts across multiple projects. Lou has managed the efforts of prime consultants and sub-consultants through design and construction, including extensive experience in project management, commissioning, and consulting for construction and design services of structural rehabilitations and bridge inspections. Lou was the PennDOT District 11 Bridge Engineer for over 35 years, working on numerous Pennsylvania bridge and tunnels projects during his career. Lou also oversaw structural design and construction rehabilitation projects for the local Fort Pitt Tunnel, Liberty Tunnels, and Squirrel Hill Tunnel.

WSP: Paul Lutkevich, P.E.

<i>Responsibilities:</i>	Senior Vice President and Technical Director
<i>Time with firm:</i>	20 years
<i>GESA project experience:</i>	Yes
<i>Education/technical training:</i>	B.S., Electrical Engineering Technology, Southeastern Massachusetts University Registered Professional Engineer (P.E.) in Massachusetts
<i>Other relevant information:</i>	Over 40 years' experience; Paul works as a senior engineering manager at WSP. Highly experienced in the study, design, and construction inspection of lighting and electrical systems. Has served as an electrical engineer and lighting designer providing engineering/project management services for highways, bridges, tunnels, and public transit systems projects and programs. Also experienced in coordinating work with local, state, and federal agencies at the highest levels.

WSP: Additional Information	
<i>Statement of Readiness and Commitment of Resources:</i>	WSP personnel identified are available and will be committed to the project for the time period referenced in the RFQ.
<i>Default/Debarment:</i>	WSP has never been disbarred or had any defaults levied against it or any of its entities

2-5.4-3(a): Subcontractors Qualifications

TEN has robust in-house construction capabilities including in-house professional construction managers who are experienced in delivering GESA and other large projects for some of the most recognized large construction companies in the industry.

2-5.4-3(a)(1): TEN Experience with Projects Greater Than \$5 Million

TEN has a record of delivering projects in excess of \$5 million (Table 18).

Table 18: TEN's Projects Greater than \$5 Million

Projects		Project Values
1.	School District of Philadelphia	\$40,738,049
2.	National Institutes of Health, Bethesda	\$35,727,845
3.	State Correctional Institution, Houtzdale	\$31,141,063
4.	Greater Johnstown School District	\$29,726,947
5.	Wilkesburg School District (6 phases)	\$26,458,533
6.	Pennsylvania State Capitol Complex	\$18,044,437
7.	Greater Johnstown Career and Technology Center	\$17,222,681
8.	Pittsburgh Public Schools, Allegheny Traditional Academy	\$15,716,599
9.	Dauphin County	\$14,294,984
10.	New Kensington-Arnold School District	\$13,446,618
11.	Pittsburgh Public School, Westwood Elementary School	\$11,957,600
12.	Wernersville State Hospital	\$11,223,430
13.	Conemaugh Township Area School District	\$10,734,813
14.	City of Portland, Maine	\$8,002,900
15.	Duquesne Light Streetlighting	\$7,590,540
16.	Central Cambria School District	\$7,486,894
18.	Sto-Rox School District	\$5,578,608
19.	Housing Authority of Lawrence County	\$5,578,608
20.	Allegheny County Airport Authority/Pittsburgh International Airport	\$13,610,668
Total		\$324,093,159

2-5.4-3(a)(2): Superintendent Qualifications

All individuals identified with construction-related roles (see Section 2-5.1 and Table 19) work directly for TEN. We have included resumes for key project management roles on the following pages:

Table 19: *TEN's Key Project Management Roles for PennDOT's Project*

TEN Project Management Team		PennDOT Management Role
1.	Brint Goettel, CWEP	Construction Executive
2.	Bobby Hall, CEM	Senior Site Project Manager

2-5.4-3(a)(3): TEN's Statement of Readiness and Commitment of Resources per the RFQ Project Schedule

TEN is using in-house construction management and site superintendents for this work. All staff identified in this RFQ are available and are committed to the project based on the anticipated schedule described in the RFQ. Any changes to staff will be made only with approval from PennDOT.



Brint Goettel, CWEP

Construction Executive

Brint will lead project construction management. He will be responsible for coordinating the tunnel work with Bobby Hall to ensure consistency in delivery and safety. Brint is responsible for managing program-wide subcontractor selection, project schedule, cost, logistics, quality of delivery, safety, and construction communication to include regular monthly meetings with the larger DGS, agency, and Pittsburgh Tunnels group. With eight years of experience with TEN, Brint is particularly skilled at organizing and maintaining the timelines of TEN's most complex projects.

Certifications

- B.S., Mechanical Engineering
University of Pittsburgh
- PennDOT Certified Flag
Training

Affiliations

- Certified Water Efficiency
Professional (CWEP)
- OSHA 30-hour construction
training
- Association of Energy
Engineers (AEE) Member

WORK HISTORY

The Efficiency Network (TEN) | Project Manager | 2018-Present

- Oversees multiple energy efficiency projects across all phases of construction
- Prepares and schedule resources to meet project schedules
- Oversees field operations and manage subcontractors
- Prepares monthly and annual cost forecasts
- Assists with value engineering solutions and scope development

CemSites | Project Manager | 2020

- Sales and development for CRM software
- Managed technical project developers and implementation specialists
- Coordinated software implementation and migrations for customers

PROJECT HISTORY

- [Allegheny County Airport Authority/Pittsburgh International Airport](#) | Central Utility Plant | Lead Project Manager | \$14.4 million
- [City of Pittsburgh Streetlighting](#) | Development/Audit | \$7.5 million
- [City of Cleveland Streetlighting](#) | Project Site Manager | \$150,000
- [Carnegie Museums of Pittsburgh](#) | Lead Project Manager | \$1 million
- [University of Pittsburgh](#) | Site Project Manager | \$12.6 million
- [Penn State University](#) | Site Manager | \$13.3 million
- [Pittsburgh Public Schools](#) | Project Manager | \$15.7 million
- [Sto-Rocks School District](#) | Project Manager | \$5.3 million
- [New Kensington-Arnold School District](#) | Project Manager | \$12 million



Bobby Hall, CEM

Senior Site Project Manager

Bobby will work as the senior site project manager, and will be responsible for managing logistics, schedule, and coordination of work at the tunnels. He will establish and lead site project manager communication and communication plans. Bobby is a master electrician and his experience includes oversight of TEN's major electrical system focused projects.

CERTIFICATIONS

- Master Electrician, Associated Builders and Contractors
- OSHA 10-and 30-hour and 30 hour training certifications

WORK HISTORY

The Efficiency Network (TEN) | Senior Project Engineer | 2013-Present

- Oversees multiple energy efficiency projects throughout all phases of development
- Develops and schedules resources to meet project schedules
- Prepares monthly and annual cost forecasts
- Completes project cost estimating and scope development

Constellation | Project Manager | 2008-2013

- Oversight for multiple energy efficiency projects throughout all phases of development
- Developed and scheduled resources to meet project schedules
- Prepared monthly and annual cost forecasts
- Completed project cost estimating and scope development

Earthwell Energy Management | Project Electrical Foreman | 1999-2008

- Working supervisor on multiple projects
- Project site superintendent
- Scheduled work for all electricians
- Participated in customer meeting update meetings

PROJECT HISTORY

- Allegheny County Airport Authority/Pittsburgh International Airport | Airfield Lighting | Lead Project Manager | \$14.4 million
- City of Pittsburgh Streetlighting | Lead Project Manager | \$7.5 million
- School District of Philadelphia | Senior Project Manager | \$40 million
- University of Pittsburgh | Senior Project Manager | \$12.6 million
- Pennsylvania State Capitol Complex | Project Manager | \$18 million
- Riverview School District | K-12 | Project Manager | \$1.2 million

2-5.4-3(a)(4-5): Key Subcontractor Qualification Forms

TEN is including subcontractor qualifications for the key subcontractors listed in Table 20. Please note that the subcontractors’ project value reflects the subcontractor’s portion only of the overall larger GESA project.

Table 20: List of Subcontractors for PennDOT Project

Subcontractors		Specialty
1.	Thoroughbred Electric	Electrical, lighting, lighting controls, SCADA
2.	McKamish, Inc.	Mechanical and fan systems, water intrusion
3.	Mosites Construction	Highway construction, general contracting, MPT

1. Thoroughbred Electric

Experience with GESA Projects

Liberty Tunnel, Phase 5	
<i>Date:</i>	2017
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	Pennsylvania Department of Transportation
<i>Contact:</i>	Geno Skerkoski, Assistant Tunnel Manager; Todd Caddy, PennDOT Tunnel Maintenance
<i>Amount:</i>	\$10,758,523
<i>Description:</i>	The scope for this project was extensively electrical which generally consisted of replacing the primary electrical distribution 1,500A 5kV switchgear, 2000A 480v MDP switchboards, 500kVA 15kV transformers, new tunnel fan variable frequency drives, fan house lighting, 5kV distribution system throughout tunnel to Portal Buildings, tunnel lighting control system, tunnel temperature monitoring via fiber optic linear heat detection, tunnel public address system, emergency bi-directional UHF amplification in tunnels, emergency telephone system in tunnels, complete SCADA system and software, fire alarm system in tunnels and fan house, emergency power generator 5kV medium voltage, medium voltage load interrupters, tunnel CCTV system, including numerous 5kV and 480v feeders, raceway, and related electrical work.
<i>Status:</i>	Complete
Emergency Services Call Center Rehabilitation	
<i>Date:</i>	2017
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	Allegheny County Airport Authority
<i>Contact:</i>	Gary Thomas, Assistant Chief Allegheny County Emergency Services, (412) 670-8716
<i>Amount:</i>	\$2,127,801
<i>Description:</i>	Complete electrical rehabilitation of existing building facility to serve as the new Allegheny County Emergency Call Center (911), including interior and exterior electrical distribution, interior lighting, electrical panelboards, 180kVA UPS, 500kW diesel emergency generator with ATS, security control system, AV systems, and related electrical work.
<i>Status:</i>	Complete

Lehigh Tunnel Lighting Replacement	
<i>Date:</i>	2018
<i>Location:</i>	Lehigh County, Pennsylvania
<i>Owner:</i>	Pennsylvania Turnpike Commission
<i>Contact:</i>	Robert Bungert AA Consulting (prior), (412) 708-6855
<i>Amount:</i>	\$10,066,733
<i>Description:</i>	Complete tunnel lighting rehabilitation, including complete replacement of electrical distribution and tunnel lighting systems via phenolic conduits, fire-rated circuits and feeders, complete tunnel lighting system, tunnel lighting control system, tunnel CCTV systems, UPS systems, emergency blue safety lights, and related electrical work.
<i>Status:</i>	Complete
Tuscarora Tunnel	
<i>Date:</i>	2019
<i>Location:</i>	Huntingdon County, Pennsylvania
<i>Owner:</i>	Pennsylvania Turnpike Commission
<i>Contact:</i>	Brian Seip, P.E., Electrical Engineering Manager, (717) 773-9815
<i>Amount:</i>	\$37,238,923
<i>Description:</i>	Complete rehabilitation of the Tuscarora Tunnel’s electrical systems including new tunnel lighting systems, electrical and communication raceway systems via phenolic conduits and fire-rated electrical circuits, tunnel lighting control systems, overhead sign structures, air-flow monitoring system, CCTV system, thermal CCTV system, complete tunnel control system (SCADA), dynamic message signs structure, fiber optic linear heat detection, tunnel and Portal Building’s fire alarm system, medium voltage feeders, new 480v switchboard in East and West Portal Building, four-400 kW diesel generators and ATS, new tunnel ventilation variable frequency drives including numerous electrical panelboards, cabling, and raceway.
<i>Status:</i>	Complete
I-579 Cap	
<i>Date:</i>	2019
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	Pennsylvania Department of Transportation
<i>Contact:</i>	PennDOT Tunnel Manager Ben Devore (prior), (412) 292-8874
<i>Amount:</i>	\$4,525,916
<i>Description:</i>	Complete lighting system for “Cap” project that included 480 each new LED under-structure lighting, electrical raceways, electrical lighting circuits, lighting control system, overhead sign structures, complete traffic signal system, underground raceway, and manholes for primary power, above-grade pedestrian park including decorative lighting poles and foundations
<i>Status:</i>	Complete
Braddock Locks and Dam	
<i>Date:</i>	2019
<i>Location:</i>	Braddock, Pennsylvania
<i>Owner:</i>	U.S. Army Corps of Engineers

<i>Contact:</i>	Kirk McWilliams, Mega Projects Engineer, (412) 287-3535
<i>Amount:</i>	\$1,644,342
<i>Description:</i>	Provided and installed complete lock chamber control system including all required cabling, raceway, and related electrical work.
<i>Status:</i>	Complete
Allegheny Tunnel Lighting and Conduit Replacement	
<i>Date:</i>	2020
<i>Location:</i>	Somerset County, Pennsylvania
<i>Owner:</i>	Pennsylvania Turnpike Commission
<i>Contact:</i>	John Cottle, PTC Construction Engineering Manager, (814) 233-4210
<i>Amount:</i>	\$13,201,880
<i>Description:</i>	Complete new tunnel LED lighting system including tunnel electrical distribution Phenolic Raceway, fire- rated electrical circuits, portal building panelboards, tunnel lighting control system, switchboard modifications, and related electrical work.
<i>Status:</i>	Complete
Charleroi Locks and Dam	
<i>Date:</i>	2020
<i>Location:</i>	Charleroi, Pennsylvania
<i>Owner:</i>	U.S. Army Corps of Engineers
<i>Contact:</i>	Kirk McWilliams, Mega Projects Engineer, (412) 287-3535
<i>Amount:</i>	\$8,903,957
<i>Description:</i>	Provided and installed complete lock chamber control system including all required cabling, raceway, and related electrical work, Lock Gate Control, CCTV systems, grounding and bonding, 480v MDP panels, 480v MCCs, complete process control system (SCADA) including related electrical work.
<i>Status:</i>	Complete
High Voltage Switchgear Replacement	
<i>Date:</i>	2021
<i>Location:</i>	Centre County, Pennsylvania
<i>Owner:</i>	University Area Joint Authority
<i>Contact:</i>	Michelle Aukerman, P.E., Team Lead, (814) 308-0645
<i>Amount:</i>	\$1,133,325
<i>Description:</i>	Replaced facility 15kV electrical distribution system, including 15kV primary power distribution panel, new electrical duct banks, and 15kV electrical circuits, electrical manholes, new 15kV transformers, and related electrical work.
<i>Status:</i>	Complete
Solar Arrays at Moraine State Park	
<i>Date:</i>	2021
<i>Location:</i>	Butler County, Pennsylvania
<i>Owner:</i>	Pennsylvania Department of Conservation and Natural Resources

<i>Contact:</i>	John Dubaich, Electrical Engineer, (717) 787-7849
<i>Amount:</i>	\$1,278,563
<i>Description:</i>	Installation of new solar array project and connection to utility grid, approximately 0.50 MW
<i>Status:</i>	Complete
Roadway and Bridges at Pittsburgh International Airport	
<i>Date:</i>	2021
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	Allegheny County Airport Authority
<i>Contact:</i>	John Bevilacqua, Project Manager, Electrical, Allegheny County Aviation Authority, (412) 877-1164
<i>Amount:</i>	\$14,888,974
<i>Description:</i>	Provided and installed complete underground duct bank raceway system and 500-kcmil and 750kcmil 5kV feeders, including 3 new 5kV switchboards, interior GRC conduits, 5kV terminations and splices, electrical testing, and commissioning
<i>Status:</i>	Complete
Sixth Street Bridge Rehabilitation	
<i>Date:</i>	2021
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	Pennsylvania Department of Transportation
<i>Contact:</i>	Jason Molinero, Deputy Director, (412) 350-5469
<i>Amount:</i>	\$7,858,572
<i>Description:</i>	Provided and installed LED decorative lighting system for three bridges: Clemente, Rachel Carson, and Warhol bridges including decorative lighting control system, GRC conduit and cabling, upgraded bridge electric services, bridge navigation lighting system, bridge roadway lighting system, fiber optic cable system, bridge raceway system, pylon decorative lighting, testing, commissioning, and related electrical work.
<i>Status:</i>	Complete
Miter Gate Hydraulic System Upgrade at Emsworth Lock and Dam	
<i>Date:</i>	2022
<i>Location:</i>	Emsworth, Pennsylvania
<i>Owner:</i>	U.S. Army Corps of Engineers
<i>Contact:</i>	Dan Paulovich, Project Manager; Wayne Crouse, (724) 601-0994; Kirk McWilliams, Mega Projects Engineer, (412) 287-3535
<i>Amount:</i>	\$839,977
<i>Description:</i>	Provided and installed new MCCs to operate new hydraulic power units including gate control system and related electrical work.
<i>Status:</i>	Complete
Traffic Management System for Blue Mountain and Kittatinny Tunnel	
<i>Date:</i>	2022
<i>Location:</i>	Franklin County, Pennsylvania
<i>Owner:</i>	Pennsylvania Turnpike Commission

<i>Contact:</i>	Trevor Engle, Pennsylvania Turnpike Project Manager, (717) 675-4180
<i>Amount:</i>	\$15,419,053
<i>Description:</i>	Provided and installed new traffic gate system to remotely close traffic lane, including 40 each traffic gate system, underground raceway and cabling, new tunnel lane use signs throughout tunnels, tunnel electrical distribution phenolic conduit and wire, fiber optic communication, and related electrical work.
<i>Status:</i>	Complete
Armstrong Tunnel Rehabilitation	
<i>Date:</i>	2022
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	Pennsylvania Department of Transportation
<i>Contact:</i>	Jason Molinero, Deputy Director, (412) 350-5469
<i>Amount:</i>	\$5,978,299
<i>Description:</i>	Complete tunnel LED lighting system, lighting control system, complete power distribution and phenolic raceway, fire-rated electrical circuits, tunnel traffic control system, fire alarm and fiber optic linear heat monitoring system, tunnel CCTV system, underground duct bank and manholes for FO system, traffic signal foundations, new primary electric services, and related electrical work.
<i>Status:</i>	Complete
Fiber Optic Network Installation	
<i>Date:</i>	2022
<i>Location:</i>	Pennsylvania Turnpike MP75 – MP 236
<i>Owner:</i>	Pennsylvania Turnpike Commission
<i>Contact:</i>	David Mattson, Kokosing Project Manager, (614) 679-8355
<i>Amount:</i>	\$64,391,745
<i>Description:</i>	Provision and installation of fiber optic network for the Pennsylvania Turnpike, including approximately one million square feet of eight-way micro-duct installed in Micro Trench, approximately 3 million SF of 288F fiber optic cable, 8 miles of aerial pole line, fiber optic cable fusion splicing, GRC conduits across 87 bridges, fiber optic testing and commissioning, and related work for the network project.
<i>Status:</i>	Ongoing
Hangar Switchgear Replacement	
<i>Date:</i>	2023
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	Allegheny County Airport Authority
<i>Contact:</i>	John Bevilacqua, Project Manager Electrical, Allegheny County Aviation Authority, (412) 877-1164
<i>Amount:</i>	\$4,418,371
<i>Description:</i>	Providing and installing new electrical switchgear to serve the existing Pittsburgh International Airport, including new cable tray, electrical distribution raceway, electrical feeders, new MV terminations, testing and commissioning, building modifications, and related electrical work.
<i>Status:</i>	Ongoing

Construct Solar Array at Heliport–Ohio Pyle State Park	
<i>Date:</i>	2023
<i>Location:</i>	Fayette County, Pennsylvania
<i>Owner:</i>	Pennsylvania Department of Conservation and Natural Resources
<i>Contact:</i>	John Dubaich, Electrical Engineer, (717) 787-7849
<i>Amount:</i>	\$1,540,826
<i>Description:</i>	Installation of new solar array project and connection to utility grid, approximately 0.50-MW
<i>Status:</i>	Complete
Construction of Tolling Facilities	
<i>Date:</i>	2024
<i>Location:</i>	Pennsylvania Turnpike MP180 – MP236
<i>Owner:</i>	Pennsylvania Turnpike Commission (PTC)
<i>Contact:</i>	John Cottle, PTC Construction Engineering Manager, (814) 233-4210
<i>Amount:</i>	\$3,636,402
<i>Description:</i>	Provided and installed electrical service and distribution for four Pennsylvania Turnpike tolling facilities, including electrical control system, underground raceway system, and related electrical work.
<i>Status:</i>	Ongoing
Upper Ohio Navigation Project–Montgomery Locks and Dam	
<i>Date:</i>	2024
<i>Location:</i>	Beaver County, Pennsylvania
<i>Owner:</i>	U.S. Army Corp of Engineers
<i>Contact:</i>	John Murray, Trumbull Corporation, (412) 352-5157
<i>Amount:</i>	\$25,470,000
<i>Description:</i>	Provided and installed complete lock chamber control system, including all required cabling, raceway, and related electrical work, lock gate control, CCTV systems, grounding and bonding, 480v MDP panels, 480v MCCs, complete process control system (SCADA), including related electrical work.
<i>Status:</i>	Ongoing
Thoroughbred Electric-Superintendent’s Qualifications	
Thoroughbred: Joseph Restelli	
<i>Responsibilities:</i>	Project Manager
<i>Time with firm:</i>	45 years
<i>GESA experience:</i>	University of Pittsburgh
<i>Education/training:</i>	Coordinated and managed numerous electrical construction projects, including heavy highway transportation, and river industrial transportation.

Thoroughbred: Joshua Reinert	
<i>Responsibilities:</i>	Vice President and Project Manager
<i>Time with firm:</i>	29 years
<i>GESA experience:</i>	IBEW Local 5 Apprenticeship, master electrician, fiber optic cable fusion splicer, industrial and commercial power systems expert, emergency power generator systems supervisor
<i>Education/training:</i>	General foreman for electrical power distribution, complete lighting system and SCADA/Lan systems in Squirrel Hill Tunnel
Thoroughbred: Wayne Williams	
<i>Responsibilities:</i>	Project Foreman
<i>Time with firm:</i>	35 years
<i>GESA experience:</i>	IBEW Local 5 Apprenticeship Program, OSHA 30, CPR, First Aid, Medium Voltage Terminations, Splicing
<i>Education/training:</i>	Electrical foreman for tunnel lighting projects, PennDOT and Pennsylvania Turnpike and other transportation and industrial projects
Thoroughbred: Frank Restelli	
<i>Responsibilities:</i>	Project Foreman
<i>Time with firm:</i>	15 years
<i>GESA experience:</i>	IBEW Local 5 Apprenticeship Program, OSHA 10, CPR and First Aid, Medium Voltage Terminations and Splicing, Mobile Work Platform
<i>Education/training:</i>	Electrical foreman for tunnel lighting projects, PennDOT and Pennsylvania Turnpike and other transportation and industrial projects
Thoroughbred: Additional Information	
<i>Statement of Readiness and Commitment of Resources:</i>	Thoroughbred Construction Group, LLC personnel identified in this response are available and will be committed to the project for the time period listed in the RFQ.
<i>Workman's Comp EMR:</i>	2025: 0.725 2024: 0.967 2023: 1.164
<i>Default/Debarment:</i>	Thoroughbred Construction Group, LLC, has never been disbarred or had any defaults levied against it or any of its entities.

2. McKamish, Inc.

Experience with GESA Projects

Tuscarora Tunnel Fan Replacement Project	
<i>Date:</i>	2023
<i>Location:</i>	Willow Hill, Pennsylvania
<i>Owner:</i>	Pennsylvania Turnpike Commission
<i>Contact:</i>	Mosites Construction, (412) 923-2255
<i>Amount:</i>	\$9,800,000
<i>Description:</i>	Fan replacement with associated ductwork and smoke evacuation for tunnel
<i>Status:</i>	Complete
Mt. Lebanon Tunnel Fan and Equipment Replacement	
<i>Date:</i>	2022
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	Port Authority
<i>Contact:</i>	Wellington Power, (724) 779-4000
<i>Amount:</i>	\$1,584,000
<i>Description:</i>	Replacement of tunnel fans, equipment rooms, and all associated ductwork and piping
<i>Status:</i>	Complete
Port Authority Damper Replacements	
<i>Date:</i>	2023
<i>Location:</i>	Pittsburgh, Pennsylvania
<i>Owner:</i>	Port Authority
<i>Contact:</i>	Wellington Power, (724) 779-4000
<i>Amount:</i>	\$2,262,000
<i>Description:</i>	Control damper replacement for the Wood Street and Steel Plaza tunnels
<i>Status:</i>	Complete

McKamish-Superintendent's Qualifications

McKamish: Robert Ward, P.E., LEED Green Associate	
<i>Responsibilities:</i>	Pre-construction Project Manager
<i>Time with firm:</i>	7 years with firm; over 30 years of industry experience
<i>GESA experience:</i>	Yes
<i>Education/training:</i>	B.S., Mechanical Engineering from Gannon University Professional Engineer (P.E.) in Pennsylvania, West Virginia, Florida, Nevada, Ohio LEED Green Associate OSHA-30 certification
<i>Other information:</i>	Bob has extensive experience in the mechanical engineering and construction fields. With over 30 years of experience, some of his past experience includes significant projects with the

	Pennsylvania Turnpike Commission including tunnel renovations and upgrades enabling him to be a valuable asset for this project from pre-construction through project completion.
McKamish: Phil Shusteric	
<i>Responsibilities:</i>	Project Superintendent
<i>Time with firm:</i>	11 years with firm; 24 years industry experience
<i>GESA experience:</i>	Yes
<i>Education/training:</i>	Sheet Metal Local 12 Apprenticeship Program OSHA 8-hour certification OSHA 30-hour certification ICRA-8 certification HVAC Universal Refrigeration License West Virginia HVAC License
<i>Other information:</i>	As Sheet Metal Superintendent, Phil oversees all sheet metal labor across McKamish’s projects. He works closely with project managers and foremen to make sure each project is staffed appropriately and managed effectively. Phil brings extensive knowledge of tunnel work, gained through his hands-on involvement with the Tuscarora Tunnel fan replacement project where coordination and precision were critical to success.
McKamish: Additional Information	
<i>Statement of Readiness Resources Commitment:</i>	McKamish personnel identified in this response are available and will be committed to the project for the time period referenced in the RFQ.
<i>Workman’s Comp EMR:</i>	2025: 0.635 2024: 0.847 2023: 0.885
<i>Default/Debarment:</i>	McKamish has never been disbarred or had any defaults levied against it or any of its entities.

3. Mosites Construction

Experience with GESA Projects

Liberty Tunnel Roof	
<i>Date:</i>	2024
<i>Location:</i>	Allegheny County, City of Pittsburgh
<i>Owner:</i>	PennDOT District 11
<i>Contact:</i>	Paul Manyisha, P.E., Senior Assistant Construction Engineer
<i>Amount:</i>	\$3,477,777
<i>Description:</i>	Replacing tunnel portal roofing system, traffic control, and upgraded drainage
<i>Status:</i>	In construction
Armstrong Tunnel Rehabilitation	
<i>Date:</i>	2022
<i>Location:</i>	Allegheny County, City of Pittsburgh
<i>Owner:</i>	Allegheny County Department of Public Works
<i>Contact:</i>	Mike Burdelsky, P.E., Assistant Deputy Director
<i>Amount:</i>	\$13,177,777
<i>Description:</i>	Replacing tunnel lighting system, concrete pavement rehabilitation, and upgraded drainage, and tunnel liner
<i>Status:</i>	In construction
Allegheny Tunnel Lighting	
<i>Date:</i>	2020
<i>Location:</i>	Somerset County
<i>Owner:</i>	Pennsylvania Turnpike Commission
<i>Contact:</i>	Bradley Heigel, P.E., Chief Engineer
<i>Amount:</i>	\$20,710,777
<i>Description:</i>	Replacing tunnel lighting system
<i>Status:</i>	Complete
Tuscarora Tunnel Rehabilitation	
<i>Date:</i>	2019
<i>Location:</i>	Huntington and Franklin counties
<i>Owner:</i>	Pennsylvania Turnpike Commission
<i>Contact:</i>	Bradley Heigel, P.E., Chief Engineer
<i>Amount:</i>	\$109,977,777
<i>Description:</i>	Replaced tunnel lighting system, SCADA, life-safety systems, new tunnel waterproofing liner, replaced ventilation fan, upgraded mechanical systems
<i>Status:</i>	Complete

Lehigh Tunnel Lighting	
<i>Date:</i>	2018
<i>Location:</i>	Lehigh and Carbon counties
<i>Owner:</i>	Pennsylvania Turnpike Commission
<i>Contact:</i>	Bradley Heigel, P.E., Chief Engineer
<i>Amount:</i>	\$13,422,422
<i>Description:</i>	Replaced tunnel lighting system
<i>Status:</i>	Complete
Mt. Lebanon Tunnel Liner Sealing	
<i>Date:</i>	2017
<i>Location:</i>	Allegheny County, Mt. Lebanon
<i>Owner:</i>	Pittsburgh Regional Transit
<i>Contact:</i>	Greg O'Hare, P.E., Chief Engineer
<i>Amount:</i>	\$2,977,777
<i>Description:</i>	Tunnel liner repairs and sealing
<i>Status:</i>	Complete
Liberty Tunnel Rehabilitation, Phase 5	
<i>Date:</i>	2017
<i>Location:</i>	Allegheny County, City of Pittsburgh
<i>Owner:</i>	PennDOT District 11
<i>Contact:</i>	Doug Thompson, P.E., Assistant District Executive
<i>Amount:</i>	\$28,632,246
<i>Description:</i>	Replaced tunnel pavement, tunnel concrete repairs, dry standpipe system, upgraded lighting and electrical system, upgraded ventilation fan, generator, and SCADA
<i>Status:</i>	Completed
Fort Pitt Tunnel Rehabilitation	
<i>Date:</i>	2014
<i>Location:</i>	Allegheny County, City of Pittsburgh
<i>Owner:</i>	PennDOT District 11
<i>Contact:</i>	Doug Thompson, P.E., Assistant District Executive
<i>Amount:</i>	\$14,177,258
<i>Description:</i>	Repaired tunnel concrete and dry standpipe system, upgraded lighting and electrical system, and upgraded ventilation
<i>Status:</i>	Complete
Mt. Lebanon Tunnel Rehabilitation	
<i>Date:</i>	2013
<i>Location:</i>	Allegheny County, Mt. Lebanon
<i>Owner:</i>	Pittsburgh Regional Transit
<i>Contact:</i>	Greg O'Hare, P.E., Chief Engineer
<i>Amount:</i>	\$4,685,777

<i>Description:</i>	Repaired tunnel concrete and standpipe system, upgraded drainage, lighting, and electrical systems
<i>Status:</i>	Complete
Allegheny Tunnel Rehabilitation	
<i>Date:</i>	2011
<i>Location:</i>	Somerset County
<i>Owner:</i>	Pennsylvania Turnpike Commission
<i>Contact:</i>	Bradley Heigel, P.E., Chief Engineer
<i>Amount:</i>	\$5,068,140
<i>Description:</i>	Repaired tunnel concrete, upgraded electrical and lighting system
<i>Status:</i>	Complete
Liberty Tunnel Rehabilitation, Phase 3	
<i>Date:</i>	2010
<i>Location:</i>	Allegheny County, City of Pittsburgh
<i>Owner:</i>	PennDOT District 11
<i>Contact:</i>	Doug Thompson, P.E., Assistant District Executive
<i>Amount:</i>	\$979,252
<i>Description:</i>	Tunnel concrete repairs
<i>Status:</i>	Complete
Liberty Tunnel Rehabilitation, Phase 2	
<i>Date:</i>	2009
<i>Location:</i>	Allegheny County, City of Pittsburgh
<i>Owner:</i>	PennDOT District 11
<i>Contact:</i>	Doug Thompson, P.E., Assistant District Executive
<i>Amount:</i>	\$9,877,777
<i>Description:</i>	Repaired tunnel concrete, upgraded electrical
<i>Status:</i>	Complete
Liberty Tunnel Rehabilitation, Phase 1	
<i>Date:</i>	2008
<i>Location:</i>	Allegheny County, City of Pittsburgh
<i>Owner:</i>	PennDOT District 11
<i>Contact:</i>	Doug Thompson, P.E., Assistant District Executive
<i>Amount:</i>	\$1,098,824
<i>Description:</i>	Tunnel concrete repairs
<i>Status:</i>	Complete
Mosites-Superintendent's Qualifications	
Mosites: Brian Gilkey, P.E.	
<i>Responsibilities:</i>	President, Heavy/Highway Division. Manages all aspects of the heavy/highway construction division including estimating, project management, and warehouse operations

<i>Time with firm:</i>	22 years
<i>GESA experience:</i>	Over 10 years' experience in tunnel rehabilitation projects
<i>Education/training:</i>	B.S., Engineering; Registered Professional Engineer (P.E.), Pennsylvania
<i>Other information:</i>	Over 25 years' experience in construction; 15 years at executive management level. 25 years' experience in project management including various tunnel projects
Mosites: Erik Bertrand	
<i>Responsibilities:</i>	Vice President, Heavy/Highway Division. Manages all aspects of estimating for heavy/highway construction division, assists in project management
<i>Time with firm:</i>	26 years
<i>GESA experience:</i>	Over 20 years' experience in tunnel rehabilitation projects
<i>Education/training:</i>	B.S., Engineering
<i>Other information:</i>	25 years' experience in construction, 10 years at executive management level, 25 years' experience in project management including various tunnel projects
Mosites: Derrick Jeannerette, P.E.	
<i>Responsibilities:</i>	Director, Project Management, Heavy/Highway Division. Manages heavy/highway division project management team
<i>Time with firm:</i>	17 years
<i>GESA experience:</i>	Over 15 years' experience in tunnel rehabilitation projects
<i>Education/training:</i>	B.E., Engineering, Registered Professional Engineer (P.E.), Pennsylvania
<i>Other information:</i>	Over 25 years' experience in construction, 25+ years' experience in project management including various tunnel projects
Mosites: Mike Rhoads	
<i>Responsibilities:</i>	Director of Operations. Manages all aspects of the heavy/highway division field operations
<i>Time with firm:</i>	16 years
<i>GESA experience:</i>	Superintendent on the four-year, \$109 million Tuscarora Tunnel project
<i>Education/training:</i>	Laborers Local 1058, extensive safety training and certifications
<i>Other information:</i>	25 years' experience in construction, 15 years' experience as a project superintendent including various tunnel projects
Mosites: Additional Information	
<i>Statement of Readiness Commitment:</i>	Mosites personnel identified are available and will be committed to the project for the time period referenced in the RFQ.
<i>Workman's Comp EMR:</i>	2024: 0.750 2023: 0.725 2022: 0.711
<i>Default/Debarment:</i>	Mosites has never been disbarred or had any defaults levied against it or any of its entities.



2024 TEN Financial Statements

Appendix A





THE EFFICIENCY NETWORK, INC.
AND SUBSIDIARIES

AUDITED CONSOLIDATED
FINANCIAL STATEMENTS

Years ended December 31, 2024 and 2023

Sisterson & Co. LLP
501 Grant Street, Suite 450
Pittsburgh, PA 15219

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Phone: 412.281.2025

INDEPENDENT AUDITOR'S REPORT

To the Board of Directors of
The Efficiency Network, Inc. and Subsidiaries

Opinion

We have audited the accompanying consolidated financial statements of The Efficiency Network, Inc. (a Delaware corporation) and Subsidiaries, which comprise the consolidated balance sheets as of December 31, 2024 and 2023, and the related consolidated statements of operations, changes in stockholder's equity, and cash flows for the years then ended, and the related notes to the consolidated financial statements.

In our opinion, the consolidated financial statements referred to above present fairly, in all material respects, the financial position of The Efficiency Network, Inc. and Subsidiaries as of December 31, 2024 and 2023, and the results of their operations, changes in stockholder's equity, and their cash flows for the years then ended, in accordance with accounting principles generally accepted in the United States of America.

Basis for Opinion

We conducted our audits in accordance with auditing standards generally accepted in the United States of America ("U.S. GAAS"). Our responsibilities under those standards are further described in the *Auditor's Responsibilities for the Audit of the Consolidated Financial Statements* section of our report. We are required to be independent of The Efficiency Network, Inc. and Subsidiaries and to meet our other ethical responsibilities in accordance with the relevant ethical requirements relating to our audits. We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

Responsibilities of Management for the Consolidated Financial Statements

Management is responsible for the preparation and fair presentation of these consolidated financial statements in accordance with accounting principles generally accepted in the United States of America, and for the design, implementation, and maintenance of internal control relevant to the preparation and fair presentation of consolidated financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the consolidated financial statements, management is required to evaluate whether there are conditions or events, considered in the aggregate, that raise substantial doubt about The Efficiency Network, Inc. and Subsidiaries' ability to continue as a going concern within one year after the date that the consolidated financial statements are available to be issued.

INDEPENDENT AUDITOR'S REPORT

(continued)

Auditor's Responsibilities for the Audit of the Consolidated Financial Statements

Our objectives are to obtain reasonable assurance about whether the consolidated financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance but is not absolute assurance and therefore is not a guarantee that an audit conducted in accordance with U.S. GAAS will always detect a material misstatement when it exists. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control. Misstatements, including omissions, are considered material if there is a substantial likelihood that, individually or in the aggregate, they would influence the judgment made by a reasonable user based on the consolidated financial statements.

In performing an audit in accordance with U.S. GAAS, we:

- Exercise professional judgment and maintain professional skepticism throughout the audit.
- Identify and assess the risks of material misstatement of the consolidated financial statements, whether due to fraud or error, and design and perform audit procedures responsive to those risks. Such procedures include examining, on a test basis, evidence regarding the amounts and disclosures in the consolidated financial statements.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of The Efficiency Network, Inc. and Subsidiaries' internal control. Accordingly, no such opinion is expressed.
- Evaluate the appropriateness of accounting policies used and the reasonableness of significant accounting estimates made by management, as well as evaluate the overall presentation of the consolidated financial statements.
- Conclude whether, in our judgment, there are conditions or events, considered in the aggregate, that raise substantial doubt about The Efficiency Network, Inc. and Subsidiaries' ability to continue as a going concern for a reasonable period of time.

We are required to communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit, significant audit findings, and certain internal control related matters that we identified during the audit.

Sisterson & Co. LLP

June 5, 2025

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

	December 31,	
	<u>2024</u>	<u>2023</u>
<u>ASSETS</u>		
Current assets		
Cash	\$ 8,558,614	\$ 8,016,532
Trade accounts receivable, including retention of \$1,945,077 and \$3,338,545 and net of allowance for credit losses of \$10,364 and \$0, respectively	9,229,627	12,990,722
Interest receivable from Duquesne Light Holdings, Inc. ("DLH") (Note 9)	291,985	170,704
Income tax refund receivable (Note 7)	1,219,060	--
Prepaid expenses and other current assets	1,412,846	994,051
Costs and estimated earnings in excess of billings (Note 3)	<u>935,443</u>	<u>4,639,905</u>
Total current assets	21,647,575	26,811,914
Property and equipment, net (Note 4)	370,544	262,278
Operating lease right-of-use asset (Note 5)	116,071	223,494
Goodwill (Note 6)	18,594,900	18,594,900
Deferred tax asset, net (Note 7)	1,377,708	1,561,213
Note receivable from DLH (Note 9)	<u>20,000,000</u>	<u>10,000,000</u>
	<u>\$ 62,106,798</u>	<u>\$ 57,453,799</u>

The accompanying notes are an integral part of these consolidated financial statements.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES

CONSOLIDATED BALANCE SHEETS

(continued)

	December 31,	
	<u>2024</u>	<u>2023</u>
<u>LIABILITIES AND STOCKHOLDER'S EQUITY</u>		
Current liabilities		
Trade accounts payable, including retention of \$2,846,692 and \$4,059,316, respectively	\$ 6,701,837	\$ 11,450,122
Accounts payable to DLH (Note 9)	117,817	112,569
Accrued salaries, commissions, taxes, and benefits	1,352,337	1,780,472
Accrued short-term incentive compensation	370,780	425,558
Accrued income taxes	--	179,162
Other accrued expenses	1,014,277	79,858
Current portion of operating lease liability (Note 5)	116,071	107,423
Contract liabilities (Note 3)	<u>6,808,860</u>	<u>1,547,609</u>
Total current liabilities	16,481,979	15,682,773
Accrued long-term incentive compensation	294,792	492,668
Operating lease liability, net of current portion (Note 5)	<u>--</u>	<u>116,071</u>
Total liabilities	16,776,771	16,291,512
Stockholder's equity (Note 6)		
Stockholder's controlling interest in equity		
Common stock, \$0.001 par value, 9,244,442 shares authorized, 8,401,359 shares issued and outstanding	8,401	8,401
Additional paid-in capital	27,893,319	27,893,319
Retained earnings	17,428,737	13,260,847
Noncontrolling interest in equity	<u>(430)</u>	<u>(280)</u>
Total stockholder's equity	<u>45,330,027</u>	<u>41,162,287</u>
	<u>\$ 62,106,798</u>	<u>\$ 57,453,799</u>

The accompanying notes are an integral part of these consolidated financial statements.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF OPERATIONS

	Year ended December 31,	
	<u>2024</u>	<u>2023</u>
Revenue		
Construction revenue	\$ 44,751,338	\$ 70,505,495
Service revenue	<u>27,562</u>	<u>223,242</u>
Total revenue	44,778,900	70,728,737
Cost of revenue	<u>35,165,737</u>	<u>57,466,627</u>
Gross profit	9,613,163	13,262,110
Selling, general, and administrative expenses	<u>8,425,233</u>	<u>8,692,398</u>
Income from operations	1,187,930	4,569,712
Other income	<u>1,372,291</u>	<u>537,291</u>
Net income before income taxes	2,560,221	5,107,003
Income tax benefit (Note 7)	<u>1,607,519</u>	<u>693,089</u>
Net income	4,167,740	5,800,092
Net loss attributable to the noncontrolling interest	<u>(150)</u>	<u>(153)</u>
Net income attributable to the controlling interest	<u>\$ 4,167,890</u>	<u>\$ 5,800,245</u>

The accompanying notes are an integral part of these consolidated financial statements.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CHANGES IN STOCKHOLDER'S EQUITY

	Common stock	Additional paid-in capital	Retained earnings	Non-controlling interest in equity	Total
Balance, January 1, 2023	\$ 9,244	\$ 23,724,521	\$ 11,628,557	\$ (127)	\$ 35,362,195
Capital contribution (Note 6)	--	4,168,798	--	--	4,168,798
Redemption of non-controlling shares (Note 6)	(843)	--	(4,167,955)	--	(4,168,798)
Net income (loss)	--	--	5,800,245	(153)	5,800,092
Balance, December 31, 2023	8,401	27,893,319	13,260,847	(280)	41,162,287
Net income (loss)	--	--	4,167,890	(150)	4,167,740
Balance, December 31, 2024	\$ 8,401	\$ 27,893,319	\$ 17,428,737	\$ (430)	\$ 45,330,027

The accompanying notes are an integral part of these consolidated financial statements.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES

CONSOLIDATED STATEMENTS OF CASH FLOWS

	Year ended December 31,	
	<u>2024</u>	<u>2023</u>
Cash flows from operating activities		
Net income	\$ 4,167,740	\$ 5,800,092
Adjustments to reconcile net income to net cash provided by operating activities		
Depreciation and amortization of property and equipment	74,296	55,136
Amortization of operating lease right-of-use asset	107,423	99,223
Deferred income tax expense	183,505	82,274
Increase (decrease) in cash from changes in		
Trade accounts receivable	3,761,095	(2,945,370)
Interest receivable from DLH	(121,281)	(170,704)
Income taxes receivable	(1,219,060)	--
Prepaid expenses and other current assets	(418,795)	8,553
Contract assets	3,704,462	2,354,003
Trade accounts payable	(4,748,285)	322,562
Accounts payable to DLH	5,248	(157,792)
Accrued expenses	74,468	(852,014)
Operating lease liability	(107,423)	(99,223)
Contract liabilities	5,261,251	447,033
Net cash provided by operating activities	10,724,644	4,943,773
Cash flows from investing activities		
Advances made on notes receivable from DLH	(10,000,000)	(10,000,000)
Purchases of property and equipment	(182,562)	(52,782)
Net cash used in investing activities	(10,182,562)	(10,052,782)
Cash flows from financing activities		
Capital contribution from stockholder	--	4,168,798
Repurchase of non-controlling shares	--	(4,168,798)
Net cash used in financing activities	--	--
Net increase (decrease) in cash	542,082	(5,109,009)
Cash, beginning of the year	8,016,532	13,125,541
Cash, end of the year	\$ <u>8,558,614</u>	\$ <u>8,016,532</u>
Supplemental disclosure of cash flow information:		
Cash paid for income taxes	\$ <u>3,181</u>	\$ <u>22,437</u>

The accompanying notes are an integral part of these consolidated financial statements.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

NOTE 1 - NATURE OF BUSINESS

The Efficiency Network, Inc. ("TEN") began operations during 2012 as a next-generation provider of energy and water efficiency projects for existing buildings, primarily performed under fixed-price contracts. TEN is headquartered in Pittsburgh, Pennsylvania. TEN Connected Solutions, Inc. ("TCS"), TEN's wholly owned subsidiary, was incorporated during 2016 and designs, finances, and implements street lighting solutions and smart cities technology projects.

On March 15, 2021, TEN and FESCO Energy, LLC ("FESCO") created TEN FESCO, LLC ("TEN FESCO") through the execution of a limited liability company agreement. Under the terms of the agreement, TEN contributed \$9,000 in exchange for 90 units of the LLC, representing a 90% interest in TEN FESCO and FESCO contributed \$1,000 in exchange for 10 units of the LLC, representing a 10% interest in TEN FESCO.

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES

Principles of consolidation

The consolidated financial statements include the accounts of TEN, TCS, and TEN FESCO (collectively, the "Company"). Noncontrolling interests in TEN FESCO are reported as a separate component of stockholders' equity in the consolidated balance sheets. All intercompany transactions and balances have been eliminated in consolidation.

Cash

The Company maintains its cash in bank accounts in amounts that at times exceed federally insured limits. The Company does not believe it is exposed to any significant credit risk with respect to cash.

Trade accounts receivable and allowance for credit losses

The Company, in the normal course of business, extends credit to customers based on standard terms, generally 30 days. The Company does not require collateral for these trade accounts receivable. Trade accounts receivable are considered to be past due when the normal trade terms have been exceeded. The Company does not charge interest on past due balances. Credit quality is monitored through the timing of payments compared to payment terms and known facts regarding the financial condition of debtors. Generally receivables that are considered uncollectible are written-off directly to bad debt expense when they are determined to be uncollectible. During the years ended December 31, 2024 and 2023 the Company wrote-off receivables totaling \$25,000 and \$4,502, respectively. Additionally, during the year ended December 31, 2024, the Company established an allowance for credit losses of \$10,364.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(continued)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Revenue recognition – construction revenue

Performance obligations related to the Company's long-term construction contracts are satisfied over time because the performance of the contract typically creates or enhances an asset that the customer controls over time, as the asset is created or enhanced. The Company recognizes revenue as performance obligations are satisfied and control of the promised good and/or service is transferred to the customer. Revenue is ordinarily recognized over time as control is transferred to the customers by measuring the progress toward complete satisfaction of the performance obligation using the cost-to-cost method because management considers this to be the best available measure of transfer of control.

The Company has engaged in a contractual agreement with a governmental entity to provide construction services whereby the governmental agency will provide funding for the Company's construction and installation costs. The Company recognizes revenue monthly over the serviceable period as performance obligations are satisfied and control of the promised good and/or service is transferred to the customers by measuring the progress toward complete satisfaction of the performance obligation using the cost-to-cost method because management considers this to be the best available measure of transfer of control.

All contract costs, including those associated with affirmative claims and change orders, are recorded as incurred, and revisions to estimated total costs are reflected as soon as the obligation to perform is determined. Contract costs consist of direct costs on contracts, including labor, materials, amounts paid to subcontractors, and overhead costs. At the time a loss on any contract becomes known, the entire amount of the estimated loss on contracts is recorded. The Company had no contracts in an estimated loss position as of December 31, 2024 or 2023.

The Company's contracts provide for termination of the contract at the convenience of the party contracting with it, with provision to pay the Company for work performed through the date of termination, including demobilization cost and direct materials specifically purchased for the job but not consumed by the job.

The accuracy of the Company's revenue and profit recognition in a given period depends on the accuracy of the Company's estimates of the cost to complete each project. The Company believes its experience allows it to create materially reliable estimates.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(continued)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Revenue recognition – construction revenue (continued)

Variable consideration

Transaction prices for the Company's contract may include variable consideration, which comprises items such as change orders, claims, incentives, and discounts. Management estimates variable consideration for a performance obligation utilizing estimation methods that it believes best predict the amount of consideration to which the Company will be entitled. The Company does not generally include estimates of variable consideration in the transaction price until the variable consideration is supported by a signed change order or filed claim. The effect of variable consideration on the transaction price of a performance obligation is typically recognized as an adjustment to revenue on a cumulative catch-up basis, as such variable consideration, which typically pertains to changed conditions and scope, is generally for services encompassed under the existing contract.

Contract assets

Contract assets consist of trade accounts receivable, including retention, and costs and estimated earnings in excess of billings. Costs and estimated earnings in excess of billings arise when revenue has been recognized but amounts have yet to be billed under the terms of the contract. Included in costs and estimated earnings in excess of billings are amounts the Company will collect from customers, changes in contract specifications or design, costs associated with contract change orders in dispute or unapproved as to scope and price, or other customer related causes of unanticipated contract costs. Amounts become billable according to contract terms, which consider the progress on the contracts as well as achievement of certain milestones and completion of specified units of work. Such amounts will be billed over the remaining life of the contract.

Contract liabilities

Contract liabilities consist of billings in excess of costs and estimated earnings, deferred revenue, and general provisions for losses, if any.

Billings in excess of costs and estimated earnings represent billings to customers in advance of work performed.

During the years ended December 31, 2024 and 2023, the Company engaged with a governmental entity to complete a construction project where funds for construction and installation costs are drawn by the Company in advance of work being performed. Deferred revenue represents funds that have been drawn on the contract prior to the recognition of related revenue.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(continued)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Revenue recognition – service revenue

Service revenue represents fees earned for monitoring and verification services performed upon completion of the construction project. The monitoring and verification services are performed in order to verify the annual cost savings, subsequent to construction completion, guaranteed by the Company within the customer contract. Service revenue is billed separately from construction revenue and is considered by the Company to be a distinct performance obligation because the services have standalone value to the customer and could be completed by a third party if necessary. Service revenue is billed at a point in time at the end of each service year upon the provision of monitoring reports to the customer.

As noted above, the Company guarantees specified energy savings as part of its construction services for up to twenty-one years. The Company will provide additional labor or reimburse the customer for up to the guaranteed amount in each year that the guaranteed energy savings are not met during the term specified in the contract. In accordance with Financial Accounting Standards Board Accounting Standards Codification (“FASB ASC”) Topic 606 – *Revenue from Contracts with Customers*, the Company considers this guarantee to be a separate performance obligation, because the guarantee includes a service component, and allocates a portion of the transaction price to the guarantee to the extent that the Company expects to be required to perform on the guarantee. From the Company’s inception through 2024, the Company has not been required to perform related to these guarantees on any customer contract and therefore generally does not allocate any portion of the transaction price except for the service revenue fees specified in the contract.

Pre-contract costs

The Company defers pre-contract costs incurred prior to the award of a construction contract to the extent that the award of the contract is considered probable for costs that specifically relate to the respective contract. Upon executing the contract, these costs are included in the incurred and estimated costs of the related contract. Amounts deferred for contracts that are ultimately not awarded to the Company are generally immaterial and are written-off upon notification that the Company has not been awarded the contract. Pre-contract costs of \$826,115 and \$499,370 are included with prepaid expenses and other current assets on the Company’s consolidated balance sheets as of December 31, 2024 and 2023, respectively.

Property and equipment

Property and equipment are stated at cost. Depreciation and amortization is computed using the straight-line method over the estimated useful lives of the assets ranging from five to fifteen years.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(continued)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Property and equipment (continued)

Maintenance and repairs are expensed as incurred. Expenditures that significantly increase asset value or extend useful lives of property and equipment are capitalized. When an asset is sold or retired, the cost and related accumulated depreciation or amortization is eliminated from the accounts and any resulting gain or loss is recognized in income.

Goodwill

Goodwill is assessed for impairment on an annual basis and is reduced through an impairment loss if the carrying amount exceeds the implied fair value.

Income taxes

The Company provides for taxes based on income as reported in the consolidated statements of operations. Deferred tax assets and liabilities are recognized for future tax benefits or consequences attributable to differences between the financial statement carrying amounts of existing assets and liabilities and their respective tax bases. Deferred tax assets and liabilities are measured using enacted tax rates expected to apply to taxable income in the years in which those temporary differences are expected to be recovered or settled. The effect on deferred tax assets and liabilities of a change in tax rates is recognized in income in the period that includes the enactment date. Valuation allowances are established when necessary to reduce deferred tax assets to amounts expected to be realized. The Company's results are included in the consolidated federal income tax return of Duquesne Light Holdings, Inc. ("DLH"). The Company presents its current and deferred taxes based on the separate return allocation method.

FASB ASC Topic 740 - *Income Taxes* clarifies recognition, measurement, presentation, and disclosure relating to uncertain tax positions. The Company evaluates uncertain tax positions for recognition by determining whether evidence indicates it is more likely than not that a position will be sustained if examined by taxing authorities. As of December 31, 2024 and 2023, the Company is unaware of any uncertain tax positions; however, were such matters to arise, they would be evaluated in accordance with existing accounting principles and accruals and disclosures would be made as required. The Company's tax returns for 2021 and beyond remain subject to examination by the Internal Revenue Service and various state tax authorities.

Advertising

The Company expenses advertising costs as they are incurred. Advertising expense for the years ended December 31, 2024 and 2023 was \$138,579 and \$93,070, respectively, and is included in selling, general and administrative expenses in the Company's consolidated statements of operations.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(continued)

NOTE 2 - SUMMARY OF SIGNIFICANT ACCOUNTING POLICIES (continued)

Use of estimates

The preparation of consolidated financial statements in conformity with accounting principles generally accepted in the United States of America requires management to make estimates and assumptions that affect the reported amounts of assets and liabilities and disclosure of contingent assets and liabilities at the date of the consolidated financial statements and the reported amounts of revenue and expenses during the reporting period. Actual results could differ from those estimates.

Reclassifications

Certain amounts previously presented in the 2023 consolidated financial statements have been reclassified to conform to the current year presentation.

Subsequent events

The Company evaluates events and transactions occurring subsequent to the date of the consolidated financial statements for matters requiring recognition or disclosure in the consolidated financial statements. The accompanying consolidated financial statements consider events through June 5, 2025, the date on which the consolidated financial statements were available to be issued.

Effective January 3, 2025, TEN's wholly-owned subsidiary, TCS, was merged into TEN. Upon execution of the merger agreement, TCS ceased to exist as a legal entity and all of its assets, liabilities, and equity were transferred to TEN. The merger was completed prior to June 5, 2025. The merger did not have a material impact on the consolidated financial position or consolidated results of operations of the Company.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(continued)

NOTE 3 - CONTRACTS IN PROGRESS

The components of contract assets and contract liabilities are as follows as of December 31:

	<u>2024</u>	<u>2023</u>
Contract assets		
Costs and estimated earnings in excess of billings on uncompleted contracts	\$ <u>935,443</u>	\$ <u>4,639,905</u>
Contract liabilities		
Billings in excess of costs and estimated earnings on uncompleted contracts	2,103,854	1,547,609
Deferred revenue	<u>4,705,006</u>	<u>--</u>
Total contract liabilities	\$ <u>6,808,860</u>	\$ <u>1,547,609</u>

Costs and recognized earnings on contracts in progress are summarized as follows as of December 31:

	<u>2024</u>	<u>2023</u>
Costs incurred on contracts in progress	\$ 66,196,802	\$ 115,841,211
Recognized earnings	<u>17,168,887</u>	<u>25,237,563</u>
Costs and estimated earnings on contracts in progress	83,265,689	141,078,774
Less: billings to date	<u>84,534,100</u>	<u>137,986,478</u>
	\$ <u>(1,168,411)</u>	\$ <u>3,092,296</u>
Costs and estimated earnings in excess of billings	\$ 935,443	\$ 4,639,905
Billings in excess of costs and estimated earnings on uncompleted contracts	<u>(2,103,854)</u>	<u>(1,547,609)</u>
	\$ <u>(1,168,411)</u>	\$ <u>3,092,296</u>

As of December 31, 2024 and 2023, the Company's backlog was approximately \$42,000,000 and \$46,000,000, respectively.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(continued)

NOTE 4 - PROPERTY AND EQUIPMENT

Property and equipment consisted of the following as of December 31:

	2024	2023
Furniture and fixtures	\$ 60,775	\$ 60,775
Equipment	473,116	307,375
Leasehold improvements	11,848	11,848
	545,739	379,998
 Less: accumulated depreciation and amortization	 175,195	 117,720
	\$ 370,544	\$ 262,278

NOTE 5 - LEASES

The Company leases its office space under a non-cancelable fixed payment lease agreement, that expires on December 31, 2025. The office space lease agreement includes a two-year extension option. The Company considered relevant economic factors and has not included the extension option in the term of the lease. In accordance with FASB ASC Topic 842 – *Leases*, the Company has measured its right-of-use-use asset and lease liability based on the calculated present value of the future lease payments. A discount rate of 5.46%, commensurate with the Company’s incremental borrowing rate, was used as the implicit rate is not known. The Company’s office space lease does not include residual value guarantees or covenants. During the years ended December 31, 2024 and 2023, the Company recognized operating lease costs of approximately \$119,600 and \$116,800, respectively, which is included in selling, general, and administrative expenses in the consolidated statements of operations.

Future minimum payments required under the office space lease are as follows as of December 31, 2024:

2025	\$ 122,408
Total undiscounted lease payments	122,408
Less: imputed interest	(6,337)
Operating lease liability	\$ 116,071

During 2025, the Company exercised the two-year extension option for the office space lease. By exercising the extension option, the Company is required to make minimum payments totaling \$125,190 and \$127,972 during the years ended December 31, 2025 and 2026, respectively.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(continued)

NOTE 6 - STOCKHOLDERS' EQUITY

During May 2019, DLH acquired 90.1% of the outstanding capital stock of the Company in a transaction that qualified as a business combination in accordance with FASB ASC Topic 805 – *Business Combinations*. The remaining 9.9% of the outstanding shares were retained by certain executives of the Company (“non-controlling stockholders”). In connection with the transaction, DLH recognized the acquired assets, liabilities, and non-controlling interest in the Company at fair value as of the date of the transaction. The Company elected to apply pushdown accounting in its separate financial statements as of the date of acquisition.

As a result of the acquisition, the Company recognized goodwill of \$18,594,900 representing the excess of the transaction purchase price over the fair value of the acquired assets and liabilities. The goodwill balance is not amortized but is assessed annually for impairment. As of both December 31, 2024 and 2023, no impairment has been recorded on goodwill.

During May 2019, in connection with the acquisition transaction, the Company entered into a Stockholder Agreement with the post transaction stockholders of the Company. The Stockholder Agreement restricted the sale or transfer of shares owned by the non-controlling stockholders for a period of four years from the acquisition date (“restriction period”). In the event of the employment termination, or death of a non-controlling stockholder during the restriction period, the Company was required to purchase the related shares at fair value. Upon the end of the restriction period, each non-controlling stockholder had the option to require the Company to purchase the non-controlling shares at fair value.

During August 2023, at the end of the restriction period, all non-controlling stockholders executed their option to require the Company to repurchase their non-controlling shares at fair value. DLH contributed capital of \$4,168,798 in the form of cash to the Company which the Company used to repurchase 843,080 shares, representing all outstanding non-controlling shares at the time of the transaction. The Company retired these repurchased shares at closing. As of December 31, 2024 and 2023, there were 8,401,359 shares of capital stock outstanding, all of which are owned by DLH.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES
NOTES TO CONSOLIDATED FINANCIAL STATEMENTS
(continued)

NOTE 7 - INCOME TAXES

Income tax benefit consists of the following for the years ended December 31:

	2024	2023
Current		
Federal	\$ (1,746,513)	\$ (638,203)
State	(44,510)	(137,161)
Total current benefit	(1,791,023)	(775,364)
Deferred		
Federal	272,790	118,249
State	(89,286)	(35,974)
Total deferred expense	183,504	82,275
Income tax benefit	\$ (1,607,519)	\$ (693,089)

The Company's income taxes differ from applying the federal and state tax rates to net income before income taxes. The primary differences relate to the utilization of net operating loss carryforwards and the permanent deduction for federal tax purposes of qualifying expenditures related to energy efficiency.

As of December 31, 2024, the income tax refund receivable represents the income tax benefit generated by TEN and utilized by DLH on its consolidated federal income tax return. These amounts are expected to be remitted from DLH to TEN.

Deferred tax assets (liabilities) result from timing of differences in the recognition of certain assets and liabilities as follows as of December 31:

	2024	2023
Deferred tax assets		
Net operating loss carryforwards	\$ 956,417	\$ 901,373
Accrued expenses	442,862	651,973
Intangible asset	22,450	33,237
Property and equipment	(44,021)	(25,370)
Total deferred tax asset	\$ 1,377,708	\$ 1,561,213

As of December 31, 2024 and 2023, the Company has approximately \$13,170,000 and \$8,440,000 of federal and state net operating loss carryforwards that will begin to expire in 2032.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(continued)

NOTE 8 - CUSTOMER CONCENTRATIONS

The Company had four customers during 2024 that accounted for 50% of total revenue. The amounts due from these customers included in trade accounts receivable, including retention, as of December 31, 2024, was \$7,155,348.

The Company had four customers during 2023 that accounted for 58% of total revenue. The amounts due from these customers included in trade accounts receivable, including retention, as of December 31, 2023, was \$4,739,832.

NOTE 9 - RELATED PARTY TRANSACTIONS

DLH and its various subsidiaries and affiliates are considered related parties of the Company based on the controlling ownership interest of DLH in the Company (see Note 6). The Company has entered into certain administrative services agreements with DLH and its affiliates, related to the provision of administrative, management, and other services to the Company. Under the terms of the agreements, the Company reimburses DLH and affiliates for services provided at an amount equal to the cost of the services provided. Payments for services rendered are due 30 days after receipt of invoice. Interest is charged on past due amounts at a rate equal to DLH's incremental borrowing rate.

During the years ended December 31, 2024 and 2023, the Company incurred \$460,276 and \$494,856 of related party expense related to these agreements that is included in selling, general, and administrative expenses in the consolidated statements of operations. As of December 31, 2024 and 2023, the Company was indebted to DLH and affiliates for \$117,817 and \$112,569 under the terms of these agreements.

During the years ended December 31, 2024 and 2023, the Company was subcontracted work by an affiliate of DLH. The Company recorded \$6,271 and \$84,054 of revenue related to this project during 2024 and 2023, respectively. As of December 31, 2024 and 2023, \$3,934 and \$7,028 had not been collected and is included in trade accounts receivable in the consolidated balance sheet, respectively.

During the year ended December 31, 2023, DLH issued a promissory note to the Company that allows for draws up to \$25,000,000. During each of the years ended December 31, 2024 and 2023, DLH made two draws of \$5,000,000. Accordingly, the outstanding balance of the note as of December 31, 2024 and 2023, was \$20,000,000 and \$10,000,000, respectively. Each draw bears interest at a 3-month Secured Overnight Financing Rate, plus 1.725%. The Company recognized interest income during 2024 and 2023 of \$1,041,480 and \$301,475, respectively, related to the note, which is included in other income on the statement of operations. At December 31, 2024 and 2023, interest receivable related to the note was \$291,985 and \$170,704, respectively. The note is unsecured and due on demand. However, the Company does not expect to demand repayment within one year and accordingly the note is classified as long-term on the consolidated balance sheets.

THE EFFICIENCY NETWORK, INC. AND SUBSIDIARIES

NOTES TO CONSOLIDATED FINANCIAL STATEMENTS

(continued)

NOTE 9 - RELATED PARTY TRANSACTIONS (continued)

On March 15, 2021, TEN, FESCO, and TEN FESCO executed a teaming agreement that outlines the various responsibilities of the three entities relating to the joint provision of construction services to customers by the three entities. There was no activity related to this agreement through December 31, 2024.

NOTE 10 - DEFINED CONTRIBUTION PLAN

The Company's employees participate in a defined contribution employee benefit plan sponsored by DLH and are eligible to receive a performance matching contribution based on the achievement by the Company of certain performance goals. Effective January 1, 2022, in addition to the performance matching contributions, the Company's employees also became eligible to receive a 5% Company non-elective contribution based on eligible salary and a Company matching contribution up to 3%. The Company made contributions totaling \$391,518 and \$317,616 to the plan for the years ended December 31, 2024 and 2023, respectively. These contributions are included in selling, general, and administrative expenses in the consolidated statements of operations.

NOTE 11 - SURETY BONDS

The Company, as a condition for entering into construction contracts, had outstanding surety bonds of \$139,244,882 and \$172,580,246 as of December 31, 2024 and 2023. The bonds are collateralized by trade accounts receivable.



TEN Certificate of Insurance

Appendix B



CERTIFICATE OF LIABILITY INSURANCE

DATE(MM/DD/YYYY)
05/16/2025

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AFFIRMATIVELY OR NEGATIVELY AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW. THIS CERTIFICATE OF INSURANCE DOES NOT CONSTITUTE A CONTRACT BETWEEN THE ISSUING INSURER(S), AUTHORIZED REPRESENTATIVE OR PRODUCER, AND THE CERTIFICATE HOLDER.

IMPORTANT: If the certificate holder is an ADDITIONAL INSURED, the policy(ies) must have ADDITIONAL INSURED provisions or be endorsed. If SUBROGATION IS WAIVED, subject to the terms and conditions of the policy, certain policies may require an endorsement. A statement on this certificate does not confer rights to the certificate holder in lieu of such endorsement(s).

PRODUCER Aon Risk Services Central, Inc. Pittsburgh PA Office EQT Plaza ~ Suite 2700 625 Liberty Avenue Pittsburgh PA 15222-3110 USA	CONTACT NAME: PHONE (A/C. No. Ext): (866) 283-7122 FAX (A/C. No.): (800) 363-0105		
	E-MAIL ADDRESS:		
INSURED The Efficiency Network, Inc 1501 Reedsdale Street, Suite 401 Pittsburgh PA 15233 USA	INSURER(S) AFFORDING COVERAGE		NAIC #
	INSURER A: Crum & Forster Specialty Insurance Co.		44520
	INSURER B: Colony Insurance Company		39993
	INSURER C: Twin City Fire Insurance Company		29459
	INSURER D: Trumbull Insurance Company		27120
	INSURER E:		
INSURER F:			

Holder Identifier :

COVERAGES	CERTIFICATE NUMBER: 570112575638	REVISION NUMBER:
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THIS IS TO CERTIFY THAT THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS. Limits shown are as requested

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFF (MM/DD/YYYY)	POLICY EXP (MM/DD/YYYY)	LIMITS
A	<input checked="" type="checkbox"/> COMMERCIAL GENERAL LIABILITY <input type="checkbox"/> CLAIMS-MADE <input checked="" type="checkbox"/> OCCUR GEN'L AGGREGATE LIMIT APPLIES PER: <input checked="" type="checkbox"/> POLICY <input type="checkbox"/> PRO-JECT <input type="checkbox"/> LOC OTHER:			EPK151686	03/31/2025	03/31/2026	EACH OCCURRENCE: \$1,000,000 DAMAGE TO RENTED PREMISES (Ea occurrence): \$100,000 MED EXP (Any one person): \$50,000 PERSONAL & ADV INJURY: \$1,000,000 GENERAL AGGREGATE: \$2,000,000 PRODUCTS - COMP/OP AGG: \$2,000,000
D	AUTOMOBILE LIABILITY <input checked="" type="checkbox"/> ANY AUTO <input type="checkbox"/> OWNED AUTOS ONLY <input type="checkbox"/> SCHEDULED AUTOS <input type="checkbox"/> HIRED AUTOS ONLY <input type="checkbox"/> NON-OWNED AUTOS ONLY			02 UEN BG1FME	05/15/2025	05/15/2026	COMBINED SINGLE LIMIT (Ea accident): \$1,000,000 BODILY INJURY (Per person) BODILY INJURY (Per accident) PROPERTY DAMAGE (Per accident) Limit (1): \$1,000,000
A	<input checked="" type="checkbox"/> UMBRELLA LIAB <input checked="" type="checkbox"/> OCCUR <input type="checkbox"/> EXCESS LIAB <input type="checkbox"/> CLAIMS-MADE <input type="checkbox"/> DED <input type="checkbox"/> RETENTION			EFX128616	03/31/2025	03/31/2026	EACH OCCURRENCE: \$5,000,000 AGGREGATE: \$5,000,000
C	WORKERS COMPENSATION AND EMPLOYERS' LIABILITY ANY PROPRIETOR / PARTNER / EXECUTIVE OFFICER/MEMBER EXCLUDED? (Mandatory in NH) If yes, describe under DESCRIPTION OF OPERATIONS below		Y/N Y	02WEBJ1S3V	05/15/2025	05/15/2026	<input checked="" type="checkbox"/> PER STATUTE <input type="checkbox"/> OTHER E.L. EACH ACCIDENT: \$1,000,000 E.L. DISEASE-EA EMPLOYEE: \$1,000,000 E.L. DISEASE-POLICY LIMIT: \$1,000,000

Certificate No : 570112575638

DESCRIPTION OF OPERATIONS / LOCATIONS / VEHICLES (ACORD 101, Additional Remarks Schedule, may be attached if more space is required)
 Evidence of Insurance.

CERTIFICATE HOLDER**CANCELLATION**

The Efficiency Network, Inc. 1501 Reedsdale Street, Suite 401 Pittsburgh PA 15233 USA	SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATE THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS. AUTHORIZED REPRESENTATIVE <div style="text-align: center;"><i>Aon Risk Services Central, Inc.</i></div>
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ADDITIONAL REMARKS SCHEDULE

AGENCY Aon Risk Services Central, Inc.		NAMED INSURED The Efficiency Network, Inc	
POLICY NUMBER See Certificate Number: 570112575638			
CARRIER See Certificate Number: 570112575638	NAIC CODE	EFFECTIVE DATE:	

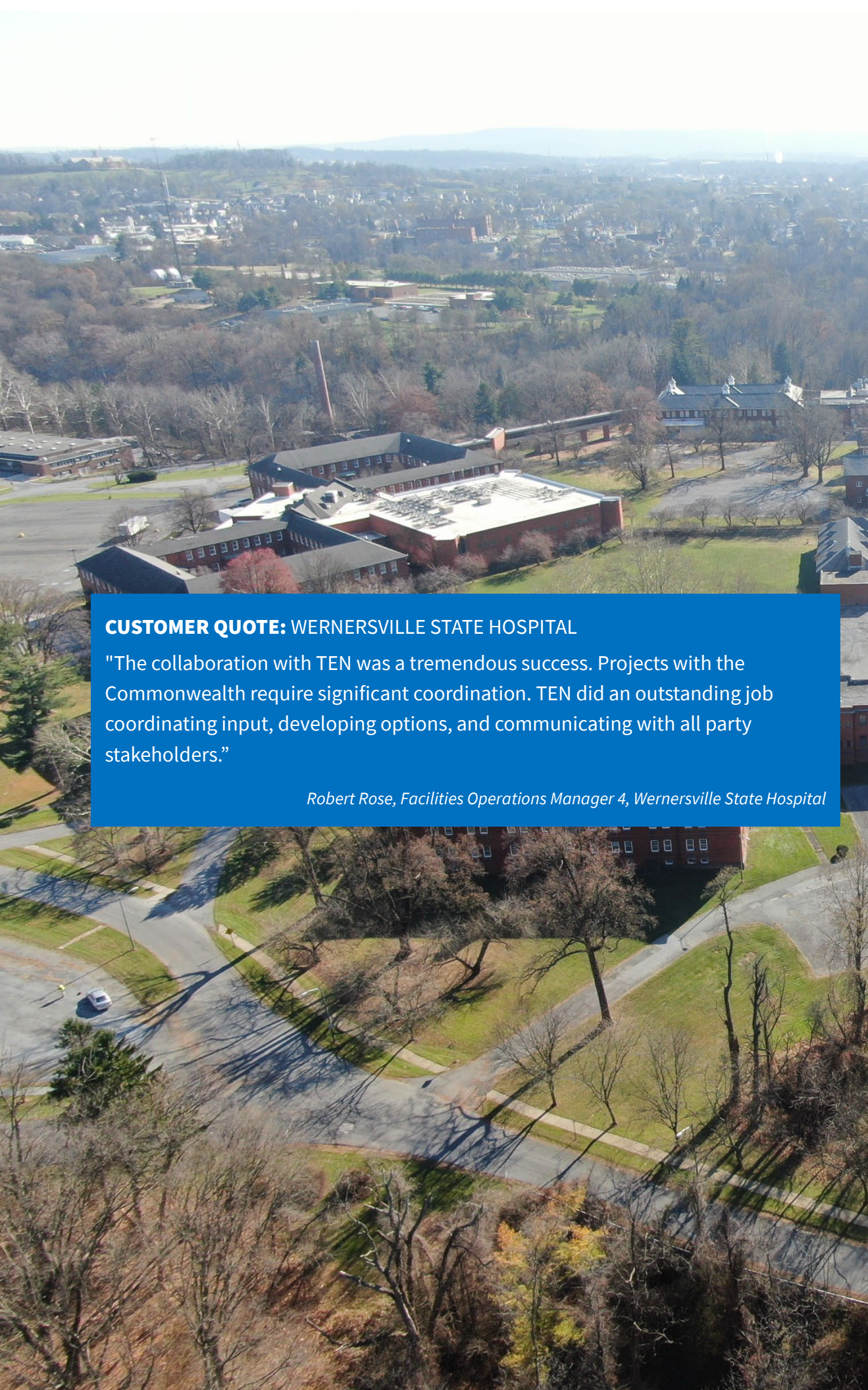
ADDITIONAL REMARKS

**THIS ADDITIONAL REMARKS FORM IS A SCHEDULE TO ACORD FORM,
FORM NUMBER: ACORD 25 FORM TITLE: Certificate of Liability Insurance**

INSURER(S) AFFORDING COVERAGE	NAIC #
INSURER	
INSURER	
INSURER	
INSURER	

ADDITIONAL POLICIES If a policy below does not include limit information, refer to the corresponding policy on the ACORD certificate form for policy limits.

INSR LTR	TYPE OF INSURANCE	ADDL INSD	SUBR WVD	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YYYY)	POLICY EXPIRATION DATE (MM/DD/YYYY)	LIMITS	
	EXCESS LIABILITY							
B				EX04287667	03/31/2025	03/31/2026	Limit (1)	\$4,000,000



Recommendation Letter: Wernersville

Appendix C

CUSTOMER QUOTE: WERNERSVILLE STATE HOSPITAL

"The collaboration with TEN was a tremendous success. Projects with the Commonwealth require significant coordination. TEN did an outstanding job coordinating input, developing options, and communicating with all party stakeholders."

Robert Rose, Facilities Operations Manager 4, Wernersville State Hospital

March 28, 2025

Mr. Matt Morris
Vice President, Construction
The Efficiency Network
1501 Reedsdale Street, Suite 401
Pittsburgh, PA 15233

To Whom It May Concern:

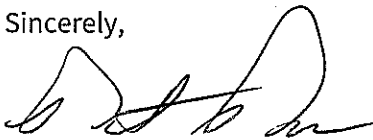
The Commonwealth of Pennsylvania's Department of Human Services (DHS) recently worked with The Efficiency Network, Inc. (TEN) to develop, design, and construct an \$11.2 million energy performance contracting project at Wernersville State Hospital.

The collaboration with TEN was a tremendous success. The hospital was able to improve its boiler plant, chiller, controls, and weatherization, among other improvements, and this project is anticipating over \$270,000 in annual savings. Projects with the Commonwealth require significant coordination between multiple agencies, consultants, third-party auditors, and the onsite staff. TEN did an outstanding job coordinating input, developing options, and communicating with all project stakeholders.

TEN's development of the investment grade audit (IGA), incorporating the input of central office and site staff allowed us to consider and implement new ideas that will make the hospital operate much more efficiently. The transfer from the IGA team to the construction team was successful and the construction team was very clear about the deliverables. TEN's inclusion of the construction team and project manager in the entire design process ensured that the team was focused on the same outcomes.

I encourage you to consider the TEN team for your energy performance contract.

Sincerely,

A handwritten signature in black ink, appearing to read 'Robert Rose', with a large, stylized flourish at the end.

Robert Rose

Facility Operations Manager 4

Wernersville State Hospital · DHS Office of Mental Health & Substance Abuse Services



We help customers solve energy, sustainability, and infrastructure issues by offering creative energy solutions delivered to meet a variety of financial needs.

