

TECHNICAL PROPOSAL



SR 247 & College Street Bridges over NS Railway Project

*P.I. Nos. 0014895 and 0014899
Macon, Bibb County, GA*



College Street over NS Railway



SR 247 over NS Railway



College Street over NS Railway



SR 247 over NS Railway

submitted by:



*in
association
with*



INFRASTRUCTURE
CONSULTING & ENGINEERING

July 25, 2019



TECHNICAL PROPOSAL

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C.1.1. Construction Staging Narrative



C.1.1 CONSTRUCTION STAGING

The CWM/ICE DB Team has developed a preliminary Construction Staging Plan which results in the ability to concurrently replace the College Street Bridge and raise the superstructure of the Pio Nono Avenue Bridge to provide the necessary vertical clearances required. FORM M is included under TAB C.3 of this technical proposal.

CONSTRUCTION STAGING – PI NO. 0014895

- A. STAGE 1: PRE-ROADWAY CLOSURE
 - a. Install Advance Warning Signs
 - b. Relocate Existing Utilities in Conflict with Proposed Construction
- B. STAGE 2: ROADWAY CLOSURE
 - a. Install Road Closure and Detour Signing / Implement Detour
 - b. Remove Existing Bridge Superstructure
 - c. Reconstruct / Modify Existing Abutments and Intermediate Bent Caps
 - d. Install New Box Beams
 - e. Construct New Sidewalk and Bridge Barrier
 - f. Form and Pour Bridge Overlay
 - g. Form and Pour Approach Slabs
 - h. Grade and Pave Bridge Approaches
 - i. Remove Road Closure and Detour Signing/ Re-Open Roadway
- C. STAGE 3: POST ROADWAY CLOSURE
 - a. Adjust Utility Valves to Final Grade
 - b. Form and Pour New Sidewalks and Curb & Gutter off of the Bridge
 - c. Reconstruct Roff Avenue

CONSTRUCTION STAGING – PI NO. 0014899

- A. STAGE 1: PRE-ROADWAY CLOSURE
 - a. Install Advance Warning Signs
 - b. Relocate Existing Utilities in Conflict with Proposed Construction
- B. STAGE 2: ROADWAY CLOSURE
 - a. Install Road Closure and Detour Signing/ Implement Detour
 - b. Remove Existing Bridge
 - c. Raise AT&T Duct Bank to Required Clearance
 - d. Install Temporary Shoring and Excavate for MSE/ Crash Wall Construction
 - e. Construct MSE/ Crash Walls and Bridge Substructure
 - f. Construct Bridge Superstructure
 - g. Construct Bridge Barrier/ Sidewalk
 - h. Install Fencing and Aesthetic Details
 - i. Remove Road Closure and Detour Signing/ Re-Open Roadway
- C. STAGE 3: POST ROADWAY CLOSURE
 - a. Adjust Utility Valves to Final Grade
 - b. Grade Greenspace
 - c. Form and Pour Bus Stop Pavement
 - d. Install Brick Pavers, Bus Shelter, Benches, Trash Receptacle, and Interpretive Panels
 - e. Form and Pour New Sidewalks and Install New Curbs



(a) Key Challenges to Construction Phasing

Successful delivery of the SR 247 & College Street Bridges over NS Railway Project will be faced with numerous challenges. With many of these challenges involving third parties, there are elevated project risks that must be managed throughout term of the project and mitigated whenever possible. Following are four of the most significant challenges to construction phasing that the CWM/ICE DB Team anticipates:

1. AT&T Utility Design & Construction Coordination – Utilizing the Department’s early coordination efforts, the CWM Team intends to pursue an early Notice to Proceed for AT&T Construction to ensure adequate time is provided for AT&T to complete their splicing and tie-in work.
2. Railroad Coordination / Design Approvals & Construction Scheduling – The CWM Team anticipates concurrent railroad and Department reviews along with consistent open communication with Norfolk Southern throughout the entire project duration.
3. Utility Relocations to Accommodate Construction – The CWM Team has already initiated coordination efforts to relocate the numerous utilities in conflict with construction. This early coordination will allow the CWM Team to pursue accelerated approval from utility owners allowing relocation efforts to begin as soon as possible.
4. Construction Access – Confined Workzone / Limited ROW and Easements – It is expected that additional temporary shoring will be required for PI 0014899 to allow for construction access. In addition, a concerted effort will be made to bring materials onsite on an as needed basis only in order to provide a clean and organized workzone.

(b) Work and Laydown Areas, Sequencing of Work, and Minimizing Impacts During Construction

In consideration of the confined workzone with limited ROW and easements all materials will be stored at their respective manufacturing facility until each site is prepared and ready for installation to limit the required laydown areas. During the closures of PI 0014895 and 0014899 the work zone and laydown will encompass the entire roadway and provided easements. Outside of the closure periods, the work zone will encompass the ROW and easements provided outside of the roadway.

The sequence of work begins with design and utility permitting, progresses through removal and reconstruction of the bridges, and finishes with the concrete flatwork and final paving. Work at both PI 0014895 and 0014899 will progress concurrently due to the constraints of the project.

In pursuance of minimizing impacts during construction the CWM Team intends to construct as much of the project during the allowed closure periods, thus reducing the number of traffic disruptions outside of the closure periods. The CWM Team also intends to utilize the latest models of equipment with more efficient engines producing less noise and pollutants. Water trucks will be available to control dust and erosion control devices will be installed as necessary, with daily checks for maintenance needs. When light plants are in use during over night work a concerted effort will be made to ensure the lights are focused on the workzone to reduce impact to the surrounding properties.

(c) Approach to Staging Utility Relocations

Utility relocations will be critical to the success of this project and will require significant coordination between utility owners, the CWM Team, and authorized contractors for the utilities. Utility design and permitting will be pursued concurrently for all impacted utilities to allow for relocation work to start on schedule. Construction will consist of work at both sites to isolate utilities attached to each respective bridge prior to bridge demolition. Each site will also include minor overhead utility relocation prior to the roadway closures to provide sufficient clearances during construction. After the completion of each bridge the isolated utilities will be reconnected via attachment to the newly constructed structures.



The affected utilities and expected sequencing have been listed below for each PI.

PI NO. 0014895 – Pio Nono

1. Georgia Power – Relocate Overhead Neutral Line from diagonal crossing to perpendicular.
2. Atlanta Gas & Light (AGL) – Cut/Cap/Remove Existing Gas Main from Existing bridge. Rehang main after construction.
3. AT&T – Remove overhead perpendicular crossing and protect on ground during closure period. Rehang after beams have been set to match existing condition.

PI NO. 0014899 – College Street

1. AT&T – Reroute existing 5-way duct bank to follow existing 12-way duct bank and temporarily support independent from existing bridge. Raise to meet clearance after bridge demolition. Attached to new bridge, once constructed.
2. Macon Water Authority – Cut/Cap/Remove existing main across arch bridge, install steel encased main to new bridge after beams are set.
3. Georgia Power – Relocate one pole on South side of bridge to be outside of proposed excavation.
4. Cox Communications – Relocate to new Georgia Power Pole.
5. Public Service Telephone – Relocate to new Georgia Power Pole.

(d) Approach to Minimizing Impacts to Motorists and Pedestrians

The scope of this project requires significant impacts to motorists and pedestrians, to mitigate these impacts as much as possible the CWM Team intends to construct the majority of the project during the allowed roadway closures. This will reduce the number of lane closures required before and after the closure period, thus reducing the impact to motorists. In regards to pedestrians, the CWM Team intends to remove and reconstruct the existing sidewalks one direction at a time to ensure pedestrians have a route throughout the project area at all times. Additional signage will be utilized as necessary to direct pedestrians safely through the project area.



C.1.2. Proposal Schedule Requirements



C.1.2 PROPOSAL SCHEDULE

The CWM/ICE DB Team has developed a Proposal Schedule which illustrates its plan for accomplishing all of the Work from NTP 1 through Final Acceptance and Project Closeout. The Proposal Schedule, submitted electronically only, includes all major design and construction activities. It recognizes and accounts for permit and/or environmental related restrictions, as well as railroad and utility requirements and restrictions. Project specific calendars that account for weather days and standard holidays were created and applied to activities. Inclusion of these features ensure that the schedule is realistic and obtainable.

The Proposal Schedule was developed in general conformance with Volume 2, Section 2.5. It graphically illustrates critical design and development activities and relationships which are coordinated with environmental approvals, permitting, preconstruction activities and construction. The Proposal Schedule includes activities for:

- Utility Coordination and Relocations
- Railroad Coordination and Approvals
- Permitting and Environmental Approvals
- Volume 2, Section 3 Submittals

The Proposal Schedule is separated into three distinct phases for each site: Pre-Closure Activities, Closure Activities, and Post Closure Activities. Each phase contains critical activities to complete the project within the required constraints, these critical activities for each site and phase are as follows:

PI NO. 0014895 – Pio Nono

1. Pre-Closure Activities
 - a. Bridge Design & Railroad Approval
 - b. Utility Permits and Relocation Plan Approval
 - c. Management Plan Approvals
 - d. Shop Drawing Development & Approval
 - e. Utility Relocations/Adjustments
2. Closure Activities
 - a. Removal and Replacement of Bridge Box Beams in 3 Phases
 - b. Construction of Sidewalks and Barrier
 - c. Construction of Bridge Overlay
 - d. Bridge Clean-up/Grooving and Striping Installation
 - e. Signal Installation
3. Post Closure Activities
 - a. Curb and Gutter Replacement to New Grade
 - b. Final Paving
 - c. Roff Avenue East Completion

PI NO. 0014899 – College Street

1. Pre-Closure Activities
 - a. Bridge Design & Railroad Approval
 - b. Utility Permits and Relocation Plan Approval
 - c. Management Plan Approvals
 - d. Shop Drawing Development & Approval
 - e. Utility Relocations
2. Closure Activities
 - a. Demolition of Existing Bridge
 - b. Raise AT&T Duct Bank for Clearance
 - c. Installation Temporary Shoring and Excavate for Crash Walls
 - d. Constructing Crash Walls



- e. Construction of Bridge End Bents/Set Beams
 - f. Construction of Bridge Deck
 - g. Construction of Sidewalks and Barrier
 - h. Bridge Clean-up/Grooving and Striping Installation
3. Post Closure Activities
- a. Curb and Gutter Replacement to New Grade
 - b. Final Paving
 - c. Construction of Greenspace Including Bus Stop

In order to satisfy all requirements of the Project, activities for both sites will be active concurrently, with each site having its own critical path to on-time completion. The CWM Team recognizes the limitations of the scheduling program Primavera P6 in illustrating multiple critical paths and although activities may not appear to be critical to the overall project, they are going to be critical to meeting the requirements of their respective site. The critical path for this project is influenced by the allowable closure durations and required railroad clearance deadline, with the substantial completion deadline being significantly less controlling than on most projects.



C.1.3. Project Management Approach



C.1.3 PROJECT MANAGEMENT APPROACH

C.1.3.1 Organization, Management, and Key Personnel

(a) Team Organization & Key Personnel

The CWM/ICE DB Team organizational structure, shown in the organization chart provided at the end of this TAB, identifies the project management team and illustrates each member's function and relationship within the overall team. Each Key Personnel and Task Manager shown not only possesses the required technical expertise and relevant experience in their particular field or work discipline but also has the ability to:

- Work in an integrated design-build environment under the guidelines of a project management plan.
- Take a proactive approach to recognizing, communicating, and mitigating issues.
- Work within the parameters of an aggressive schedule while maintaining high quality standards.
- Have an implicit understanding of project expectations and policies.
- Clearly and concisely communicate project expectations with all team members.
- Coordinate with GDOT, SRTA and other stakeholders in a collaborative manner.

The following table identifies the Project's Key Personnel and their specific role and responsibility. Each member of the CWM/ICE DB Team will be fully committed to the success of the project and will always be available to carry out their assigned roles and responsibilities.

KEY PERSONNEL			
NAME	KEY POSITION	DESIGN-BUILD EXPERIENCE	ROLE / RESPONSIBILITY
Kyle Marchman, PE	Lead Contractor Project Manager	✓	Responsible for managing and executing of all aspects of the project including design, planning, permitting, safety and project controls.
Tyler McIntosh, PE	Lead Consultant Project Manager	✓	Overall design management, coordination and planning for adequate design resources.
Sam Wade, PE	Engineer of Record	✓	Engineer of Record and coordination of the Design Team.
Billy Glover	Contractor Superintendent	✓	Responsible for construction in accordance with design and contract requirements including safety, erosion control, traffic control, resource planning and subcontractor scheduling.
David Wertz, PE	Construction Quality Assurance Manager	✓	Responsible for management of the contractor's quality control program and coordination with GDOT's quality assurance program.
Chris Rountree	Lead Utility Coordinator	✓	Responsible for coordinating utility design and construction with the DB Team, GDOT and all affected utility owners.

(b) Project Management Approach

To successfully achieve contractual milestones and deliver this Project within the contract time, while implementing a construction phasing plan that minimizes the impacts to pedestrians and the traveling public, a design-build (DB) team of experienced design and construction professionals is required. The CWM/ICE DB Team is a team of designers and construction managers who have worked together on similar projects and who have experience in delivering challenging projects on-time and on-budget.

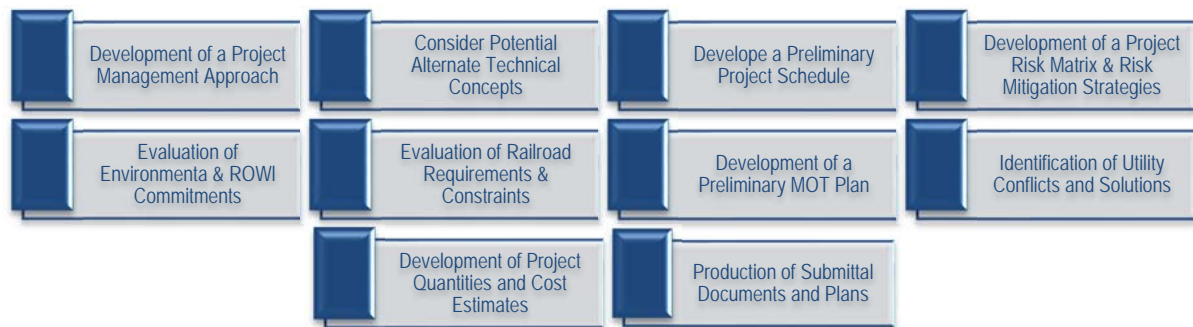
The CWM/ICE DB Team's approach to management of this bridge replacement project will be shaped by the Project Management Plan (PMP). The PMP will include multiple specific task plans that will give the management team a "tool box" to be utilized in managing the different facets of the project. In addition to incorporating "lessons learned" the PMP will be reviewed during the course of the project and updated as necessary to keep the "tool box" current. The PMP will incorporate a management approach to ensure the



Project is constructed in a safe, environmentally sensitive, and timely manner while maintaining GDOT's high standards for quality. The roles and goals of all stakeholders will be addressed while giving the management team the necessary guidelines for decision making and developing strategies to be utilized in managing the schedule, public involvement, safety, scope, quality assurance, and environmental commitments

Kyle Marchman, the Lead Contractor Project Manager and Tyler McIntosh, P.E., the Lead Design Consultant Project Manager have collaborated on the successful delivery of numerous design-build projects. Their past collaboration will enhance the PMP by incorporating "lessons learned" from past projects. Under their leadership, they will guide the CWM/ICE DB Team, through the design and construction phases in an integrated manner from NTP1 to Final Acceptance.

During the project procurement phase, key personnel, task managers and construction personnel collaborated within the outline of a project development plan to complete the following tasks:



After award of the contract the CWM/ICE DB Team will transition into the project development phase. This phase is focused on design and permitting and will begin with a review of the project requirements and the development of project goals and expectations. A "lesson learned" from previous design-build projects, which will be incorporated in the project development phase of this project, will be to include key members of the construction team, particularly those who were instrumental in developing the construction staging and preliminary schedule during the procurement phase, in the development and design process. Their involvement and constructability reviews will be an important part of the design process. Being involved in the development phase will enable the construction team to develop working relationships with the design team. Open lines of communication during the design process will result in a "constructible" set of plans that will reduce the number of requests for information (RFIs) from the field, and ensure a smooth transition from design to construction.

The CWM Team's approach for advancing the design will be to develop the overall project schematic and Submittal Schedule within 60 days of NTP1. Upon approval of these plans, staged design submittals will be developed and submitted to advance the Released for Construction (RFC) drawings consistent with the Project's Critical Path. The CWM Team is experienced in managing and coordinating submittal packages to balance the workload of reviewers while achieving expedited approval. Early negotiation with utility owners with utility conflicts will have high priority so that utility plans can be finalized to facilitate early start of the work.

As described above, one of the CWM/ICE DB Team's key approaches to project management is for the committed key personnel and task managers to remain engaged in the project from inception to completion and shifting from the design phase to the construction phase will be no different. This principle ensures that first-hand project knowledge gained during the procurement and development phase is not lost. The key members of the construction team who were involved in the development phase will be supplemented by additional construction managers, safety, quality, and environmental managers who will benefit from the experience of the development staff. At this milestone, the construction team will implement their logistical plan bringing in the construction resources required.



Upon receipt of a NTP3 and issuance of any necessary agency approvals, RFC drawings and approval of all contract management plans, the CWM Team will transition into the project's construction phase. Guided by the project schedule a logistical plan that identifies labor, equipment and material requirements will be developed during the project development phase. Allocation of resources will continue to follow the available RFC plans, with adequate resources allocated in sufficient numbers to meet the logistic and schedule requirements identified during the construction planning stage.

CWM recognizes the importance of retaining the trust and confidence of the GDOT, GDOT's consultants and other stakeholders during the course of the project and welcomes their participation and involvement. Past success has shown us early and effective communication and transparency among all stakeholders promotes sharing of information that results in a cohesive design and construction plan. The CWM Team encourages and desires participation in Project meetings at all levels from GDOT, project stakeholders, designers, subcontractors, and utility owners to ensure that key elements of the project are coordinated into an efficient constructible design and issues are promptly addressed and resolved. Beginning with kick-off meetings, stakeholders will be integrated into the project meeting protocol. Entities, such as the utilities and subcontractors will be invited to participate in project development meetings and construction scheduling meetings to promote communications and the early identification and resolution of issues before they impact the schedule and timely completion of the Project.

In addition to the regularly scheduled meetings, an effective communication plan among the CWM Team and GDOT is important in maintaining design consistency, quality and schedule. The CWM Team will utilize the GDOT project web-based management system for communications, file sharing and project documentation. With multiple subconsultants working on the design plans, an internal system must be established for design file management and communication. ICE will establish a dedicated and secure website that will facilitate internal team communications through the use of file sharing, events calendars, task lists and a project contact list. This internal site will also be the location for sharing digital plan sets, submittals, meeting minutes, agendas, and other Project events between the Design and Construction Team. This collaborative software tool has been an effective management tool on the I-85 Widening project in Gwinnett, Barrow and Jackson Counties.

Success of the CWM Team's subcontracting plan is predicated on key subcontractors joining in the project development phase. These firms, and others, will participate in Project meetings during the design and construction phases. These meetings give the CWM Team the opportunity to receive input to design, coordinate, and clearly define the scope and quality expectations of subcontractor's work.

The Project Scope, and contract limitations and constraints will determine the daily operating hours of the project. The CWM Team's approach for routine operations will be for each shift to work 12 hours, Monday through Saturday. Certain construction phases of the Project may require work at night or working 24 hours per day, seven days a week. Activities that may require aggressive scheduling include activities that:

- Significantly impact traffic congestion
- Involve bridge demolition, beam erection or deck pours
- Can only be performed during allowable lane and/or roadway closures
- Require two shifts per day to maintain the schedule

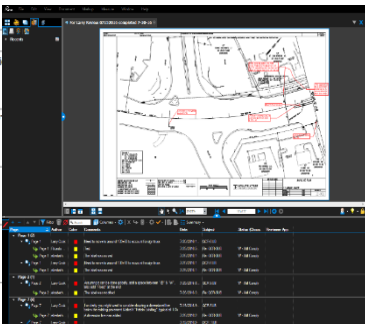
(c) Quality Management Approach

The CWM/ICE DB Team will develop and implement a Project Quality Management Plan (QMP), which will include a Design Quality Management (DQM) Plan and a Construction Quality Management (CQM) Plan. The QMP will be the core document for managing and documenting the quality of the delivered project and documentation of any changes from the design processes or nonconforming work through a Nonconformance Report Process. The DQM will define the specifications, qualifications and procedures for developing a quality design. The CQM will document the detailed procedures, specifications and frequencies for construction quality verification.



The quality management process will start with the development and submittal of the QMP no later than 30 days from NTP 1. The DQM Plan will outline the procedures for a system of independent design checks and as illustrated on the organizational chart, the Design QA/QC Manager, Peter Graff, PE function independently of the Design Team by reporting to the Lead Contractor Project Manager.

ICE has developed an extensive Quality Assurance/Quality Control (QA/QC) program which it requires its staff to follow. Peter Graff, PE, with more than 30 years of transportation-related experience, will be responsible for ensuring the project follows ICE's established QA/QC practices. As part of ICE's project-specific QA/QC plan, internal plan checklists will be developed to ensure the project meets the intended scope, adheres to the highest standard of quality, and reduces the need for re-work. ICE's internal checklists will be built around the GDOT Design Policy



Markup	Page	Author	Color	Comments			
	Page 18	elizabeth.scales	Yellow	Showing the Topo EOP line has been sufficient in the past.			
	Page 18	Larry Cook	Red	Show sta/offset for every PC, PCC & P along gutter line			
	Page 18	elizabeth.scales	Yellow	Labels were added			
	Page 18	Larry Cook	Red	Label End Type 2 C&G + sta/offset			
	Page 18	elizabeth.scales	Yellow	Labels were added			
	Page 18	Larry Cook	Red	Label Begin 10' Paved Shoulder + sta/offset	7/19/2016 6:25:11 PM	QCR-SUB	
	Page 18	elizabeth.scales	Yellow	A label was added	8/1/2016 9:35:42 AM	Re: QCR-SUB	

Sample Quality Control Tracking Sheet from Blue Beam Studio Session

Manual, GDOT EDG and PPG, GDOT Bridge and Structures Policy Manual QC/QA process — including checklists from the Bridge and Structures Detailing Policy Manual, Field Plan Reviews and GDOT QC/QA Manual — but will expand to ensure all data is appropriately shown and that the design meets all local, state, and federal guidelines. The project specific QMP is not intended to be a check-off at the end of the day, but rather a procedure to be integrated into the decision-making process when developing this project. ICE will utilize Bluebeam's Studio Sessions to perform interdisciplinary reviews and electronically document the "Quality Control conversation" between the designer and the checker. The Studio Sessions platform provides a repository for storing pdf plan sets, and allows each reviewer to make comments simultaneously, in real time, on one document. The marked comments are then automatically processed to a comment log associated with each pdf document. Each comment or mark-up must be addressed by the designer and can only be confirmed by the comment originator. The internal QA phase ensures that appropriate QC measures were taken and that the documentation creates an auditable paper trail between the designer and the reviewer. These procedures ensure all project decisions are justified, properly coordinated and documented across all design disciplines.

The CWM/ICE DB Team will designate a Quality Assurance Manager (QAM) who shall have the authority and responsibility for developing and implementing the required Management Plans, including the Quality Management Plan. Duties will include ensuring that all elements of work are performed in accordance the Contract requirements and adequate resources are assigned the DB Team's quality efforts. Reporting to the QAM will be the Construction Quality Assurance Manager (CQAM). The CQAM will have overall responsibility implementing the CQMP and coordinating the construction engineering inspection and testing functions of the CQM Plan which will be performed independent of the Design-Build Team by GDOT or authorized representatives.

Prior to beginning construction, a Construction Quality Management Plan (CQMP) will be developed and implemented to ensure the work is delivered in accordance with the DB Documents. The CQMP will define the CWM/ICE DB Team's quality management structure and processes by addressing each of the following main topics:

- A. OVERALL CONSTRUCTION QUALITY CONTROL PROCESS
- B. TRACKING, MEASURING AND DOCUMENTING CONSTRUCTION PROGRESS
- C. DOCUMENT CONTROL



- D. PROTOCOLS FOR INSPECTION, TESTING AND MAINTAINING QUALITY RECORDS
- E. MANAGING RFI'S, FIELD CHANGES, DESIGN CHANGES AND REVISIONS
- F. MANAGING AND CONTROLLING THE CONSTRUCTION SCHEDULE
- G. CONSTRUCTION COMMUNICATION, COORDINATION AND COLLABORATION
- H. ENVIRONMENTAL COMPLIANCE
- I. NON-CONFORMANCE PROCESS AND MANAGEMENT
- J. QUALITY AUDITS AND REVIEWS

C.1.3.2 Safety Plan

As evidenced by the commitment of time and resources beginning with the President of CWM, the safety of our employees, subcontractors and the traveling public is of paramount importance and the first responsibility of all members of the CWM/ICE DB Team. In conjunction with the Project Management Plan, CWM will submit a comprehensive Project Safety Plan that fully describes the policies, plans, training programs, work site controls and incident response plans. All members of the CWM/ICE DB Team will be committed to the Safety Plan and a 'Zero-Accident' goal for the project workers and the traveling public. The focus of the Safety Plan will be loss prevention using safety training and hazard identification, awareness and avoidance.

CWM's commitment to the Safety Program is demonstrated by the fact that CWM's loss experience rates are continuously below industry standards. The CWM Safety Program is a proven system with its foundation in the philosophy of insisting that all personnel have day to day responsibility for safety, but with particular focus on the Foreman and Worker level, and continuous Safety training and education. This philosophy empowers personnel who directly perform the work to have the appropriate training and resources necessary to recognize and mitigate hazards immediately. The effectiveness of the program is continually evaluated through our formal Safety Audit Program. This program provides regularly scheduled Safety Audits of randomly selected operations. Participation in the audits include personnel at every level, from senior management to craft workers, and provides an immediate and recordable safety evaluation. A monthly Loss Control Analysis and root-cause analysis of incidents will be used to evaluate the success of the Safety Program.

The CWM Safety Plan will include the following key elements:

- Senior management commitment to safety
- Incident response and notification procedures
- Special safety procedures for working around and over railroads
- Dedicated Safety Manager with responsibility for safety of project personnel and the public
- Safety orientation for every employee and subcontractor prior to beginning work
- Substance abuse prevention program that includes pre-employment testing and random verification after employment
- Experienced personnel for implementation and monitoring of Maintenance of Traffic Plans
- Protocols to ensure that all first aid and safety equipment is on-site
- Safety planning in all phases of project delivery
- Safety Audit Program
- Specialized Training in specific discipline areas
- Continuing Safety training and education
- Monthly project wide meetings and daily hazard analysis
- Protocols for accident investigation and follow-up actions

Continuous training is a basis of the CWM Corporate Safety Program and will be an integral part of the Project Safety Plan. Training begins when a new employee is hired and continues throughout the duration of their employment. CWM offers 35 safety training classes per year that are tailored to the employees' discipline and exposure to specific hazards. Core components of the training program include:



- ✓ New hire orientation
- ✓ Defensive Driving
- ✓ 10-hour OSHA training course
- ✓ First Aid, CPR
- ✓ Alcohol Awareness

Specific discipline training, including Fall Protection, Competent Person, Confined Space Entry, Rigging, MOT Certified Flaggers, Crane Hand Signals and Crane Assembly, will be incorporated into the Project Safety Plan.

C.1.3.3 Approach to Public Outreach

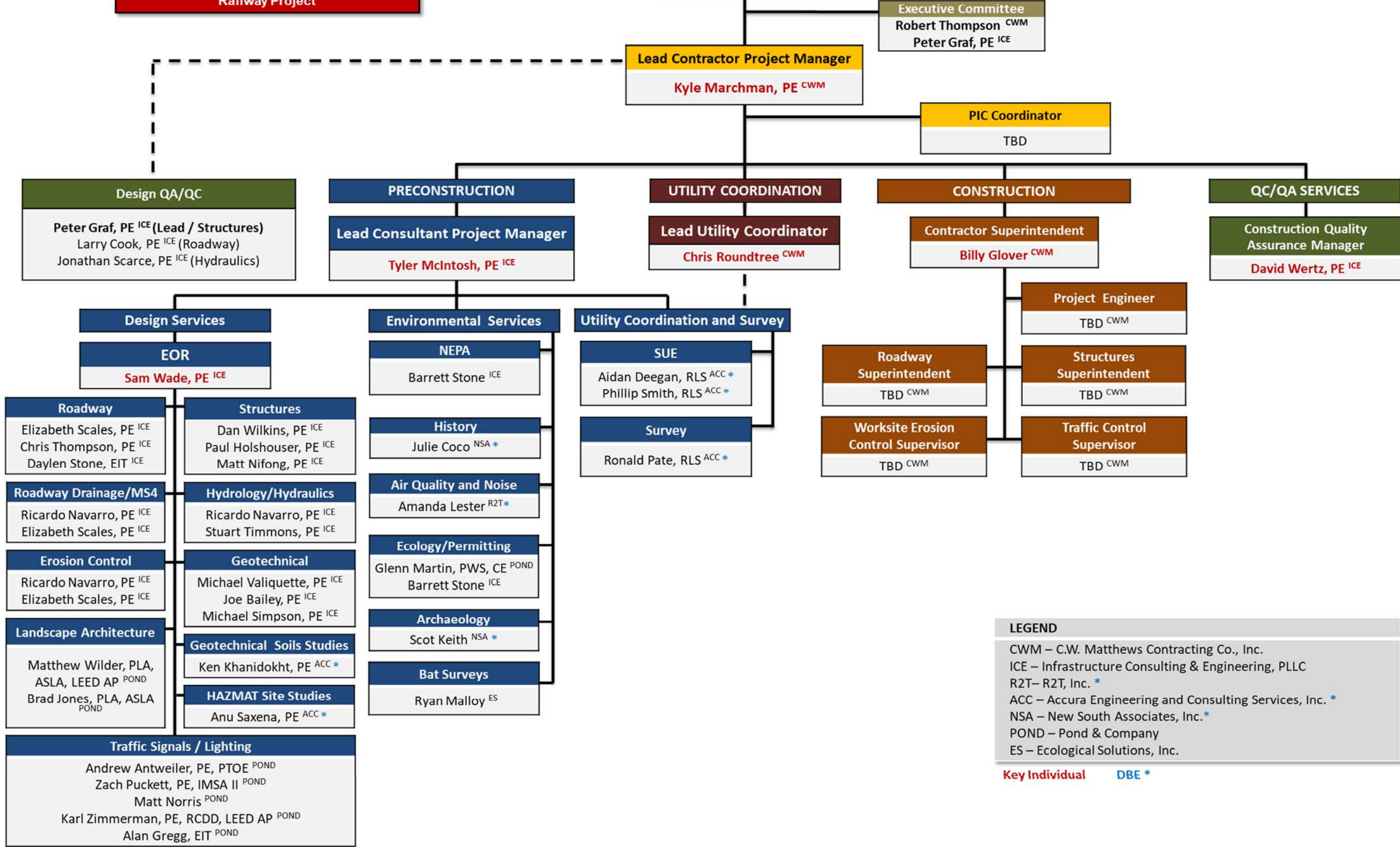
The Public Information and Communications Plan (PICP) will be critical to maintaining the support of the traveling public and stakeholders of the project. The CWM/ICE DB Team will develop a Communications Support Plan and will designate a Public Information Coordinator (PIC) who will collaborate with GDOT in the development of a comprehensive PICP that will outline the communications protocol to be utilized by GDOT and the DB Team to keep the public informed of scheduled project activities, traffic restrictions and emergency situations.

The DB Team's PIC will be the Department's primary point of contact for public information. The PIC will ensure that updated project information is provided in a timely manner, will coordinate with GDOT to facilitate communications and will attend and provide support for stakeholder and public meetings and public outreach presentations.

The underpinning for achieving GDOT's communication and public outreach goals is to form a collaborative partnership and to effectively communicate with all stakeholders. The CWM/ICE DB Team will support GDOT in engaging stakeholders through several proven techniques, specifically Collaboration, Stakeholder Identification and Stakeholder Coordination Meetings. The CWM/ICE DB Team will work closely with GDOT to develop a comprehensive Communications Plan which includes Public Awareness, Involvement, and Outreach. This multifaceted, multi-layered approach will provide the greatest engagement with the identified stakeholders beginning as soon as the contract is awarded and continuing throughout the course of the project. The goal is to provide balanced and objective information as to construction activity, travel and noise impacts and project progress by building on established communications tools and utilizing innovative strategies to reach varied demographics.



Team Organizational Chart
SR 247 & College Street Bridges over NS
Railway Project



LEGEND

CWM – C.W. Matthews Contracting Co., Inc.
ICE – Infrastructure Consulting & Engineering, PLLC
R2T– R2T, Inc. *
ACC – Accura Engineering and Consulting Services, Inc. *
NSA – New South Associates, Inc. *
POND – Pond & Company
ES – Ecological Solutions, Inc.

Key Individual

DBE *



C.2 Project Differences from Reference Information Documents (RIDs)



C.2 PROJECT DIFFERENCES FROM REFERENCE INFORMATION DOCUMENTS

The CWM/ICE DB Team proposes to design and construct PI 0014895 and PI 0014899 consistent with the Environmental approvals and the approved Concept Reports. The CWM/ICE DB Team does not propose to design and construct PI 0014895 and PI 0014899 materially different from the Reference Information Documents. As such, no Schematic Plans are provided.

The CWM/ICE Design-Build Team chose not to submit any Alternative Technical Concepts. Although not applicable, FORM Q is provided on the following page indicating same.

APPROVED ATCs

[illegible]

List all ATCs approved by GDOT that are not included in Proposal, and a brief description why not included:

ATC Number	ATC title/name and brief description why not included in Proposal

NOT APPLICABLE



C.3 Closure Durations, Interim Completion, Substantial Completion, and Final Acceptance Proposal - Form M



C.3 CLOSURE DURATIONS, INTERIM COMPLETION, SUBSTANTIAL COMPLETION, AND FINAL ACCEPTANCE – FORM M

The CWM/ICE Design-Build Team's proposed Closure Durations, Interim Completion, Substantial Completion and Final Acceptance are provided on the following FORM M.

FORM M

Closure Durations, Interim Completion, Substantial Completion, and Final Acceptance Proposal

Proposer's Name: C. W. Matthews Contracting Co., Inc.

The Proposer shall indicate acceptance of the full roadway closures, Substantial Completion Deadline, and Final Acceptance Deadline durations identified below.

Table M-1: Milestone Deadlines

Milestone Deadlines	Duration
Duration of full roadway closure of SR 247 / Pio Nono Avenue for bridge modifications.	<u>30</u> days (Not to exceed 30 days, and demolition to establish required vertical clearance must be completed no later than June 30, 2020.)
Duration of full roadway closure of Roff Avenue west of Pio Nono Avenue.	<u>30</u> days (Not to exceed 30 days, and must be open to traffic no later than June 30, 2020.)
Duration of full roadway closure of Roff Avenue east of Pio Nono Avenue.	Not to exceed <u>60</u> days.
Duration of full roadway closure for CR 5813 / College Street and Appleton Lane for bridge demolition and construction.	<u>180</u> days (Not to exceed 180 days, and demolition to establish required vertical clearance must be completed no later than June 30, 2020.)
Substantial Completion Deadline.	No later than <u>500</u> Days after NTP 1.
Final Acceptance Deadline	No later than <u>90</u> Days after Substantial Completion.

Date: July 25, 2019

Proposer: C. W. Matthews Contracting Co., Inc.

Signature: 

Title: Daniel P. Garcia, President