

# King County - Interim Base Electrification (IBE) Project



STATE OF WASHINGTON CAPITAL PROJECTS ADVISORY REVIEW BOARD (CPARB) PROJECT REVIEW COMMITTEE (PRC)

Application for Progressive Design-Build Project Approval

Submitted by

King County

December 18, 2020



#### **Capital Division**

201 S. Jackson Street KSC-TR-0412 Seattle, WA 98104-3856

December 18, 2020

Via email (<u>PRC@des.wa.gov</u>) Attn: Talia Baker, Administrative Support Project Review Committee c/o State of Washington Dept. Enterprise Services Engineering & Architectural Services Post Office Box 41476 Olympia, WA 98504-1476

## Re: King County's Interim Base Electrification (IBE) Project - Application for Project Approval (Design-Build)

Dear PRC Members,

King County is pleased to submit the attached application for approval for the Interim Base Electrification (IBE) project to use the Design-Build alternative contracting procedures, as defined in RCW 39.10.

The IBE project will initiate the directive from King County Executive, Dow Constantine, to operate a 100% Zero Emissions Fleet by 2040. This project entails design and construction to support the charging operations for 120 Battery Electric Buses (BEB) at King County's Interim Base at South Campus, located in Tukwila, WA. In 2019, the County and consulting engineering firm, Parametrix, worked closely together to develop a conceptual design report specific to this project. The report was completed in late 2019 and serves as a starting point for the IBE project's design-build efforts. The IBE project's schedule has been impacted by the COVID-19 pandemic, yet our commitment to 2040 is fixed. Time is of the essence, both in commitment to the 2040 target date and our role in mitigating greenhouse gases globally via this impactful transportation electrification strategy.

Our project delivery of choice for the IBE project is Progressive Design-Build (PDB). We believe a PDB approach will enhance the probable success of the IBE project substantially over a traditional Design-Bid-Build (DBB) delivery. King County (KC) has worked to ensure that the IBE project meets the criteria under RCW 39.10.300. We are positioned with team members and support consultants that can facilitate successful outcomes in an integrated and collaborative approach. The IBE project is highly specialized, and a PDB approach will allow for greater innovation and efficiencies between

parties, as well as significant saving in time. Transparency between team members will also be enhanced compared to a DBB approach. One of our key goals is to transfer the information gained from this important project to upcoming BEB projects as well.

As KC's Project Manager, I am leveraging my experience in renewable clean energy and information technology market sectors to assemble an exceptional team to successfully deliver this essential project. Carol Pennie, KC Project Representative, brings years of experience in delivering challenging transportation projects and will primarily focus on the interface between the design and construction phases. She will also have oversight responsibilities during the construction phase. Both Carol and I have design-build experience that will greatly help facilitate utilization of the PDB delivery method within the KC agency. Additionally, KC's legal, contracts and procurement groups are also fully engaged to deliver a coordinated request for qualification, request for proposal, and contract document package. Our engineering staff will also be involved throughout the IBE project.

KC has also retained Vanir Construction Management, Inc. (Vanir), a professional project and construction management firm to assist KC throughout the IBE project. Vanir has assembled a highly qualified team with significant relevant design-build, project and construction management services, and technical expertise that is led by Scott Tomlinson, CCM, DBIA (Professional), who will serve as the Owner Advisor. Within Vanir's team is David Umstot, PE, CEM, of Umstot Project and Facilities Solutions, a national leader in PDB project delivery, Carol Rhodes, PE, PMP, DBIA (Professional) of Vanir who possesses excellent transportation experience, as well as Santosh Kuruvilla, PE, SE, PMP, President, Exeltech Consulting, Inc., who brings excellent insights into the State of Washington RCW 39.10 Alternative Delivery.

In the past six-years KC has successfully completed hundreds of millions of dollars in construction projects, in transit, water/wastewater, parks and public facilities. KC is focusing more and more on alternative project delivery to help facilitate successful outcomes on our projects. The IBE project is fully funded. Continuity of the project team is key for a successful project delivery. All team members, including our consultants are engaged throughout the course of the IBE project. As you may already know, KC is a leader in promoting small, women and minority-owned business participation in their projects. We will work to ensure that our RFQ, RFP and contract documents continues to advance these outreach goals.

All our team members are excited to apply their skill sets and lessons learned in an integrated and collaborative manner to ensure the success of the IBE project. We look forward to presenting our proposed project to the Project Review Committee and answering any questions you may have.

Sincerely,

DocuSigned by: kenin kibet -997C3C45133447A...

Kevin Kibet, PMP Transit Capital Project Manager King County (206) 263-1553 kkibet@kingcounty.gov

### STATE OF WASHINGTON CAPITAL PROJECTS ADVISORY REVIEW BOARD (CPARB) PROJECT REVIEW COMMITTEE (PRC)

### **APPLICATION FOR PROJECT APPROVAL**

To Use the Design-Build (DB) Alternative Contracting Procedure

The CPARB PRC will only consider complete applications: Incomplete applications may result in delay of action on your application. Responses to sections 1-7 and 9 should not exceed 20 pages *(font size 11 or larger)*. Provide no more than six sketches, diagrams or drawings under Section 8.

#### **Identification of Applicant**

- a) Legal name of Public Body: King County
- b) Address: 201 South Jackson Street, Seattle, WA 98104
- c) Contact Person Name: Kevin Kibet

Title: Project Manager E-mail: kkibet@kingcounty.gov

d) Phone Number: (206) 263-1533

#### **Acronyms and Abbreviations**

BEB	Battery Electric Bus
CM	Construction Management
CMAA	Construction Management Association of America
CPARB	Capital Projects Advisory Review Board
CPPB	Certified Professional Public Buyer
DB	Design-Build
D-B team	Design-Builder
DBB	Design-Bid-Build
DBIA	Design Build Institute of America
ESCO	Energy Savings Performance Contracting
ESJ	Equity and Social Justice
EV	Electric Vehicle
FTA	Federal Transit Administration
GCCM	General Contractor/Construction Manager
GMP	Guaranteed Maximum Price
IBE	Interim Base Electrification
KC	King County
KCM	King County Metro
LOE	Level of Effort
OA	Owner Advisor
PDB	Progressive Design-Build
PRC	Project Review Committee
RFP	Request for Proposal
RFQ	Request for Qualification
SCL	Seattle City Light

#### 1. Brief Description of Proposed Project

- A) Name of Project: Interim Base Electrification
- b) County of Project Location: Tukwila, WA
- c) Please describe the project in no more than two short paragraphs. (See Attachment A for an example) Note: Attachment A not utilized in this application)

The Interim Base Electrification (IBE) project is initiating the directive from the King County's Executive, Dow Constantine to operate a 100% Zero Emissions Fleet by 2040. This will require the development of standards and design requirements for electric buses, which is one of the primary objectives of this project. Once the IBE project is complete, King County Metro (KCM) will expand the implementation of an electrified bus fleet and utilize the information gained to support future electric bus infrastructure projects.

The IBE project entails design and construction of electrical power infrastructure (in coordination with Seattle City Light (SCL), charging infrastructure, and charge management systems, and other elements required to support the charging operations for 120 Battery Electric Buses (BEB) at King County's (KC) Interim Base at South Campus located in Tukwila, WA. The planning, operations, and implementation of the infrastructure will need to take into consideration the procurement of the new BEBs as well. This project will also be fundamental in the positioning the remainder of South Base's fleet, as well as the East Base and North Base to achieve a 100% Zero Emissions Fleet by 2040. Coordination with the Design-Builder will be instrumental to determine the charging cycles that will need to be taken into consideration, such as, charging systems speed, quantity of chargers, quantity of BEBs and their assigned routes. Electrical rates are another key component and can be viewed as variable dependent upon the time of day for charging. Seattle City Light's variable rates will need to be coordinated with the DB team's charge management system and KC's operation to ensure effective electrical power rates per charge.



Image 1. Overview of IBE site.



Image 2. Overview of IBE site, looking East, electric buses with gantries.

#### 2. Projected Total Cost for the Project:

#### A. Project Budget

Professional Services (Technical Reviews, Legal, OA/CM, Inspection)	\$ 3,075,000.00
Est. Project Design & Construction (Includes 10% Missing Scope Contingency)	\$ 35,329,000.00
Off-Site Costs (SCL)	\$ 500,000.00
Contingencies (Design & Owner)	\$ 10,599,000.00
Other Related Project Costs	\$ 9,583,000.00
Sales Tax N/A (Project Falls Under WAC 458-20-171 Exception)	\$ 0.00
TOTAL	\$ 59,029,000.00

#### **B.** Funding Status

Please describe the funding status for the whole project. <u>Note</u>: If funding is not available, please explain how and when funding is anticipated

KCM's budget for the IBE project is fully appropriated as of the 2020, 3rd Omnibus request approved by the County Council on July 21, 2020. This project is funded with internal KCM funds. KC is also seeking grant funding opportunities for the IBE project as they become available to offset the amount of internal KC funds required. This includes Federal Transit Administration grant funds.

#### 3. Anticipated Project Design and Construction Schedule

Please provide (See Attachment B for an example schedule):

The anticipated project design and construction schedule, including:

- a) Procurement;
- b) Hiring consultants if not already hired; and
- c) Employing staff or hiring consultants to manage the project if not already employed or hired.

#### **IBE SCHEDULE MILESTONES**

Task	Status/Duration
Procure Design-Build (DB) Project/Construction Management Consultant	Completed
PRC Approval	Jan. 28, 2021
DB RFQ Advertisement	Feb. 2, 2021
DB SOQ Due	March 9, 2021
Select/Notify Finalists	March 23, 2021
Issue RFP	March 24, 2021
Proposals Due	April 21, 2021
Notify Highest Scored Finalist	May 10, 2021
Notice to Proceed	June 7, 2021
Design & Construction Phase	Jun. 2021 – Sept. 2024
Closeout Phase	Oct. 2024 – Nov. 2024

#### **IBE SCHEDULE**

Please refer to Attachment B for additional schedule Information.

4. Explain why the DB Contracting Procedure is Appropriate for this Project

Please provide a detailed explanation of why use of the contracting procedure is appropriate for the proposed project. Please address the following, as appropriate:

 If the construction activities are highly specialized <u>and</u> a DB approach is critical in developing the construction methodology (1) What are these highly specialized activities, and (2) Why is DB critical in the development of them?

The development and implementation of a battery electrified bus fleet starting with the South Base requires a highly specialized and integrated team of professionals that will work closely with KC staff to accomplish the project goals. Multiple combinations of system charging configurations, including varied number of chargers, charger power output management software and parking configurations, will need to be analyzed and coordinated with the new BEB fleet procurement. Technology in this field also continues to evolve. A key goal for the project goal is to capture the most current and best suited charging system for its South Base fleet. Utilizing a progressive design-build (PDB) approach allows for an integrated approach between the DB team and our staff. This integrated approach will substantially help to resolve the issues we face in a collaborative manner, as well as provide greater resources and expertise early in the IBE project's schedule. The ability to integrate new technology properly with procurement of the selected charging system and BEB procurement will also be essential, as this will allow configuration optimization based on vendor-unique capabilities in a rapidly evolving market.

A PDB approach increases the opportunity for KC's participation, allowing for a higher level of integration between the KC, contractor, and designer within the programming and planning process. In addition, a PDB approach is an effective project delivery method if limited scope and cost information are available, or difficult to ascertain at the time of the DB team selection which we are challenged with at this time. By utilizing a PDB approach, we can refine the budget to scope requirements continuously with all key team members.

The Interim South Base is an active site that will require operational coordination during the construction of the IBE project. A PDB project delivery allows for the DB's input into the phasing, constraints, and sequencing of the project to mitigate impacts to the operations and other projects. Coordination with SCL with an integrated PDB approach will also be enhanced. Strategies to mitigate risk caused by COVID-19, relating to the supply chain and field work will also be enhanced by an integrated PDB approach, if still necessary.

Integrated coordination with the DB's team can facilitate assurances that the power demands, electrical infrastructure and selected charging systems are accounted for correctly, and the electrical rates/periods are understood, which if done properly can have significant savings in energy costs.

The IBE project includes key performance-based elements of the contract relating to the performance of the charging system. A DB approach will provide a single contractual entity that is responsible for guaranteeing performance as well.

• If the project provides opportunity for greater innovation and efficiencies between designer and builder, describe these opportunities for innovation and efficiencies.

As the BEB infrastructure is relatively new in the country. Our goal is to secure an integrated team of experts to capture the latest state-of-the-science technologies and promote new innovative ideas, as well as the efficiencies that come with an integrated team.

The water table at South Base is variable and at times within a foot of surface. A working history of the site has presented substantial challenges to construction implementation pertaining to the water table and dewatering requirements. Developing a coordinated plan that mitigates this risk with an integrated

team will be highly beneficial. This may include fast tracking to allow civil work to begin in the Spring/ Summer of 2022, as there are substantial differences in the water table's elevation between the wet and dry seasons.

The ability to mitigate impacts to operations can also be enhanced with an integrated team and certain prefabricated systems for such items as the gantries and charging stations, will need to be investigated.

#### If significant savings in project delivery time would be realized, explain how DB can achieve time savings on this project.

Because the DB team is selected based on qualifications and a price factor, the selection process will take approximately the same amount of time that KC would normally expect to hire a design team in the traditional, design-bid-build procurement method. The DB team will significantly compress the traditional design schedule and may start construction while the design is being completed.

Design duration will also be shorter because documentation will be done to the extent necessary for permitting, building and record drawings, rather than to the level typically needed for competitive lump sum bidding.

The ability to fast-track the project will also be enhanced for such items as:

- o Charging system selection and procurement
- Charging software procurement
- o Securing permitting
- o SCL and DB coordination
- o Civil work in Spring/Summer of 2022
  - Mitigates wet weather and groundwater concerns

#### 5. Public Benefit

In addition to the above information, please provide information on how use of the DB contracting procedure will serve the public interest. For example, your description must address, but is not limited to:

- How this contracting method provides a substantial fiscal benefit; or
- How the use of the traditional method of awarding contracts in a lump sum (the "design-bid-build method") is not practical for meeting desired quality standards or delivery schedules.

To reduce greenhouse gases that are causing global warming, KC is committed to achieving a 100% Zero Emissions Fleet by 2040. Time is critical and the IBE project will play an instrumental part in our efforts to achieve that goal. Taking a PDB approach allows for an integrated team early in the process, bringing collaboration and innovation to the design, procurement and the implementation processes. A key public benefit of a PDB approach is a higher project success rate in quality, time and cost certainty as an integrated team can manage and resolve risks in a more effective manner than in a traditional design-bid-build (DBB) method.

A PDB approach will also minimize the amount of the programming documents necessary to move forward with an integrated team saving considerable amounts of time and costs. Budget control is very important. The PDB integrated team will be able to work effectively prioritizing cost elements of the construction, as well as how those potential cost elements impact the long-term cost of fleet operations and energy costs. Therefore, the public will benefit by securing the best blend of construction cost and future operations and energy costs.

6. Public Body Qualifications

Please provide:

6.1 A description of your organization's qualifications to use the DB contracting procedure.

KC retained Vanir Construction Management, Inc. (Vanir), a professional project and construction management firm to assist KC throughout the IBE project. Vanir has assembled a highly qualified team with significant relevant and design-build expertise. **Scott Tomlinson, CCM, DBIA** (Professional) will serve as the Owner Advisor, providing leadership, DB expertise and support to the team.

Supporting our PDB project delivery approach in an advisory position is **David Umstot**, **PE**, **CEM**, of Umstot Project and Facilities Solutions. David is a national leader in PDB project delivery, he will work closely with the team in the initial set-up and DB procurement, starting with a PDB workshop, as well as through project on as needed basis. Vanir Project Manager, **Carol Rhodes**, **PE**, **PMP**, **DBIA** (Professional), has successfully led large bus programs for Sound Transit's Sound Move, Regional Express Program. Carol will foster collaboration between all parties to ensure successful project results.

Vanir's team will be supported by the following firms:

- CS3W Associates Inc. (M/DBE, SCS Firm): Electrical/Structural Engineering, Construction Management
- Exeltech Consulting, Inc. (MBE, SCS Firm): Alternative Delivery (Santosh Kuruvilla) Civil/ Structural Engineering, Construction Management, Environmental Permitting, and Inspection
- o Wise Charging: Optimizing Fleet EV Charging Infrastructure
- o Ankura Consulting: Audited Labor Rates and Invoicing

Ankura Consulting, CS3W and Exeltech have successfully delivered DB projects. Wise Charging brings key EV charging infrastructure experience.

KC's staff is highly experienced in public contracting and many of the KC team members having DB expertise. Managing Director, **Liz Krenzel**, will provide project oversight and governance. She is fully supportive of KC's movement into alternative delivery, including PDB. Project Manager, **Kevin Kibet**, **PMP**, brings expertise in renewable green energy projects, as well as current DB experience on the KC ESCO bus charging project. Project Representative, **Carol Pennie**, brings considerable expertise in project and construction management, and has recent DB experience. Supervising Attorney for KC 's Contracts, **Thomas Kuffel**, **JD**, and Contracts Specialist, **Trisha Roth DBIA**, **CPPB**, will be leading the procurement and contract documents efforts for KC's efforts.

KC is also well positioned with engineering support to tailor the initial conceptual design/program developed by Parametrix for the project, as well as working to ensure that the DB is meeting the initial and adjusted program. KC's Project Engineer, **James Degnan**, will be leading that effort for the project.

6.2 A project organizational chart, showing all existing or planned staff and consultant roles.

<u>Note</u>: The organizational chart must show the level of involvement and main responsibilities anticipated for each position throughout the project (for example, full-time project manager). If acronyms are used, a key should be provided. (See Attachment C for an example.)

Please additional detail on staffing and level of effort, refer to Attachment C - Organizational Chart

6.3 Staff and consultant short biographies that demonstrate experience with DB contracting and projects (not complete résumés).

Refer also to **Attachment E – Team Member Experience** worksheet for additional detail about key team members.

#### Scott Tomlinson, CCM, DBIA: Owner Advisor, Vanir

Scott is a construction professional with over 35 years of experience in the construction industry, working on industrial, institutional, transportation, wastewater, marine, and commercial projects for contractors and owners. He holds degrees in Building Construction and Civil Engineering Technology. Scott is also a member of both Design Build Institute of America (DBIA) and the Construction Management Association of America (CMAA) and has served on the regional CMAA Board. With a solid background in construction contracts, RCW 39.10 alternative delivery including progressive design-build, expertise in project/construction management, construction sequencing, and field experience, he is uniquely qualified to assist clients in reviewing and mitigating risks on construction projects. For over 20 years he has supported public agencies in the development of project delivery that address the risks associated with construction projects as well as working to with teams to resolve complex construction disputes.

#### David Umstot, PE, CEM: PDB Advisor, Umstot Project and Facilities Solutions, LLC

David is a Professional Civil Engineer (PE) with more than 35 years of leadership experience in private sector and public agency construction program management and facilities management. He is a nationally recognized leader in Lean Project Delivery and DB. David co-founded Umstot Project and Facilities Solutions, LLC in 2013 to assist others in delivering better projects, performance and results. David has worked with more than 70 organizations coaching owners, developers, builders, designers, and specialty trade contractors in Lean thinking, culture change, and continuous improvement as part of the company's core offerings. He is a past president of the DBIA's Western Pacific Region (2015) and current member of the region's Board. Over his career, David has been involved in more than 50 DB projects as a practitioner, owner, and advisor including 28 progressive design-build projects since 2008. He has worked with 10 different public agencies to help successfully deliver their first progressive design-build project. He was recognized by DBIA in 2012 with a national Distinguished Leadership Award for pioneering the use of progressive design-build in the California higher education sector and by the American Society of Civil Engineers Region 9 as the 2011 Outstanding Civil Engineer in the Public Sector.

#### Carol Rhodes, PE, PMP, DBIA: Project Manager, Vanir

Carol has 24 years of experience working as an owner, prime contractor and designer for major transit, transportation, and facility projects. Her experience includes managing projects that span all project phases and tasks from conceptual design through start of operations. She is experienced in Washington State public works, grant-funded projects and alternative contracting delivery methods. Carol is well-versed in project and construction management, policies and procedures, and project controls with a proven record building collaborative teams to deliver projects on time and under budget.

#### Michael Clark, PMP: Resident Engineer, Vanir

Michael has over 30 years of experience managing and coordinating the design and construction of municipal infrastructure and urban development projects, from conceptual development through to completion. Michael is a strong, organized leader and public communicator with demonstrated effectiveness in implementing a comprehensive approach to projects in aligning strategic municipal

business, operations planning, policy development, conceptual and technical design, and community stakeholder engagement. He is effective in developing and leading project teams through all phases of technical and nontechnical project lifecycles.

#### Santosh Kuruvilla, PE, SE, PMP: President, Exeltech Consulting, Inc.

Santosh is a strategic thinker, a problem solver, and has served as a valued and trusted engineering advisor for local, state, and federal agencies. His innovative solutions and creative ideas have enabled agencies to manage risk and deliver engineering projects on-budget and on-schedule. His leadership, management, and communication style motivate project teams to successfully deliver projects under difficult budget and schedule constraints, creating real value for owners and clients. He brings excellent insights into the State of Washington RCW 39.10 Alternative Delivery that includes DB. Santosh is also a Governor Appointee as an Engineering Representative for Washington State CPARB (2015 –2023).

#### Liz Krenzel, PE, PMP: Project Delivery Section Manager, King County Metro

Liz is a project management professional with over 25 years of experience working with managers, supervisors, chiefs and staff teams throughout the KCM Transit Department on a wide variety of transit initiatives, programs and projects. She holds a degree in Civil Engineering and is a member of the Project Management Institute. She is an excellent listener, which is an important part of learning and understanding each person's role and experience they bring to the team and organization. She has experience in building relationships and treating all employees and customers equitably, with respect and dignity as well as solve problems for the good of KCM Transit.

#### Thomas Kuffel, JD: Supervising Attorney – Contracts, King County

Thomas is the senior deputy prosecuting attorney in the Civil Division of the KC Prosecuting Attorney's Office, where he supervises the Contracts, Finance and Court Services Section. Thomas has been with the prosecutor's office since 1993. He has assisted county agencies on a wide variety of legal matters involving the drafting, procurement and administration of public contracts. His experience covers professional services and traditional design-bid-build contracts and alternative public works contracts, such as the Brightwater Treatment Plant Project (GCCM), the KC Children and Family Justice Center Project (Design-Build) and the KC Marine Division Pier 50 Float Replacement Project (Design-Build).

#### Trisha Roth, DBIA, CPPB: Contracts Specialist, King County Procurement

Trisha brings more than 20 years of experience in both public and private sector with a firm background in project management and contract administration, particularly for capital projects. Trisha holds a Master of Science in Transportation Management, as well as an associate DBIA and Certified Professional Public Buyer (CPPB) certifications. Trisha has direct DB procurement experience working as the Contract Specialist on the KCM Pier 50 Float Replacement, approved by the PRC in 2017. Prior to KC, Trisha worked for Sound Transit (2013-2017) and was exposed to DB delivery methods supporting senior contract specialists. During the three and a half years with KC, Trisha has working on multiple large Design-Bid-Build Invitations to Bid, procured the KC Job Order Contract (alternative), and had a two-year special duty assignment as lead of the construction team.

#### Kevin Kibet, PMP: Project Manager, King County Metro

Kevin is a project management professional with 15 year of experience managing projects in transportation, energy and technology sectors. He holds degrees in Renewable and Clean Energy, and Information Technology, and he is a member of DBIA. Kevin is currently managing the South Base Test Electrification project, which is utilizing Washington State Department of Enterprise Services Energy Savings Performance Contracting (ESCO) process to build twelve chargers for BEB's. He will carry

forward the lessons and institutional momentum on the integrated teams and the design build processes from that project. With experience and interest in managing integrated teams, change management, development of organizational policies and structures to support projects, he is qualified to navigate the delivery of this project using the PDB alternative delivery at KCM.

#### Carol Pennie, Construction Project Representative, King County Metro

Carol has over thirty-five years of experience in project management, construction management and civil engineering design. Carol holds a degree in Civil Engineering and has managed the design and construction of transit multi-modal facilities and industrial and bus maintenance facilities, including the administration of FTA funded projects in both the private and public sector. She has recently completed the Pier 50 Float Replacement, which was a DB project for KCM's Marine Transit Division. As a Construction Supervising Engineer V at KCM's Capital Project Delivery Section, she has demonstrated experience in facilitating integrated teams to deliver transit construction projects including DB, ESCO, Lump Sum, Work Order contracting. She will secure excellent results for the IBE project.

#### James Degnan, PE, Project Engineer, King County Metro

James will lead a talented in-house multi-disciplinary engineering group that will guide the design of the new facility. James is a registered Professional Electrical Engineer, with more than 30 years of experience. He has worked for owners and contractors as part of the traditional design-bid-build process, GCCM method, and DB teams. His construction experience includes notable projects such as the Washington State Convention Center, University of Washington's Medical Center Expansion, and SeaTac Airport's Northstar and International Arrivals Facility. James has served on several local and national construction and energy code councils.

- 6.4 Provide the <u>experience and role</u> on previous DB projects delivered under RCW 39.10 or equivalent experience for each staff member or consultant in key positions on the proposed project. Please refer to Attachment D - Team Experience and Role on Previous Projects.
- 6.5 The qualifications of the existing or planned project manager and consultants.

Kevin Kibet, PMP, KC's Project Manager is a leader in the renewable and clean energy field for KC, as well as the information technology field. He has managed and overseen transportation, energy and technology for 15 years and has embraced the ability to work in an integrated PDB project delivery approach. KC has put in place an experienced consultant team to support the County's team to deliver successfully the IBE project utilizing a PDB approach. In addition, to the key reference biographies above KC will have access to Vanir's resources as a company, which has extensive DB experience on a national level if needed.

6.6 If the project manager is interim until your organization has employed staff or hired a consultant as the project manager indicate whether enough funds are available for this purpose and how long it is anticipated the interim project manager will serve.

#### Not Applicable

6.7 A brief summary of the construction experience of your organization's project management team that is relevant to the project.

In the past six-years KC has performed hundreds of millions of dollars in construction projects, in transit, water/wastewater, parks and public facilities. Liz Krenzel, Kevin Kibet, Carol Pennie, James Degnan, Thomas Kuffel, and Trisha Roth are all senior level personnel dedicated to the success of the IBE Project. Our organization and this team are also focusing on alternative project delivery to allow for an integrated team to continue our long history of successfully completing large and complex construction projects. Vanir's team also bring a strong record of best-in-class program, project and construction management services to public agencies in Washington State. Scott Tomlinson, David Umstot, Carol Rhodes, and Santosh Kuruvilla bring special expertise in DB, as envisioned and practiced under the provisions of RCW 39.10.

Please see our individual biographies in Section 7.3 above for more details.

6.8 A description of the controls your organization will have in place to ensure that the project is adequately managed.

KC and Vanir will implement project control procedures that address all aspects of the project from predesign through closeout. A Project Management Plan has been developed that addresses the goals, the overall project management plan, authority, responsibility and communication protocols. This plan will be periodically modified as necessary to address new team members. Detailed project control procedures that address the request for qualification (RFQ) and request for proposal (RFP) solicitations, validation, design development and reviews, scheduling, cost control and quality assurance will be established. A Risk Register has been developed to identify and mitigate risks. The Risk Register will be periodically updated throughout the Project and proper contingencies will be established to address those risks.

Vanir's team will also work closely with KC and its legal counsel to ensure that RCW 39.10 requirements are followed including the governing processes for securing statements of qualifications and proposals. All public notices will have legal approval prior to publication.

An initial project scope/program definition will be developed with assistance from the KC's engineering, Vanir, Exeltech, and Wise Charging, in order to ensure the DB teams have enough information to provide quality statements of qualifications (SOQ's) and proposals. KC will work to ensure compliance with RCW 39.10.330 Design-Build Contract Award Process.

Basis-of-design and drawings will be developed in collaboration with the selected DB team and the project team. In addition, cost, schedule and further design refinements will be a combined effort with the DB and KC. The County will take the lead in technical reviews, with assistance from Vanir, Umstot, CS3W, Wise Charging, and Exeltech. KC, with the assistance of Vanir, will lead the team in guaranteed maximum price (GMP) negotiations with the DB in a transparent and open book manner. Ankura will work to ensure that the claimed labor rates and costs are aligned with the contract and can be reasonably reviewed and audited. Audits are planned at the beginning to set rates and expectations, at the middle to ensure compliance and possible mid-course refinements, and at final completion.

During the design phase the County will implement design reviews, design logs and trend logs throughout the course of the engineering development to ensure that the project goals, criteria and refinements during the validation period are secured. KC will be the primary party responsible for engineering reviews and stakeholder integration related to engineering development by the DB Team. Field quality assurance will be a combined team effort, incorporating the Army Corps of Engineers

quality control principles. KC's document and project controls best practices will be followed throughout the IBE project. At the completion of the project, Vanir will prepare a project close-out report, which will capture all pertinent project data and lessons learned.

#### 6.9 A brief description of your planned DB procurement process.

KC intends to use the provision contained in RCW 39.10.330(1)(d)(ii) *that allows public agencies to select the design-builder based largely on qualifications, including "cost or price-related factors…*". This provision of the statute enables the County to use a PDB approach. With a PDB approach, the County will conduct a streamlined selection process in which there will be no design competition. Rather, the County will select the DB team that demonstrates that it will bring the best value to the project. The best value calculation will include the establishment of the design-builder's overhead and profit in the competitive selection environment.

KC intends to have a two-part procurement process for the DB team starting with a Request for Qualifications (RFQ) package. Once the Statement of Qualifications (SOQ) are submitted the County will review, score and shortlist the finalist estimated to be three firms. The shortlisted firms will receive a Request for Proposal (RFP) that will be scored and will include a cost component on the design-builder's fee proposal percentage. During the proposal period an interactive proprietary meeting will be held with each finalist. This meeting will also be scored. Once the proposals have been submitted the County will score the packages. KC will then combine the scores of each finalist's SOQ, interactive proprietary meeting and proposal. Notification of the highest scored finalist will be sent out. An honorarium will be provided to the finalist's that were not awarded the contract.

KC is working closely with University of Washington (UW) and the County has elected to utilize a twopart PDB Agreement that has been used successfully by the UW and is RCW compliant. The "Preliminary Agreement Between Owner and Design-Builder" will start with funding to develop an agreed upon Project Work Plan (Work Plan). The Work Plan will include, but is not limited to, an overall project schedule, listing all tasks of the project with target milestones listing responsible parties (Design-Builder and Owner) or subject matter experts, trade partners, and specialty consultants as well as the, estimated time and cost to administer and support the project.

When the Project Performance Criteria, Project Definition, and Design has developed enough for the DB team to submit a cost-plus-fee for a Guaranteed Maximum Price (GMP) exhibit, which will include a proposed GMP for the design and construction, schedule date of substantial completion and all other information necessary for the parties to enter into the "Agreement Between Owner and Design-Builder for the GMP". The initial sum for the preliminary agreement between the Owner and Design-Builder will be enhanced to compensate the DB team's efforts. Payments will be made on a monthly basis for its services based on actual time and expenses, but also under a not-to-exceed price. Currently, KC believes that the IBE project team will be able to execute the GMP agreement between 30% and 60% design documents.

## 6.10 Verification that your organization has already developed (or provide your plan to develop) specific DB contract terms.

KC has a well-established procurement office/staff that is supported by KC Prosecuting Attorney's Office and contract specialists. Thomas Kuffel and Trish Roth are leading the development of the DB Contract Documents, utilizing a modified University of Washington PDB two-part agreement, as well as the develop of the RFQ and RFP. Supporting this effort will also be Vanir's team of experts as well to bring insights and lessons learned on other DB projects and procurement.

The contract terms will be RCW compliant, typical for a PDB approach and will provide the County with the flexibility to establish reasonable commercial terms and perform early construction work while managing the maximum cost of the Project. Our goal is to have an exceptional set of RFQ, RFP and Contract Documents in place and ready for public solicitation by January 28, 2021.

#### 7. Public Body (your organization) Construction History:

Provide a matrix summary of your organization's construction activity for the past six years outlining project data in content and format per the attached sample provided:

(See Attachment E. The applicant shall use the abbreviations as identified in the example in the attachment.)

- Project Number, Name, and Description
- Contracting method used
- Planned start and finish dates
- Actual start and finish dates
- Planned and actual budget amounts
- Reasons for budget or schedule overruns

#### Refer to Attachment E Construction History.

#### 8. Preliminary Concepts, sketches or plans depicting the project

To assist the PRC with understanding your proposed project, please provide a combination of up to six concepts, drawings, sketches, diagrams, or plan/section documents which best depict your project. In electronic submissions these documents must be provided in a PDF or JPEG format for easy distribution. Some examples are included in attachments E1 thru E6. At a minimum, please try to include the following:

- An overview site plan (indicating existing structure and new structures)
- Plan or section views which show existing vs. renovation plans particularly for areas that will remain
  occupied during construction.
  <u>Note</u>: applicant may utilize photos to further depict project issues during their presentation to the PRC

The attached drawings in **Attachment F** are from the Parametrix's 2019 Conceptual Design Report which was specifically developed for this Project and the informational sketches are from Wise Charging. Parametrix's 180-page report with modifications by KC's engineering department will serve as an initial starting point for the DB coming on board.

#### 9. Resolution of Audit Findings on Previous Public Works Projects

If your organization had audit findings on any project identified in your response to Question 7, please specify the project, briefly state those findings, and describe how your organization resolved them.

KC has received no audit findings on any of the public works projects listed in response to Question 7.

#### 10. Subcontractor Outreach

Please describe your subcontractor outreach and how the public body will encourage small, women and minority-owned business participation.

KC is a national leader in strategic planning that promotes Equity and Social Justice (ESJ) innovations. A common area of interest is how to influence the spending of government dollars to enhance equity outcomes for small businesses.

KC will establish a minimum required level for the participation of Small Business Enterprise (SBE) firms certified by the Washington State Office of Minority and Women Business Enterprises (OMWBE). The requirement will be expressed as a percentage of the total contract value to be performed by SBE firms. In

order to ensure success at meeting the SBE utilization requirement, KC will also require submission of an Equity and Social Justice (ESJ) Innovation Plan. The ESJ innovation plan formalizes the proposer's approach and the specific actions that the proposer will take to maximize SBE participation on the project. The plan includes outreach and engagement strategies, identification of subconsultant and subcontractor work opportunities, potential barriers to small and diverse business participation, technical assistance, mentorship, as well as monitoring and performance measurements to ensure success of the plan. The proposer will be asked to separately address their inclusion strategies for design tasks, construction subcontracting, as well as equipment and supply purchases from SBE firms.

During contract performance, the awarded firm will be required to submit monthly reports to the project team detailing the ESJ Innovation Plan activities taken over the past month, as well as those activities planned for the coming month. Additionally, the awarded firm will be required to report all subcontract awards, and all subcontractor/subconsultant/supplier payments on a monthly basis into the County's Diversity Compliance Management System (DCMS). If at any point the awarded firm falls short of the SBE utilization requirement established for the contract, the County may require submittal of a corrective action plan.

#### **CAUTION TO APPLICANTS**

The definition of the project is at the applicant's discretion. The entire project, including all components, must meet the criteria of RCW 39.10.300 to be approved.

#### SIGNATURE OF AUTHORIZED REPRESENTATIVE

In submitting this application, you, as the authorized representative of your organization, understand that: (1) the PRC may request additional information about your organization, its construction history, and the proposed project; and (2) your organization is required to submit the information requested by the PRC. You agree to submit this information in a timely manner and understand that failure to do so may delay action on your application.

PRC strongly encourages all project team members to read the Design-Build Best Practices Guidelines as developed by CPARB and attend any relevant applicable training. If the PRC approves your request to use the DB contracting procedure, you also understand that: (1) your organization is required to participate in brief, state-sponsored surveys at the beginning and the end of your approved project; and (2) the data collected in these surveys will be used in a study by the state to evaluate the effectiveness of the DB process. You also agree that your organization will complete these surveys within the time required by CPARB.

I have carefully reviewed the information provided and attest that this is a complete, correct and true application.

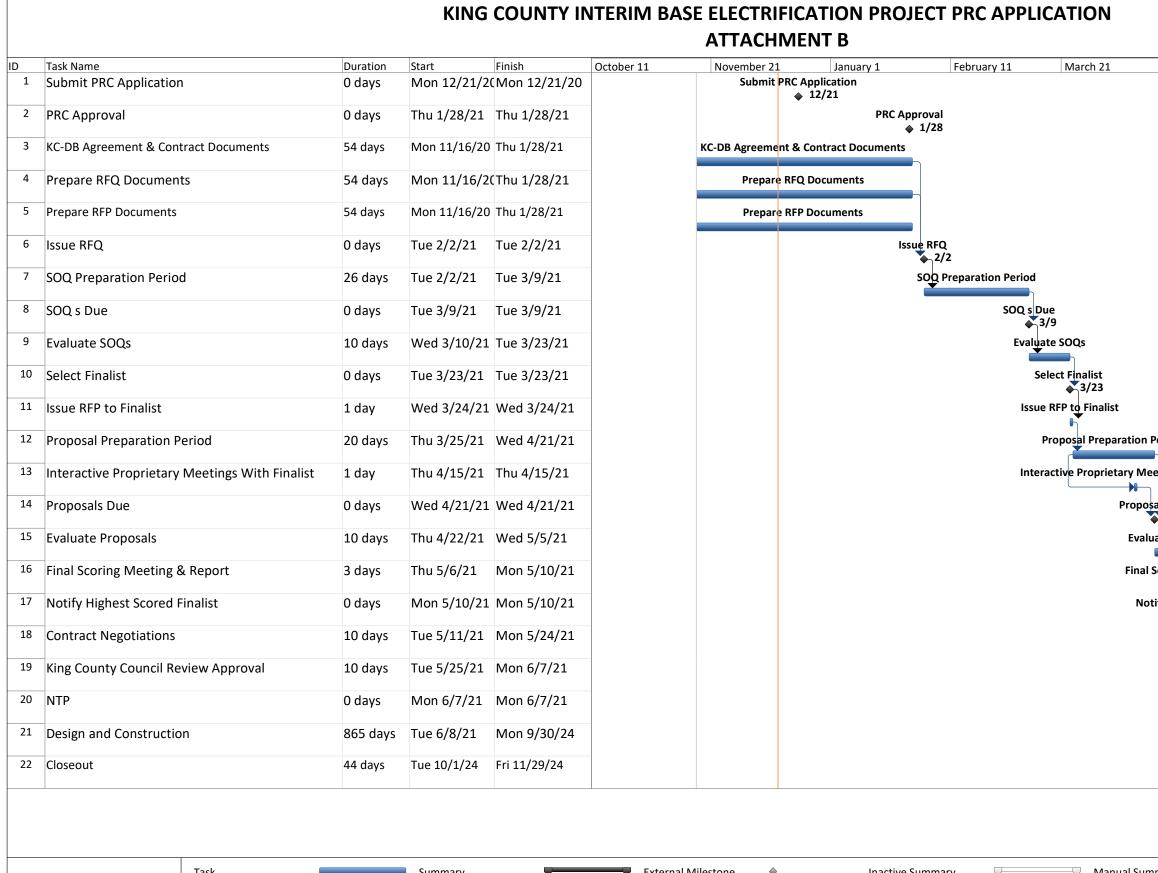
Signature:

Name: Kevin Kibet

\_\_\_ (public body personnel)

Title: Transit Capital Project Manager

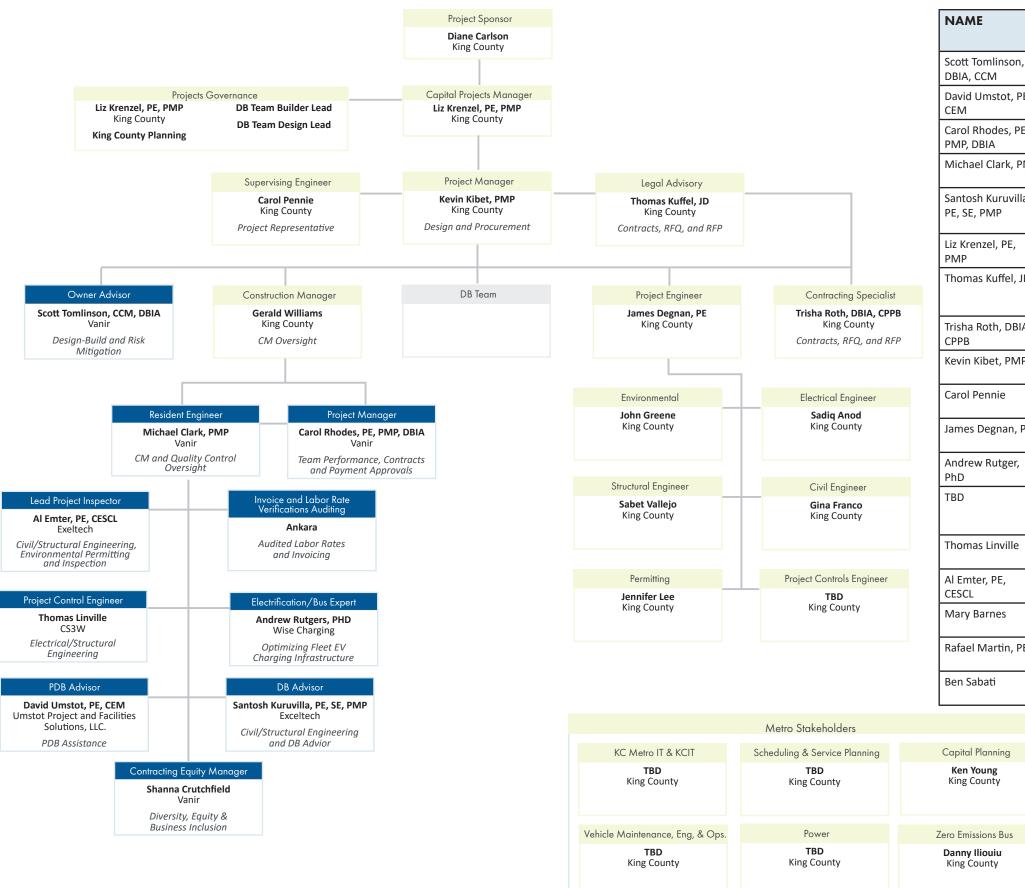
Date: December 21, 2020



Task External Milestone  $\blacklozenge$ Manual Sum Summary **Inactive Summary**  $\nabla$ Project: Interim Base Electrificatio Split Manual Task Manual Sum Project Summary Inactive Task ..... Date: Mon 12/14/20 External Tasks  $\diamond$ Duration-only Milestone ۲ Inactive Milestone Start-only Page 1

May 1	June 11	July 21	
May 1 eriod tings With Finalist Is Due 4/21 te Proposals coring Meeting & Repor ty Highest Scored Finalis		July 21	
Contract Negotiation			
King County Counci	NTP 6/7	ign and Construction	
nary Rollup	Finish-only		
nary Rollup	Finish-only Deadline	] †	

## King County Interim Base Electrification Project - PRC Application - Attachment C Organization Chart



	ROLE	FIRM	ROLE DURING PHASES					
			PLAN	DESIGN	CONST.			
١,	Owner Advisor	Vanir	50%	50%	25%			
PE,	PDB Advisor	Umstot	15%	10%	5%			
ΡĒ,	Project Manager	Vanir	50%	50%	25%			
PMP	Resident Engineer	Vanir	30%	75%	100%			
lla,	President	Exeltech	10%	5%	5%			
	Managing Director	King County	10%	10%	5%			
JD	Supervising Attorney- Contracts	King County	20%	5%	5%			
IA,	Contracts Specialist	King County	50%	25%	5%			
1P	Project Manager	King County Metro	75%	50%	20%			
	Construction Project Rep.	King County Metro	50%	50%	75%			
PE	Project Engineer	King County Metro	75%	75%	50%			
,	Electrification/ Bus Expert	Wise Charging	20%	20%	10%			
	Invoice & Labor Rate Verif. Auditing	Ankara	5%	5%	5%			
	Project Control Engineer	CS3W	25%	50%	100%			
	Lead Project Inspector	Exeltech	0%	20%	100%			
	Document Control	Vanir	50%	50%	50%			
ΡE	Scheduling Manager	Vanir	25%	15%	10%			
	Estimating Manager	Vanir	25%	25%	10%			

Additional Va	nir Resources
Document Control	Cost Estimator
<b>Mary Barnes</b> Vanir Document Management	<b>Ben Sabati</b> Vanir Estimating Services
Sc	heduling
	<b>I Martin, PE</b> Vanir aluate Scheduling

							Role Duri	ng Project	Phases (Y/N)	
Name	Firm	Summary of Experience	Project Name	Role	Project Size	Project Type (GCCM, DB, DBB)	Planning	Design	Construction	Timeframe
Scott Tomlinson, DBIA, CCM	Vanir	Construction professional with over 35 years of experience in the construction industry, working on industrial, institutional, transportation, wastewater, marine, and commercial projects. He holds	Grant County PUD, Substation Reliability	Design-Build Advisor/Project Manager	\$36 M	PDB	Yes	Yes	Yes	2015-2018
		degrees in Building Construction and Civil Engineering Technology. Scott is also a member of both DBIA and CMAA. With a solid background in	Grant County PUD, Load Growth	Design-Build Procurement Advisor	\$62 M	PDB	Yes			2019-2020
		construction contracts, RCW 39.10 alternative delivery including PDB,	Quileute Tribal School Replacement	Project Director	\$46 M	PDB	Yes	Yes	Yes	2018-Current
		expertise in PMCM, construction sequencing, and field experience, he is uniquely qualified to assist clients in reviewing and mitigating risks on construction projects. For over 20 years he has supported public	Sound Transit, C-810 Operations & Maintenance (O&M) Facility	Claims Manager	\$65 M	DBB			Yes	2007-2010
		agencies in the development of project delivery that address the risks associated with construction projects as well as working to with teams	King County, Children's Family Justice Center	Design-Build Advisor to KC Council	\$154 M	DB	Yes			2015
		to resolve complex construction disputes.	(Confidential) Microsoft Data Centers	Executive Director	n/a	CM at Risk	Yes	Yes	Yes	2016 - Curren
			City of Bothell, Public Works Operations Center and Northshore School District Trans. Joint Use Facility	Project Director	\$22 M	DBB	Yes	Yes	Yes	2009-2011
David Umstot, PE, CEM	Umstot Project and Facilities Solutions, LLC	leadership experience in private sector and public agency construction program management and facilities management. He is a nationally	Fullerton College Instructional Building and Central Plant Expansior	Progressive Design- Build Consultant	\$49.6 M	PDB	Yes	Yes	Yes	2017-present
		recognized leader in Lean Project Delivery and Design-Build. David has worked with more than 70 organizations coaching owners, developers, builders, designers, and specialty trade contractors in Lean thinking, culture change, and continuous improvement as part of the company's core offerings. A large part of the firm's practice is tied to supporting	Saddleback College Advanced Technology and Applied Sciences Building	Progressive Design- Build Consultant	\$53 M	PDB	Yes	Yes	Yes	2017-present
		progressive design-build projects. Over his career, David has been involved in more than 50 DB projects as a practitioner, owner, and advisor including 28 progressive design-build projects since 2008. He	County of Mono, California New Civic Building Mammoth Lakes, CA	Progressive Design- Build Consultant	\$14 M	PDB	Yes			2018
		has worked with 10 different public agencies to help successfully deliver their first progressive design-build project. He was recognized in 2012 with a national DBIA Leadership award for pioneering the use of progressive design-build in California's higher education community.	Los Angeles World Airports, LAX Terminal Cores Project for Automated People Mover	Lean Coach and Facilitator for Lean Progressive Design- Build Project	\$340 M	PDB		Yes	Yes	2017-2020
Carol Rhodes, PE, PMP, DBIA	Vanir	Carol has 24 years of experience working as an owner, prime contractor and designer for major transit, transportation, and facility projects. Her experience includes managing projects that span all project phases and tasks from conceptual design through start of operations. She is experienced in Washington State public works, grant-funded projects and alternative contracting delivery methods. Carol is well-versed in project and construction management, policies and procedures, and project controls with a proven record building collaborative teams to deliver projects on time and under budget.	Sound Transit, Sound Move and ST2	Director of Project Management,	\$18 B - Projects incl. South Link – \$311 M North Link – \$1.9 B East Link – \$3.7 B Commuter Rail program – \$562 M Regional Express Bus program – \$385 M Link Light Rail Closeout (14 projects) – \$36 M	DBB, DB, and GCCM	Yes	Yes	Yes	2010-2012
			Port of Tacoma, Auto Import Terminal	Senior Project Manager	\$35 M	DBB		Yes	Yes	2017-2018
			Sound Transit, Capital Projects	Director of Project Management,	\$1.6 B	DBB	Yes	Yes	Yes	2008-2010
			Sound Transit, East Link Light Rail	Director of Project Management,	\$2.8 B	DBB and GCCM	Yes	Yes	Yes	2012-2014
			TriMet, Interstate Max Light Rail Expo Segment,	Project Manager	\$350 M	DB		Yes	Yes	2001-2002

									Phases (Y/N)	
Name	Firm	Summary of Experience	Project Name	Role	Project Size	Project Type (GCCM, DB, DBB)	Planning	Design	Construction	Timeframe
Michael Clark, PMP	Vanir	design and construction of municipal infrastructure and urban	King County Metro Transit, South Base Expansion Development	Construction Field Manager	\$23 M	DBB			Yes	2019-2020
		development projects, from conceptual development through to completion. Michael is a strong, organized leader and public communicator with demonstrated effectiveness in implementing a	Seattle City Light (SCL), Denny Substation Program	SCL Program Manager	\$400 M	DBB	Yes	Yes	Yes	2011-2019
		comprehensive approach to projects in aligning strategic municipal business, operations planning, policy development, conceptual and technical design, and community stakeholder engagement. He is	Seattle Department of Transportation (SDOT) Mercer East & West Corridor	SCL Lead Project Manager	\$192 M	DBB	Yes	Yes	Yes	2005-2015
		effective in developing and leading project teams through all phases of technical and nontechnical project lifecycles.	Bill & Melinda Gates Foundation World Headquarter Campus Development	SCL Lead Project Manager	\$500 M	DB	Yes	Yes	Yes	2005-2013
Santosh Kuruvilla, PE, SE, PMP	Exeltech Consulting, Inc.	agencies. His innovative solutions and creative ideas have enabled	Seattle Department of Transportation (SDOT) Elliott Bay Seawall Replacement	Deputy Project Manager	\$372 M	GCCM	Yes	Yes		2010-2013
	on-: mot	on-schedule. His leadership, management, and communication style motivate project teams to successfully deliver projects under difficult	City of Tacoma, Murray Morgan Bridge Rehabilitation, East & West Approaches	PIC, Exeltech	\$60 M	DB	Yes	Yes	Yes	2009-2012
		clients. He brings excellent insights into the State of Washington RCW 39.10 Alternative Delivery that includes DB. Santosh is also a Governor Appointee as an Engineering Representative for Washington State	WSDOT I-5/Chamber Way Bridge - Repair and Replacement	PIC, Exeltech	\$20 M	DB	Yes	Yes	Yes	2017-2019
			ODOT US20 Pioneer Mountain to Eddyville	PQM	\$170 M	DB		Yes	Yes	2005-2009
Andrew Rutgers	Wise Charging	(consulting services) and the CEO of ChargeSim (software). He developed ChargeSim to help translate fleet schedules into utility power profiles and helps agencies design charging infrastructure for electric buses. He has used ChargeSim to help some of the largest transit agencies find the right charging infrastructure and utility sizing for their bases. He has a deep background in power electronics and electric vehicles including several patents and has worked on solar powered cars and aircraft. He is based in Eindhoven. The Netherlands.	King County Metro Transit, South Interim Base Electrification Project (via Heliox / Parametrix)	Base Electrification Expert	n/a	n/a	Yes	No	No	2019
	k		WMATA Electrification Study	Base Electrification Expert	n/a	n/a	Yes	No	No	2020
			LA Metro Division 9	Base Electrification Expert	n/a	n/a	Yes	No	No	2020
			Heliox (EVSE Manufacturer)	Product Manager	n/a	n/a	n/a	n/a	n/a	2018-2019
Liz Krenzel, PE, PMP	King County	Liz is a project management professional with over 25 years of experience working with managers, supervisors, chiefs and staff teams throughout the Metro Transit Department on a wide variety of transit initiatives, programs and projects. She holds a degree in Civil Engineering and is a member of the Project Management Institute. She	Legacy Metro Transit RapidRide Program	Implementation Manager	\$27M	DBB	Yes	Yes	Yes	2008-2014
	i t t	Engineering and is a member of the Project Management Institute. She is an excellent listener, which is an important part of learning and understanding each person's role and experience they bring to the team and organization. She has experience in building relationships and treating all employees and customers equitably, with respect and dignity as well as solve problems for the good of Metro Transit.	Downtown Seattle Transit Tunnel Closure Program	Project Manager	\$16M	DBB	Yes	Yes	Yes	2002-2004
Trisha Roth, DBIA, CPPB	King County	Trisha brings more than 20 years of experience with a firm background in contract procurement and administration. Trisha holds a Master's in Transportation Management, associate DBIA and CPPB certifications.	King County Marine Division Pier 50 Float Replacement Project 2019 Job Order Contract		\$8 M \$6 M	DB Alternative Public	Yes Yes			2017
		Trisha was the Contract Specialist on the King County Metro Pier 50 Float Replacement, approved by the PRC in 2017.		Contracts Specialist		Works		Voc	Voc	
			Tacoma Trestle: Reservation Junction Track and Signal	Contracts Specialist	\$57 M	DBB	Yes	Yes	Yes	2016

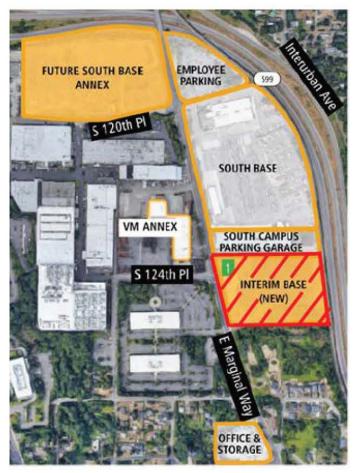
							Role Duri	ng Project	Phases (Y/N)	
Name	Firm	Summary of Experience	Project Name	Role	Project Size	Project Type (GCCM, DB, DBB)	Planning	Design	Construction	Timeframe
Thomas Kuffel,	King County	Thomas is a senior deputy prosecuting attorney in the Civil Division of the King County Prosecuting Attorney's Office, where he supervises the Contracts, Finance and Court Services Section. Thomas has been with	King County Children and Family Justice Center Project	Legal Advisory	\$154 M	DB	n/a	n/a	n/a	2015
		the prosecutor's office since 1993. He has assisted county agencies on a wide variety of legal matters involving the drafting, procurement and administration of public contracts. His experience covers professional services and traditional design-bid-build contracts and alternative public	King County Marine Division Pier 50 Float Replacement Project	Legal Advisory	\$8 M	DB	n/a	n/a	n/a	2017-2020
		works contracts, such as the Brightwater Treatment Plant Project, the King County Children and Family Justice Center Project and the King County Marine Division Pier 50 Float Replacement Project.	Brightwater Treatment Plant Project	Legal Advisory	\$277 M	GCCM	n/a	n/a	n/a	2005-2011
Kevin Kibet, PMP	King County Metro	Kevin is a project management professional with 15 year of experience managing projects in transportation, energy and technology sectors. He holds degrees in Renewable and Clean Energy, and Information	South Base Test Chargers	Project Manager	\$12 M	ESCO	Yes	Yes	Yes	2020-2021
		Technology and he is a member of DBIA. Kevin is currently managing the South Base Test Electrification project, which is utilizing Washington State Department of Enterprise Services Energy Savings Performance	RapidRide H Line	Project Manager	\$62 M	DBB	Yes	Yes	Yes	2018-2023
		Contracting (ESCO) process to build twelve chargers for a BEB. He will carry forward the lessons and institutional momentum on the integrated teams and the design build processes from that project. With experience and interest in managing integrated teams, change management, development of organizational policies and structures to support projects, he is qualified to navigate the delivery of this project using alternative delivery at Metro.	Eastlake Layover Facility	Project Manager	\$18 M	DBB	Yes	Yes	Yes	2018-2022
			Montlake Hub Improvements	Project Manager	\$4 M	DBB	No	Yes	Yes	2018-2020
Carol Pennie	King County Metro	Carol has over thirty-five years of demonstrated experience in project management, construction management and civil engineering design.	King County Marine Division Pier 50 Float Replacement Project	Contract Project Representative	\$8 M	DB	Yes	Yes	Yes	2017-2020
		Carol holds a degree in Civil Engineering and has managed the design and construction of transit multi-modal facilities and industrial and bus maintenance facilities, including the administration of FTA funded	KC South Interim Base Building Demolition	Contract Project Representative	\$900,000	DBB			Yes	2018
		projects in both the private and public sector. She has recently completed the Pier 50 Float Replacement, which was a DB project for	KC Atlantic Base Yard Refurbishment	Construction Project Representative	\$30 M	GCCM	Yes			2020-present
		Metro's Marine Transit Division. As a Construction Supervising Engineer V at Metro's Capital Project Delivery Section, she has demonstrated	KC Frye Warehouse and AC Base Operations Demolition	Contract Project Representative	\$2 M	DBB			Yes	2016-2018
		experience in facilitating integrated teams to deliver transit construction projects including DB, ESCO, Lump Sum, Work Order contracting. She will secure excellent results for the IBE project		Construction Project Representative	\$20 M	ESCO	Yes			2020-present
		will secure excellent results for the IBE project.	KC South Base Test Chargers King County Multistoried Structured	Construction Project Representative	\$5 M \$70 M	ESCO	Yes	Yes	Yes	2020-present 2000-2010
James Degnan, PE	King County	James will lead a talented in-house multi-disciplinary engineering group	Parking Program Seatac Airport NorthStar	Consultant Program and Project Manager Electrical Engineer	\$70 M \$710M	DBB GCCM	No	Yes	Yes	2016-2019
	Metro	that will guide the design of the new facility. James is a registered Professional Electrical Engineer, with more than 30 years of experience.			<i>\$7</i> 10101			105	105	2010 2013
		He has worked for owners and contractors as part of the traditional design-bid-build process, GCCM method, and DB teams. His construction experience includes notable projects such as the	Seatac Airport International Arrivals Facility	Electrical Engineer	\$900M	PDB	No	Yes	Yes	2017-2019
		Washington State Convention Center, University of Washington's Medical Center Expansion, and SeaTac Airport's Northstar and International Arrivals Facility. James has served	WSDOT SR 520 Lake Washington to I405	Electrical Engineer	\$700M	DB	No	Yes	Yes	2015-2019
		on several local and national construction and energy code councils.	King County Metro Transit, South Base Testing Planning	Project Engineer	\$12M	ESCO	Yes	Yes	No	2019-2020

### King County - Interim Bus Electrification Project - PRC Application - Attachment E Construction History (Within 6 Years)

Project #	Project Name	Project Description	Contracting Method	Planned Start	Planned Finish	Actual Start	Actual Finish	Planned Budget	Actua Budge
1	Pier 50 Float Replacement	Design, construct and deliver a "turn-key" ready for use concrete float (approx. 117'x30') for the King County Water Taxi at the new WSF Colman Dock.	D-B	Feb-18	Sep-18	Mar-18	May-19	\$7.2 M	\$8.0 M
2	Montlake HUB Capital Improvements	Construction of a concrete plaza adjacent to the University of Washington's Husky Stadium including raised concrete planters, bus zones, roadway paving, and signal work. Work included critical milestones to avoid impacting football games and school commencement.	D-B-B	Jun-17	May-20	Jun-20	Jul-20	\$3.4 M	\$3.5 M
3	Eastgate Park & Ride Comfort Station	Construction of a new single unit driver comfort station (restroom) and new accessible path.	D-B-B	Dec-17	Mar-17	Dec-17	Jul-18	\$ 202,000	\$ 203,5
4	Third Avenue ORCA Reader Improvements	Project specific work order contract for construction of ten bus zones (foundations, electrical power, sidewalk reconstruction) in the City of Seattle to support Metro's service relocations from the Downtown Tunnel to 3rd Avenue.	D-B-B	Mar-19	Mar-20	May-19	Jun-20	\$2.8 M	\$3.3 M
5	South Interim Base (SIB) Development	Project specific work order contract to construct an interim bus. Work included concrete and asphalt paving, utilities, excavation and grading, storm drainage and water quality. Concrete foundations for Owner-procured modular and Pre-Engineered Buildings, installation of Owner-procured data/comm equipment, maintenance equipment and vehicle lift equipment.	D-B-B	Jun-19	Jun-21	Jul-19	Jun-21	\$23 M	\$26.4 M
6	South Interim Base (SIB) Demolition	Removal of 290,000 SF building including hazardous materials abatement, termination of utilities, removal of two underground fuel tanks, new paved access to existing garage and temporary site asphalt paving.	D-B-B	Jan-19	Jun-19	Jan-19	Jun-19	\$2 M	\$1.9 M
7	Judge Patricia A. Clark Children and Family Justice Center - Phase 1A (* not a Metro Department project but a King County Department of Executive Services project)	The Children and Family Justice Center replaces an outdated Youth Services Center with a trauma- informed facility that provides modern youth and family court services as well as a flexible and therapeutic juvenile detention center. The new facility includes: 137,000 sf courthouse with 10 courtrooms, an increase of three courtrooms and 40,000 sf; 92,000 sf, 112-bed juvenile detention center allowing for flexibility to reduce detention space in the future; 10,200 sf of youth program space; and 1.55 acres of open area including pedestrian and bicycle pathways and a public plaza. ( <i>Phase 1B includes 360 car garage along with landscaping for 9.1 acres and the Alder School due in</i> 2021))	D-B	Mar-15	Nov-19	Mar-15	Nov-19	\$154 M	\$186 M
8	Safety and Training Building	Due to the construction of the South Annex Base the Safety and Training facility needs to be relocated. Metro has signed a Lease for a build to suit space that is 12,000 sq. ft facility with a 350,000 sq ft training and storage yard.	Lease - Build to Suit	Mar-20	Dec-19	Mar-20	Mar-21	\$3.7 M	\$4.7 M
9	Passenger Ferry Terminal at Colman Dock	10,000 SF passenger ferry terminal located at Colman Dock, Seattle, WA. King County Water Taxi and Kitsap Fast Ferry operate out of the terminal serving 1.25 million passengers annually. Project achieved Platinum on the King County Sustainable Infrastructure Scorecard and included passenger wait area, small office space, two pedestrian bridges and 1% for art.	Joint Venture	Aug-17	Sep-18	Aug-17	Sep-19	\$35 M	\$35 M
10	Atlantic Vehicle Maintenance (VM) & South Base Test Chargers	Replace existing HVAC system serving the shop and storage spaces in the Vehicle Maintenance building. The HV units servings shops will be replaced by new units with dual-core heat recovery, electric resistance heating and CO/NO2 control for VAV operation. The storage spaces will be supplied ventilation air by a DOAS unit with zone level electric unit heaters. Building HVAC controls will be upgraded.	D-B utilizing ESCO	Mar-21	Dec-21			\$15 M	
		King County Metro is committed to lowering its carbon footprint. To meet this commitment King County Metro is rolling out an Electric Bus Fleet. As part of the roll out King County Metro is developing an Electric Bus Charger test facility at its South base. This project includes installation of new electrical service, duct bank, and charger infrastructure		Jan-21	Jul-21			_	

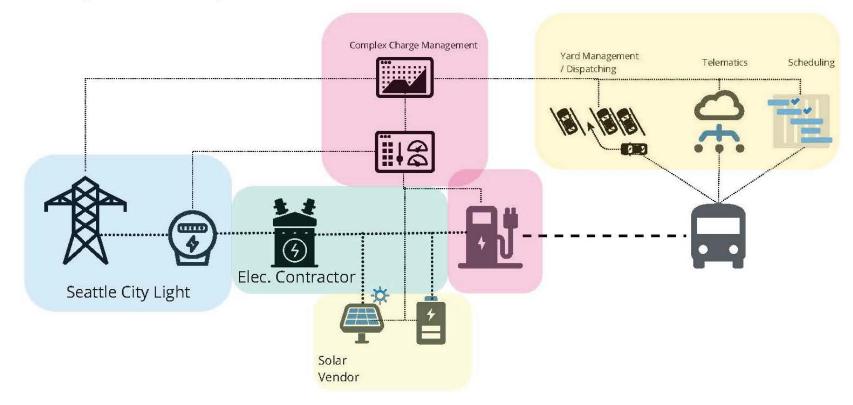
al Iet	Reason for Budget or schedule overrun
М	Float delivery to Colman Dock delayed due to WSF construction delay. Budget changes due to moorage costs, float Installation costs and steel guide pile hoop design change.
M	Budget changes due to Seattle City Light design changes, additional paving and power to the RTIS system. Time extension due to weather impacts.
,506	Time extension due to additional electrical permitting and geotechnical work required. Cost increase for water line change per local agency.
N	Additional funds were allocated to the budget to construct two additional bus zones. Contract time was extended to obtain Street Use Permits from the City.
М	Contract price was revised to include construction contingency.
M	Credit for work that was not required to be performed (light pole relocation and rainwater storage tanks).
M	Phase 1A construction was delayed by political opposition and issuance of the Master Use Permit. The team was able to reduce and mitigate the impact of this delay by approximately two months through efficient management of the schedule and performance of the work.
N	Cost variance due largely to insecurity in Gross Maximum Price from owner as Design/Build was negotiated and completion date was impacted by Covid and permitting.
Л	Construction was delayed one year due to schedule impacts of the Colman Dock project. The project was delivered under budget despite the schedule delay. Final cost is still being determined (project is in closeout).

## King County - Interim Base Electrification Project - PRC Application - Attachment F Preliminary Sketches & Plans

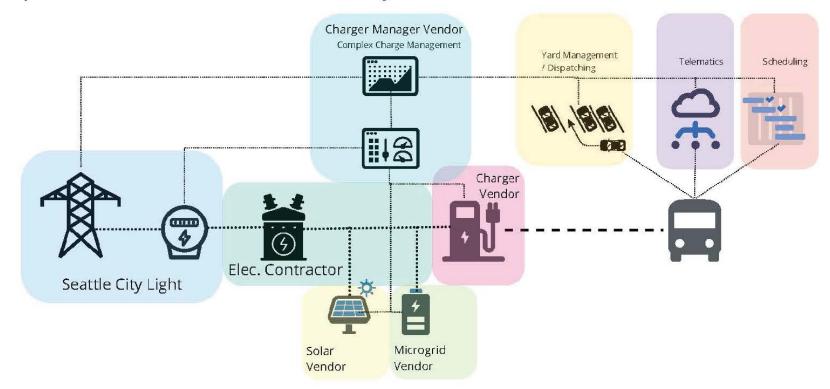


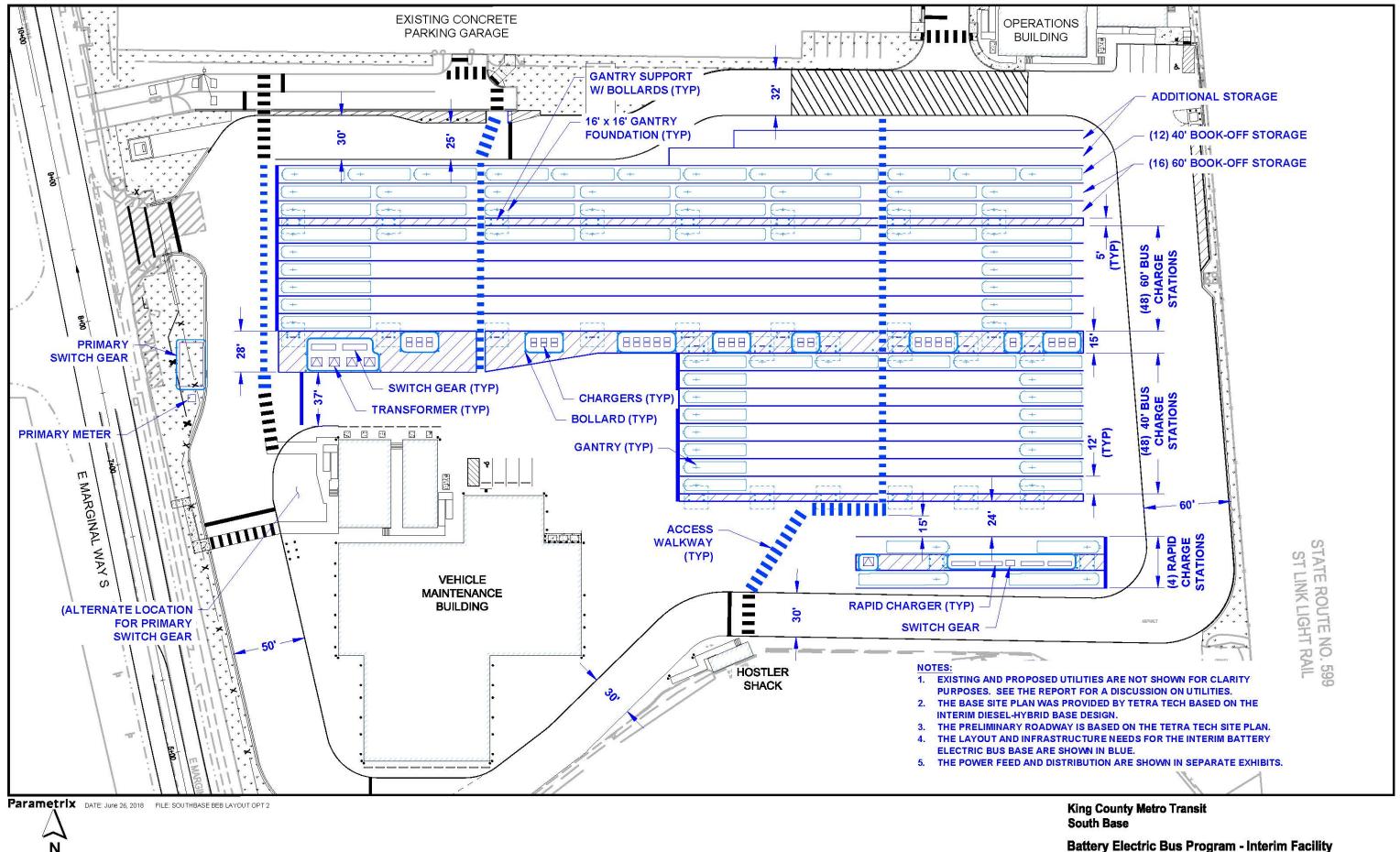
Site Map

### A Few System Groups



### Separated Vendors Between Each System

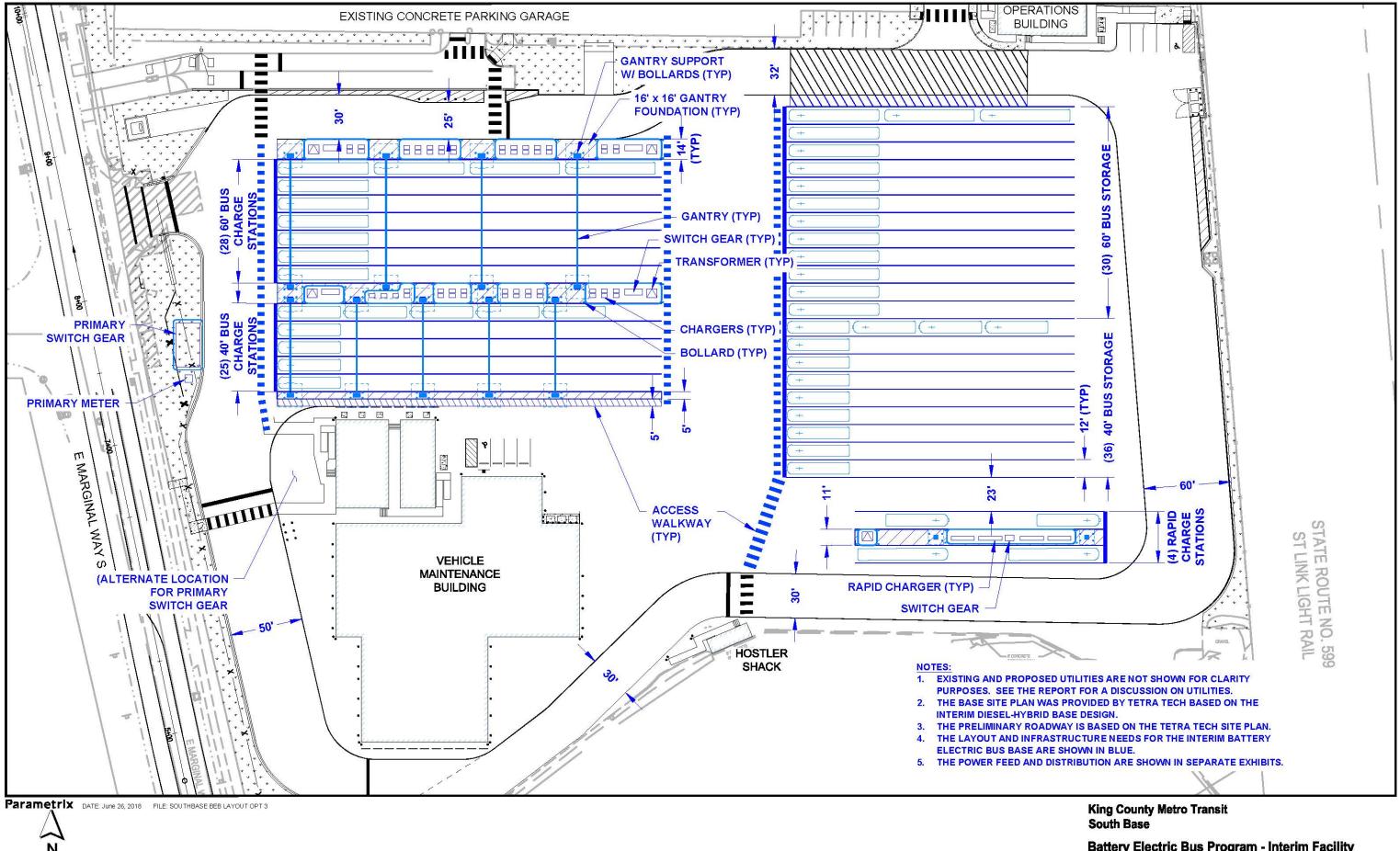




SCALE IN FEET

- **Battery Electric Bus Program Interim Facility**

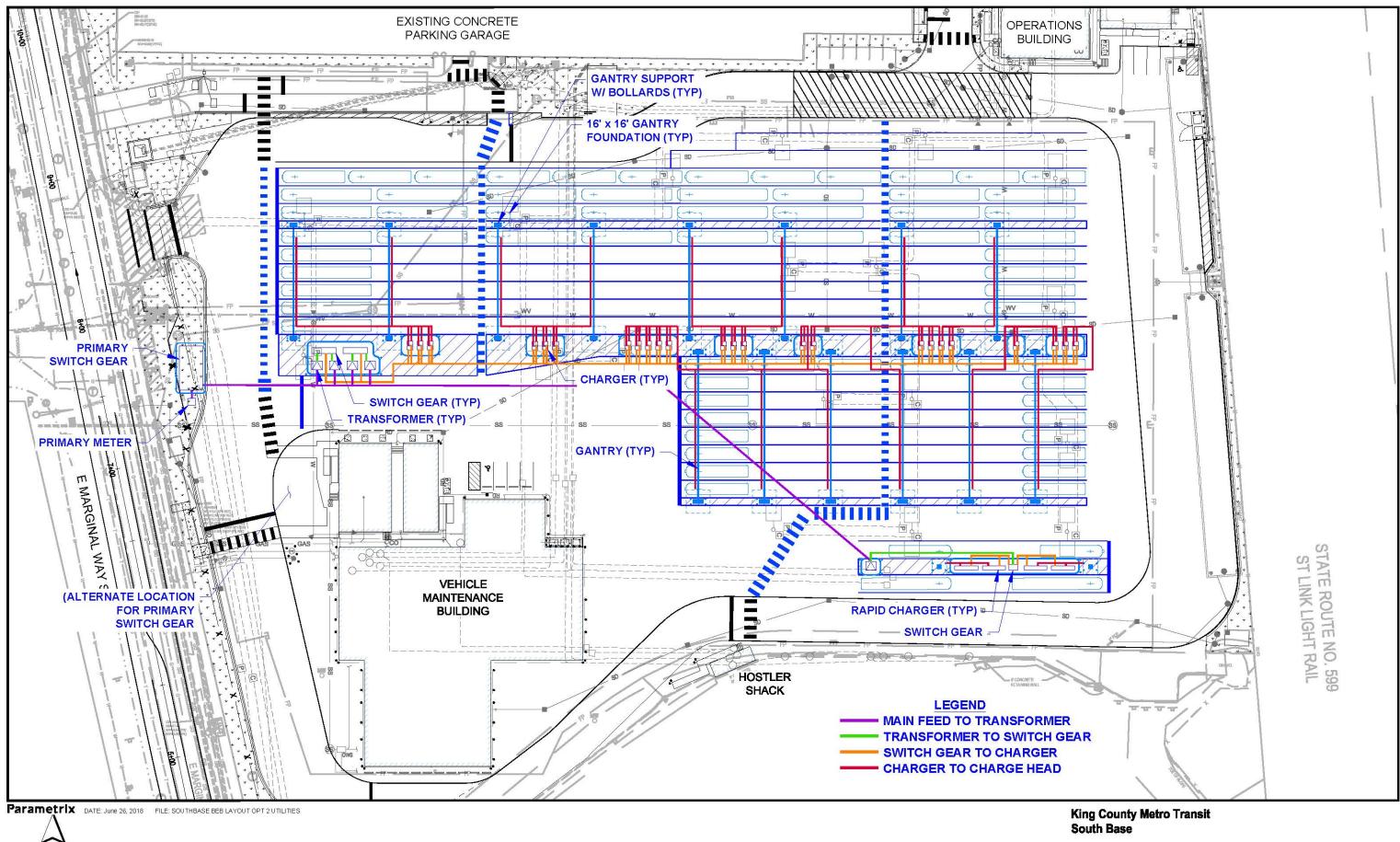
Layout Concept 2 **Truss Bridge Gantry Structures** (100 charging positions : 48 chargers & 4 rapid chargers)



SCALE IN FEET

**Battery Electric Bus Program - Interim Facility** 

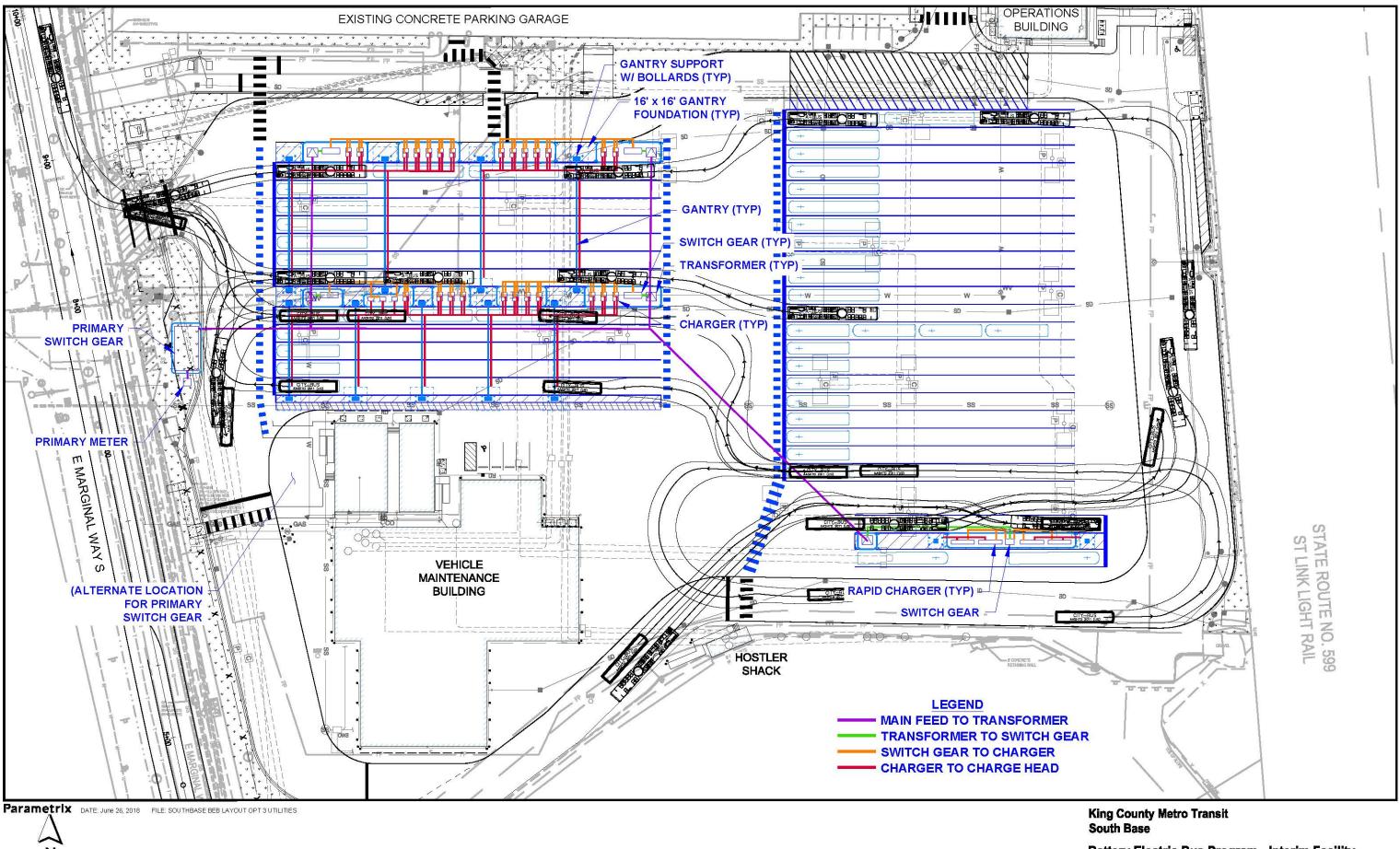
Layout Concept 3 **Truss Bridge Gantry Structure** (57 Charging Positions : 53 Chargers & 4 Rapid chargers)



SCALE IN FEET

**Battery Electric Bus Program - Interim Facility** 

Layout Concept 2 - Truss Bridge Gantry Structures **Conduit Routing** (100 charging positions : 48 chargers & 4 rapid chargers)





**Battery Electric Bus Program - Interim Facility** 

Layout Concept 3 - Truss Bridge Gantry Structure **Conduit Routing** (57 Charging Positions : 53 Chargers & 4 Rapid chargers)