

## ELECTRICAL TRADE PARTNER

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# Intuitive Peachtree Corners Campus RFP Response



**Eckardt-Whitehead-1 Group**  
3690 North Peachtree Road  
Atlanta, GA 30341



## COMPANY PROFILES

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### **Eckardt Group**

Eckardt Group is one of Atlanta's leading electrical contractors, with over 80 years of experience building hospitals, data centers, and other critical use facilities throughout the region. Over the past decade our firm has completed several complex and high-profile projects in multiple markets. Our operations are driven by our core values of Integrity, Safety, Innovation, Teamwork, and Excellence; and we seek partners who share our vision for the industry.

### **Whitehead Electric**

Whitehead Electric Company, established in 1938, is managed and staffed with personnel highly qualified to perform a variety of conventional and design-build (design-assist) electrical construction projects in the commercial, industrial, medical and institutional fields.

### **1electric**

As a minority owned and operated business, 1electric partners with facility directors and building owners to set the gold standard in electrical service. 1electric is an industry front runner in safety standards. We have experience in outdoor and indoor lighting maintenance, power distribution, generator installation, data centers, medical facilities, solar photovoltaic systems, car chargers, voice/data work, coax, signaling, switchgear maintenance, infrared survey, fire alarm systems, new construction and design build applications.

### **EC Electric**

EC Electric is a full service commercial electrical contractor that has been serving Metro Atlanta for over 31 years. We are a family owned firm with a history of providing quality work and excellent service for some of the nation's largest general contractors. We specialize in installation for tenant buildouts and ground up construction, design build services, and comprehensive 24/7 electrical service.

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## THE PARTNERSHIP

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Eckardt, Whitehead, & 1electric have a long history of success and leadership in the electrical contracting industry, with company leaders providing oversight and direction locally in the Atlanta area and across the Southeast. 1electric is currently engaged with Eckardt on the Grady Center for Advanced Surgical Services and projects on the new CHOA Campus at North Druid Hills. This partnership will deliver to Intuitive and DPR labor stability and a deep bench of experienced leaders in the electrical construction industry in Metro Atlanta. Additionally, we are engaging EC Electric as a sub-contractor to add valuable experience to the on-site team. EC brings lengthy experience in this type of work, as well as direct knowledge of the owner through their work on Phase 1 of the new campus project.

Our team will perform the project as a fully integrated team, with clear points of contact for management and issue escalation. We have created a seamless team that will deliver a world class headquarters campus for Intuitive to enjoy for years to come.



## RELEVANT EXPERIENCE

### **Kendeda Building**

Georgia Tech Campus  
422 Ferst Dr NW, Atlanta, GA 30313

LEED Platinum Certification

\$2,420,000

Skanska  
245 Peachtree Center Avenue, Suite 2500  
Atlanta, GA 30303  
Emilian Purcar  
770-375-1238



At 47,000 sqft the Kendeda Building is an innovative sustainable energy structure built in the heart of Midtown on the Georgia Tech campus and it is the first of its kind to be built in the Southeast. The building composed of materials screened for common hazardous chemicals known to harm human and environmental health. During the 12-month performance period 15x the amount of water needed for operations was collected and infiltrated into the ground. Sixteen foam flush toilets and waterless urinals were installed and use less water than one typical low flow toilet. A Photovoltaic System supplied 225% of the buildings energy need that far exceeds the 105% LBC requirement.

### [Eckardt recognized for pioneering HDPE as electrical conduit](#)

### **Winship at Emory Midtown**

580 Peachtree Street, Atlanta, Ga 30308

LEED Silver Certification

\$28,000,000

Batson-Cook Construction  
2859 Paces Ferry Rd SE, Suite 200, Atlanta, GA 30339  
Ryan Porche

This is a 20 story cancer treatment center in midtown Atlanta that will also include a retail unit and parking deck. This building will contain CT scanning machines and linear accelerators for cancer treatments and imaging. Back up power will be achieved with two 1250kw generators. This building will include energy efficient LED lighting as well as light sensors for optimal usage and recycled materials will be used in the interior of the facility. This is also a sustainable job site that requires the recycling of unused materials.



# RELEVANT EXPERIENCE CURRENT PROJECTS

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These projects are a sampling of our current design assist projects in the Atlanta market. Our team has developed a reputation for excellence in design assist construction in Atlanta, and we are eager to partner with DPR and Intuitive on this important project

## **Piedmont Athens Regional Tower**

Piedmont Athens Regional Hospital  
137 Nacoochee Ave. Athens, GA 30601

\$10,000,000

Design Assist GMP

### **DPR Construction**

3301 Windy Ridge Parkway SE #500  
Atlanta, GA 30339  
Matt Steinmetz  
404-274-0584



## **Grady Center for Advanced Surgical Services**

Grady Memorial Hospital  
80 Jesse Hill Jr. Drive SE, Atlanta, GA 30303

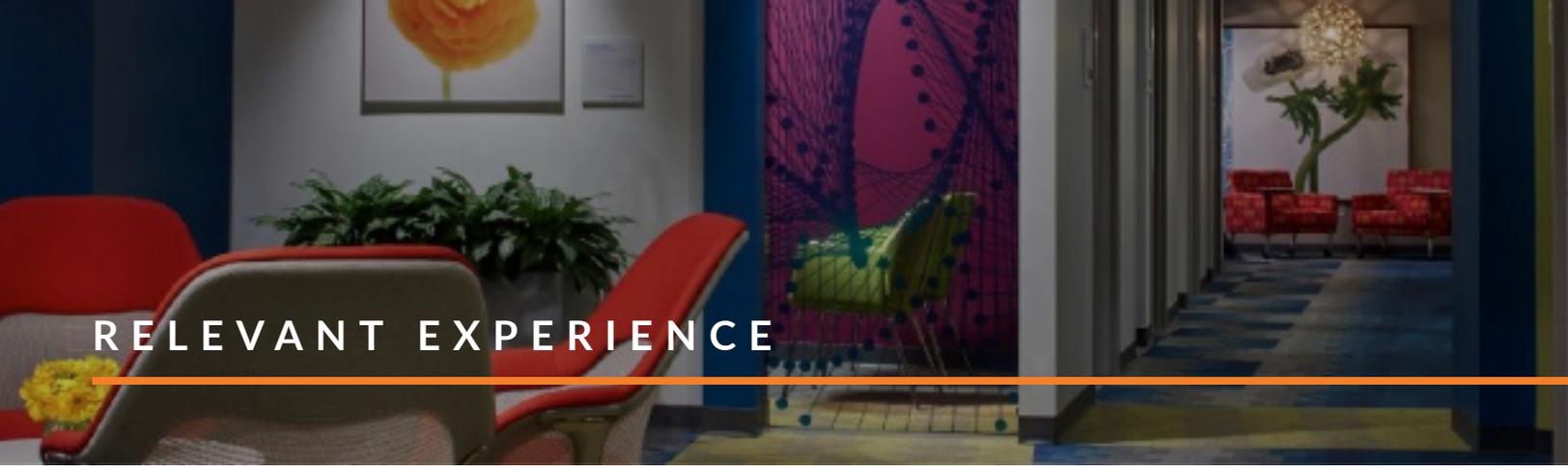
\$17,440,462

Design Assist GMP

### **Skanska**

245 Peachtree Center Avenue, Suite 2500  
Atlanta, GA 30303  
Emilian Purcar  
770-375-1238





## RELEVANT EXPERIENCE

### Lanier Technical College

2535 Lanier Tech Dr  
Gainesville, GA 30507

\$10,000,000

Design Assist GMP

New South Construction

This 94-acre development allows Lanier Technical College to grow into the 21st century and beyond by becoming a state-of-the-art technical institution that trains the future workforce for northeast Georgia.



### Primerica

1 Primerica Parkway, Duluth, GA 30099

\$5,000,000

Duke Realty

The Primerica headquarters is a three floor, three wing building that required over 1.6 million feet of wire & cabling, and included a theater, production studios, and a 7,500 sq.ft internal data center.





## RELEVANT EXPERIENCE

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### **Solis Hotel**

Atlanta, Ga

\$2,700,000

Winter

Design Assist

Standing at 8 stories tall with 214 guestrooms, this luxury hotel is adjacent to the North American headquarters of Porsche just outside of Hartsfield Jackson International Airport. It also features an event space, rooftop bar and fully equipped restaurant. There was extensive collaboration with the owner, architectural firm and interior designers to make the installation a success.

### **Grant Park Parking Garage**

Atlanta, Ga

\$2,200,000

Winter Johnson Group

This is a \$48 million, LEED certified, garage project with 1,000 parking spaces, green rooftop and restaurant intended for Grant Park and Zoo Atlanta. A high tech parking system will detect and report empty spaces to those entering the garage. The 3-tier deck will be partially embedded into the hillside and will effectively double parking from the original lot.

### **VA Specialty Care Clinic**

Atlanta, Ga

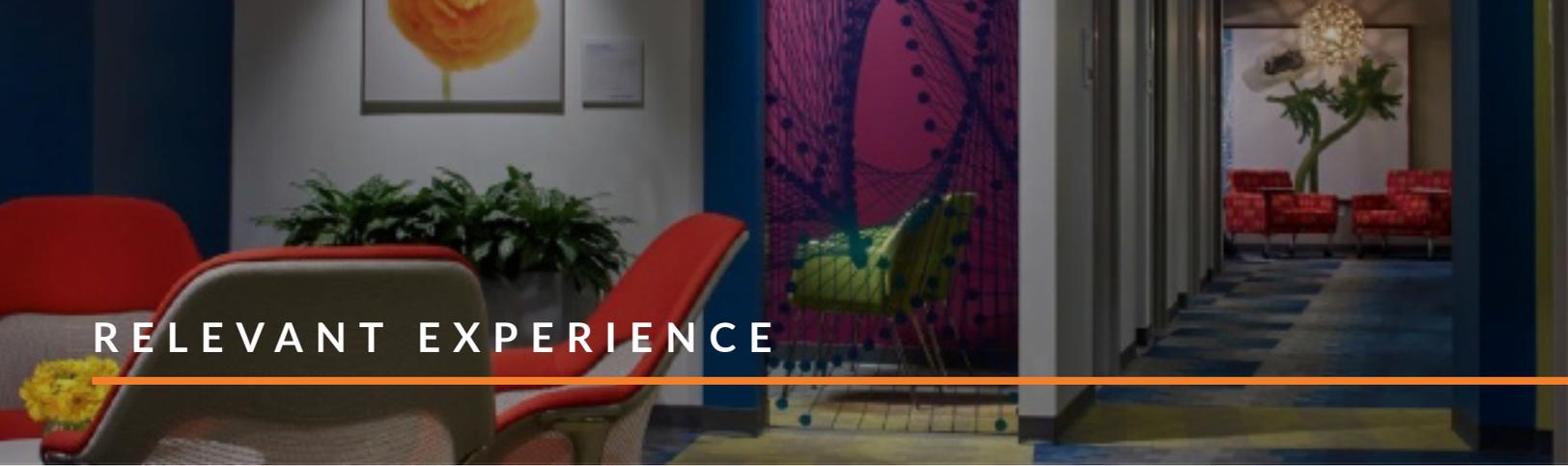
\$4,300,000

DPR

Design Assist

Transformation of an existing college classroom building, formally DeVry, into a 103,000 square foot outpatient clinic for the Veterans Administration. This project was designed to achieve LEED Silver certification and includes facilities for: Primary Care, Womens Care, Dental, Dermatology, Radiology, Canteen, Staff Offices, and Training Rooms.

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# RELEVANT EXPERIENCE

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## Selected LEED Certified Projects

Kendeda Building- LEED Platinum

The Martin Luther King Jr. Recreation & Aquatic Center- LEED Gold

Zoo Atlanta Elephant Center- LEED Gold

Zoo Atlanta Savanna Hall- LEED Gold

Winship Cancer Center, Emory Midtown Hospital- LEED Silver

Emory University Turman Hall- LEED Silver

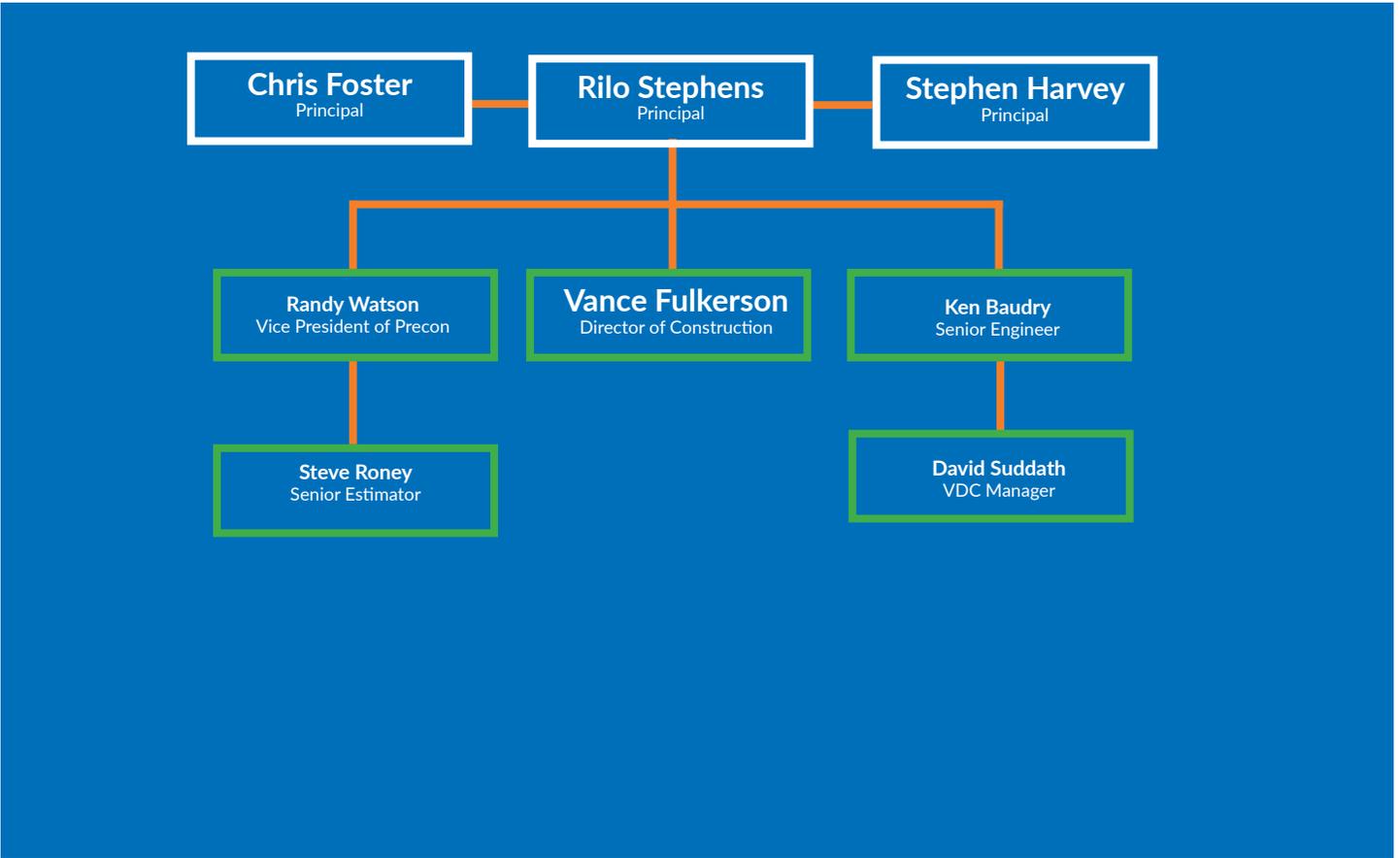
The AC Hotel Buckhead- LEED Silver

Metropolitan Library- LEED Silver

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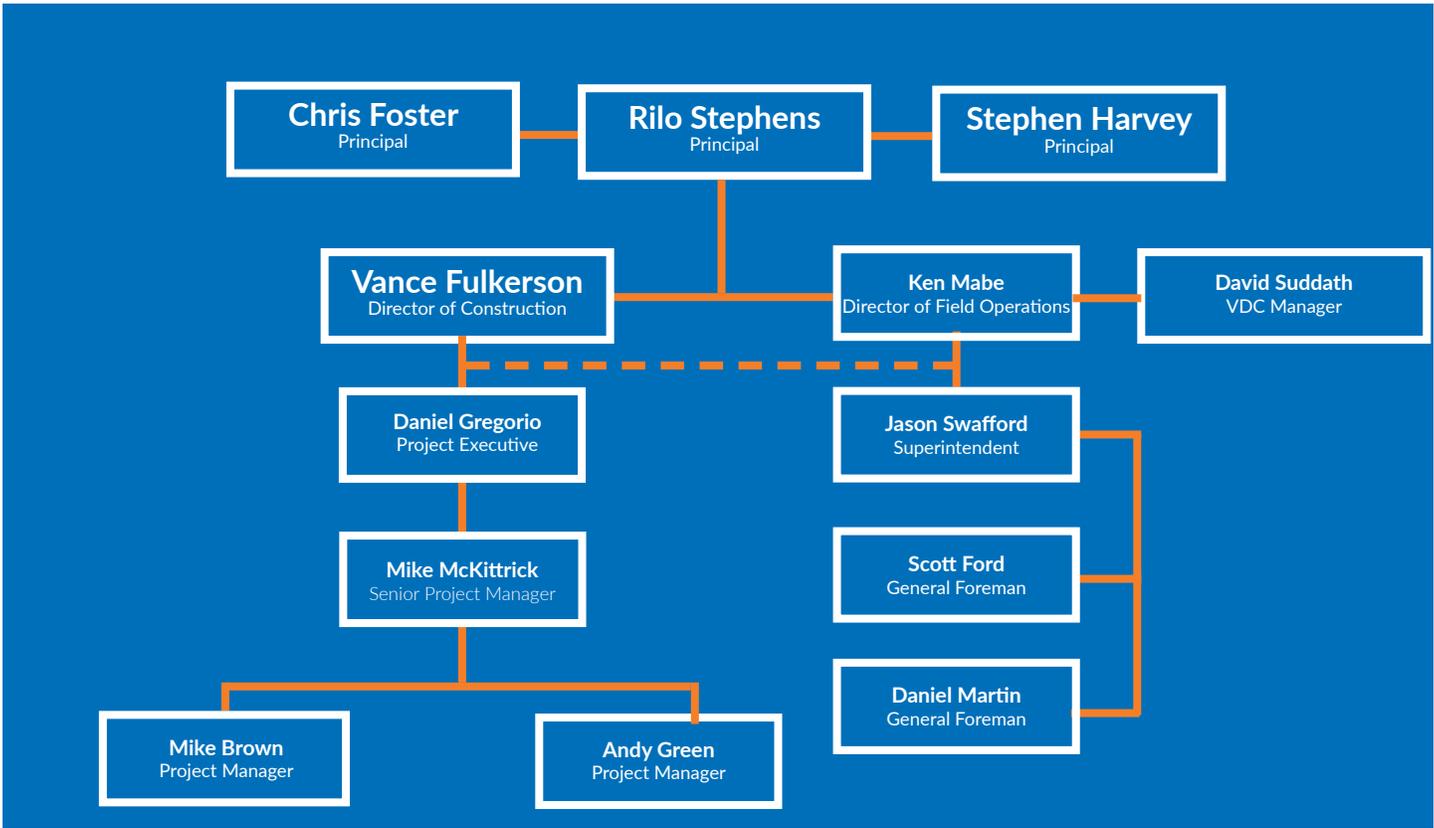
# PRECONSTRUCTION TEAM

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# CONSTRUCTION TEAM

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# VALUE ANALYSIS

With respect to Value Analysis, our team will utilize life cycle cost comparisons and not simply first cost options. VA will be broken down in our format into:

## MEANS & METHODS

Options that modify specified means and methods and do not impact functionality of the facility.

## EQUIPMENT

Options that modify equipment selections / coordination that do not or minimally impact function of the facility.

## DESIGN

Options that alter the base design and may impact form and function of the facility.

### Engineering Review

Review Drawings/Specs/  
Narratives

Identify areas for  
value analysis:

- Location of rooms
- Equipment layout within room
- Modular design
- Equipment and material
- Quantities of devices
- Distribution Topology
- Equipment Testing
- Spare devices
- New Technologies
- Distribution voltages
- Short circuit withstand values

Conduct calculations

- Heat rise
- Lighting
- Voltage drop
- Short circuit

Business Case Analysis

- Background
- Options
- Identify analysis Criteria: Reliability/Redundancy/Maintainability/Operability/Safety/Future
- Analysis/Pros Cons
- Real time Cost Analysis
- Impact on other trades
- Impact on schedule
- Recommendation
- Action/Follow up

BIM Modeling / Coordination

### Constructability Review

Review Drawings/Specs/  
Narratives

Identify areas for  
value analysis:

- Underground vs overhead
- Phasing of construction
- Installation/Replacement
- Coordination with other trades
- Equipment and material
- Alternative means and methods

Identify Opportunities for Prefab

- Single trade
- Multi trade
- Vometric/Modular
- Logistics
- Impact on schedule
- Impact on cost

Business Case Analysis

- Background
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- Analysis/Pros Cons
- Real time Cost Analysis
- Impact on other trades
- Impact on schedule
- Recommendation
- Action/Follow up

BIM Modeling / Coordination

Procurement / Logistics

Review with Design  
Team, CM, and Owner

Once a decision is made, distribute  
to Estimating for adjusting GMP

Review with Design  
Team, CM, and Owner

# COST CONTROL & MANAGEMENT

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The cost management process is one of the most important in the entire project, and our approach includes a thorough budget and scope based on the conceptual information and previous experience. The key aspects of our cost management process include: Basis of Design, Accountability, Value Analysis, and Monitor.

## BASIS OF DESIGN

Our process for conceptual estimates begins with a detailed review of the Basis of Design and Design Development documents for the project. Our team will draft a power distribution diagram based on the narrative. We use the power distribution plans to create a feeder schedule and complete a detailed take-off of each feeder. The remaining systems are built in our estimate based on the narrative and assumptions as outlined in our scope letter. A detailed estimate during the DD phase of the project allows the entire team greater cost certainty and decision-making capabilities during design.

## ACCOUNTABILITY

During future pricing phases, we will update our budget and track all variances by line item with corresponding estimate detail. We are diligent in our accountability to assist the team in maintaining budget targets on the project. Any variances will be presented with explanations and, in the case of overages resultant of changes, potential options to mitigate any cost increases. Our team will act as a custodian of the budget.

## VALUE ANALYSIS

Throughout each phase of design, we will implement our VA process to organize concepts into means and methods, equipment, and design function to properly evaluate life cycle cost savings for the facility. Our value analysis is conducted with the assistance of the construction team as well as our in-house engineering group assuring the combination of practical expertise and sound engineering.

## MONITOR

Cost metrics are monitored on every project with a full activity-based costing system that is set up to match the established format. On a weekly basis, our operations team reviews reports of labor cost vs. projections for that week. On a monthly basis, we conduct a detailed percent complete review of each cost code and project costs through completion of the project. Our team and our clients understand our cost and performance against targets with full transparency. Further, we can identify early savings on projects to allow the Owner to most efficiently allocate their capital.

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## EXPERIENCE & CAPABILITIES

Our team members began their BIM efforts dating to 2006 and have steadily improved and expanded our virtual construction team ever since. To date, we have completed a variety of models and coordination processes across multiple healthcare facilities, complex enterprise environments, and mission critical facilities. Through modeling millions of facilities, our team has developed a proprietary process that maximizes use of both field knowledge and technology. The ultimate output of the process includes detailed fabrication and install drawings as well as-builts and a living model for the customer. We have experience leading coordination efforts from a full federated model on similar size programs.

## BIM Execution

Review contract documents (SD, DD, CD) to determine scope of work and planned electrical installation. Using Bluebeam, layout circuitry and generate RFI's for scope clarification and general questions regarding contract documents. Request all design Revit models and set up the Eckardt Group Construction Model in Revit. Model and coordinate the electrical scope of work including, but not limited to, electrical equipment, conduit, lighting, ductbanks, cable tray, in-wall, and other items that may have space requirements and thus impact coordinated installation efforts. Our VDC team provides shop drawings, prefabrication drawing for manufacturing, as well as installation drawings for field installation. We utilize Autodesk Navisworks for clash detection and resolution as well as provide weekly updated Navisworks coordinated files to our field teams for confirmation of all installed trades adhering to the coordinated models.

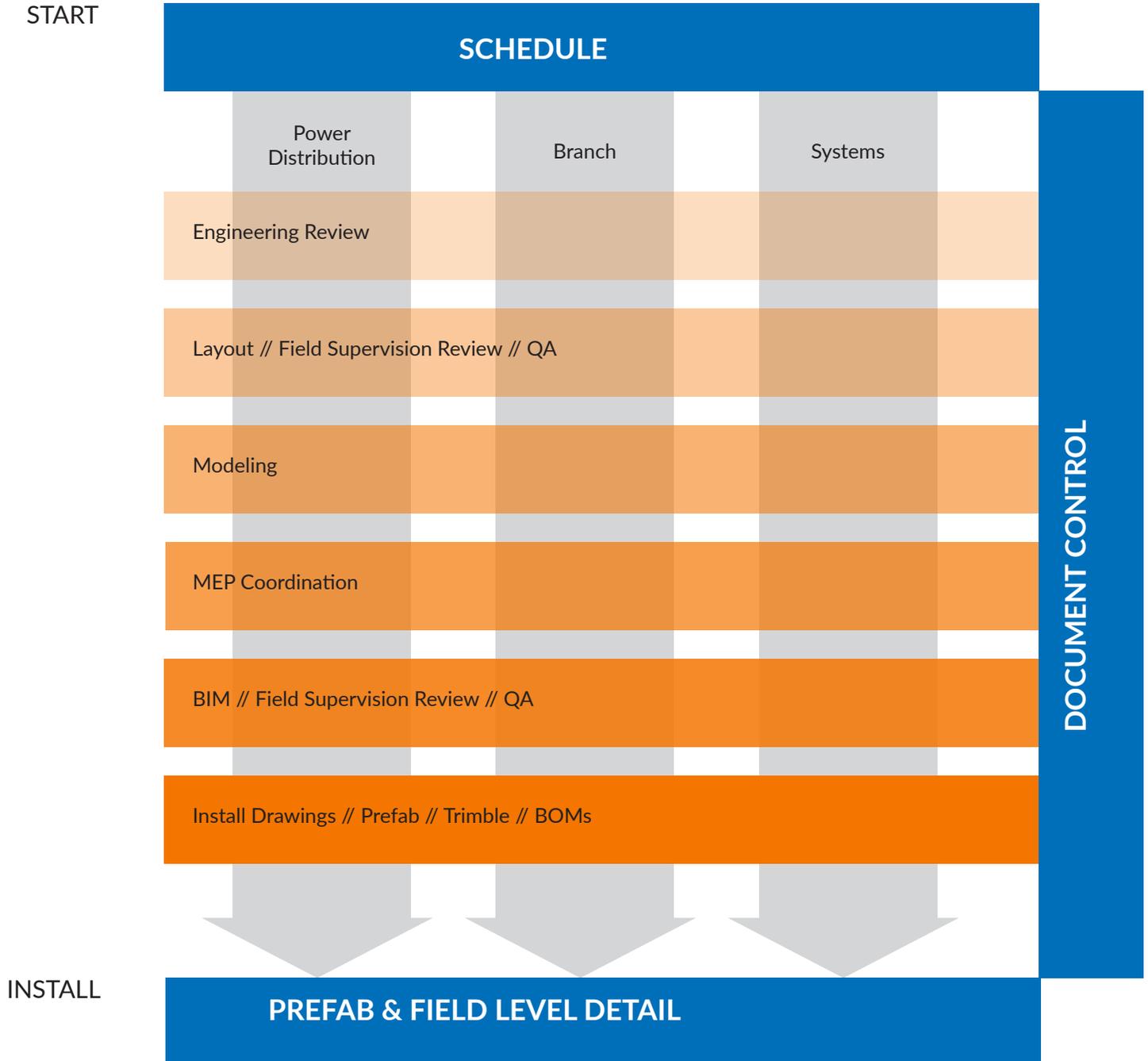
## Similar Project Experience

- Lanier Technical College: 6 Building Higher Education Campus
  - City Springs: Performing Arts Center, Office Building, Parking Deck City Center
  - Office Examples: Overton Synovus, UGA Business Learning Center, Atlantic Yards, GT Living Building
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# VIRTUAL DESIGN CONSTRUCTION

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## PROCESS



# PREFABRICATION

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## Layout and BOM

- Provide Complete Layout Installation Drawings and BOM's for ALL work to be installed on the project. This includes the Phases of work for: Underground; Under-slab; Wall Rough-in; Overhead; Finishes.
- This will provide the Project Team the ability to release materials by Area or Room with an "On-time" Delivery concept, taking the material directly to where it is to be installed when it is needed, instead of stock-piling materials on the project site.

## Kitting

- As materials are being released, materials will be labeled and placed into "Kitted" delivery methods to be delivered directly to the area for which it is to be installed.
- Material releases are to be scheduled at least two weeks in advance to enable the "Kitting" process.
- Materials will be routed through EG's Innovations Center for the Kitting Process, prior to delivery. (Kitting Process: Material quantities, types and identifications will be as listed on the Layout Installation Drawings and BOM for the specific Area or Room and based on the Phase of Work.)
- Materials will be delivered to the area to be installed on engineered carts that are completely mobile. (Carts will be rotated back to the EG Innovations Center for re-use.)
- Kitted Materials will be delivered where they are to be installed with a complete set of installation drawings and BOM's that identify exactly what is included in the Kit and corresponds with the included Layout Installation Drawings. This will provide the Electricians all of the information needed to install the Kitted materials.

## Prefabrication Offsite at Eckardt Innovations Center

- Ductbank prefabrications (Fabrication includes: conduit targets; installed conduit sections up to 40' in length; rebar; etc)
  - Prefabricated Temporary Power Provisions
  - Ground Containers prefabricated with entire temporary distribution equipment including: Switchgear; Panelboards; Transformers; Disconnects; Monitoring Equipment; Conditioned Air; etc.
  - Modular Temporary Power Centers to be placed on site, and in other areas of the project. (Skid mounted Transformers, Panelboard(s), Disconnects, Devices, etc)
  - Prefabricated Conduit
  - Conduits fitted with required bends, boxes, supports, etc. (Assemblies that can be used for in-slab; in-wall; above ceilings.)
  - Conduits prefabricated on conduit racks to be lifted and installed overhead, up to 40' in length.
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# PREFABRICATION

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## Prefabricated Electrical Equipment

- Panelboards/Disconnects/Transformer
  - Pre-punch and fit out electrical equipment with required conduit or cable connectors.
  - Pre-arrange all breakers according to Panel Schedules

## Prefabricated Electrical Rooms

- Prefabricate mobile assemblies that include pre-installed, pre-wired Panelboards, Disconnects, Transformers, Controllers, etc on wheels that can be easily rolled to where they are to be installed via a removable dolly system. Mobile assemblies can be designed to the scenario of where it is to be installed, whether bolted in-place to the floor or housekeeping pad, hoisted and suspended, or bolted to a wall. Units are designed to roll through a standard doorway and dolly system to be removed after final installation.

## Prefabricated Wall Rough-ins

- Wall rough-in assemblies including: Conduit or MC Cable cut to needed length and connectors and any required bends; Box, Mounting Brackets; Devices/Yokes pre-installed.
- Complete wall rough-ins offsite to be delivered as modular units.

## Light Fixtures

- Remove and dispose of all packaging for light fixtures and stage on delivery carts identified by the area to where they are to be installed.

## Other Trades Coordination

- Coordinate with other trades to pre-install conduit, wire and equipment on their equipment. ie: Mechanical Skids, Mechanical Piping Racks, Cooling Towers, Chillers, etc
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# LEAN

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Eckardt Group is a practitioner of Lean Construction, and like many other trade contractors, has been implementing Lean Construction tools and principles long before they were known as “Lean”. Eckardt is an active sponsor of LCI (Lean Construction Institute) and is active on the LCI Georgia CoP leadership team where Stephen Cary (VP) serves as Vice Chair.

While we utilize many pieces of the Lean Toolkit, Lean Construction starts with respect for the individual and a culture of continuous improvement. Eckardt strives to cultivate a culture of respect and continuous improvement in our office and job site locations. We aim to treat vendors and other trade contractors just as we would our own employees or customers. Each employee that walks through our doors receives a full day of orientation, where we walk through basic principles of our continuous improvement culture. Employees are trained to give feedback on processes and systems so that we can learn from and improve upon what we already have in place.

On any Eckardt project, we require our field team to adhere to Lean Construction principles of scheduling. The person who is accountable for the installation of the work—or, the Last Planner—is responsible for the planning of the work. This lookahead schedule is then passed up the chain to the field supervisor, who works with the Project Manager to develop a job-level schedule.

As a trade contractor, our level of implementation of the Last Planner System is largely dictated by the General Contractor. Most of our customers are Lean practitioners, and on their jobs, our field are actively involved in Last Planner and pull planning sessions.

Eckardt uses many Lean Construction principles in how we support our field installation. We require Just in Time delivery from each of our vendors, as well as requiring them to “stage and ship” material so that we aren’t removing excess packaging and waste on our job sites. We utilize a 50,000 sq. ft. prefabrication facility to improve the safety and quality of our installations, while improving the productivity of our on-site teams. And while prefab is a major driver in our Lean activities, we are implementing kitting on key construction projects, where all material, whether or not it is prefabbed, is packaged and released to the job site by area. This greatly reduces the time it takes our job site personnel to locate the right material for installation in their given area.

While prefab is an integral part of Eckardt’s typical installation plan, we have also participated in collocated, multi-trade prefab. We see this as a critical part of our success moving forward and have space at our current prefab facility to accommodate. Most recently, we were able to partner with BKI to build overhead racks that include both mechanical duct and conduit on the Piedmont Athens Regional project.

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# SAFETY PROGRAM

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Our commitment to safety starts at the top and infuses every level of operations within the organization. Several years ago, we entered into a world of larger and more complex projects, which required a more comprehensive safety program. Our Safety program is lead by Safety Professional Diana Johnson CHST. Diana leads a team of qualified personnel who work with project management to oversee and implement our safety program on the job site. The safety team has worked diligently to reduce incidents and increase compliance as our overall man-hours have grown steadily year over year. To achieve our goal of zero accidents, our team enlists the following activities and practices:

- Develop and communicate our safety and health policy to all of our employees.
- Provide safety orientation for new employees and refresher training on a routine basis.
- Mandate OSHA 30 hour safety certification for all supervisory employees.
- Conduct Worksite Analysis – evaluate all project specific activities and processes for hazards.
- Conducts Hazard Prevention and Control – to eliminate and control hazards.
- Demonstrates management commitment by instilling accountability for safety and health, obeying safety rules and reviewing accident reports.
- Testing of all employees for substance abuse
- Record and analyzes safety performance (e.g. Experience Modification Rate (EMR), OSHA safety statistics) and communicates safety performance to employees.
- Stretch and Flex Program
- Project Specific Safety Plan

**2017** - EMR: .74 | TRIR: 3.21

**2018** - EMR: .69 | TRIR: 2.59

**2019** - EMR: .79 | TRIR: 2.02

**2020** - EMR: .97 | TRIR: 0.50

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## WORKFORCE DEVELOPMENT

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Our three firms are proud of our long history in and focus on the Metro Atlanta region. The partnership's entire workforce comes from the greater Metro area and none of the member firms utilize temporary labor suppliers on jobsites.

All member firms support the Apprenticeship Training Center, which is located near the project site in Peachtree Corners. Students at the school are able to work as apprentice electricians while attending class. The contractors cover all costs for the students outside of books, which allows the students to move through the program debt free.

Our member firms are all active supporters of construction programs across Metro Atlanta:

- Eckardt Group is a long-time supporter of the construction program at Berkmar High School in Gwinnett County and has hired multiple graduates of the program. Eckardt has supported CEFGA and its efforts to increase construction education around the state, as well as other workforce programs throughout the city. Most new employees at Eckardt Group will come through our new Innovation Center, which is a 50,000sf facility in Norcross that houses our prefab, BIM, and training departments.
- Whitehead Electric is a long-time supporter of construction programs in Paulding County schools, as well as an active participant in the management of the Apprentice Training Center.
- 1electric has a productive partnership with the construction program at Tucker High School in Dekalb County and is also involved with Apprentice Training Center.

## DIVERSITY

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The Eckardt-Whitehead-1electric team recognizes the importance of working with a diverse group of partners, vendors, and suppliers from across the construction industry. Member firm 1electric is a certified AABE with a strong workforce. Our team for this project includes vendor support from both Mayer Electric Supply (WBE) and B&S Electric Supply (AABE). These firms are two of our largest vendor partners and provide our teams with excellent material and logistical support.

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# REFERENCES

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## Owners:

Kevin Grass, Principal & EVP

Noble Investment Group

kevin.grass@nobleinvestment.com

Warren Edwards, Sr. Director, Critical Infrastructure Management

Cox Enterprises

warren.edwards@coxinc.com

## General Contractors:

Tom Nichols, President

Winter Construction Group

tnichols@winter-construction.com

Wes Cobb, CEO

Jerry L Johnson & Associates

wes@jjassociates.com

## Design Engineer:

Tim Milam, President

Jordan & Skala

tmilam@jordanskala.com

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