Statement of Qualifications for

Capital Facilities General Engineering Contract

SUBMITTAL PACKET A

Submitted to

Washington State Department of Transportation (WSDOT)

September 4, 2024

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TKDA

Contents

1. QUALIFICATIONS/EXPERTISE:
SECTION A - TEAM OVERVIEW

Established in 1910 in Saint Paul, Minnesota, TKDA helps build and grow communities, institutions, and businesses across the country. We are a 100-percent employee-owned company of engineers, architects, planners, and specialized experts solving client challenges across four primary markets: Transportation, Industrial and Manufacturing, Buildings and Sites, and Water. Our service to Pacific Northwest clients was reinforced with the opening of our Seattle office in 2006.

In-house disciplines include: Structural, Civil, Mechanical, and Electrical Engineering, Architecture, Surveying and Geospatial, and other specialized experts in areas like GIS and community engagement.


King Street Yard Facility - Seattle, WA

Types of Expertise

Our work includes project management, condition assessments, construction management, planning studies, feasibility studies, design, public engagement, and preparation of construction documents for a wide variety of projects.

TRANSPORTATION FACILITY EXPERTS

TKDA's transportation expertise spans surface transportation, freight and commuter rail, aviation, and regional transit system infrastructure.

In providing complete infrastructure solutions for more than a century to state DOTs, counties and municipalities, freight and commuter rail operations, and commercial airports, we have developed deep expertise in the assessment, design, and maintenance of passenger, operations and administration facilities that support transportation infrastructure.

RELEVANT SERVICE AND PROJECT TYPE EXPERIENCE

With TKDA's transportation facility expertise, we bring an extensive background in condition assessments; capital planning and budgeting; facility maintenance and upgrade design and construction administration services; new facility planning and design; building system assessments, including power infrastructure and arc flash hazard assessments, structural systems, and mechanical and plumbing systems; ADA accessibliity and space use studies.

Owing to the diverse responsibilities of organizations like WSDOT, the facility types we assess, design, and maintain for them are equally diverse. Transit facilities like bus and train stops, locomotive and light rail operations maintenance facilities, vehicle storage and maintenance facilities are familiar to our teams. Our portfolio also includes highway maintenance vehicle facilities, salt storage facilities, and rest areas. In aviation, we work extensively on airfield support facilities like deicing systems, and snow removal equipment buildings. Parking ramps and administrative facilities are also are also familiar to us.

SOLVING COMPLEXITY THROUGH LONG-TERM PARTNERSHIPS

During the last 114 years, we have worked with a wide range of clients across business and government, but TKDA's hallmark is the duration of our client relationships. Some of our current client partnerships date back to the very earliest days of our existence in the 1910s and 1920s. The longevity of our partnerships and our business are testaments to our pursuit to deliver an exceptional client experience. These partnerships represent a significant majority of our business, and they are primarily conducted through general engineering or master service agreements like the WSDOT General Engineering Contract.

TKDA currently has such contracts with King County Metro, Amtrak, Minnesota Department of Transportation (MnDOT), Metro Transit in Minneapolis-Saint Paul, Metropolitan Airports Commission (MAC) in Minneapolis-Saint Paul as well as Minnesota State Fair. Further to this, we have General Engineering Service agreements for facilities with private businesses in industry and transportation, including United Airlines, BNSF Railway, Union Pacific Railway, Norfolk Southern, Canadian National, and Canadian Pacific Railway.

TKDA has built our business and systems on delivering complete engineering and architecture solutions through long-term partnerships to clients with complex facility and capital programs. We seek to bring to WSDOT these complete solutions in support of your facility program.

Time in Business
Engineering: 114 years
Architecture: 109 years

Employee Count
Washington State: 15 / Nationwide: 424

The TKDA Team

In addition to our in-house engineers and architects, our team is strengthened by the inclusion of several partner firms: Stemper Architecture Collaborative, FSi Engineers, Shannon & Wilson, Confluence Environmental Company, Reyes Engineers, JB Iringan Consulting, Bolima Drafting & Design. We acknowledge the 26% MSVWBE goal and participation plan requirements associated with this contract. **Five of the seven partner firms on the TKDA team are certified under this program, and we commit to meeting the participation goal as specific work orders are issued under the WSDOT General Engineering Contract.**

WBE/MBE/SBE

STEMPER ARCHITECTURE COLLABORATIVE

ARCHITECTURE

Stemper Architecture Collaborative is a leader in architectural design and building envelope systems. Striving to be reliable, innovative, knowledgeable, trustworthy, dedicated, and fun to work with, Stemper AC has been making a name in Seattle for 30+ years. Scott Stemper is a go-to architect for building envelope systems. Melody Leung is a leader in management, planning, and design, having built her architecture career over 24 years.

Types of Expertise

- Renovation and restoration of existing, aged, and historic buildings.
- Roofing and building envelope investigation, troubleshooting, and replacement.
- Building systems design.
- On-call/emergency repairs.
- New building design.
- Site planning/development.
- Interiors, ADA upgrades, and space planning.
- Comprehensive Condition Assessments & Reporting.
- Feasibility Studies, Preliminary Design Studies.
- Facility condition assessments.
- Sustainable LEED® facilities.
- Elevator modernization design.

Time in Business
36 Years

Employee Count
Washington State: 9 / Nationwide: 11

SBE

MECHANICAL ENGINEERING

FSi formed in 1985, primarily to provide engineering to Boeing. Their ability to communicate technical issues clearly, to understand complex functions and facilities, and to meet fast track schedules earned them the honor of a 35-year relationship with Boeing. Our capacity to quickly get up to speed on industrial functions earned them the trust of agencies with complex facilities, such as the Port of Seattle, King County Transit, and utility districts. Now, 38 years later, FSi has grown to a team of nearly 50 employees in three offices, and every person at FSi is steeped in their culture of clear communication and excellence in customer service

Types of Expertise

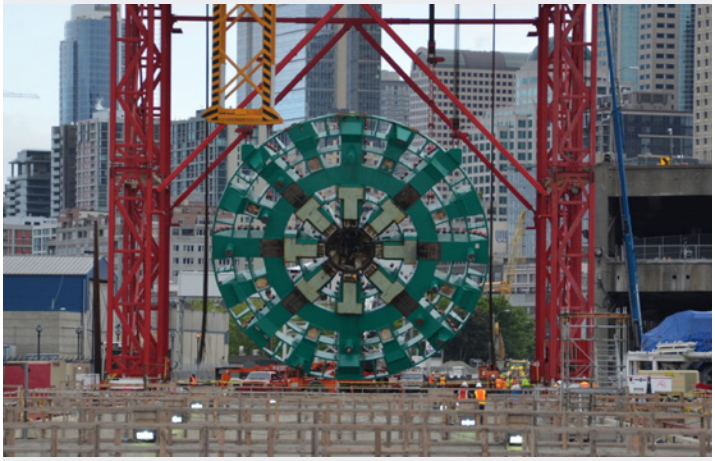
- Condition assessments and master planning.
- Computational fluid dynamics and airflow modeling.
- Energy assessments, audits, and models.
- Work order and IDIQ contracts.
- Mechanical and plumbing system design.
- Commissioning.
- Construction administration.

Time in Business

38 Years

Employee Count

Washington State: 43 / Nationwide: 46



GEOTECHNICAL ENGINEERING

Shannon & Wilson is an employee-owned consulting firm headquartered in Seattle, Washington. Committed to technical excellence and high-quality service, they provide integrated geotechnical engineering, engineering geology, environmental, and natural resource services for clients worldwide. Since 1954, they have delivered comprehensive engineering and environmental solutions for the most challenging infrastructure planning, design, permitting, and construction conditions.

Their staff of professional geotechnical engineers, geologists, technicians, and support personnel, are adept at developing project scope and planning exploration programs, directing field drilling and sampling operations, completing laboratory testing, and performing engineering analysis.

Types of Expertise

- Geotechnical and geological site characterization.
- Landslide and rock slide investigations.
- Foundation design recommendations.
- Excavations, shoring, and dewatering systems.
- Geotechnical instrumentation.
- Sediment and erosion control.
- Surface and subsurface drainage.

Time in Business

70 Years

Employee Count

Washington State: 152 / Nationwide: 369

SBE

CONFLUENCE ENVIRONMENTAL COMPANY

ENVIRONMENTAL

Confluence Environmental Company offers services in environmental science, project management, and regulatory strategy and compliance for a variety of public and private capital and restoration projects. Our team includes fish and wetland scientists, built and natural environment planners, regulatory and permitting specialists, and GIS and remote sensing experts. They ensure that each project is staffed with an outstanding team that can successfully deliver strategic solutions.

Types of Expertise

- Environmental project delivery.
- Natural resource services.
- Mitigation and restoration.
- Regulatory strategy, compliance, and permitting.
- Geospatial solutions (GIS).
- Aerial data collection/UAV services.

Time in Business

17 Years

Employee Count

Washington State: 31 / Nationwide: 31

MBE/SBE

REYES ENGINEERING

ELECTRICAL ENGINEERING

Founded in 1999, Reyes Engineering, Inc. is an electrical engineering firm with offices in Seattle, Portland, Los Angeles, and Honolulu. Their design services include electrical systems, architectural lighting and daylighting, fire safety and security, telecommunications and audiovisual. As sustainable design professionals, they are actively engaged in providing holistic design solutions that optimize high performance buildings with energy efficiency, control light pollution, and utilize alternative and renewable energy solutions.

Types of Expertise

- Geotechnical and geological site characterization.
- Landslide and rock slide investigations.
- Foundation design recommendations.
- Excavations, shoring, and dewatering systems.
- Geotechnical instrumentation.
- Sediment and erosion control.
- Surface and subsurface drainage.

Time in Business

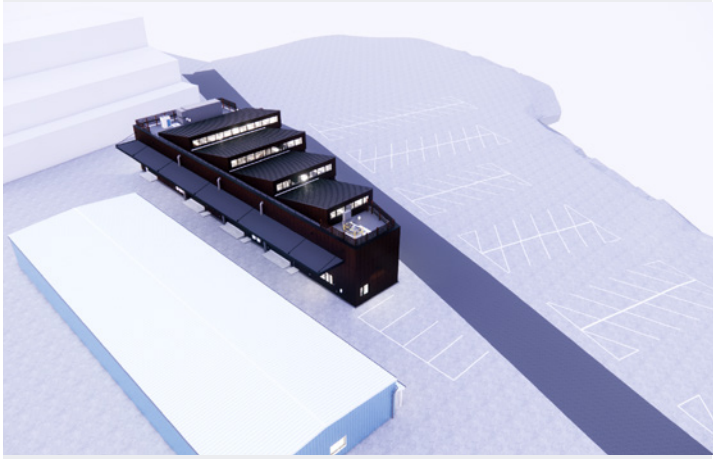
25 Years

Employee Count

Washington State: 1 / Nationwide: 13

SBE

BOLIMA



COMPUTER AIDED DRAFTING & DESIGN

Established in 1987, Bolima Drafting & Design, Inc. (Bolima) is a design technology consulting firm in Seattle, WA, that provides CADD and BIM management, modeling, drafting and support services for engineering, architectural, and construction firms in the Puget Sound area. We are experienced in the CADD standards of various agencies including Sound Transit, Washington State Department of Transportation (WSDOT), King County, King County Metro Transit, City of Seattle, Port of Seattle, Oregon Department of Transportation (ODOT), City of Portland, and U.S. Army Corps of Engineers. We are a Native American-owned firm and MBE/DBE certified in Washington, Oregon, California and Arizona.

Types of Expertise

- CADD management.
- Document QA/QC.
- 3D Modeling.
- Civil 3D.
- OpenRoads.
- MicroStaton.
- Revit.
- Autodesk Construction Cloud.
- ProjectWise.
- Bluebeam.

Time in Business

37 Years

Employee Count

Washington State: 13 / Nationwide: 17

MBE

J B IRINGAN CONSULTING

CONSTRUCTION COST ESTIMATING

J B Iringan Consulting was established & founded by Juan Iringan in 2005 based in Everett, WA. The company primarily serving number of Architects, Engineers, Owners and Developers in Puget Sound Area, from Olympia to Bellingham. It offers all facets of cost estimating services with experience from all aspects of the Design & Construction industry. J B Iringan Consulting enjoys a reputation for accuracy in all areas of cost estimating. Our estimates are based on current, project specific, contractor and material men pricing information. We do not rely on printed pricing guides which can be outdated by the time of publication and are not reflective of area and time-of-year changes in construction costs. For projecting future costs we maintain a substantial historic cost data base.

Types of Expertise

- Cost Modeling.
- Customized Estimates.
- Change Order Review.
- Feasibility Studies.
- Pre-design Estimate.
- Parametric Evaluations.
- Budget Analysis.

Time in Business

19 Years

Employee Count

Washington State: 1 / Nationwide: 1

ORGANIZATION CHART

The following organization chart illustrates the general make up of the TKDA team for the WSDOT General Engineering Contract. As specific project work orders are issued under this contract, we will work with WSDOT to identify the needed skill sets and submit a refined project team and org chart aligned to the requirements of the project.

The TKDA staff on our WSDOT General Engineering Contract team are highly accomplished and fully capable of taking on project leadership, depending upon WSDOT project requirements and even as those requirements change throughout the project. We have proven our ability to respond with discipline expertise to evolving project needs with our addition of architecture to our scope on the Eagle Harbor Weld Shop for Washington State Ferries.

TKDA regularly and proactively seeks to build relationships with our subconsultant partners. As we demonstrate in this statement of qualifications, the firms and professionals on our team have collaborated on past and ongoing work. We look forward to bringing this proven performance and comprehensive transportation facility expertise to WSDOT through this contract.

Amtrak King Street Facility - Seattle, WA

WSDOT

WSDOT Project Manager

Daniel Munn, SE
Project Manager /
Structural Lead

Michael Keilbart
QA/QC Lead

TKDA DISCIPLINE LEADS

Brett Morse
Transportation Facility
Assessment Lead

Craig Edmondson, PE
Transportation Facility
Design Engineer

Jaime Saez, PE
Civil Lead

Steve Burgeson
Survey Lead

DJ Heinle, AIA
Architecture Lead

Timothy Hoseck, PE
Mechanical Lead

Randall Jacobs
Electrical Lead

Caitlin Andress, PE, PTOE
Traffic/Parking Design Lead

SUBCONSULTANTS

Melody Leung
Stemper Architects
Facility Assessment Lead

Ola Jarvegren, LEED GA
FSi
Mechanical Design

Flaviano Reyes, Jr., PE
Reyes Engineering
Electrical Engineer

Bob Pierce
Bolima
CADD/BIM Manager

Jeremy Butkovich, PE
Shannon & Wilson
Geotechnical Engineer

Chris Soncarty
Confluence Environmental
Mechanical Lead

Juan Iringan
J B Iringan Consulting
Cost Estimator

1. QUALIFICATIONS/EXPERTISE: SECTION B - WASHINGTON STATE OFFICES

Firm	Location	Employees at Location	Local Expertise
TKDA	2025 1st Avenue, Suite 270 Seattle, WA 98121	12	Civil engineering, structural engineering, surveying and geospatial
	748 Winslow Way E Bainbridge Island, WA 98110	3	Civil engineering, structural engineering, surveying and geospatial
Stemper Architects	4000 Delridge Way SW, #200 Seattle, WA 98106	9	Architecture, interior design, space planning
Shannon & Wilson	400 N 34th Street, Suite 100 Seattle, WA 98103	147	Geotechnical engineering
	2705 Saint Andrews Loop, Suite A Pasco, WA 99301-3378	5	Geotechnical engineering
Confluence Environmental	146 N Canal St, Suite 111 Seattle, WA 98103-8652	31	Environmental
FSi	1001 Alaskan Way, Suite 200 Seattle, WA 98104	39	Mechanical, electrical, commissioning, energy assessments, audits, and models
	505 West Riverside Avenue, Suite 440 Spokane, Washington 99201	5	Mechanical, energy assessments, audits, and models
Reyes Engineering	1420 5th Avenue, Suite 2200 Seattle, WA 98101	1	Electrical engineering
Bolima	1904 3rd Ave, Suite 711 Seattle, WA 98101	17	CADD services
J B Iringan Consulting	121 60th Place SE Everett, WA 98203	1	Cost estimating

1. QUALIFICATIONS/EXPERTISE: SECTION C - PRIME/SUB PAST COLLABORATION

TKDA's Seattle-based team proactively builds subconsultant partnerships within the local engineering, architecture, and construction market. The goal of these efforts is to maintain an active and collaborative pool of partners that can serve a broad range of task orders and projects, supporting and supplementing TKDA's own engineers, architects, and planners. This proactive approach allows us to build strong relationships, identify potential partners who share our values and expertise, and ensure the best fit for the specific project needs. The result is a proven track record of successful projects delivered with our subconsultants, as demonstrated on the following projects.

Sub Consultant	Project/Project Roles	Project Dates
Stemper Architects	Pierce Transit, Spanaway Transit Center CA Services: Stemper AC (Prime - Architect) TKDA (Subconsultant - Structural Engineer, Civil Engineer)	2023-Present
Shannon & Wilson	WSF, Eagle Harbor Welding Shop: TKDA (Prime - Civil, Structural, Architecture) Shannon & Wilson (Subconsultant - Environmental)	2023-Present
FSi	WSF, Eagle Harbor Welding Shop: TKDA (Prime - Civil, Structural, Architecture) FSi (Subconsultant - Mechanical)	2023-Present
Reyes Engineering	King County Metro, Work Order Conditions Assessment: TKDA (Prime) Reyes (Subconsultant - Electrical)	2023-Present
Bolima	WSF, Eagle Harbor Welding Shop: TKDA (Prime - Civil, Structural, Architecture) Bolima (Subconsultant - CADD)	2023-Present

1. QUALIFICATIONS/EXPERTISE: SECTION D - KEY STAFF AVAILABILITY

It is challenging to accurately forecast key staff availability years in advance for a general engineering contract, so we present here our current availability through 2024, and a minimum availability that we commit to for the duration of the WSDOT General Engineering Contract. TKDA and our proposed partners offer 265 Washington-based professionals and nationwide resources of more than 900 to draw upon for WSDOT - we have the professionals available to support your project requirements throughout the duration of this contract and will prioritize WSDOT work.

Key Staff	Current Availability Per Month Through 2024 in Hours	Minimum Availability Per Month 2025 - Through End of Contract Term in Hours
TKDA		
Dan Munn Project Manager / Structural Lead	50	80
Mike Keilbart QA/QC Lead	30	50
C. Brett Morse Transport Facility Assessment Lead	20	40
Craig Edmondson Transport Facility Design Engineer	32	40
Jaime Saez Civil Lead	32	40
DJ Heinle Architecture Lead	20	40
Timothy Hosek Mechanical Lead	20	32
Randall Jacobs Electrical Lead	20	32
Caitlin Andress Traffic/Parking Design Lead	16	24
Steve Burgeson Survey Lead	32	40
Stemper		
Melody Leung Facility Assessment	15	20
Shannon & Wilson		
Jeremy Butkovich Geotechnical	16	32
Confluence		
Chris Soncarty Environmental	8	20
FSi Engineers		
Ola Jarvegren Mechanical	32	48
Reyes Engineering		
Flaviano Reyes Jr. Electrical	20	32
Bolima		
Bob Pierce CADD Support	80	80
J B Consulting		
Juan Iringan Cost Estimator	16	32

TKDA

Eagle Harbor Welding Shop

Washington State Ferries
WSDOT
Bainbridge Island, WA

TKDA is leading the terminal design engineering for the Washington State Ferries' (WSF) Eagle Harbor Welding Shop expansion project. TKDA is the prime contract holder with mechanical, electrical, civil, cost estimating and CAD personnel as subconsultants. We are providing structural and architectural design for a 6,500 SF single-story steel structure on deep foundations and equipment shop renovation supporting WSF's expansion of their maintenance facility. The project includes deep pile foundations, a custom steel-framed shop building, and the installation of two bridge cranes in the shop floor area. The project is designed to LEED Silver standards per state requirements. The project design is 90% complete.

Project Team:

TKDA

- Daniel Munn, PE, SE - Project Manager and Structural Engineer
- Jaime Saez, PE - Civil Engineer
- DJ Heinle, AIA - Architect

Subconsultants

- Ola Jarvegren, LEED Green Associate - Sr. Mechanical Engineer, FSi
- Bob Pierce - CADD/BIM Manager

Fee: $356,350

TKDA

Work Order Condition Assessments

King County Metro Transit Department
Seattle, WA

TKDA was hired by King County for a one-year master contract with two (2) one-year options to extend. The contract is to provide multidisciplinary services, which may include but are not limited to condition assessment, nondestructive testing, and system inspection services to King County Metro Transit Division (KCM) for reporting on the State of Good Repair (SGR) of KCM facilities and infrastructure. The services will further the already developed KCM Condition Assessment Program, while continuing to comply with Federal Transit Administration (FTA) Best Practices and Moving Ahead for Progress in the 21st Century (MAP-21) legislation, or other current and relevant legislation or guidance. The objective of the Condition Assessment Program is to provide a defensible and effective way to compare the importance of a varied and extensive list of recommendations across a portfolio of KCM facilities and infrastructure. These include:

- Review/Refine the Condition Assessment Program methodology.
- Utilize/Modify the Condition Assessment Database, or other.
- County approved data management system to store, track, and analyze the condition assessment information.
- Assess the condition of systems and/or individual assets within KCM facilities and infrastructure.
- Produce an annual Level 1 - HLCA Report for FTA reporting that summarizes current condition assessments for facilities and systems across the County.
- Produce Level 2 - Transit Facilities Condition Needs Report (TFCNR) that identifies and prioritizes needs for maintaining systems or assets.
- Provide condition assessment summaries at facility, system, and/or individual asset level.
- Document non-conformities impacting facilities, systems, and/or individual assets.
- Additional work may include assisting KCM with developing detailed budgetary requirements for a sustained SGR asset management program, reporting on individual facility or infrastructure, and integrating.

WORK ORDER EXAMPLE: SUBSTATION CONDITION ASSESSMENTS

TKDA was contracted to perform the condition assessment of 47 substations across King County. This involved general site conditions, building structure and envelope/systems, AC and DC power distribution inclusive of transformers, switches, switchgear, breakers rectifiers and HV feeds. Testing methods included but were not limited to; visual inspections, insulation resistance testing and infrared testing.

Project Team:

TKDA

- Craig Edmondson, PE - Project Manager
- Daniel Munn, PE, SE - Structural Engineer
- Randall Jacobs - Electrical Designer

Subconsultants

- Flaviano Reyes, PE - Sr. Electrical Engineer, Reyes Engineering
- Harpreet Gurm, IES - Sr. Lighting Designer, Reyes Engineering

Fee:

Not to Exceed $1,000,000
Contract to Date: $655,500

TKDA

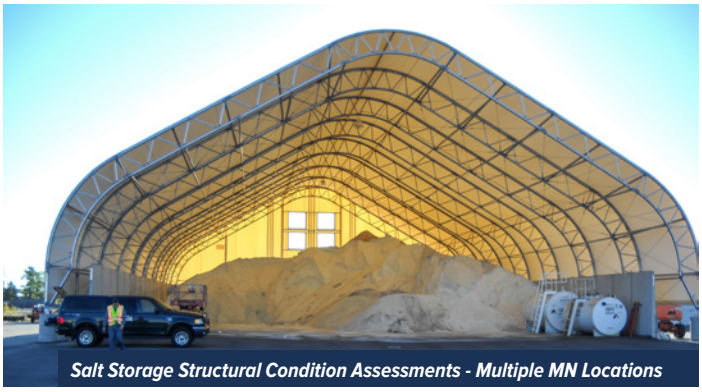
Master Contract On-Call Professional Services

Minnesota Department of Transportation
Saint Paul, MN

Since 2015, TKDA has served the Minnesota Department of Transportation with over 50 architecture and engineering projects through a master contract. Those projects have included:

- Willmar truck station roof replacement.
- St. Cloud headquarters mechanics shop addition pre-design.
- Preston truck station building envelope improvements.
- Salt storage structural condition assessments at 20 truck stations.
- Reroofing projects at 16 truck stations and headquarter facilities.
- Areaway assessments and structural improvements.
- Parking lot asphalt condition assessments.
- Arden Hills watermain service.
- Owatonna headquarters boiler replacement.
- Rushford truck station improvements.
- Thompson Hill Visitor Renovation and Cass Lake and Oak Rest Area Improvements.
- Roof replacements at six MnDOT rest areas.

Rushford Truck Station Improvements - Rushford, MN



Salt Storage Structural Condition Assessments - Multiple MN Locations

PROJECT HIGHLIGHT

Water's Edge District Office Furniture Layout and HVAC Replacement

TKDA provided mechanical updates, furniture design, and documentation services for MnDOT's existing Water's Edge Facility, a five-level, 150,000 SF building in Roseville, MN. Work included preliminary design documentation (including existing and two new design concepts), construction documents, referred concept development, and bidding phase services. TKDA provided project management and administration, meeting coordination, and solicitation phase services.

Mechanical System updates included ventilation improvements, two new air-cooled chillers, and one new 30-ton four-pipe heat pump chiller. All existing mains and branch ductwork were removed and replaced.

The design provided two 110-ton air-cooled chillers mounted on the roof, two 30-ton heat pump chillers installed in the penthouse, and three 240 kW electric boilers and controls. For the Building Automation System (BAS), new motorized valves, dampers, and actuators were provided. The BAS system followed MnDOT standards utilizing an owner-approved framework.

Project Team:

- Brett Morse, PE - Project Manager
- Tim Hoseck, PE - Mechanical Engineer, QA/QC Manager

Fee: $159,900

STEMPER ARCHITECTURE COLLABORATIVE

On-Call South Hill Mall Transit Center Improvements

Pierce Transit
Puyallup, Washington

As part of their ongoing on-call contract with Pierce Transit, Stemper renovated the South Hill Mall Transit Center, including the exterior transit loop pavement and plaza. Our team designed replacements of the sidewalks, paving squares, concrete curb and ramps to meet current ADA code requirements. We also designed improvements to the bus shelters, upgrades to the exterior restroom building,, including replacing exterior doors, waterproofing of the roof structure, and exterior and interior painting.

Completed: 2021 | Approx. Amount Received: $1.3M

FSI ENGINEERS

South Annex Interim Base

King County Metro
Tukwila, Washington

FSi was the mechanical and fire protection engineer for the King County Metro South Annex Interim Base. The project was designed to temporarily serve staff and buses until the South Base is expanded with permanent buildings. The project team designed the building and systems to provide a minimum five year life, balancing sustainability with a tight budget for the temporary building. The project demolished an existing building and added maintenance facilities and 25,000 sf of offices. The site includes six maintenance bays, a steam bay for cleaning buses, and an N+1 oil/water separator system

Completed: 2022 | Approx. Amount Received: $488K

REYES ENGINEERING

Powell Bus Maintenance Facility

TriMet
Portland, Oregon

The Powell Garage was built in 1976 as a temporary facility. The client, TriMet wanted to reconfigure the Powell Garage site to improve bus and employee circulation and safety at its access points, replace and modernize the aging buildings, and accommodate 50 percent more buses, including larger, articulated buses for the Division Transit Project. The project also includes improvements to upgraded sidewalks on 99th Avenue; New light poles for better lighting; Re-grading the surface of SE99th Avenue; A new traffic light on SE 99th Avenue to efficiently move vehicles onto Powell Boulevard and 99th.

This critical operations and maintenance facility operates 24/7 and is vital to the operations of regional transportation. This renovation project was phased to limit impacts to operation.

Reyes provided electrical, lighting, data, fire alarm, access control for the main maintenance building and fuel and wash building. The facility has a large quantity of specialized equipment for bus maintenance and this needed to be meticulously coordinated to limit impact to operations.

Completed: 2023 | Approx. Amount Received: $430K

BOLIMA

SR 167/I-5 to SR 509 New Expressway Project

WSDOT

Puyallup, Washington

Bolima supported the entire project by performing the WSDOT CAD Audits for all package submissions to the agency. We created methodology and processes to support the landscape team working in AutoCAD and created and updated their sheets in MicroStation. Bolima also created workflows and frameworks to allow for the landscape team to continue to work in CAD and be able to update the MicroStation work with minimal time delays. We worked with the geotechnical team in creating and modifying SIP plans along with generating figures for Geotech Memos. Additionally, Bolima managed the drafting team for the structural design of 22 bridges.

Completed: Current | Approx. Amount Received: $906,000

CONFLUENCE ENVIRONMENTAL

State Route (SR) 520 Bridge Replacement and HOV Program

WSDOT

Seattle to Redmond & Grays Harbor, Washington

Since 2008, Confluence has managed ESA consultation and environmental permitting for multiple phases of WSDOT's SR 520 Program, and served as a key team member through NEPA, ESA, mitigation planning, and permitting. Their team developed a broad impact assessment framework for the project as member of the Mitigation Technical Working Group and participated in a watershed-based approach to identify several candidate sites based on appropriate opportunities for functional uplift. Chris Soncarty facilitated environmental permitting with applicable regulatory agencies, including critical areas and shoreline compliance in the City of Seattle. Ongoing work includes managing the ESA consultation and compliance, support of permit compliance and obtaining new, or modified, permits, providing updates to compensatory mitigation plans due to design refinements, environmental contract and specifications development and administration, and participating as an interdisciplinary team member for the final design of compensatory mitigation projects.

Completed: Current | Approx. Amount Received: $4.9M

SHANNON & WILSON

Seattle District Special Tactics Squadron (STS) Operations Facility (SOF 22)

US Army Corps of Engineers

Joint Base Lewis McChord (JBLM), Washington

The SOF 22 STS project site is located on the McChord side of JBLM. Five low-rise buildings occupy the eastern and southern areas of the site. The project involves the demolition of the existing Building 305 and the construction of a new SOF 22 STS Operations Facility in the same area. The parking lot in the northwestern area of the site will be replaced with a new parking lot and low impact development stormwater facilities. The project will also construct new five to eight-foot-tall retaining walls along the west side of the new SOF 22 STS Operations Facility. Shannon & Wilson evaluated the subsurface conditions across the project site. The project site is underlain by surficial fill materials of variable composition to depths of three to six feet. This surficial material is underlain by competent gravel with sand, which will provide good bearing for conventional spread footing foundations to support the proposed structure. In addition to the geotechnical soil borings, they completed two small-scale pilot infiltration tests. The infiltration test results on soils below the site confirm that infiltration is feasible at the site.

Completed: 2019 | Approx. Amount Received: $112,000

J B IRINGAN CONSULTING

MRJC Central Plant & Detention Facility

King County

Kent, Washington

This project was for the re-roofing of the existing 242,000 SF roof of the MRJC facility. JB Iringan Consulting's role was to confirm whether the bid was within the market pricing or if King County needed to seek a second opinion from an independent estimator.

Completed: 2022 | Approx. Amount Received: $6,500

Dan Munn, SE

Project Manager

WA # 38727

Education

Bachelor of Science - Civil Engineering
Arizona State University (1993)

Registrations

Professional Engineer / Structural Engineer
Washington Registration #38727 (2003)

Dan has more than 25 years of experience in project management including design, evaluations, assessments and work on major design-build projects for WSDOT.

Dan is a registered Civil and Structural engineer in the State of Washington. Dan's work has included design of multiple transportation projects including parking structures. In addition to design and renovation work, Dan has recently provided expert witness services for a parking structure project, facility assessment of parking and office facilities for Pierce County and led the team performing building condition evaluation for both pre and post construction conditions for 50 structures including historic office and multi-story parking facilities adjacent to the Alaskan Way Viaduct demolition construction project. **Specifically, his project management experience features the following three projects:**

Eagle Harbor Welding Shop
Washington State Ferries (WSF)
2023 - Present
Bainbridge Island, WA

Dan's project management responsibilities on this contract included scope and schedule development in coordination with the State PM Frank Feidler, Subconsultant contract and approved ANTE Table facilitation with WSDOT accounting office, management of the project coordination items log, jurisdictional requirement support, Monthly Earned Value reporting on the contract financial status.

In addition to project management responsibilities, Dan worked to bring two new Small and Minority businesses into the project and those firms now have approved ICR status with WSDOT to support their small and growing businesses.

Architectural Facilities On-Call
King County, TKDA sub to KMB Architects
2021 - Present
Seattle, Washington

TKDA provided civil, survey and structural engineering services for this multi-disciplinary facility review for King County. TKDA's services were contracted through Prime Contract holder KMB Architects for this work.

Dan's role was as project manager within TKDA partnering with KMB Architects to execute multiple on-call projects. Responsibilities include Job walk pre-proposal to review scope and planning, coordinating Scope of Work development and design schedule with the client and owner, developing our in-house multi-discipline Level of Effort (LOE) hours and fee estimates for the projects, and staffing and project management plans for TKDA's in house multi-discipline team. TKDA has provided the following services to King County under this contract: Structural, Civil, Plumbing, Traffic planning, Surveying, and Utility coordination. Projects executed under this on-call contract included the following:

- Emergency sewer repairs permitted through SDCI and coordinated for approval with SPU.
- Parking lot studies for traffic flow improvement at peak usage.
- Building facility assessment reports for office, housing, and maintenance facilities.
- Waterproofing and drainage repairs at building facilities.
- ADA assessment and improvements.

SR 509 I-5 to 24th Avenue S. Phase 1b – New Expressway D-B
WSDOT/Atkinson/Jacobs
2021 - Present
Seattle, Washington

Dan's role on this project was as TKDA's project manager and lead structural engineer. Project management responsibilities include weekly staff accounting submissions, Monthly staff utilization and task completion reports, Earned Value reporting for TKDA's multi-discipline team, WSDOT Task Force meetings and month billing. Dan's structural work included design of Noise walls, Retaining walls, Monotube signage structures, and other miscellaneous structures in support of this key Gateway Program project for WSDOT. Our team worked closely with the Prime Design Build partner Jacobs Engineering in the design lead role and construction partner Atkinson Construction.

2. PM QUALIFICATIONS: SECTION B - PM FAMILIARITY WITH STATE/FED REGS

Dan's role on projects includes project management and structural design lead. He is fully versed in current building codes, WSDOT standards (M21-01, M22-01, M41-10) including seismic demand and force requirements for infrastructure facilities, ASCE flood resistant design standards, and SEPA - Washington State Dept of Ecology regulations.

For projects under this General Engineering Contract that involve facility condition assessments governed by the Federal Transit Administration (FTA), Dan is well-versed in the FTA State of Good Repair (SGR) reporting requirements as demonstrated through his work on the King County Metro Work Order Facility Condition Assessment contract.

2. PM QUALIFICATIONS: SECTION C - PM MANAGEMENT CAPABILITIES

Our recent work with WSF supports this question well and provides examples of our PM's working relationship with the WSDOT PM in design execution for an important maintenance facility for WSDOT.

1. PROJECT SCHEDULE:

The design schedule has been in review on a bi-weekly basis and is tracked both internally with the design team and externally with the client for project needs to support internal budgeting, permitting, and construction schedule. A good example of schedule management occurred when it came to light that WSF needed support in developing project images for permitting submittals. TKDA rearranged the internal design schedule to free up the team to develop renderings so that the overall project schedule and full team design budgets would not be impacted. A value to WSDOT with our integrated design team is that we were able to pull in additional architectural team support for unexpected needs. The total project schedule was maintained and the client's need for permit submittal documents was achieved in a compressed schedule.

2. SCOPE OF WORK AND SCOPE CREEP:

This project has required active discussion with the WSF PM and team due to the programmatic needs of WSF being not fully defined when the design project started. It has been a team effort to understand programmatic requirements, options to manage program needs within other spaces, and limit impacts to the design and project construction budget. Tools that have been brought to the table for discussion include options for no-cost/low-cost solutions; options that can be implemented with lower cost and schedule risk; and an active project coordination log that tracks issues for resolution by discipline with required individuals responsible for resolution and on a defined schedule to keep the project moving forward. Our team worked diligently internally to manage scope/deliverable creep to stay within the original design budget as much as possible and have communicated with the WSF PM along the way as to fee burn rate and planning for design finalization.

3. BUDGET ISSUES:

TKDA is responsible for cost estimating and cost budget impact communication to the State PM. Through our cost consultant, TKDA delivers a cost estimate at each milestone phase that has been fully reviewed and accepted by TKDA for accuracy as well as priced VE options for the WSF leadership consideration. WSDOT decides what is the correct construction to include and accept the costs associated. TKDA partners with WSDOT by managing the cost estimation like any other design disciple as an active contributor. Understanding cost options early, our team has delivered estimates, plans for cost reduction, and alternate no-cost or low-cost solutions for the state's consideration. This approach is especially valuable for smaller and fast-execution projects where budgets are established early without full understanding of the scope.

4. CHANGES THAT ARISE THROUGHOUT THE LIFE OF THE PROJECT:

This is inevitable and our experienced staff that specializes in on-call and state of good repair-type projects is where our team shines. An example of this is on the WSF welding shop foundation selection. The project footprint is smaller at 6,500 SF, but it has a very challenging site to manage in design solutions. The project is adjacent to contaminated soil and vibration mitigation is critical. Additionally, the site is located on 30 feet of liquefaction-susceptible fill. Removing soil has a risk of contamination and driven deep foundations have vibration concerns. TKDA worked with WSDOT geotechnical engineer (Jeremy Butkovich with Shannon & Wilson) to develop multiple foundation options including a mat foundation, drilled shaft, and driven steel piles. Ultimately the best solution was determined to be helical piles installed through the fill soils and embedded into the natural grade. Dan Munn developed this option with Jeremy Butkovich (also included on our team for this contract proposal) and then presented the solution and cost/benefits to a three-member structural team with WSDOT for acceptance.

Dan Munn, SE

Structural Lead

WA #38727

Dan's structural engineering work includes building structures, site structures, transportation, and utility infrastructure. He has worked as the lead structural engineer and project manager throughout the Puget Sound Region. His ability to provide rapid assessment and evaluation on unique and challenging structures has become standard in his practice for new construction, renovation, and maintenance projects.

Dan is fully versed in the current codes and facility design manual standards for WSDOT structures including seismic demand and the force requirements for infrastructure facilities. Dan has a unique ability to problem solve as a team player and communicate structural solutions to design teams, owners, and contractor partners.

SR 500 Pedestrian Bridge; WSDOT/COWI, Seattle, WA (2023-2024)
Dan is the lead structural engineer for the scope of the retaining wall for this project to install a new pedestrian bridge, SEW-supported bridge abutment, and SEW fill walls. The SEW fill wall supported bridge abutment required special provision specifications for the design and bid of the precast segmented fill wall construction.

SR 167, I-5 to SR 509 D-B; WSDOT/Jacobs/Atkinson, Seattle, WA (2022-Present)
Dan is the engineer of record for all overhead sign structures (bridge mounted and monotube steel) designed for this project completing the connection of SR167 to downtown Tacoma.

Eagle Harbor Welding Shop; WSF, Bainbridge Island, WA (2022-Present)
Dan the lead structural engineer and project manager on this project. He leads the design of the installation of driven pile foundations in contaminated soil in an environmentally sensitive area, a custom steel-framed shop building designed to provide daylighting for 100% of the shop floor area, and the installation of two bridge cranes in the shop floor area.

Mike Keilbart

QA/QC Lead

Mike brings over 18 years of experience in his field. He is a seasoned CADD/GIS manager with a solid background in the execution of numerous institutional, commercial, transportation, and residential developments and re-developments. His experience includes preparing construction engineering drawings for design-bid-build and design-build projects encompassing structural, civil, topographical, and architectural deliverables using AutoCAD and MicroStation. His CADD know-how and approach, his responsiveness combined with his ability to work in a team environment the added value he brings to every project, every team, and every client. He has worked on over 20 WSDOT projects.

Olympic Region GEC Fish Passage Projects; WSDOT/ HDR/Jacobs, Olympic Region, WA (2021-Present)
Mike is the assistant project manager on these fish passage projects. He is certified by WSDOT for "Fish Passage and Stream Restoration Design" and has provided support for the modeling of more than 52 PHD streams using MicroStation and Inroads software. He has also delivered 12 topographical maps. His focus has been on working with Task Order AC: Fish Passage PHD Support and Task Order AM: Supplement Survey for multiple site locations in the Olympic Region.

SR 305 Utility As-Builts and Utility Relocation Design; WSDOT/Parametrix, Kitsap County, WA (2017-Present)
Mike is the assistant project manager and led coordination and design of Utility Relocate and TESC sheet submittals. He attended project meetings and coordinated submittals and QAQC efforts.

WSFSEP – Washington State Ferries Electrification Program; WSDOT/Hill International, Bainbridge Island, WA (2023-Present)
Mike is the assistant project manager for Task AJ and AK Bainbridge Island Terminal and Tasks AL and AM Clinton Ferry Terminal. Utility research and coordination, assist in report writing and figure production and CADD services for plans and GIS exhibits.

Brett Morse

Transportation Facility Assessment Lead

Brett Morse has led the assessment and design of government, mass transit, railroad, and industrial facility projects for 30 years. He also designs steel, concrete, masonry, and wood structures, and is an expert in building demolition and decommissioning. Brett's work with assessments for the Minnesota Department of Transportation, Metropolitan Airports Commission, King County Metro, and Minnesota State Fair, along with his exceptional design and management skills make a great fit for the role of Transit Facility Assessment Lead.

Minnesota Department of Transportation (MnDOT) Master Contract, Various Locations (2015-Present)
TKDA serves MnDOT on a variety of architecture and engineering projects under this master contract. Brett serves as a project manager and structural engineer on these projects, while also serving as our Client Service Manager to MnDOT for the master contract.

Bridge and Tunnel Safety Inspections Program; Metropolitan Airports Commission, Minneapolis-St. Paul International Airport, Minneapolis, MN (2007-Present)
Services include annual visual condition surveys and information imported into MnDOT SIMS condition assessment database for 20 bridges and tunnels on MAC property. Brett leads all aspects of work on this program, as both a structural engineer and facility condition assessment expert.

Work Order Condition Assessments; King County Metro, Seattle, WA (2023-Current)
TKDA provides multi-disciplinary facility condition assessment and evaluation of over 45 facilities in the King County Metro transit portfolio. The contract involves performing visual inspections, non-destructive testing, identifying deficiencies, updating the EAM database, producing High-Level Condition Assessment Reports, cost estimates for repairs and replacement, and replacement specifications. Brett serves as our Lead TAM/EAM Systems Expert on this contract.

Craig Edmondson, PE

Transportation Facility Design Engineer

WA #23000391 (2023)

Based in Seattle, Washington. A Professional Engineer in the State of Washington, he has garnered multi-faceted experience working across Australia, the Middle East, and North America on rail and transit facilities, including high-speed rail, heavy rail, light rail, monorail, commuter rail, and freight rail projects. In Australia, he was the Design Manager for 19 new stations on the Sydney Light Rail project and was a Package Manager for numerous new freight rail facilities in the United Arab Emirates.

Work Order Condition Assessments; King County Metro, Seattle, WA (2023–Current)
Craig serves as the Project Manager, overseeing all cost, quality and schedule, risk and safety. Craig oversees all coordination with King County Metro, all subcontracts, SBE contract compliance and administration as well as managing the project team and technical deliverables.

Sepulveda Transit Corridor PDAs; Los Angeles County Metropolitan Transit Authority (LACMTA), CA (2020-2022)*
The Sepulveda Transit Corridor Project is a fixed-guideway transit service running between the San Fernando Valley and Los Angeles International Airport through the west side of Los Angeles. Craig served as a Program Management Consultant providing:

- Oversight of project controls, document control, quality/requirements management, managing reviews of all PDA/environmental deliverables
- Setting up and developing project management processes/systems including; work breakdown structure, document control, project management plan, file management systems, project charter, quality/requirement management, budget, and schedule
- Interdepartmental coordination between the various Metro departments, external third parties and stakeholders
- Managing the development of cost estimates including capital estimates, lifecycle rehab and replacement, operational and maintenance

**Work completed prior to joining TKDA*

Jaime Saez, PE

Civil Lead

WA Registration #26173 (1989)

Jaime brings over 37 years of professional experience in transportation/infrastructure design and construction throughout the Pacific Northwest including national and international design-build projects. Jaime has cultivated his skills through multiple project types of varying sizes and complexity. His analytical approach to problem-solving combined with his common-sense-approach and his knowledge of federal, state, and local agency requirements allows him to analyze and resolve complex issues and move projects forward effectively. Jaime understands the WSDOT Design Manual, Utilities Manual, PS&E, Construction Manual, Design-Build, QAQC ,VE an CR studies and bid unit bid analysis, tabulations, and estimates.

SR 167 I-5 to SR 509; WSDOT/Jacobs/Atkinson, Seattle, WA (2022-Present)

Jaime led the utility engineering for this $375M project, managing the Tacoma Power, power, and communication, Zayo and Lumen systems, and the City of Fife water main relocations, accommodations, and removals.

SR 509, I-5 to 25th Ave. S. Phase 1B; WSDOT/Jacobs/Atkinson, Greater Seattle Area (2021-2024)

Jaime was the principal engineer of utility relocations of water lines, responsible for sizing and calculations for non-standard pipe diameters, oversight of team's performance and checking design conform with standards. The Project provides an alternate route to I-5 through Seattle, reducing traffic congestion, connect freight links and an alternate access to SeaTac airport.

Spanaway Transit Center; Pierce County Transit Spanaway, WA (2023-Present)

Jaime is serving as the Senior Construction Project Manager on this project. TKDA is currently under contract with Pierce County Transit (PCT) to assist in the construction management phase for civil and structural disciplines of this 3-acre site. Jaime prepared the variance request submittal for the utility crossing to WSDOT with descriptions of the work and revised plans, profiles, sections, and details.

Steve Burgeson

Survey Lead

Steve has 20 years of field surveying experience and manages all field survey operations and project schedules for TKDA. He is currently involved with all contracted survey projects and reports directly to our Professional Engineer. Steve's experience includes topographical mapping, construction staking, scanning, and GPS surveys utilizing Leica, Trimble, and Topcon hardware and software. His leadership skills and discipline allow him to work independently or lead a crew. He is a strong team player whose talents range from coordinating with an entire project team to hands-on surveying; either way, he always listens to and understands the client's needs. Steve has a strong understanding of WSDOT's land surveying standards.

Advanced PHDs Fish Passages; WSDOT Olympic Region/Jacobs/HDR, WA (2020-2024)

Steve acted as our survey services lead for the following local WSDOT fish passage projects: an Unnamed Tributary to Hoko at Hwy 112, an Unnamed Tributary to Clallam Bay in Clallam Bay, and several creek crossings on Hwy 112. Steve oversees multiple projects from survey requests to final CAD delivery including working with contract surveyors to manage any discrepancies.

I-405 Topographical Survey; WSDOT/WSP, Seattle, WA (2019-Present)

Steve was the survey lead on this project. Survey services were completed on the I-405 and consisted of a topographical survey, staking out of future structures, and survey of existing structures, including taking inverts of sewer manholes where accessible.

SR 99 Alaska Viaduct Replacement; STP, Seattle, WA (2010-2019)

As a Survey Crew Chief, Steve oversaw weekly scanning of the tunnel lining for deformation as it was built. Notable contributions include monitoring the success shaft build and lifting of the Tunnel Boring Machine head, discovering the ground settlement from dewatering the access shaft area, setting Seattle's first and deepest permanent benchmarks, and quality checking/correcting the alignment for the Tunnel Boring Machine near its final completion.

DJ Heinle, AIA

Architecture Lead

WA #24008501 (2024)

DJ leads a range of projects types with 25 years of experience. He works extensively with manufacturing and public infrastructure clients. His experience includes predesign, design, production documents, project management, site analysis, code review, cost estimating, and construction administration.

Eagle Harbor Welding Shop; Washington State Ferries, WSDOT, Bainbridge Island, WA (2023-2024)
DJ is the architect on this project, working in collaboration with the client's on-staff architect. The project includes driven pile foundation installation in contaminated soil in an environmentally sensitive area, custom steel framed shop building designed with daylighting of 100% of shop floor area, and two bridge cranes in the shop floor area. Project design is 90% complete.

Northfield Truck Station; Minnesota Department of Transportation, Northfield, MN (2023)
The 8,540 SF Truck Station Facility includes fleet bays, crew room, offices, storage room, restrooms, locker rooms, mechanical space, and dedicated circulation to improve efficiency, safety, and daily operations. The facility houses seven full-time staff members and accommodates four tandem axle plow trucks and a tow plow. DJ served as architecture lead on this project.

Architecture/Engineering Master Contract; MetroTransit, St. Paul, MN (2004-Present)
DJ has served as architecture lead on numerous projects under our ongoing contracts with MetroTransit, Minneapolis/St. Paul's regional transit agency, including:

- Multiple Bus Maintenance Facility Equipment Upgrades and Remodels.
- Multiple Light Rail Vehicle Operations and Maintenance Facility New Construction and Renovation Projects.
- Multiple Light Rail and Bus Transit Stations.
- Multiple MetroTransit Office Building/Site Renovations.

Timothy Hoseck, PE

Mechanical Lead

WA #53481 (2016)

Tim works with government and industrial clients. He designs HVAC systems, district energy systems, domestic piping and plumbing systems, and industrial ventilation and piping systems with over 25 years of experience. He also analyzes heat recovery options and energy reduction methods. Tim has extensive experience with on-site field investigation, facility assessments, construction management, and inspection.

Water's Edge District Office HVAC Replacement; Minnesota Department of Transportation, Roseville, MN (2022-Present)
Mechanical System updates included ventilation improvements, two new air-cooled chillers, and one new 30-ton four-pipe heat pump chiller. All existing mains and branch ductwork were removed and replaced. The design provided two 110-ton air-cooled chillers mounted on the roof, two 30-ton heat pump chillers installed in the penthouse, and three 240 kW electric boilers and controls. The Building Automation System (BAS) uses new motorized valves, dampers, and actuators. The BAS system followed MnDOT standards using an owner-approved framework. Tim was QA/QC Manager on this project.

Northfield Truck Station; Minnesota Department of Transportation, Northfield, MN (2023)
The new campus was designed following MnDOT Truck Station Standards to accommodate larger fleet vehicles and comply with current regulatory codes. MnDOT voluntarily implemented the Minnesota Sustainable Building Guidelines (B3 version 3.1) to re-evaluate current system-wide design practices and develop a standard model for future similar facilities.

The 8,540 SF Truck Station Facility (main building) includes fleet bays, crew room, offices, storage room, restrooms, locker rooms, mechanical space, and dedicated circulation to improve efficiency, safety, and daily operations.
The facility houses seven full-time staff members and accommodate four tandem axle plow trucks and a tow plow. Tim provided QA/QC oversight on this project, and served as project engineer during construction administration.

Randall Jacobs

Electrical Lead

Randy designs electrical power, lighting, and communications systems with 37 years of experience. He is experienced in medium- and low-voltage power distribution for government and industrial facilities, including the design of systems for hazardous locations. He is also a certified lighting designer experienced in lighting performance, photometry, and control. Experience with low voltage communications systems includes Fire Alarm, Public Address, CCTV, Telephone, Data, and Access Control systems. In addition to the design of electrical systems for new and renovated buildings and campuses, he has performed peer reviews, commissioning services, power analysis studies, pre-design studies, master planning, and lighting redesign studies. Power analysis studies include Arc Flash Analysis, Fault Current Analysis, and Overcurrent Protective Device Coordination studies.

Work Order Condition Assessments; King County Metro, Seattle, WA (2023–Current)
This project included an inspection, evaluation, and recommendations report that encompassed forty-seven traction power substations for King County Metro. Substations were a combination of interior and exterior substations taking power from medium or low voltage AC power systems and conversion to 700VDC power utilized by light rail transit vehicles. Randy serves as electrical designer on this contract, performing visual inspection and development of recommendations for the replacement of equipment that is at or beyond its expected service life.

Heywood Campus Renovation; Metro Transit, Minneapolis, MN (2016-Present)
The 62,000 SF Heywood facility has reached capacity and can no longer support anticipated staff growth. Along with interior renovation, TKDA is providing design for mechanical, electrical and plumbing upgrades. Conference rooms and offices will be relocated to interior spaces to increase sunlight depth and provide equitable window views throughout. A second floor infill area captures additional collaborative and support space. TKDA performed a predesign study in 2016 - construction administration is ongoing. Randy provided electrical engineering for the predesign and design phases.

Caitlin Andress, PE, PTOE

Traffic/Parking Design Lead

WA #24013566 (2024)

Caitlin designs signing, pavement marking, traffic signal, and traffic control plans with eight years of experience, as well as developing transportation management plans (TMPs) and writing special provisions. Caitlin develops and oversees traffic studies, including Intersection Control Evaluations, Traffic Impact Studies, and other safety and operations analyses. Previously a Traffic Engineer for MnDOT, Caitlin has extensive coordination and design experience and brings a public-oriented perspective to her work. She is proficient with OpenRoads Designer, Synchro/SimTraffic, PTV VISSIM, RODEL, and Highway Capacity Software.

Elections Office Traffic Flow Mitigation; King County, Renton, WA (2024)
TKDA provided traffic engineering and design services to mitigate traffic congestion that occurs on high-volume election days. Caitlin reviewed previous traffic flow analyses and performed a site visit to observe traffic issues. She developed three parking lot layout concept alternatives to improve traffic flow and safety, allow additional queue storage, and maintain adequate parking spaces.

Fergus Falls Rest Area Site Selection Study; Minnesota Department of Transportation, Fergus Falls, MN (2023-2024)
TKDA provided planning and site selection services to MnDOT for the replacement of a rest area on I94 that was decommissioned several years ago. Caitlin provided crash study analysis to establish an approach to minimizing potential crashes resulting from the construction of the new facility.

TH 212 Detail Design Review; Minnesota Department of Transportation, Sacred Heart to Renville, MN (2019)
The project includes an unbonded concrete overlay from 2.3 miles east of TH 23 through the City of Sacred Heart to the western City limits of Renville. Caitlin performed detail design review of staging, traffic control, signing, and pavement marking plans, as well as the Traffic Management Plan and signing special provisions.

Melody Leung

Architectural and Facility Assessment Specialist

Melody has practiced architecture for 28 years and brings a depth of public agency design experience including interiors, ADA, tenant improvements, concept design, programming, planning, design development, construction document production, bidding and permitting, cost estimates, and construction administration. Melody has experience with many public agencies in an on-call capacity, including: State of Washington DES, City of Seattle, Pierce Transit, Community Transit, City of Bellevue, Seattle Parks & Recreation, and more.

On-Call Spanaway Transit Center Phase I (CA); Pierce Transit, Pierce County, WA (2023-Present)
Melody was Principal-in-Charge. She is providing construction administration support and permitting support for a transit center building and new bus loop. Permitting is through WSDOT and Pierce County

On-Call Seattle Municipal Tower Exterior Plaza ADA Civic Core Projects; City of Seattle, Seattle, WA (2020-Present)
Melody was Principal-in-Charge. Removal of ten exterior ADA barriers, design for ramp additions, sidewalk improvements, entry upgrades.

On-Call South Hill Mall Transit Center Renovations; Pierce Transit, Puyallup, WA (2020–2021)
Melody served as Principal-in-Charge. ADA curb and ramp upgrades, sidewalk replacement, restroom building upgrades, exterior door replacement, waterproofing, and painting for the transit loop, bus shelters, and restrooms.

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Ola Jarvegren, LEED Green Associate

Mechanical Design

Ola brings 24 years of professional design experience with a focus on public infrastructure, transit, and maintenance and operations facilities. He brings effective collaboration enabling team cohesion on complex projects. Ola has demonstrated his WSDOT experience through numerous projects during his career including the following project examples:

Eagle Harbor Maintenance Facility Weld Shop; WSF, Bainbridge Island, WA (2023-Present)
Ola is the mechanical lead for a new weld shop building and remodel of existing maintenance buildings at the WSF Eagle Harbor facility.

Mukilteo Ferry Terminal; WSF, Mukilteo, WA (2014-2023)
Ola is the project manager and lead mechanical for a new ferry terminal in Mukilteo. FSi's scope included mechanical and fire protection design, as well as energy modeling and CFD modeling & analysis.

Juan Iringan

Cost Estimator

Juan is the principal estimator of J B Consulting. He graduated with a bachelor's degree in Civil Engineering at FEATI University in 1984. Before he migrated here in USA, he worked in Manila, Philippines and in Riyadh, Saudi Arabia as a cost estimator. He continues his education in extensive courses including the University of Washington with an emphasis in cost estimating. He has worked on numerous projects with municipal agencies in the greater Seattle area.

CHRLF NFS Modular Buildings Relocation; King County, Seattle, WA (2023-Present)
Juan is the lead cost estimator, the project is currently at 60% design phase heading to 90% in construction documents.

Flaviano Reyes JR., PE

Electrical Engineer

WA #36699 (2024)

Flaviano is the president and founder of Reyes Engineering, Inc for the past 25 years. His experience includes nearly three decades of electrical systems design, including power distribution, fire alarm, lighting, telecommunications infrastructure, and renewable energy solutions. As the firm's managing principal in charge, Flaviano directs design on all projects, taking a hands-on approach to ensure clear team communications and quality engineering through all project phases. Among Flaviano's long-term clients are Metro, TriMet, Oregon Department of Transportation, and the City of Portland.

Tacoma Dome Operations Maintenance Facility; Sound Transit, Tacoma, WA (2019-Present)
Flaviano led the electrical design for three transit stations and three parking structures. Reyes also provided fire alarm, security, telecommunications, and lighting design. The client requested renewable energy options on this project. Reyes provided sustainable energy design solutions including solar panel design on garage rooftops and electric vehicle charging stations.

King County Metro Transit Assessments; King County, Seattle, WA (2016-2023)
Flaviano worked in concert with TKDA to provide engineering assessments of existing electrical substations that supply the King County Metro electric buses. The substations were varying in age – many were nearly 50 years in operation. The power switchgear and systems were evaluated based upon existing drawings and specifications.

L&I/WSDA Safety & Health Laboratory & Training Center, Tumwater, WA (2019-2023)
Flaviano was the lead electrical engineer. He provided electrical engineering and backup generator utilities. This includes tie-in to the solar array on the rooftop. Low voltage design includes all telecommunication and audio/visual for classrooms and conference rooms. Fire alarm and security access control for the whole facility . Lighting design includes daylighting design as well as lighting controls. Special lighting was used in the laboratories to provide clear lighting to avoid shadows while doing testing.

Bob Pierce

CADD/BIM Manager and Civil 3D Designer

Bob has an extensive background in Autodesk Civil 3D and MicroStation. His experience ranges from modeling roadways, storm water and sanitary sewer designs, utility design and grading. Bob's experience on a range of WSDOT projects, spanning from fish passage projects to several megaprogram projects, has provided him with an understanding of WSDOT CADD standards for roadways, structural and state ferries.

Eagle Harbor Weld Shop Building, WSF, Seattle, WA (2023-Present)
As CADD manager, Bob is providing Revit to MicroStation conversions and ensuring the project team is meeting WSDOT standards for CAD. Bolima and TKDA are in close communication with Mark Morin with WSF to ensure drawings are delivered back to WSDOT meeting all file and drawing standards for the WSF Welding shop project.

SR 167/I-5 to SR 509 New Expressway Project, WSDOT, Seattle, WA (2021-Present)
Bob managed the drafting team for the structural design of 22 bridges.

SR 509, SR 509 Completion (Stage 1B), WSDOT, Seattle, WA (2023-2023)
For both projects listed above, Bob performed WSDOT CAD Audits for all package submissions to the agency. He created methodology and processes to support the landscape team working in AutoCAD and created and updated their sheets in MicroStation. He also worked with the geotechnical team in creating and modifying SIP plans along with generating figures for Geotech Memos.

Jeremy Butkovich, PE

Geotechnical Engineer

WA #45197 (2024)

Jeremy Butkovich is one of Shannon & Wilson's lead seismic engineers and brings 19 years of experience working on a wide range of geotechnical engineering projects. His areas of expertise include nonlinear time history analyses (e.g. dynamic soil-structure interaction and site response), liquefaction triggering evaluation, slope stability and deformations, and deep foundation design. Jeremy is intimately familiar with WSDOT design and construction methods and has used their design manuals and standard specifications in his work. He was also the lead author for the seismic design chapter for the 2024 update of the WSDOT Geotechnical Design Manual.

SR 520 Bridge Replacement and HOV Program, WSDOT, Seattle, WA (2016–Present)
As project manager, Jeremy led a team of 8 engineers analyzing the proposed base-isolated bridge extending from Montlake to the Evergreen Point floating bridge. The analyses included one-, two-, and three-dimensional FLAC analyses, and required substantial expertise and skill.

Kingston Ferry Terminal Seismic Retrofit, WSDOT/ WSF, Kingston, WA (2020–2024)
Jeremy was the project manager, he led the geotechnical team evaluating deep foundation performance, lateral spreading hazard, and lateral loading of deep foundations. Jeremy's team also conducted site-specific hydraulic modeling of tsunami inundation, sea level rise, and probabilistic evaluations of seismic and tsunami effects.

Terminal 91 Uplands Redevelopment, Port of Seattle, WA (2019–2024)
Jeremy, project manager and his team coordinated with the other project team members and Port representatives to perform a value engineering study for the proposed building foundations.

Chris Soncarty

Environmental Lead

Chris Soncarty has 28 years of experience in regulatory compliance and permitting for projects involving culvert replacement, bridge replacement, road improvements, and aquatic restoration. He works on federally funded projects for local, state, and federal agencies, preparing technical environmental documentation such as National/ State Environmental Policy Act (NEPA/SEPA) discipline reports as well as biological assessments for Endangered Species Act (ESA) consultation. His expertise includes culvert inventory and fish passage assessment, and he has extensive knowledge of Washington Department of Fish and Wildlife (WDFW) Fish Passage Guidelines and Habitat Assessment methods. Chris coordinates closely with project engineers to ensure project impacts are avoided/minimized and biological benefits are maximized to streamline the environmental process, and with permitting agencies to ensure their input is carefully considered and addressed as appropriate, with supporting rationale and adequate level of detail. He is experienced with the Washington State Department of Transportation (WSDOT) Categorical Exclusion (CE) process for NEPA compliance through the WSDOT Highways & Local Programs division.

State Route 520 Bridge Replacement and HOV Program, WSDOT, Grays Harbor, WA (2019-2020)
Chris was the senior biologist/regulatory specialist on this project. Chris obtained permits (Corps Clean Water Act Section 404 and Rivers & Harbors Act Section 10, WDFW Hydraulic Project Approval) and regulatory approvals (Endangered Species Act biological assessment and Marine Mammal Protection Act Incidental Harassment Authorization documentation).

I-5/Marine View Drive to SR 529 Peak Use Shoulder and Interchange Improvements, WSDOT, Marysville, WA (2018-2019)
Chris was the project coordinator on this project. . Chris was responsible for QA/QC review of draft wetland and critical area reports for City of Marysville, City of Everett, and Snohomish County, which were completed by Confluence.

Quality Assurance/ Quality Control Processes

As part of TKDA's project management program, we use a documented Quality Assurance Plan and Quality Control Plan (collectively, Quality Management Plan or QMP) to minimize errors and rework that can cost time and money. These plans are initiated at the start of each project and are followed through its completion. The Quality Assurance Plan addresses scope of services, deliverables, project schedule, staff meetings, project documentation, and technical accuracy. The Quality Control Plan addresses checking policy and procedures, self-checking, and the checking of calculations, specifications, reports, and drawings. This plan helps us complete projects with minimal interruptions.

As Project Manager, Dan Munn is ultimately responsible for the project's quality and the implementation of TKDA's QMP. Upon agreement on the project scope between TKDA and WSDOT, our QA/QC Lead, Mike Keilbart, will ensure that assigned discipline leads carry out quality control responsibilities and execute the discipline coordination tasks identified in our plan. The QMP plan includes:

1. **Client Focus** - Develop specific quality procedures to meet project objectives including the timely submission to meet project deadlines.
2. **Team Roles and Responsibilities** – Discipline leads and independent technical reviewers.
3. **Quality Control** - Organizational and technical Interfaces, database inputs & raw observation data, database outputs, and report reviews
4. **Document Control** – Processes to establish that document submissions are free from errors and omissions document submissions are free from errors and omissions.

Additionally, the QMP will contain procedures for achieving product conformity according to the WSDOT requirements and will be adapted specifically for the Facilities General Engineering Contract methodology established by WSDOT. The QMP will describe in detail, the expectations that TKDA and subcontractor team members will perform quality activities, providing instructions on how to perform them.

Key Personnel in their respective technical disciplines will also facilitate the process to verify that the QMP is properly executed for their respective groups, and that each member understands and follows through on the QMP.

TKDA's reputation is built on providing quality designs, facility assessments and report documents, and is a key feature that we seek in our partners and subconsultants. As we work in partnership with and support WSDOT on the delivery of a successful project, during the kickoff meeting we will reconfirm services, potential deliverables specified on the RFP, milestones, and schedule as proposed so we have a clear understanding of the WSDOT's expectations and needs.

Internal team coordination meetings will be held weekly, to discuss tasks for the upcoming week, to review the project schedule, deliverables, and revise ongoing project coordination needs. There will be on-going communication within the project management team throughout the project, to ensure that all team members are apprised of project process and coordination items.

QUALITY ASSURANCE PROCESS

QMP template is tailored to the project	Deliverables reviewed by discipline leads and Quality Assurance Manager	Comment responses independently verified	Draft and final deliverables go through formal technical editing and word processing

The agreed scope and deliverables serves as the basis for the tasks to be completed for the project, and the foundation of the QMP. TKDA uses internal project team meetings, detailed schedules, and project documentation to foster interactions between technical disciplines to help ensure each discipline knows what others' technical objectives are and works together to achieve common goals. The project schedule will be updated regularly and provided to the client in the submission of monthly reports and at check-in meetings as requested.

The QMP will also detail a structured process for the checking of field observations/database inputs, database outputs and report documents by a qualified staff member as appointed by each discipline lead. The reviewer will check for technical content, completeness and accuracy. A QA/QC milestone is set seven days prior to each client submittal to allow time for a thorough review and update as necessary.

TKDA adapts a QMP specifically for each project and will be shared with WSDOT. We have found a well-developed plan followed throughout the entire project not only enhances the outcome for the owner, but also benefits the communities in which WSDOT serves. Additionally, and as part of the plan we perform a risk assessment to identify and develop mitigation strategies to in the event of scope or schedule changes.

Tracking Systems to Monitor Project Budget and Scope

PROJECT PLANNING, BUDGET, AND RESOURCE SCHEDULING

TKDA uses Deltek VantagePoint for comprehensive financial management, covering project budgets, and client and partner invoicing. VantagePoint is also used to develop project plans and staff resource scheduling. This robust tool enables us to proactively plan payment schedules and stay within budget. To track project scope, we utilize a combination of SharePoint, Microsoft Excel, Bluebeam, and Smartsheets. We will deliver functionality and advance documentation and reporting.

Our Cost Control system will reference baseline budgets, resources, contract requirements and anticipated scope variances. TKDA will follow a work breakdown structure coding in alignment with WSDOT's cost code structure for an accurate reporting on budget, schedule, and contract dates. All processes will be in accordance with WSDOT's Procurement and Contracting Policies. This allows us to seamlessly integrate our scope and schedule into any software provided by WSDOT.

SCHEDULING AND COLLABORATION

Currently, Dan uses ProjectWise on the WSF Eagle Harbor Welding Shop project to facilitate collaboration among TKDA, WSDOT, and other technical team members in creating, assigning, and managing project elements.

TKDA uses Microsoft Project for our project scheduling software. Dan is currently using this on the WSF Eagle Harbor Welding Shop project.

Process for Interacting with Internal Project Team

TKDA recognizes the importance of having well-defined project management processes and communication protocols within the internal project team. Dan Munn, TKDA's Project Manager, will lead the TKDA team. Dan will work closely with the internal team following the issuance of a Notice to Proceed to establish a client kick-off meeting, in parallel, commencing the draft Project Management Plan (PMP). Following the client kick-off meeting, the TKDA team will hold an internal kick-off meeting to establish expectations, roles, and responsibilities within the team.

Workload management is essential for this general engineering contract. TKDA will perform weekly workload coordination meetings with all of our subconsultants to efficiently distribute and manage work across our teams. In these meetings, TKDA will also prioritize work based on urgency and importance. If the contract demands to provide personnel on short notice, TKDA will allocate resources to break down workloads. The work with the top-priority will be assigned first, considering time management strategies and taking into consideration deadlines and expectations. After these distinctions are made, TKDA will monitor and adjust workloads weekly to stay on track with goals and schedules. Our workload management strategies include task prioritization, effective delegation, setting realistic deadlines, and conducting regular meetings.

Ability to Provide Interaction with Client and/or Stakeholders

TKDA optimizes the value to WSDOT and provides transparency throughout the contract duration. TKDA will work via in-person meetings, conference calls, video meetings, email and other digital coordination means to closely work with all stakeholders to fully coordinate the Task Orders throughout the course of the contract. At the conclusion of every month, TKDA will submit a monthly report to WSDOT, which will include monthly status update (planned vs. actual); qualitative description of work completed in the month; invoicing status; meetings held; monthly update; MSVWBE utilization update (planned vs. actual), sustainability update; safety update; risk updates; and forward look ahead for next month. The following Task Summary exemplifies a portion of the information included on our Monthly Reports:

Sample Work Order Overview - Task Summary

WO OVERVIEW - TASK SUMMARY

WO#01 Substation Inspections

	Original WO Price	Current WO Price	Amount Billed Prior	$ Requested this Invoice	Amount This Invoice	Amount Paid To Date	Remaining Balance
100 - PROJECT MANAGEM	$ 73,556.35	$ 72,687.64	$ -	$ 19,125.04	$ 19,125.04	$ 19,125.04	$ 53,562.60
400 - FIELD CONDITION A	$ 323,111.60	$ 323,111.60	$ -	$ 26,464.19	$ 26,464.19	$ 26,464.19	$ 296,647.41
500 - LEVEL 1 - HIGH LEVI	$ 37,017.94	$ 35,895.12	$ -	$ -	$ -	$ -	$ 35,895.12
600 - LEVEL 2 - TRANSIT F	$ 102,029.23	$ 98,414.82	$ -	$ -	$ -	$ -	$ 98,414.82
Lump Sum ODC	$ 3,133.20	$ 3,133.20	$ -	$ 447.60	$ 447.60	$ 447.60	$ 2,685.60
WO Totals	$ 538,848.32	$ 533,242.38	$ -	$ 46,036.83	$ 46,036.83	$ 46,036.83	$ 487,205.55

TASK DETAIL SECTION:

WO#01 TASK 100 PROJECT MANAGEMENT AND COORDINATION

	Original WO Price	Total Task Change Amt	Current WO Authorized	Amount Billed Prior	Amount This Invoice	Amount Paid To Date	Remaining Balance
Labor & Overhead	$65,533.75	$0.00	$ 65,533.75		$17,264.99	$ 17,264.99	$ 48,268.76
Escalation Pool	$ 868.71	$0.00	$ -				
Invoiced ODC	$0.00	$0.00	$ -	$0.00	$ -	$ -	$ -
Fixed Fee	$7,153.89	$0.00	$ 7,153.89		$ 1,860.05	$ 1,860.05	$ 5,293.84
Task Totals	$ 73,556.35	$ -	$ 72,687.64	$ -	$ 19,125.04	$ 19,125.04	$ 53,562.60

Task 100 Due this Invoice						Project	Organization
Current Task Status	Active	Prime ODCs	Overhead %	Overhead $	Total Lbr & OH		
Prime (Direct Labor)	$ 6,200.17	$ -	178.46%	$ 11,064.82	$ 17,264.99		
Subcontractors	**Labor & Overhead**	**Sub ODCs**	OH $ adj. if needed				
Reyes			0.00%		$ -		
Saez			0.00%		$ -		

Additionally, weekly meetings to review the contract's progress with WSDOT and other designated stakeholders will be scheduled. From these meetings TKDA will provide minutes with documented decisions made and direction received. Any identified action items will be noted in the minutes – what the item is, and who is responsible for addressing them.

When design decisions or conflicting requirements are identified that require WSDOT input, they will be documented through an Action Items/Need List. The Action Items/Needs List is maintained by the Project Management team but is a document that is open to the entire team to provide input. This document helps to track those project decisions that require WSDOT to have input and decision-making power around. The Action Item/Needs List will provide a written request, along with any background information, a requested decision date, and serves as the tool to document the response. The Action Item/Needs List is a living document that is updated throughout weekly meetings, and development of the design to continually communicate with WSDOT as information and decisions are required.

The TKDA team will work with WSDOT to evaluate and develop approaches to alternative project delivery methods and project packaging.

Work Plan Development and Decision-making Process

Strong project management is TKDA's specialty and the reason behind more than a century of successful projects. We have an extensive history of managing large and complex teams that require unique skills which TKDA actively fosters and develops in its project managers. Our Project Managers are the point people through which all communication flows. They will maintain the knowledge of the project, oversee the status at all phases, and make sure specific information is properly passed on to all parties who need to know. All key team members contribute their respective areas of expertise, ensuring the projects align with the defined scope of services. This creates a win-win scenario for both TKDA and WSDOT by providing the best skillset for a particular project.

Regardless of project size and complexity, our approach is rooted in a strong project management methodology established in our project planning process. The Project Manager, Dan Munn will complete a Project Management Plan (PMP) at the start of each project inform the design team of the project scope, planned hours, deliverables schedule, internal and client communication plan, quality management plan, project risks, identified constructibility issues, and other pertinent project data. The PMP is a critical document that sets out the expectations for the project's scope, quality, schedule, and budget for the entire team. This document is shared at the kick-off of a project and periodically updated and shared to align the team on a common set of project goals.

Pierce County Spanaway Transit Center, Spanaway, WA

Elements of Proposed Work Plan

TKDA is known for completing projects on time and on budget. We achieve results by talking with our clients and interested stakeholders and asking questions up front that confirm we fully understand the project scope, budget, and schedule expectations. A preliminary project schedule will be developed prior to the project kickoff meeting.

The preliminary schedule will be shared with key project personnel, including those of WSDOT, and all lead disciplines, subconsultants, and internal stakeholders and reviewed during the project kickoff. Once aligned and agreed to, a baseline project schedule will be set. The baseline schedule will take into account defined WSDOT milestones for the project.

A critical step in developing, maintaining, and tracking the design schedule is to continuously engage all parties. Our team will document meetings, emails, and phone calls, organize and summarize the information, and incorporate it into the project schedule. We will meet as a project team regularly throughout the design process to review the project schedule and status of the defined tasks.

TKDA project schedules define not only the schedule for design but incorporate key milestones and timelines for client input/feedback and engagement. TKDA will work with local authorities to define estimated permitting review periods. The schedule will account for estimated permit review periods. All project schedules incorporate QA/ QC tasks to account for the necessary time to provide complete, accurate, and consistent quality controls of all deliverables. Finally, TKDA will work with the WSDOT to define the necessary review periods at all key milestone points in the design process.

Our design process depends on the project size. On large projects, our team will first submit a schematic design for review and then proceed to a 90% review submittal. For smaller projects, we will work toward a 90% design submittal for review. Throughout our design effort, we incorporate our design partners to meet both project goals and master contract participation goals. Our deliverables may consist of plans, specifications, internal construction cost estimates, and reports. After receiving review comments, we will incorporate them into the final construction documents.

Please refer to the table on the next page for a listing of all possible key project management tools for our work plan.

Key Project Management Tools		
Action Item/Needs List		Tracks all requests for information and project decisions that required input from WSDOT or stakeholders. A living document that is updated throughout the project and shared with the project team.
Basis of Design	BOD	Documents the project scope, goals/objectives, requirements, criteria, assumptions, and considerations used to guide design decisions and calculations.
Project Schedule		Part of the PMP and set up at project initiation, the schedule outlines the tasks, activities, and milestones required to complete a project on time and budget.
Construction Risk Register		Documents the construction risks and constructability challenges identified by the design team. Updated continuously throughout the project.
Change Management Plan	CMP	Part of the PMP, the plan outlines to team members the steps that are followed for identification, communication, approval, and implementation of all scope changes.
Design Checklist		Checklists developed to verify design deliverables and calculations are completed according to applicable regulatory requirements, client guidelines, standard, and codes with adequate detail for the intended purpose.
Discipline Coordination Review	DCR	Structured review method for obtaining input from each discipline to identify conflicts and determine compatibility of design elements. Held at the conclusion of each design phase and prior to each deliverable issuance.
Independent Constructibility Review	ICR	A review of the design package by an experienced, non-team member focused on verifying that the final design can be constructed in a reasonable and safe manner. The ICR is conducted before any deliverables are issued for construction.
Quality Assurance Manager	QAM	Individual responsible for implementation of the quality management plan for all WSDOT projects. Provides review and over site of the quality plan and quality controls.
Quality Management Plan	QMP	Division, client, and project specific plans defining quality control and assurance procedures. Defines all required quality control activities.
Project Management Plan	PMP	Sets the expectations for the project's scope, quality, schedule, and budget through documentation of all project elements. Includes project scope, planned hours, project deliverables, schedule, communication plans, quality management plan, stakeholder engagement, project risks, and constructibility challenges. Developed at the start of the project and maintained throughout by the project manager.
Public Involvement Plan	PIP	For applicable projects, the document defines the parameters, approaches, and schedule for engagement of the public in the design of the project.
Risk Register		Part of the PMP, documents the risks to the project's schedule and budget and identifies the determined approach for elimination or mitigation. Updated continuously throughout the project.
Site Logistics Plan		Site planning identifying site boundary information, staging locations, access points, and/or known utilities for the construction team.
Stakeholder Matrix		Part of the PMP, it identifies each stakeholder and documents engagement parameters, scheduled engagement points, decision making processes, and the project approach to integrating stakeholder contributions. Tracks completion of defined engagements.

Contingencies and Project Issue Resolution

SCOPE CHANGE DOCUMENTATION AND COMMUNICATION

We all acknowledge there will be changes on projects – how you manage the changes to minimize impact and avoid risk is the challenge. Identifying and communicating scope changes starts with written documentation of the initial scope. TKDA starts all projects with documentation of the project scope within the Project Management Plan. The plan is developed before the project kickoff meeting and is continually updated, starting at the kickoff meeting, through the completion of the project. The project scope section of the Project Management Plan is shared with the client PM to verify alignment and reviewed at the kickoff meeting to gain feedback from key project personnel, including those of WSDOT and all lead disciplines, subconsultants, and internal stakeholders.

Once the initial scope is defined, scope changes are tracked, and information is subsequently shared with the WSDOT team so that discussions may be had, and implementation decisions may be made. TKDA develops a Change Management Plan that outlines to team members the steps that are followed for identification, communication, approval, and implementation of all scope changes. We understand that a lack of change management can result in project surprises, yielding cost increases, schedule slippage, and end performance deficiencies.

SCHEDULE AND SCOPE RISK MANAGEMENT

TKDA will perform a scope and proposed schedule review at the time of task order issuance to identify any discrepancies and/or challenges. TKDA's project teams can then put an early emphasis on those areas that require special attention. Communication of risks related to the alignment of the scope, schedule, and budget is key and begins with the kickoff meeting in which a review of known scope and schedule challenges and risks will be conducted. Risks are documented in the Project Management Plan, along with a tracked and maintained risk register.

The risk register will be shared with the WSDOT project manager on a regular schedule to allow for review and discussion of the risks to cost and schedule. Sharing information allows for continuous feedback from WSDOT on the desired approach to eliminating or mitigating the risks. The register not only lists the risks but proposes prevention measures and tracks the status of the resolution or agreed upon mitigation measures. Documents are shared with key team members and updated periodically to ensure accuracy and completeness of the risks identified and the resolutions proposed. Reviewing the risk register and discussing the resolutions on a regular schedule, through the use of weekly internal project meetings and at key design collaboration points, is how TKDA's project managers keep the scope, schedule, and budget front of mind as the design evolves and changes.

Finally, all design changes that impact the agreed upon scope are documented per the Change Management Plan. The Change Management Plan will be developed along with WSDOT Project Managers so that those communication methods that work best for WSDOT staff may be implemented in the plan. Key parts to the plan include documentation of project objectives, documentation of initial project scope, procedure for identification of a scope change, communication procedure, change approval process, and process for implementation of the change. The plan for identification, communication, approval, and implementation of all scope changes sets a clear and consistent process for managing scope change approvals and prevents the design from evolving beyond the agreed scope without associated cost and schedule impact mitigation measures.

Assumptions for Work Breakdown Structure

Once TKDA and WSDOT approve each capital facility project, the PMP will create detailed work breakdown structures (WBS) aligned with the project's requirements. Our project manager will work closely with the team to define specific responsibilities for each discipline involved.

We achieve results by talking with our clients and interested stakeholders and asking questions up front that confirm we fully understand the project scope, budget, and schedule expectations. A preliminary project schedule will be developed prior to the project kickoff meeting.

The preliminary schedule will be shared with key project personnel, including those of WSDOT, and all lead disciplines, subconsultants, and internal stakeholders, and reviewed during the project kickoff. Once aligned and agreed to, a baseline project schedule will be set. The baseline schedule will take into account defined WSDOT milestones for the project.

Identified Key Issues and Critical Milestones

With this new general engineering contract under the Capital Facilities group, we recognize the need for efficient implementation of facility improvements. A clear understanding of project drivers will be instrumental in developing our PMP. General Engineering Contracts account for 80% of our total projects, and our experience on over 20 WSDOT projects will provide valuable insights into critical milestones.

A critical step in developing, maintaining, and tracking the design schedule is to continuously engage all parties. Our team will document meetings, emails, and phone calls, organize and summarize the information, and incorporate it into the project schedule. We will meet as a project team regularly throughout the design process to review the project schedule and status of the defined tasks.

TKDA project schedules define not only the schedule for design but incorporate key milestones and timelines for client input/feedback and engagement. TKDA will work with local authorities to define estimated permitting review periods. The schedule will account for estimated permit review periods. All project schedules incorporate QA/QC tasks to account for the necessary time to provide complete, accurate, and consistent quality controls of all deliverables. Finally, TKDA will work with the WSDOT to define the necessary review periods at all key milestone points in the design process.

The QMP will be used at major milestones throughout the project. As part of the TKDA management emphasis whether the project is a complex multi-discipline project or a single discipline effort.

TKDA