



Technical Proposal

Binder 1 of 2 | All Parts Excluding Appendix F.7 - Conceptual Plans

OPPORTUNITY CORRIDOR SECTION 3

Submitted by:
Kokosing Construction Company, Inc., 886 McKinley Avenue, Columbus, OH 43222

Kokosing | Michael Baker | Brownstone Grey | Richland Engineering
Independence Excavating | E.L. Robinson | CH2M | CDPS | Artessa

Attention: Letting Manager
Project 3000 (17)
Project: CUY IR 490/SR 010 02.09/19.28
PID 96833



December 21, 2017

ES: Executive Summary





The Kokosing DBT enthusiastically presents its technical proposal for the Opportunity Corridor Section 3 Project (OC3). We have focused our proposal efforts on developing solutions that provide significant value while meeting the project’s scope, schedule, budget, quality, safety, and diversity goals. Our Ohio-based team has significant experience with ODOT, the City of Cleveland, GCRTA, Norfolk Southern, and the multiple utility owners. All of our key personnel have ODOT design-build experience and each is fully committed to the successful delivery of OC3.

OC3 will complete the Opportunity Corridor Program, providing much-needed transportation improvements, connecting I-490 to University Circle, spurring economic development, and providing immediate positive impact to the local community through diversity and inclusion efforts. The Kokosing DBT has expended significant effort developing the project approach that is outlined in this technical proposal, starting with the formation of a team that has decades of experience delivering significant projects for ODOT, providing critical local resources, diversity and outreach experience.

The Kokosing DBT



Throughout this proposal, you will find our approach to meeting the Department’s project goals, including: **Demolish existing residences and commercial structures as soon as possible**—dedicated subcontractor Independence Excavating (IX) is a local demolition expert and will utilize New, Small, Local, and Edge (NSLE) subcontractors, providing early work for these firms.

Deliver the Project at or below budget – incorporation of 12 ATCs, notably ATC #32, which realigns OC Boulevard in the area of Kingsbury Run, provides significant constructability advantages, improves GCRTA facilities, and minimizes long-term maintenance.

Maximize Quality—Baker commits to high quality design through implementation of a design quality

management plan, with Richland Engineering’s Dave Rinehart, PE, providing independent quality assurance as IQF. Kokosing commits to implementation of a construction quality management plan that provides construction quality consistent with the I-670/71 Columbus Crossroads DB Project, which won an international quality management award.

Minimize traffic impacts and open all roadways by November 1, 2021 – our approach meets all project schedule goals as presented in the attached schedule.

Meet or exceed aesthetics and sustainability guidelines – inclusion of Margaret Hewitt, LEED AP, president of The Construction Green Team, as our sustainability consultant provides expert guidance to our commitment of obtaining a “Silver” INVEST rating.

Deliver the project with zero lost-time incidents – Safety is our #1 priority. Kokosing and IX are leaders in construction safety, with both firms winning 2016 OCA Safety Awards in our respective size categories.

Deliver a positive economic impact to the community while maximizing team diversity – Cleveland Ward 4 resident Wyatt Brownlee leads a team of diversity, inclusion and outreach experts, including Maurice Stevens, Joe Lopez, and Jill Harris, who will exceed ODOT’s outreach expectations.

Project Management

Our overall management approach starts with providing experienced, local management staff. **Kerry Hart, DBIA**, proposed DB Project Manager, has significant experience managing local major transportation and DB projects, including the CUY-77 Widening Project and I-670/71 Columbus Crossroads. Early and ongoing coordination with all stakeholders will be key to the success of the project. **Jason Wise,**

PE, will be the DB Utilities/Rail/City Coordinator, a role he has filled during the procurement process and on previous projects including CCG6B where he helped mitigate potentially significant utility impacts.

Throughout the procurement, we have established a cohesive team that will immediately integrate ODOT and other stakeholders upon project award. Constant communication and true collaboration will ensure the successful delivery of the project.

Design and IQF

Larry Ciborek, PE, will serve as DB Design Project Manager, with **Chris Cummings, PE**, and **Sean Milroy, PE**, as DB Lead Structural and Roadway Engineers, respectively. Larry, Chris, and Sean work in Baker’s Cleveland office and have more than 14 years of experience working together on complex, multi-disciplined urban reconstruction projects, including the Lakefront West and Innerbelt projects. Baker will work closely with the Design IQF Project Manager, **Dave Rinehart, PE**, to ensure conformance with established project design standards.

Our design incorporates several refinements and ATCs that provide value to the project through reduced initial cost and long-term maintenance.

- ATC #32 improves the OC Blvd crossing of GCRTA facilities, significantly reduces earthwork waste, and minimizes future maintenance.
- Our optimized drainage design allows for shallower sewers that follow existing grades, meets NEORS’s Title IV requirements, and directs over 25 acres of storm water to storm-only sewers.
- ATC #15 improves the OC Blvd bridges over the GCRTA Blue and Green Lines with the use of weathering steel, reducing construction time, impacts to the GCRTA facilities, and long-term maintenance needs.

Construction

Led by DB Construction Project Manager **Brad Mast**, and supported by local roadway subcontractor IX, Kokosing has ample resources to meet all project schedule needs. Inclusion of key subcontractors during the bidding process has ensured full scope coverage and a thorough vetting of the construction sequence.

Our top-down construction approach and phasing of

utility relocations at East 55th Street minimizes traffic impacts and mitigates potential utility delays. Similarly, our approach at NS requires only two moves of the tracks in lieu of the three that are presented in the RFP concept, minimizing costs and duration for this work.

Safety is paramount on this project, with all personnel having immediate stop-work authority if they encounter an unsafe situation. All personnel entering the site, including subcontractors, will receive a site-specific safety orientation and all subcontractors will participate in a preplanning meeting that includes a detailed safety discussion prior to starting their work.

Diversity, Inclusion and Outreach

The Kokosing DBT understands the significance that Opportunity Corridor plays in developing local and disadvantaged contractors and workforce. Our DB Diversity/Outreach Lead Manager, **Wyatt Brownlee**, will actively manage the project-specific Diversity, Inclusion and Outreach Program. Wyatt is a Ward 4 resident with critical ties to the local community. Subconsultants **Maurice Stevens** and **Joe Lopez** will provide expertise in local workforce development and focused subcontractor outreach. Kokosing’s Contractor Diversity/Outreach Lead Manager, **Jill Harris, PHR, SHRM-CP**, has 25 years of experience in recruitment, diversity and inclusion planning.

We have already initiated our efforts through Kokosing DBT OC3 specific pre-bid outreach events, which were attended by nearly 200 individuals. We have met with individual firms to discuss capabilities to provide “right-sized” bid packages, and have investigated the use of nontraditional contracting opportunities, such as a drug and alcohol screening subcontractor, a service that we would normally perform in-house. These efforts will be expanded upon immediately following project award to include workforce development and community outreach.

The Kokosing DBT provides ODOT the confidence that this project will be constructed safely, on schedule, on budget, with a high degree of quality, and with a focus on diversity and the local community.

A. Project Management





Our project management team brings a strong history working on large ODOT design-build (DB) projects. We will provide meaningful integration of project stakeholders to promote coordination, collaboration, and timely issue resolution. Our processes have successfully delivered some of ODOT’s most significant projects: Kokosing’s \$200 million I-670/71 Columbus Crossroads DB project substantially completed seven months early and the \$125 million downtown Dayton I-75 project completed one year ahead of schedule. Both projects were delivered below the original bid budget. Baker has a history of delivering complex urban reconstruction projects, including the Lakefront West Project in Cleveland, on an accelerated schedule, with significant stakeholder involvement, utility, Northeast Ohio Regional Sewer District, Norfolk Southern Railroad, and city coordination.

A.1 – Management Approach

A.1.i – Interface with the various design and construction disciplines, the IQF, and the Diversity and Inclusion Consultant

We understand the significant role that efficient communication plays in the success of a project. In addition to multiple design disciplines and construction personnel, the IQF and Diversity, Inclusion and Outreach Consultant (DIOC) will be integrated into the project to form a truly collaborative team. Through Kokosing’s, Baker’s, and Richland Engineering’s DB project experience, we have developed methods to streamline our team interface throughout all phases of the project.

In addition to the scope requirements, DB Lead Structural Engineer Chris Cummings, PE, and DB Lead Roadway Engineer, Sean Milroy, PE, will be co-located during the duration of the structural and roadway design.

In addition to lead firms of the Kokosing DBT, members of Brownstone Grey, Independence Excavating (IX), E.L. Robinson (ELR), and CH2M will be co-located for the duration of their work. We have experienced first-hand the tremendous benefits that this daily formal and informal interaction provides in a project of this significance.

Design Phase

DB Design Project Manager Larry Ciborek, DB Lead Structural Engineer Chris Cummings, and DB Lead Roadway Engineer Sean Milroy live in Cuyahoga County and work in Baker’s Cleveland office. Even after the requirement for co-location during the design phase is complete, the key personnel will be a few miles away in downtown Cleveland and available on-site as necessary. Larry, Chris, and Sean are all experienced project managers and are ideally suited to perform their roles on this project.

To ensure collaboration, the design has been developed on a ProjectWise platform, ensuring access to real-time, live design files and tight version control. The same live design files will be used by Baker engineers and subconsultants, which mitigates the potential for errors caused by working in outdated files. A Baker design lead will be assigned to each design subconsultant. The design lead will coordinate and oversee the work, ensuring an integrated, comprehensive design effort.

Our overall approach to integration of our team members will be facilitated and enhanced through the use of regular Task Force Meetings. Held weekly at the start of the design phase, and tapering off as dictated by design progression, Task Force Meetings will be attended by members of design, construction, IQF, DIOC, ODOT, and other project stakeholders, including utility owners and railroads. These meetings will provide a forum to keep all parties informed of current design direction and review, the project schedule, and ball-in-court responsibilities for open items. Larry will be the direct point of contact for ODOT, Kokosing, the DIOC, and the IQF during the design phase. Table A-1 presents a summary of anticipated task force meetings.

An Issues Log will be developed that tracks outstanding issues, resolutions, and ball-in-court

Task Force Meetings		
Meeting	Leader	Discussions
Roadway and Drainage	Sean Milroy	Sean leads weekly meetings to discuss the geometry, roadway and drainage related design items. This group also includes DBT constructed utilities such as water and sewers.
Structures and Geotech	Chris Cummings	Meeting weekly, Chris leads bridge, wall and other geotechnical related design discussions.
Traffic Control/MOT	Sean Milroy	Separate from the Roadway and Drainage meetings, Sean leads weekly coordination of signing, signals, roadway lighting and MOT related design items.
Diversity, Inclusion and Outreach	Wyatt Brownlee	Wyatt’s task force includes discussion of Diversity and Inclusion Outreach and OJT status, issues, and opportunities on a weekly basis.
Aesthetics and Enhancements	John Fennell	Meeting as needed to make aesthetic and enhancement related decisions.
Utility/Rail/City Coordination	Jason Wise	Meeting weekly during design phase and into construction to discuss third party coordination required for design and construction. Additional third-party coordination meetings will occur as needed.
Quality	Dave Rinehart	Meeting regularly throughout design to coordinate design quality assurance and discuss any scope clarifications.
Weekly Design Coordination	Larry Ciborek	Occuring the day after weekly task force meetings, Larry will lead a multi-disciplined design coordination meeting with task force leads, Kokosing, IQF, ODOT, City of Cleveland, DIOC, key subs and third-party representatives. This weekly meeting provides comprehensive, cross-discipline updates and coordination among the DBT, ODOT team and key stakeholders.

We have utilized this task force structure during the pre-bid phase, with weekly roadway, structure, and overall design coordination task force meetings. We’ve also held three dedicated workshops with Kokosing, IX, Baker, and ELR to address the East 55th Street and NS grade separations.

Table A-1 – Proposed Task Force Meetings

responsibilities at every task force meeting. Compiled as a single living document, this log will be reviewed at the Weekly Design Coordination meeting, which is attended by personnel from design, construction, IQF, ODOT, GCRTA, NS, the City and other stakeholders.

Diversity and inclusion has been an integral part of our pre-bid efforts, including weekly meetings to plan the pre-bid outreach events, review feedback, and fulfill the NSLE goals. Immediately after notice to proceed, we will assimilate ODOT and other third parties into these efforts. **Demonstrating our commitment to the NSLE diversity goals, DB Project Manager Kerry Hart has been leading our pre-bid outreach efforts**

with DB Diversity/Outreach Lead Manager Wyatt Brownlee, Contractor Diversity/Outreach Lead Manager Jill Harris and subconsultants Maurice Stevens and Joe Lopez.

Through Baker’s pre-bid work with Kokosing and Brownstone Grey, 15 NSLE firms were identified for inclusion on the post-award design team that fit into logical project elements and their respective design prequalifications. Larry Ciborek will pair each design subconsultant with a Baker design lead, who will review their work and provide design direction. **To facilitate inclusion of subconsultants that don’t typically use ODOT’s MicroStation platform,**



Baker engaged Wayne Andre Grant of The CADD Department to provide conversions services between AutoCAD and MicroStation.

Larry Ciborek will provide NSLE subconsultant oversight and provide status updates to Wyatt Brownlee and Kerry Hart at the DIOC task force meetings. Larry, Kerry, and Wyatt will schedule periodic meetings with subconsultants to review performance and upcoming work.

Wyatt Brownlee and his staff will assist Larry Ciborek with outreach efforts to identify potential candidates for drafting or technician intern positions in support of Type 2 on-the-job training (OJT) goals. Baker has established contacts with John Hay High School staff to assist with identification of graduates within Wards 4, 5, and 6 who are pursuing technical careers and are interested in possible internships.

Design IQF Project Manager Dave Rinehart and DB Design Project Manager Larry Ciborek will interact daily to discuss design and IQF status and schedules to ensure that thorough reviews of design packages are conducted. This continuous coordination ensures timely turnaround of critical design packages.

The Kokosing DBT understands that the IQF is ODOT's primary design quality assurance partner in this design-build project. ODOT can rely on our IQF, Richland Engineering (REL), backed by CH2M, to know and uphold the scope, resulting in design packages that meet contract requirements. Richland has relevant experience performing similar roles, including owner's representative roles, on the I-90 EB Bridge (CCG2) and I-480 Valley View Bridge DB projects. On the I-670/71 Columbus Crossroads DB Project, REL's Dave Rinehart, PE, served as the Independent Design Quality Manager on the Kokosing DBT, reviewing the design and plans of CH2M. On the I-90 Innerbelt Bridge (CCG1) Project, Baker served as owner's representative. These common experiences provide our team a clear understanding of the roles and interaction among design, IQF, construction and ODOT.

We will raise specific design questions to the IQF as

they arise in the development process. All questions and answers will be logged to document assessments of scope interpretation with this log posted to the SharePoint site as an open collaborative tool. The IQF will have an agenda item at the weekly Design Coordination meeting for raising specific scope interpretation issues for discussion. This transparent approach provides ODOT with an opportunity to consider these issues in advance of formal IQF review and design package finalization.

Baker engineers and IQF reviewers will use a variety of software collaboration tools, to improve transparency, efficiency and documentation:

- SharePoint for submittal workflows
- ProjectWise for plan development and facilitation of over-the-shoulder reviews
- Bluebeam Revu for QC reviews and documentation

Throughout the design phase, Kokosing will perform over-the-shoulder constructibility reviews at all levels of plan development. Mike Luyster, PE, will serve as full-time Design-Build Coordinator to expedite communication transfer, ensure that all staff are working with the most current information, and monitor ball-in-court responsibilities. He will also be a single point of responsibility for submittals to and responses from ODOT.

Kokosing and Baker have teamed on nine previous pursuits. We know each other's strengths and have great awareness of the responsibilities of each firm. This experience allows our project management staff to work seamlessly together. Richland Engineering served as the design quality manager on Kokosing's Columbus Crossroads DB Project, with ELR and CH2M as lead designers.

Construction Phase

Throughout construction, we will continue to incorporate collaboration among all entities through the following methods:

- A full-time Baker design coordinator will continue to co-locate with the construction personnel after design is substantially complete. This on-site point of contact provides immediate response to requests

for information (RFI) and other potential design-related changes.

- Each subcontractor will be assigned to an on-site project engineer for direct coordination and schedule communication.
- To ensure that subcontractors and suppliers have the most current available plans, we will establish a Sharefile site specifically for the project, which serves as an online plan room. They will have free access to the latest documents, thereby providing immediate access for new firms as they are brought onto the project.
- Key subcontractors and material suppliers will be integrated into the task force meetings held during design and into scheduling meetings during construction.
- Preconstruction meetings will be held with each subcontractor prior to the initiation of their work to discuss schedule, quality control, and safety. These meetings will include DB Project Manager Kerry Hart, DB Construction Project Manager Brad Mast, and other DBT personnel directly involved with the subcontractor's work elements.

Dedicated roadway subcontractor Independence Excavating has been a key participant during the pre-bid design process. This provides a seamless transition into construction that minimizes design time and unanticipated conflicts.

Diversity, inclusion and outreach will continue throughout construction, with a focus on workforce development and OJT. Kokosing's Contractor Diversity/Outreach Lead Manager, Jill Harris, and Corporate Workforce Development Manager, Mark Osborne, will coordinate closely with Wyatt Brownlee, Maurice Stevens, and Joe Lopez. This group will coordinate weekly on ongoing efforts and include senior project leadership on a regular basis.

A.1.ii – Interface among the design, construction, the IQF, Diversity and Inclusion Consultant and Department personnel

The Department will be encouraged to attend and actively participate in all Task Force Meetings and the weekly Design Coordination Meeting identified above in A.1.i. Additionally, the Kokosing DBT will coordinate project items with ODOT at progress meetings that will include key subcontractors and other project stakeholders.

Facilitated partnering, per PN 111, is included in this project, and members of the Kokosing DBT have worked within this formal structure with great success. The initial partnering meeting is a forum that will establish formal lines of communication and chains of command at various management levels, and outline the goals of each party. In addition to the formal setting, we will have daily communication with ODOT. **DB Project Manager Kerry Hart will reinforce a project open-door policy that encourages members of the DBT, ODOT, and other stakeholders to collaboratively communicate with each other throughout the life of the project.**

Kokosing's past partnering successes include:

- I-670/71 Columbus Crossroads DB won the 2014 Don Conaway Partnering Award
- I-75/SR4 Interchange won the 2013 Don Conaway Partnering Award
- I-75 Downtown Dayton Reconstruction, Phase 2 received a 2017 Don Conaway Partnering Award Honorable Mention

Key personnel will carry forward lessons learned from numerous ODOT DB projects and build on existing relationships with ODOT D12 and the City of Cleveland. We anticipate interacting with Department personnel at all levels of the project, from inspectors to senior management.

ODOT will be kept well-informed throughout all stages of the project, and our communication structure and task force organization encourages frequent, meaningful, two-way discussions between ODOT and the DBT. Making an upfront effort to identify project



issues with ODOT leads to an integrated, fluid design process. Construction submittals and field documentation will be handled with a similar level of transparency.

Additionally, we propose quarterly Executive Management Meetings among the senior levels of the Kokosing DBT and ODOT. These meetings will review the status of the project, support partnering efforts and promote timely resolution of any issues.



Figure A-1 – Kokosing informally partnered with ODOT on the Cuyahoga I-77 Widening Project, resulting in zero claims and all lanes open to traffic by the interim completion date

Our diversity, inclusion, and outreach (DIO) team will be an integral part of the project and will have significant interaction with the Department. A specific DIO task force meeting will be held each week at which the following items will be addressed:

- “Dashboard” overview of our outreach efforts, including metrics demonstrating current NSLE, OJT, and local workforce levels
- Snapshot of previous outreach efforts and upcoming inclusion opportunities
- Any current issues or community or subcontractor feedback and plan to address each

Additionally, Wyatt Brownlee will be an active participant in the ODOT progress meetings.

Additional interface opportunities will include:

- Over-the-shoulder reviews will be held as needed throughout the design phase. These reviews will

include personnel from design, construction, the IQF, ODOT, and other parties affected by the project element being reviewed.

- Information sharing on common networks, including a SharePoint site for electronic submittals and document tracking, storage of the impact matrix, and subcontractor outreach tracking. Kokosing’s DB Coordinator Mike Luyster will serve as the single point of responsibility for submittals to and responses from ODOT.
- ODOT will be invited to third-party discussions with City of Cleveland departments, railroads, and utility companies. We commit to publishing documentation of any meetings or discussions within two business days.
- Kokosing’s Point of Contact will be in constant communication with ODOT’s Public Information Office.

A.1.iii – Approach to ensuring design and construction quality

The Kokosing DBT commits to providing top quality in design and construction. Quality is the responsibility of each DBT member and is embedded in our member firms’ corporate cultures. We have experience developing project-specific quality programs, particularly on DB projects such as the MLK Interchange in Cincinnati and the I-670/71 Columbus Crossroads project, for which our quality performance ratings, as measured by an independent quality firm, exceeded those of other similar projects around the country.

Design Quality

Baker will proactively manage the design phase to ensure compliance with the project scope of services and contract documents in a transparent, collaborative manner. We will incorporate effective communication through co-location of key staff, regular task force meetings and use of collaboration software tools. Our initial design effort will include development of a Geometrics Package, similar to a Line, Grade & Typical submission for the entire OC Blvd corridor. The will be advanced through the IQF and ODOT reviews to achieve a “Geometric Lock”. The Geometrics Package will improve the quality by serving as a uniform geometric reference throughout

design development of individual Buildable Unit packages.

Design and plan production will be performed in accordance with rigorous quality procedures. The draft Design Quality Management Plan (DQMP) for the design effort is included in Appendix F.12, and outlines these procedures. Upon notice to proceed, Larry Ciborek, will complete and submit the DQMP for design services. Larry has 35 years of experience in the bridge design field and 14 years with Baker. As Ohio QA/QC manager, Larry helped develop Baker’s corporate and office level quality assurance and quality control (QA/QC) policies. He has fulfilled quality control and quality assurance roles on multi-disciplined transportation projects, including large design-build projects.

The DQMP will lay out the framework for design development, including management and design staff roles and responsibilities, communication protocols, deliverables, schedule, and quality procedures. The quality procedures are thoroughly outlined in the DQMP, which includes Baker’s standard protocols for ensuring quality assurance and quality control on design work and preparation of construction documents.

Beyond the standard yellow, red, green coloring of check, back-check, and review protocols for design calculations, plans, and specifications, the DQMP will specify all reviews and the personnel responsible for conducting these reviews for each deliverable. Interdisciplinary, contract consistency, presentation, and Kokosing constructability reviews will be performed for design deliverable packages. The DQMP will be a living document with checklists that will be completed and initialed with each design deliverable package. Baker will incorporate internal design and plan production checklists during design development. ODOT design checklists will be completed and included with deliverables as appropriate. All of these checklists will become part of the quality control (QC) documentation for the project.

Larry Shannon, PE, Baker’s Design QC Manager for the project, will verify that design or plan submittals are complete and documented in accordance with the DQMP. Larry is a senior roadway engineer with more than 40 years of experience. He will apply his recent experience as design QC manager for the Portsmouth Bypass DB Project to manage conformance with the DQMP. He will report to Larry Ciborek, Design Project Manager, but will also communicate directly with IQF Project Manager Dave Rinehart on a regular basis and after each submittal.

Larry Shannon, Larry Ciborek, and Dave Rinehart will communicate through the Quality Task Force Meetings and as needed to track design and plan submittal status. Dave Rinehart will coordinate over-the-shoulder reviews and schedule his technical review staff for formal submittals. Having served as Design Independent Quality Manager for the I-670 Crossroads Project with Kokosing, Dave has demonstrated his proficiency performing this IQF role.

Upon award, Dave Rinehart and the Design IQF team will identify the requirements in the contract documents, beginning with the Project Scope and its attachments, and progressing through the Governing Regulations enumerated in Section 1.10 of the Project Scope. The extracted requirements will be used by the IQF team to verify the quality of the design. The requirements will also be shared with the design team. Design verifications will be performed informally through over-the-shoulder reviews, and formally with the interim, final, and RFC design submissions.

Over-the-shoulder reviews will be used to assess whether the requirements and design criteria are being followed for in-progress work, without the need to wait for a formal review. Dave Rinehart and Larry Ciborek will schedule them as spot-checks on the design. The design team may also request an over-the-shoulder review to review specific elements of the design.



Kokosing Construction Company		
Design IQF PM Dave Rinehart	↑	Verifies Deliverable Meets Requirements
DB Design PM Larry Ciborek	↑	Certifies Deliverable
DB Design QC Lead Larry Shannon	↑	Verifies DQMP Compliance
Design Discipline Leads	↑	Coordinates Checks and Reviews
Production Teams	↑	Produce design and plan deliverables

Figure A-2 – Design Quality Process

When a formal design submission is received, applicable requirements for that submission will be drawn from the IQF requirements database. Each element of the design submission will be verified by comparing it to the applicable standard for conformance. Upon completing the verification for a formal design submission, a conformance report will be provided to Larry Ciborek and Larry Shannon and to ODOT noting the conformances and requirement deficiencies. Requirement deficiencies will be logged and tracked to confirm they are corrected.

If the IQF identifies issues with the QC of individual submittals, Dave Rinehart will follow up with Larry Shannon and Larry Ciborek to review the observed deficiencies. They will review the severity of the deficiencies, the QC documentation, and identify any corrective action or adjustments necessary to the DQMP.

These conformance reports will give the design team, ODOT, and stakeholders feedback on the performance of the design team. A positive report helps to build

confidence that quality – meeting requirements – is being achieved in the design of the project.

Construction Quality

We understand that construction quality is the responsibility of the DBT. Kokosing and IX are experienced with ODOT’s requirements for QC testing by the contractor, including CMS 455 concrete testing and inspection and CMS 611 performance inspections of conduit and drainage structures. We are also very familiar with Supplemental Specifications 840 and 878 and will follow all applicable testing and inspection requirements within them. These activities will be performed by qualified third-party subcontractors or by trained in-house construction personnel as specified in the contract

In the last five years, Kokosing’s projects have received 75 awards, including 46 individual quality awards.

Nathan Reber will serve as the Construction QC Manager. He is a Lead Project Engineer with 17 years of experience at Kokosing. Nathan will be responsible for coordinating all QC testing per the Project specifications, and will manage all QC document control. His experience includes managing contractor QC documentation, independent inspection and testing firms on the I-670/71 Columbus Crossroads DB project. Nathan is currently performing similar duties on Kokosing’s \$225 million Lucas I-75 reconstruction program. He has local experience on a \$45 million Cleveland Hopkins Runway Extension. Nathan will be 100% dedicated to the OC3 Project and will be co-located on a full-time basis for the duration of the construction activities.

During construction, the following integrated approaches will be used to monitor quality control:

- Construction QC Manager handles daily monitoring and implementation of the Construction Quality Management Plan. **This plan empowers all employees with stop-work authority if they encounter a quality issue** and initiates a thorough review by supervisory staff prior to work proceeding on the suspect work element.
- Activity planning meetings will outline which



Figure A-3 – Process Flowchart

specifications will be followed

- All specifications and conformed plans will be maintained on tablet computers for field personnel
- Use of Quality Checklists and Hold Points to ensure that work is properly constructed before proceeding
- Quality-specific training for supervision, craftspeople, and subcontractors



Figure A-4 – Kokosing utilized Quality Checklists and Hold Points for all major operations on the I-670/71 Columbus Crossroads Project

We understand that there are multiple reviewing and inspection agencies associated with this project. The City of Cleveland, NEORS, GCRTA, NS, CPP, and other entities each have their own standards and construction specifications. Both Kokosing and IX have experience working with the various agency stakeholders on this project. We will ensure that each project element is constructed to the standards of the ultimate reviewing agency. The process flowchart outlined in Figure A-3 demonstrates the steps used to ensure quality construction of each Project element:

1. Identify the specifications, inspection requirements, and reviewing/inspection agencies for the upcoming work element.

2. Plan the work to incorporate necessary specifications, testing and Hold Points. Pre-planning meetings will incorporate inspection and field testing personnel and third parties.
3. Execute the work while Observing/Tracking Quality through the use of Quality Checklists and Hold Points. Implement Course Correction if any potential quality issues are identified.
4. Share the Results with all parties through the use of effective QC documentation and dissemination.
5. Celebrate successes among all those involved, encouraging continued use of best practices.

As required by Addendum 21, Kokosing will utilize the SWPPPTrack web platform which aids the inspection and monitoring of proper BMP installation and maintenance. Kokosing has experience on multiple projects with this newer tool being implemented by ODOT, including our Summit I-271 widening project.

A.1.iv – Organizational Chart

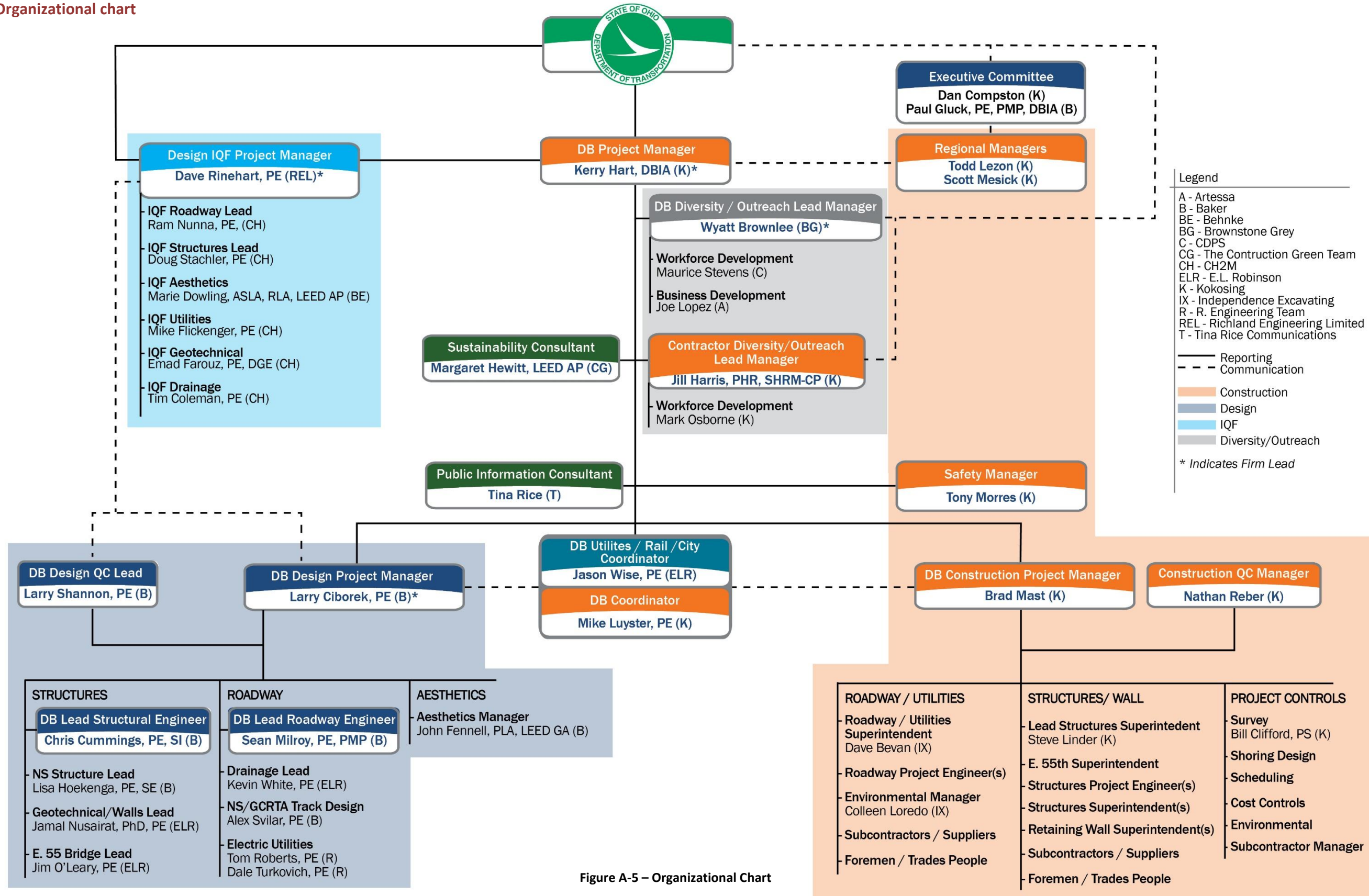
An organizational chart for the Kokosing DBT is provided in Figure A-5. Kokosing Construction Company, Inc. is the Lead Contractor and sole contracting entity with the Department. Subcontractors to Kokosing include:

- Michael Baker International - Lead Designer
- Richland Engineering Limited - IQF
- Brownstone Grey, LLC - DIOC

All other firms represented on the organizational chart are subcontractors to Kokosing or lower tier subcontractors/subconsultants to the same.



A.1.iv – Organizational chart



Legend

- A - Artessa
- B - Baker
- BE - Behnke
- BG - Brownstone Grey
- C - CDPS
- CG - The Construction Green Team
- CH - CH2M
- ELR - E.L. Robinson
- K - Kokosing
- IX - Independence Excavating
- R - R. Engineering Team
- REL - Richland Engineering Limited
- T - Tina Rice Communications

— Reporting
 - - - Communication

Construction (Orange)
 Design (Blue)
 IQF (Light Blue)
 Diversity/Outreach (Grey)

* Indicates Firm Lead

Figure A-5 – Organizational Chart



A.2 – Methodology to ensure that design and IQF staffing will be adequate to meet the proposed schedule

The Kokosing DBT recognizes that design quality and independent review for compliance is an important first step towards a successful project. The schedule for this project will dictate the buildable units that are prioritized for early completion. Baker and REL are both experienced firms in the roles they will fill for this project. Larry Ciborek and Dave Rinehart have both been involved in various capacities on the Cleveland Innerbelt projects, which had critical early deliverables requiring timely reviews. REL, under Dave Rinehart’s leadership, worked with CH2M in an independent quality role on the Columbus Crossroads Project. REL’s and CH2M’s successful experience on Columbus Crossroads will help shape the approach to this project.

Baker prepared the 1,600 page Lakefront West plan set for ODOT D12 in a six-month period with the Cleveland office supported by local, regional, and national assets.

On the I-670 Crossroads DB Project, a total of 135 plan packages (over 3,200 plan sheets) were verified by REL in a total of more than 800 submissions (interim, final, and release-for-construction) for conformance to the scope, specifications, and standards.

Design Staff Allocation: As shown in Figure A-6, we estimate that design staff will peak between May 2018 and December 2018, with a slight lag in IQF staff needs. Our approach to ensuring appropriate design staff allocation includes:

- Establishing the content and magnitude of each Buildable Unit (BU)
- Developing an integrated design and construction schedule
- Identifying the required capabilities and number of design staff for each BU

Larry has started this planning in conjunction with Sean and Chris for design; Jason for utility, railroad, and third-party; and Kerry for construction considerations.

At present, 29 BUs have been identified. We have identified internal roadway and structural design teams for each of these design packages.

In addition to Baker’s more than 30 Cleveland staff, including 8 roadway and 11 structures professionals, Larry will have access to the larger resources of Baker’s 3,000 national design staff. We will augment our local staff with specialists from other Baker offices and from staff resources provided by our specialized NSLE subconsultants. We are committed to assigning the right people at the right time in order to deliver the right product.

Our regular design task force meetings will evaluate design schedule requirements to assess staffing needs. Staffing for required specialization or capacity will be adjusted accordingly.

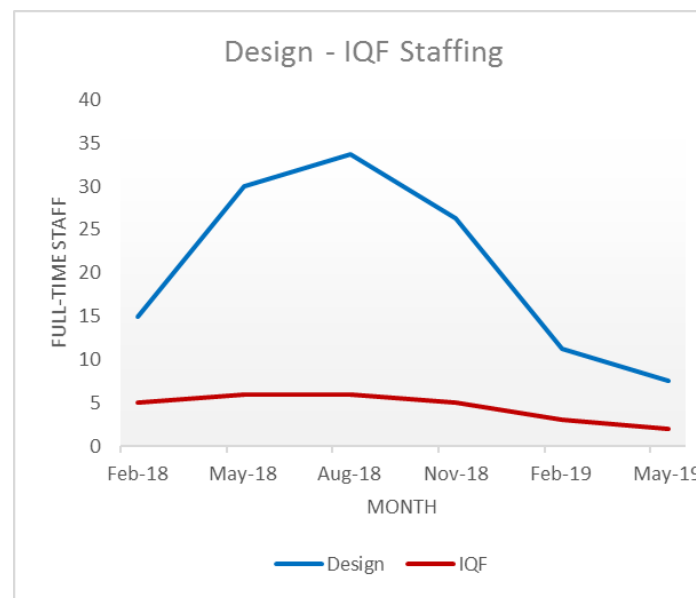


Figure A-6 – Anticipated Design & IQF Staffing Levels

IQF Staff Allocation: Each BU deliverable will be assessed by Dave Rinehart to determine the staff and level of effort necessary to complete an independent review. Dave will then ensure that REL and CH2M have the appropriate staff available for when the deliverables are submitted to the IQF.

Close Coordination: The co-location of the key personnel will allow Dave Rinehart and Larry Ciborek to closely coordinate and monitor the progress of the design packages and the reviews. Face-to-face

communication will ensure that the project is meeting the schedule and that adjustments are made when necessary. It will be critical to have the appropriate staff available for early BUs to ensure that deliverables for third-party reviews or relocations are available.

CH2M Support: In addition to REL’s staffing resources in Ohio, CH2M has been included as a key subconsultant for the IQF. CH2M is an international leader in engineering and has professionals in four Ohio offices, including a downtown Cleveland location. A core team of reviewers is assigned, with additional expertise available.

Staff Forecasting: Upcoming submittals will be discussed at weekly Design Task Force meetings to ensure that the IQF is aware and has appropriate staff available to complete the reviews.

A.3 – Coordination with third parties and stakeholders

Effective coordination with the multiple stakeholders is critical to the success of this project. As demonstrated in Figure A-7, we have a thorough understanding of the affected parties, including the City of Cleveland, GCRTA, NS, and multiple private and public utilities. DB Utilities/Rail/City Coordinator **Jason Wise, PE**, has been proactively coordinating with each major affected party throughout the pre-bid phase. Jason’s efforts will continue through the project, offering continuity from pre-bid through design and construction. **Jason will maintain a current Utility Impact Matrix and Issue Log throughout all phases of the project.** Our approach to coordinating with each affected party will follow the process outlined in Figure A-8.

Baker and E.L. Robinson’s Cleveland offices have personal contacts with many of the stakeholders, including GCRTA, NS, and local and regional utilities. This past experience will facilitate effective coordination with these parties. Baker is also familiar with the various requirements of each utility. For example, drainage standards are different depending on whether the facility will be maintained by ODOT, Cleveland Water Pollution Control (WPC), or NEORS. Baker works closely with WPC and NEORS facilities and utilizes available GIS mapping as a tool for sewer investigation and

coordination. The local knowledge and personal relationships that Jason Wise and Baker have will ensure timely and productive utility coordination.

Recognizing the importance of the underground utility and environmental remediation work to this project is one of the reasons that Kokosing enlisted IX as a dedicated roadway and utility subcontractor. One of IX’s core capabilities is the installation of various utility components, including drainage, water mains, sanitary, leachate piping, and underground power. Their management team and utility crews have years of experience specifically related to City of Cleveland construction standards and permitting requirements that pertain to WPC, Cleveland Water Department (CWD), NS, and NEORS. Additionally, Kokosing’s in-house professional engineers have submitted hundreds of shoring, demolition, and erection plans to rail and utility companies. We have established working relationships with these entities.

Our approach is proactive, effective third-party coordination, acting on behalf of ODOT. We understand that many of the third parties involved in the project must be sought out independently with targeted outreach on specific issues. We have started third-party coordination in the pre-bid phase, and will leverage our well-established relationships with utilities and railroads to engage individual agencies outside of task force and weekly coordination meetings. This approach will limit the need to focus on specific issues that may need to be resolved through discussions with multiple layers of project management (design, construction, ODOT, IQF, etc.). We’ll work to build goodwill with the agencies on behalf of the DBT and ODOT and indicate that when we call, there is something specific that needs the agency’s input. We will post minutes from utility meetings within two workdays on the project SharePoint site and will directly engage ODOT on correspondence when an issue needs to be escalated, such as consideration of an obstruction notice.

On the current ODOT D12 CCG6B project, Kokosing and Jason Wise proactively resolved two potential major utility issues during the design phase. These included avoidance of an AT&T duct bank and re-route of a 30” gas line off the proposed structure.



1 – E. 55 St. Utilities

E. 55th is a major utility corridor with CEI power, CPP power, 16" sludge line, 6", 8", and 30" water lines, and gas lines in the R/W. Lines that cannot be temporarily taken out of service will be maintained along the temporary East 55th Street runaround while the East 55th Street Bridge is constructed. The utilities will then be routed onto the bridge allowing the remaining roadway and retaining walls to be constructed.

3 – GCRTA East 55th Street Transit Station

We will maintain bus ingress and egress to the bus loop, as well as ADA-compliant pedestrian access from East 55th Street during and post-construction per the scope documents. Specific details will be coordinated and approved by the GCRTA

5 – Blue and Green Bridge and 72" Box Conduit

Impacted catenary poles will be shortened and feeder wires will be relocated underground in advance of construction.

Bridge piers have been placed to avoid impacts to the existing 72-inch box conduit along the west side of the GCRTA trench. Incorporating ATCs for stay-in-place forms and weathering steel minimizes impacts to GCRTA revenue operations during construction.

7 – E. 89th Bridge over Railroad Trench

We will work with the City of Cleveland Water Department to locate redundancy in the network so the existing 8" and 16" water lines can be temporarily cut and capped. If redundancy cannot be found, the lines will be maintained utilizing part-width bridge demolition.

2 – S-10 Regulator Relocation

New Regulator S-10A will be constructed prior to the East 55th Bridge foundations. Detailed coordination between all facilities in this area, including the bridge and walls, has begun and will be continued into construction.

4 – GCRTA Test Track/Kingsbury Utilities

Enacting ATC #32, we improve separation of OC Blvd and the GCRTA test track, and improve GCRTA facilities.

Underground utilities in the valley will be replaced where increased loading occurs due to placement of embankment and we will avoid impacts to the Kingsbury relief sewer. Lightweight Haydite fill will be utilized over the existing 108" combined sewer to ensure a net zero load change.

6 – NS and Utilities and Associated Utilities

The rail lines and associated utilities (NS Comms, Level 3, Windstream, TTT, Job 8, Verizon, QWEST, Water Line) will be maintained during construction. Our proposed construction approach for the temporary runaround and bridge construction using top-down construction requires only two track moves instead of the three that are identified in the RFP plans, saving time and money for ODOT and NS. We initiated coordination with NS and T-Cubed regarding consolidated utility coordination. Based on information provided in the scope documents and by T-Cubed, there are five separate communication utility companies within the NS rail corridor that will be consolidated, with T-Cubed leading the relocation design and efforts.

8 – Kenneth L. Johnson Recreation Center

To streamline coordination, we will coordinate with ODOT and provide the required temporary impact drawings a minimum of one year in advance of impacting the Rec Center. No permanent impacts will occur and access will be maintained at all times.

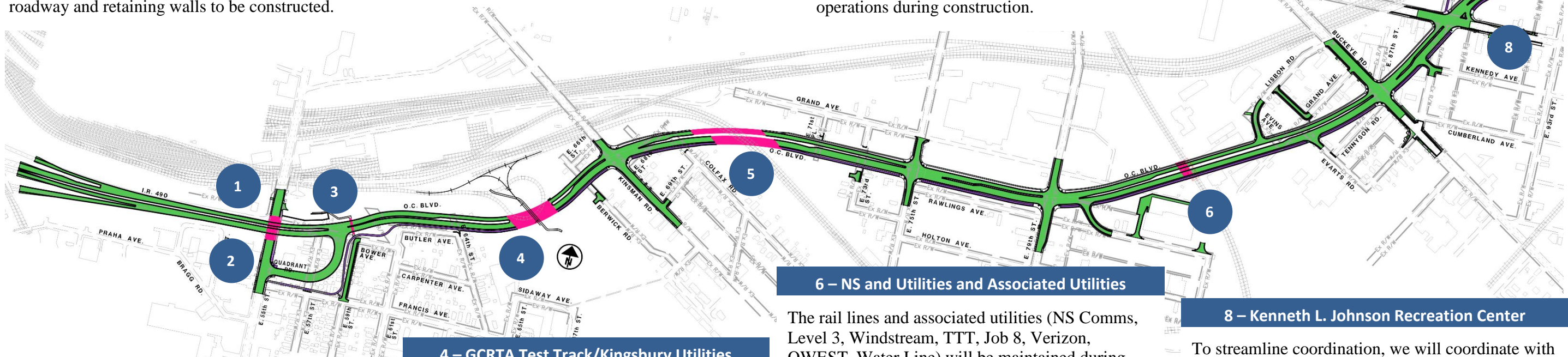


Figure A-7 – Project Impacts and Approach

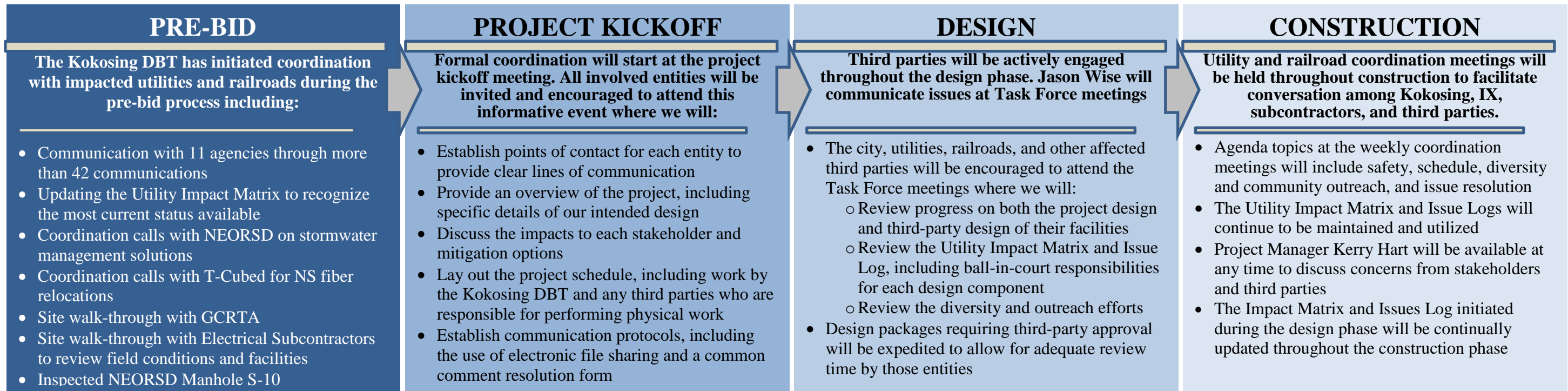


Figure A-8 – Third Party Coordination Progression

A.4 – Role and responsibilities of DB Project Manager and DB Utilities/Rail/City Coordinator

DB Project Manager Kerry Hart, DBIA

Kerry is currently employed by Kokosing as a Senior Area Manager. As the DB Project Manager, he will have ultimate responsibility for the DBT’s performance, ensuring that personnel and other resources are made available in a timely manner. He will be the primary contact for ODOT regarding all contractual matters. His approach to managing the project will include:

- Hands-on daily management of all project aspects
- Daily interaction with key personnel
- **Direct participation in the diversity and inclusion outreach efforts.** Kerry has managed Kokosing’s pre-bid outreach efforts, developing a relationship with our DIOC team of Wyatt Brownlee, Maurice Stevens, Joe Lopez, and Jill Harris. He will remain highly active in this aspect of the project.
- Promotion of an open-door policy facilitating communication between all parties
- Leadership of scheduling and resource meetings, with direct authority to adjust labor and material resources as necessary to meet the project schedule

Kerry has 22 years of experience managing ODOT projects, including the \$90 million Cuyahoga I-77 widening and \$225 million Lucas I-75 reconstruction program, as well as experience with complex underground utility and city street work. He has key DB experience as the Construction Manager on the \$200 million I-670/71 Columbus Crossroads project, and he is a certified design-build professional through the Design Build Institute of America. Kerry has experience working with other Kokosing DBT key personnel, including DB Construction Project Manager Brad Mast; DB Utilities/Rail/City Coordinator Jason Wise; and Design IQF Project Manager Dave Rinehart.

DB Utilities/Rail/City Coordinator Jason Wise, PE

Jason is a Project Manager and Roadway and Geotechnical Engineer with E.L. Robinson and is a Cleveland-area resident. He will be responsible for coordination with utilities, railroads, city or local representatives, and other third parties. He will have the authority to make commitments on behalf of the DBT. Jason’s approach on this project will include:

- **Direct coordination with GCRTA, NS Railroad, utility owners, and the City of Cleveland,**

including its public utility divisions. Jason has already been performing this coordination during the pre-bid phase, providing continuity from the bid through design and construction.

- Leading the weekly Utilities and Rail Task Force Meeting
- Maintaining the Utility Impacts Matrix and Issues Log and providing continual feedback to all entities on ball-in-court responsibilities

Jason has 13 years of experience managing and directing the design of new highways, new and rehabilitated structures, geotechnical design and stabilization, design-related construction services, construction administration, utility coordination, and third-party coordination. Jason is an established local presence, with knowledge and expertise working with various City of Cleveland departments, railroads and multi-agency coordination, and stakeholder involvement gained through working on many projects throughout the greater Cleveland area, notably the Cleveland Innerbelt Bridge projects (CCG1/CCG2).

His utility coordination experience includes working with NEORS D and CPP to avoid impacts related to the ramp and bridge reconstruction at Eddy Road and I-90. Most recently, Jason performed pre-bid, design and construction-phase utility coordination duties on ODOT’s CCG6B project, similar to OC3. This has included the removal of CEI and Dominion from the proposed structure through coordination; significant reduction of relocation required by AT&T and elimination of a 60” NEORS D combined sewer relocation by utilizing unique wall designs. Jason’s coordination responsibilities on CCG6B will be 95% complete and will transferred to Rick Rockich, PE, upon award of OC3 and Jason will be committed full-time to OC3. Jason has significant experience working with other Kokosing DBT key personnel, including DB Project Manager Kerry Hart and Kokosing Regional Managers Scott Mesick and Todd Lezon.

A.5/6 – CPM schedule

Per the RFP and prebid Questions and Answers, both the CMP schedule and narrative are included in Appendix 6.

B. Design





Our design team brings local leadership and knowledge combined with the expertise necessary to meet the goals and schedule of this project. Baker’s design leadership team of Larry Ciborek, Chris Cummings, and Sean Milroy has 14 years of experience working together delivering major urban reconstruction projects in the area. E.L. Robinson provides Kevin White’s and Jamal Nusairat’s expertise in highway drainage and geotechnical engineering, respectively, and Jason Wise as Utilities/Rail/City Coordinator. Our Design IQF Project Manager, Dave Rinehart of Richland Engineering, leads an experienced technical review team with assistance from CH2M to provide ODOT with design quality assurance.

Our design incorporates several significant ATCs that improve earthwork balances for the project and reduce initial and long-term costs associated with structures. Our team used its local understanding of the stakeholders to come up with a solution that meets the needs of the department and key project partners.

B.1 – Roles and responsibilities of design key personnel

DB Design Project Manager Larry Ciborek, PE

As the DB Design Project Manager, Larry will actively manage the overall design of the project, including all structural and roadway elements. Larry will be responsible for design staffing, subconsultant management, and meeting the required design schedule. He will also serve as the primary contact for Kokosing during design and construction and will work closely with Dave Rinehart to coordinate the review of design submissions. Larry, a Cuyahoga County resident, has significant urban design and construction experience in northeast Ohio. Larry has experience working as a Project Manager on complex bridge projects and recently has been a key member of Baker’s teams on some of the largest design-build projects in the country, including the \$3.1 billion Tappan Zee Bridge, \$2.3 billion I-4 Ultimate Project, Cleveland Innerbelt CCG1, and \$1.2 billion I-15 Core Project. He will be co-located during the project’s design phase.

Larry will actively manage all aspects of the design with weekly task force meetings for each specialty. Larry will work closely with Kokosing, ODOT, and the IQF to ensure that the deliverables for each buildable unit are progressing as planned in the CPM. Larry will also coordinate closely with Jason Wise to ensure that submittals to third parties for approval are being reviewed. The bulk of the design work will be done by staff from the Cleveland offices of Baker and ELR,

allowing for face-to-face meetings as necessary during the design process.

Larry, Chris, and Sean all work in the Cleveland office and have been collaborating on projects as Baker employees for more than 14 years. Their experience together brings a design management team that has the personal and professional relationships necessary to keep all the disciplines working together on a project of this size and scope. Larry will participate in all the Design Task Force Meetings and will lead the overall weekly design coordination meeting.

Baker commits to co-locate the Lead Roadway and Lead Structures Engineers for enhanced communication with the DB Design Project Manager and Third-Party Coordinator.

DB Lead Structural Engineer Chris Cummings, PE

Chris is employed by Baker in the Cleveland office as a Project Manager and Structures Department Head. As the Structures Design Lead, Chris will be responsible for the overall structural design elements of the project, including bridges and walls, and coordinating the geotechnical engineering done by ELR.

Chris has 18 years of experience working on ODOT projects, including complex structures, for a variety of clients, including ODOT, Cuyahoga County, City of Cleveland, Cleveland Metroparks, NS, GCRTA, and others. Chris has experience working with ELR and Kokosing in various capacities. He was involved in the FAI-22-23.88 Design-Build Bridge Replacement as part of the Kokosing DBT. Having worked for and with

GCRTA and NS, Chris has an understanding of their major concerns. *A Cuyahoga County resident, Chris is committed to co-locate in the project office during design.*

Chris will lead the structures and Geotech Task Force Meetings. He will be responsible for the scheduling of Baker bridge staff and will coordinate structural design elements with Larry and Sean and internal and external designers. Chris will supervise individual structures leads and coordinate cross-discipline reviews with roadway, drainage, aesthetics, utilities, railroad, and city departments. Chris will also work closely with Kokosing construction staff for constructibility evaluations.

DB Lead Roadway Engineer Sean Milroy, PE, PMP Sean is employed by Baker in the Cleveland office as a Project Manager and Lead Highway and Maintenance of Traffic Designer. As the Lead Roadway Engineer, he will manage the design of the roadway elements of the project, including stormwater management, and will manage the roadway subconsultants. He has 20 years of experience, including work for ODOT and the City of Cleveland. Sean served as the Design Project Manager on CUY-87 Buckeye/Woodhill/Shaker Project, adjacent to the project area, which involved many of the same third-party stakeholders as this project. He also managed the drainage and maintenance of traffic design for the

Value Added Staff	Duties	Key Qualifications
NS Structure Lead <i>Lisa Hoekenga, PE, SE (Baker)</i>	<ul style="list-style-type: none"> NS Design Coordination NS Bridge Design 	<ul style="list-style-type: none"> 11 years of experience NS Rail bridge design and Class 1 railroad experience Served as owner’s rep for NS performing bridge plan reviews
NS/GCRTA Track Design <i>Alex Svilar, PE (Baker)</i>	<ul style="list-style-type: none"> NS shoofly and permanent track GCRTA loop track reconfiguration 	<ul style="list-style-type: none"> 14 years of roadway, rail and structures experience Track design experience for GCRTA and NS projects
Drainage Lead <i>Kevin White, PE (ELR)</i>	<ul style="list-style-type: none"> Oversee all drainage related work elements 	<ul style="list-style-type: none"> 24 years of experience Lead drainage designer for Columbus Crossroads DB project Drainage design on \$209M WVDOH Corridor H DB
Geotechnical Lead <i>Jamal Nusairat, PhD, PE (ELR)</i>	<ul style="list-style-type: none"> Manage all Geotechnical Engineering for structures and roadway 	<ul style="list-style-type: none"> 25 years of experience Lead geotechnical engineer for Columbus Crossroads DB project CCG1 & CCG2 West Slope lead design engineer Geotech engineer for the WVDOH Corridor H DB
Aesthetics Manager <i>John C. Fennell, PLA, LEED GA (Baker)</i>	<ul style="list-style-type: none"> Corridor Aesthetics Context Sensitive Design 	<ul style="list-style-type: none"> 22 years of experience Expertise in context sensitive solutions roadways and public spaces Managed major projects and master plans for aesthetic enhancements of public and private facilities
DB Design QC Manager <i>Larry Shannon, PE (Baker)</i>	<ul style="list-style-type: none"> Internal Design QC oversight 	<ul style="list-style-type: none"> More than 40 years of experience Design QC Manager for Portsmouth Bypass DB
E. 55th Bridge Lead <i>James O’Leary, PE (ELR)</i>	<ul style="list-style-type: none"> E. 55th Street Bridge Design 	<ul style="list-style-type: none"> More than 25 years of bridge design experience CCG1 Bridge plans reviewer

Table B-1 – Design Value Added Personnel



CUY-271-0.00 Project, currently being constructed by Kokosing. *Sean is a resident of Cuyahoga County and is committed to co-locate in the project office during design.*

Sean will manage all elements of the roadway design and will lead the Roadway/Drainage and Traffic Control/MOT Task Force meetings. Sean will work closely with Chris and Larry to provide the information necessary for the design of proposed structures. Sean will be responsible for coordinating with Kevin White for the proposed drainage design and will ensure that the appropriate level of internal and external staff is available to meet the project schedule.

B.2 – Roles, responsibilities, and experience of IQF personnel to ensure a high-quality design

Design IQF Project Manager Dave Rinehart, PE

Dave is a principal and the Bridge Department Manager for REL. He will serve as the Design IQF Project Manager. Dave will manage the Design IQF effort to validate and document the design quality to ensure that the design meets the requirements of the scope, contract documents, and applicable standards.

Dave will lead a skilled team of subject matter experts, listed in Table B-2, to verify that the project design

meets the scope and all applicable standards and requirements.

Dave will lead the IQF verification team members to extract the project requirements from the scope of services and other project-specific contract documents. This process serves two primary purposes: it forces a close reading and recognition of the unique requirements of this project and provides checklists that will be used to efficiently document that the project requirements are met.

Dave has a strong working relationship with ODOT, his CH2M support staff, and Kokosing from his recent role serving as the IDQM on the I-670/71 Columbus Crossroads DB Project, where Dave maintained an organized workflow that reviewed over 3,200 pages of plans sheets.

IQF Roadway Lead Ram Nunna, PE

Ram Nunna, PE, of IQF subconsultant CH2M, will serve as the IQF Roadway Lead. Ram will coordinate the verification of the various non-structural BUs (mainline roadway, side streets, drainage, public utilities, traffic control, traffic signals, lighting, etc.). He worked with Dave Rinehart on the Columbus Crossroads project, and is familiar with the

requirements-based approach to quality that the IQF will employ on this project.

In addition to his experience as a roadway design lead on the \$200M I-670/71 project, Ram also served as the Quality Oversight Design Review Manager on the \$429M Portsmouth Bypass Project, as the Quality Lead on the \$73M I-270/US 33 Interchange Improvements project in Dublin, and as the Project Quality Manager on the \$110M GRE-35 project.

IQF Structural Lead Doug Stachler, PE

Doug Stachler, PE, of IQF subconsultant CH2M, will serve as the IQF Structural Lead. Doug will oversee the verification of the various structural BUs (bridges and retaining walls). He too worked with Dave Rinehart on the Columbus Crossroads project, and is also familiar with the requirements-based approach to quality that the IQF will employ on this project.

In addition to his experience as Deputy Structures Manager on the \$200M I-670/71 project, Doug also served as the Structural Design Quality Audit Lead on the \$429M Portsmouth Bypass Project, as Structures Task Lead / Bridge Project Engineer on the \$73M I-270/US 33 Interchange Improvements project in Dublin, and as Project Manager & Lead Bridge Engineer as a subconsultant on Columbus Crossroads Project 6A.

B.3 – Design narrative

B.3.i – Surface water collection system

Baker engineers work daily on ODOT-funded projects within the city. We clearly understand the division of stormwater management responsibility and requirements among ODOT, the City of Cleveland Water Pollution Control (WPC), and the Northeast Ohio Regional Sewer District (NEORS). We have reviewed the conceptual drainage information provided in the scope and appendices and have optimized the stormwater design of the project within the scope and regulatory requirements to generally follow proposed terrain patterns to minimize deep pipes and manholes.

With the proximity of multiple branches of the Kingsbury Run Combined Sewer Overflow (CSO) to the project, our stormwater management approach removes large drainage areas from the combined

sewer network. The proposed runoff from these areas will be treated to ODOT’s L&D Volume 2 requirements for water quantity and quality with stormwater best management practices (BMP) and outlet into overflow sewers downstream of regulators on the Kingsbury Run system.

The balance of the project area will outlet to existing combined sewers with no increase in flow to the combined sewer system. While the overall project increases impervious area, our approach results in no increase in flow to the combined sewer system, meeting NEORS’s Title IV requirements included in Appendix DR-04.

The project drainage area is composed of two CSO sewersheds. In the preconstruction condition, the majority of the project west of the NS alignment drains to combined sewers within the CSO 40 (southerly) sewershed, and the majority of the eastern portion of the project drains to the easterly sewershed.

East of NS | The combined sewer areas east of NS (Outfall #6 and #7, see Figure B.1 for outfall locations) that have increased flow to the combined sewer system are offset by the reduction in flow and acreage to the combined sewer provided by directing the drainage system between NS and Buckeye to follow grade to a proposed extended detention pond southeast of the proposed NS grade separation (Outfall #5). This flow is treated for water quality and quantity prior to discharging through the proposed outfall north along the NS alignment.

West of NS | Three storm-only outfalls are proposed west of the NS grade separation:

- Outfall #2 to the Kingsbury Run Sewer C-Branch, a 108" by 108" brick culvert in the Kingsbury Valley.
- Outfall #3 to the Kingsbury Run Sewer D-Branch, a 72" by 72" concrete box culvert under the GCRTA Blue and Green Lines. Runoff to this outfall is treated with an extended detention pond prior to discharge to the outfall sewer.
- Outfall #4 to the Kingsbury Run Sewer A-Branch, a 48" brick sewer north of the NS Nickel Plate Line. Runoff to this outfall is treated with a vegetated swale prior to discharge to the outfall sewer.

Value Added Staff	Duties	Key Qualifications
IQF Drainage <i>Tim Coleman, PE (CH2M)</i>	<ul style="list-style-type: none"> • Verification of drainage elements 	<ul style="list-style-type: none"> • Involved with the Green Stormwater Infrastructure (GI) Program for NEORS • Experience includes GI project concept development, writing portions of NEORS’s GI plan, and miscellaneous hydrologic and hydraulic (H&H) modeling-related support
IQF Aesthetics <i>Marie Dowling, ASLA, RLA, LEED AP (Behnke)</i>	<ul style="list-style-type: none"> • Verification of corridor aesthetics 	<ul style="list-style-type: none"> • Landscape architect and principal for Behnke, a Cleveland landscape architecture firm
IQF Utilities <i>Mike Flickenger, PE (CH2M)</i>	<ul style="list-style-type: none"> • Verification of utility work 	<ul style="list-style-type: none"> • Served as the Utilities Coordinator for several large urban projects, including Columbus Crossroads, FRA-270-17.28 (I-270/US 33 Interchange), and SUM-S.R. 91/U.S. 224/Canton Road in Akron
IQF Geotechnical <i>Emad Farouz, PE, DGE (CH2M)</i>	<ul style="list-style-type: none"> • Verification of geotechnical elements 	<ul style="list-style-type: none"> • Designed the requirements for the 4,400' microtunnel constructed with the Columbus Crossroads project • An expert on geotechnical risk assessment and management

Table B-2 – IQF Value Added Personnel

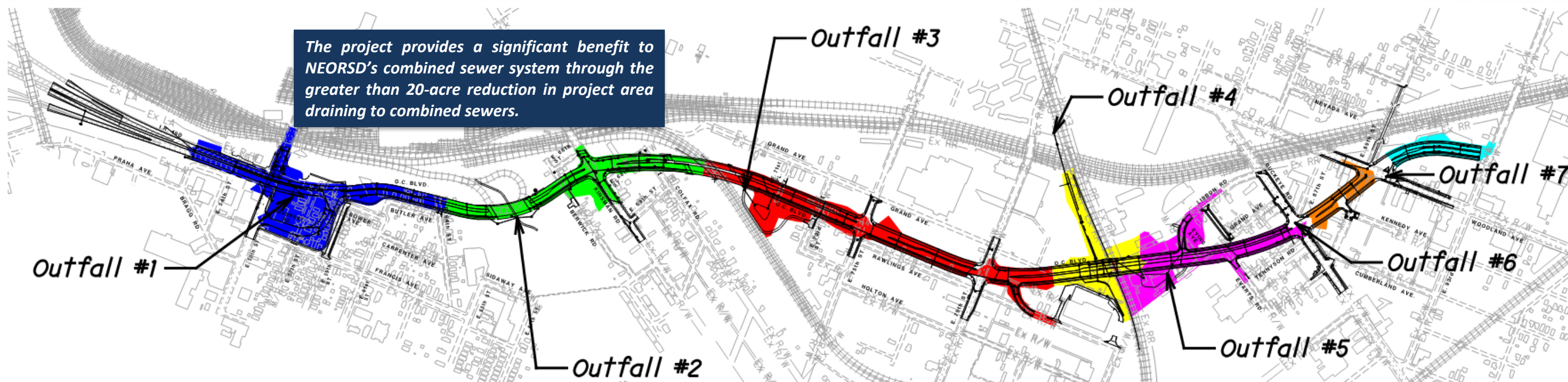


Figure B-1 – OC3 Stormwater Management Map Showing Drainage Areas and Outfall Locations

Please see item B.3.iv for a discussion of the design of Outfall #1.

During the development of the preliminary design, our team contacted NEORS D to understand both the general stormwater management interests in the OC3 corridor, and specific design opportunities. Based upon these conversations and detailed review of the project scope and site conditions, our stormwater management approach modifies the concept plans for drainage in multiple locations. One opportunity was realized between NS and Buckeye Road. Our approach eliminates the need for deep sewers bucking grade eastward to Buckeye. Our design instead conveys stormwater west from Buckeye along the proposed grade of the OC Blvd toward the NS grade separation, keeping storm sewers shallow, and discharges of the water to the storm-only system via the new pipe jacked under NS after being treated by a proposed extended detention pond.

Stormwater management during construction is also a significant concern on this project, as the East 55th Street Bridge and NS bridge topography both create new local low points that will need to be drained during construction. Our drainage team will design the final drainage system in coordination with

construction representatives to appropriately determine ways in which the system can accommodate temporary drainage prior to full system functionality.

For example, our drainage design has identified a temporary connection from the existing No. 3 sewer west of East 55th to the deep 60" combined sewer near East 55th that allows for improved constructibility of OC Blvd and the East 55th Street Bridge while maintaining sewer flows without installing the final deep connection between the No. 3 sewer and the 60" (25' below existing grade but only a few feet below proposed grade) prior to excavating to the proposed grade of OC Blvd.

We fully understand that additional coordination will be required with ODOT, WPC, and NEORS D to achieve the final stormwater management solution. This may include modeling to document that system performance satisfies scope and NEORS D requirements and supports approval by NEORS D of stormwater outfall locations. We will use our experience to navigate the process of providing stormwater solutions that are compatible with the federal mandates affecting NEORS D's operations.

We understand the sensitivity of extended detention ponds in the right-of-way. These ponds are designed to drain in 48 hours, which avoids standing water. Our design also includes fencing around ponds for pedestrian safety. For both ponds and stormwater ditches, we will keep any rock channel protection that may be needed for erosion control outside of the clear zone or provide roadside barrier protection.

On the Lakefront West and other ODOT projects in the city, we designed drainage systems that provided a net decrease in peak flows to CSOs, a paramount concern of NEORS D and a federal mandate affecting this project. Our design addresses NEORS D's requirements for no increase in runoff volume to the combined sewer system.

Baker has performed stormwater modeling of NEORS D's systems for design of an 84-inch interceptor sewer relocation on the West 73rd Street NS underpass project and for conceptual design work associated with CCG6B.

Final stormwater coordination will be streamlined, leveraging our strong professional relationships with NEORS D and WPC staff. Through recent work on

Cleveland Innerbelt CCG3, CCG6B, and the Towpath Trail projects, ELR's Kevin White and Baker's drainage designers coordinate frequently with Mary Maciejowski at NEORS D and Elie Ramy and Alan Schiely at WPC to ensure that project development is performed in active communication with the maintaining agencies. This approach minimizes rework and leads to streamlined approvals of final plans.

Our approach includes prompt and thorough documentation of NEORS D, WPC, and other third-party correspondence to keep ODOT abreast of design decisions and agency feedback. We commit to publishing third-party documentation within two days of any meeting or discussions with utilities or other third parties. ODOT will be invited to all third-party discussions and engaged in any decision points that may affect the project scope. Kokosing values transparency; Baker's approach to collaborating with ODOT and third parties reflects that priority.



B.3.ii – Subsurface Utility Management

Management of utilities will be a major task on this project. Kokosing, IX, Baker, and ELR all have long histories working on projects in the region that impact the same utilities that are encountered on this project. This history and existing relationships with utilities have allowed the firms to develop an understanding of the affected utilities and the typical avenues for coordination, identification, and mitigation. Jason Wise will be leading the effort to identify utilities that are in conflict with the proposed design and the relocations or design avoidances that will be necessary. **Our team has already taken a proactive approach to subsurface utilities and completed a manhole inspection of the existing 60’ deep drop structure that will be affected by the project. This early coordination will help avoid surprises post-award.**

During pre-bid and throughout design and construction, Jason, with support from roadway and drainage designers, has been and will be continuously updating the Utility Impact Matrix. The DBT has been building off the UT-01 Utility Matrix that was developed by HNTB for the corridor. As designers review the proposed alignments and drainage, they identify utility conflicts. These conflicts are then evaluated to determine whether they can be mitigated through adjustments in the design or if additional information will be necessary to determine accurate depths or sizes. The designers review the available record information provided as UT appendices or provided by the utilities during Jason Wise’s pre-bid coordination to determine whether depth and size information is available. Additionally, the Level A test holes that have already been excavated by So-Deep provided as UT-03 are reviewed to see if test holes were already bored at or near the point of conflict. If there is no available record or test-hole data, the conflicts are flagged as requiring additional follow-up.

The potential utility conflicts are then evaluated to determine the level of information that will be necessary prior to construction. Based on the ability to make field adjustments of underground elements (drainage conduits, lighting or CPP ducts, water lines, etc.) the following will be performed:

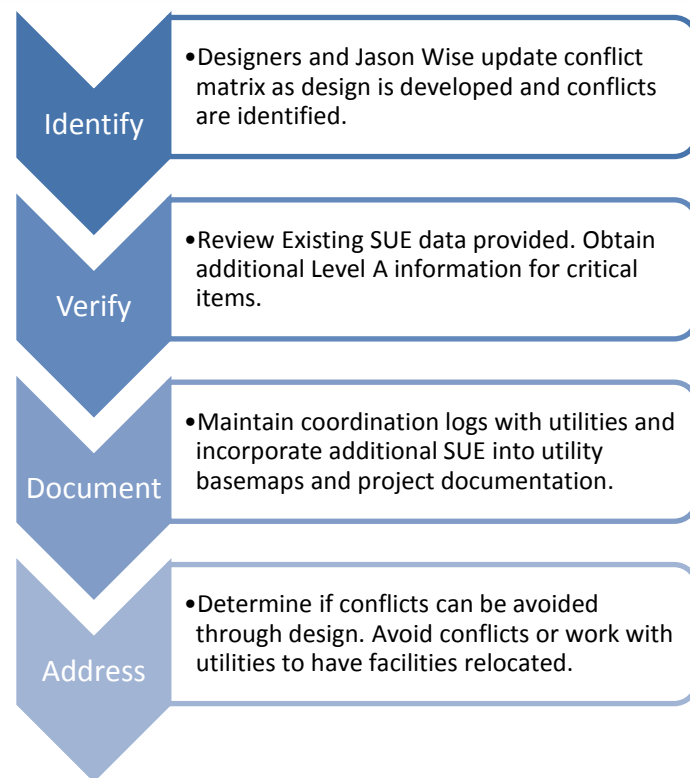


Figure B-2 – Process for Utility Identification and Verification

- Vacuum excavation (test holes) by a subsurface utility engineering (SUE) subcontractor and survey by Kokosing survey crews, if information is needed to finalize design
- Utilities flagged for careful excavation and exposure by IX or Kokosing crews during drainage or utility installation, if field adjustments are possible after final design

If conflicts cannot be avoided through design changes, Jason will coordinate with utilities to develop relocation plans. Our DBT has experience working directly with affected utilities to develop relocation design and perform relocation work as needed. Our DBT understands that work related to non-compensable private utilities is not an ODOT expense and that those efforts must be tracked separately. Self-performing utility relocations also helps mitigate potential delays waiting for utility crews or contractors to perform the work.

In addition to the design effort, Kokosing and IX are both experienced contractors in Cleveland and understand the challenges of working around historic infrastructure, such as clay telecommunication ducts and clay drainage conduits. All contractors on site will also be familiar with the OUPS requirements for notification. Our DBT understands the limitations of OUPS and that not all utilities in the city participate in the program. Therefore, as necessary, third-party locators will be retained or internal equipment will be deployed to trace the subsurface utilities.

Kokosing employs the use of our own active utility locate methods using RD8100 Radio-detection devices for supplemental verification. Additionally, our corporate policy extends the impact zone of OUPS markings from 18” to 24” on either side of the locate markings.

B.3.iii – Norfolk Southern grade separation

Baker has experience developing track phasing for ODOT grade separation projects, including the CUY-Lakefront West 73rd Street under NS in Cleveland, Ohio. Baker’s Cleveland staff also perform work directly for NS, including the recent 600-acre Bellevue Classification Yard in Bellevue, Ohio. These improvements doubled the size of the classification yard, with new grade separation for a shop access road and pedestrian tunnel placed beneath mainline lead tracks under temporary runaround and short-duration closure. We will use these experiences to address the following:

a. Track relocation, phasing, tie-ins

Tie-in points are limited by constraints with rail-to-rail grade separations. Track work for the proposed NS Bridge, including maintenance-of-way alignments, must tie in seamlessly with track on the NS Bridge over the GCRTA corridor to the north; and under the GCRTA Bridge to the south. Our plan addresses the base requirements of the 45-mph design speed, but also allows for the opportunity to improve constructability by limiting track relocation to one temporary and one permanent relocation.

b. Multi-phase bridge construction

Our proposed bridge design incorporates a top-down construction approach with NS on a 45-mph temporary

runaround alignment, using a proven approach that was implemented on Baker’s CUY-73rd Lakefront West Project. The top-down bridge construction addresses NS’s prohibition of tied-back sheeting designs and minimizes risks with large shoring adjacent to active tracks, as shown in Figure B-4.

Pre-Phase 1 NS Bridge Construction:

1. Construct embankment for NS temporary runaround on the east side of existing NS tracks.
2. Coordinate with T-Cubed and other utilities to relocate facilities
3. Coordinate with NS for its construction of temporary runaround tracks

Phase 1 NS Bridge Construction:

4. Install sheeting to protect NS tracks for excavation to bottom of beam seat
5. Excavate to bottom of proposed abutments and pile caps
6. Install drilled shaft foundations and construct pier and abutment caps
7. Erect beams and form and pour deck
8. Install waterproofing and construct parapet
9. Concurrent with bridge construction, construct NS approach embankment up to sub-ballast
10. Coordinate with NS to construct mainline tracks on final alignment

Excavation is limited to only that needed to construct drilled shafts with pile caps for the abutments and pier, set girders, and construct the concrete deck. The majority of the bridge is constructed in Phase 1, which allows final embankment construction and NS track construction across the bridge to occur in the final mainline track configuration. Once NS completes the switchover, the remaining bridge construction is completed using the same top-down approach to limit shoring. After NS is relocated onto the new bridge, we will complete the excavation for OC Blvd beneath the structure.



Phase 2 NS Bridge Construction:

11. Excavate behind sheeting installed in Phase 1 to bottom of proposed abutments and pile caps.
12. Install drilled shaft foundations and construct remaining pier and abutment cap extensions
13. Erect beams and form & pour deck extension.
14. Complete waterproofing and parapet construction

A cast-in-place facing will be constructed in front of the drilled shaft foundations to achieve the finished appearance.

Our approach includes two NS track relocations instead of the three identified in the RFP documents, which will reduce scheduling issues with NS and reduce force account costs to ODOT.

c. Utility Coordination and Relocation

Jason Wise, Utilities/Rail/City Coordinator, spoke with T-Cubed on multiple occasions about the necessary fiber relocation. We understand that T-Cubed is NS’s dedicated utility manager that coordinates leasing of its corridors for fiber communications facilities. Two approaches were discussed with T-Cubed: a single conduit jack-and-bored under future OC Blvd in advance of the excavation work; and construction of conduit across the new bridge in the first phase of bridge construction. The jack-and-bored conduit was initially identified as attractive, but risks with the shallow rock interfering with construction led T-Cubed to consider the



Figure B-3 – Excavation of W. 73rd St. under NS – Baker designed bridge using top-down construction approach

relocation in conduit across the superstructure as a preferred solution. The proposed bridge construction methods and phasing will accommodate either relocation method, and the Kokosing DBT will continue coordination with NS and T-Cubed to incorporate the facility relocation into the project.

d. Drainage

Our proposed drainage design improves on the RFP design by reconfiguring the storm-only system to follow the new drainage patterns after construction of the OC Blvd trench under NS. Instead of bucking grade with deep sewers to take drainage east towards Buckeye Road, the stormwater is conveyed in shallow storm mains west from Buckeye to a low-maintenance detention pond on the southeast corner of the OC Blvd/NS grade separation. After detention, the water is piped north along the west side of NS, with jack-and-bored pipe extension under NS with a connection to a storm-only outfall that is identified in the concept plans. We have located the pipe parallel to NS outside of the zone of railroad influence to improve constructability of the facility.

e. Other potential risks

Other potential risks from a design standpoint are related to the railroad influence lines on any temporary shoring that is required to work adjacent to the active track. Lisa Hoekenga, PE, SE, and Baker’s design team have extensive experience working for and with NS. Our experience has also allowed our team to develop relationships with the NS engineering staff that will be reviewing the proposed systems. These relationships help facilitate more efficient railroad design reviews that will be coordinated by Lisa Hoekenga and Jason Wise.

Another risk we understand is the required beam spacing and the constructability issues associated with the tight spacing. Baker understands the AREMA requirements that dictate the tight beam spacing and have communicated these to Kokosing to ensure that preconstruction planning takes place for the difficult access between bays.

Our team’s experience in the design and construction of railroad structures will allow us to anticipate and mitigate the unique risks that are associated with this element of the project.

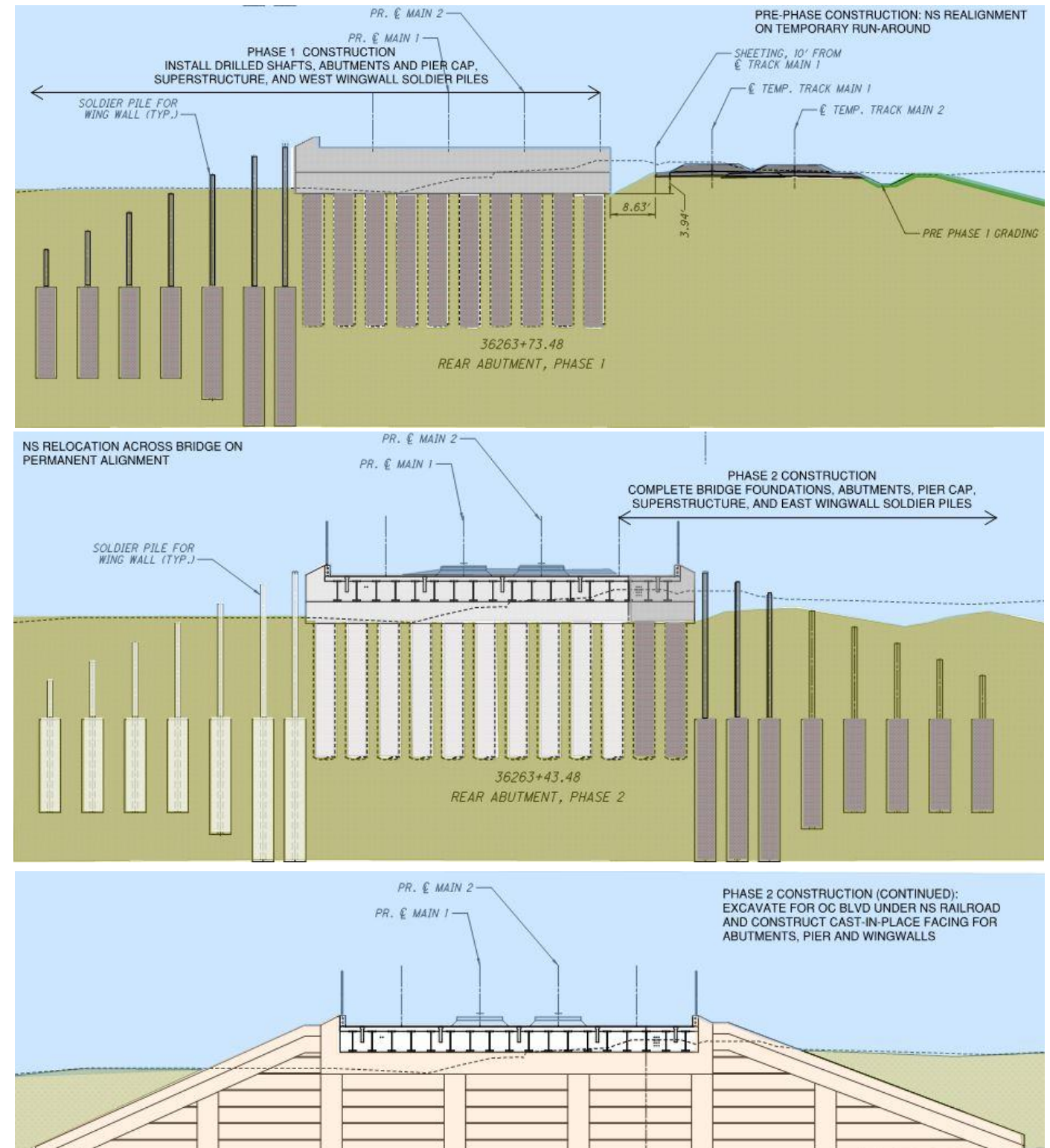


Figure B-4 – Phased Top-Down Construction with NS on Temporary Run-Around

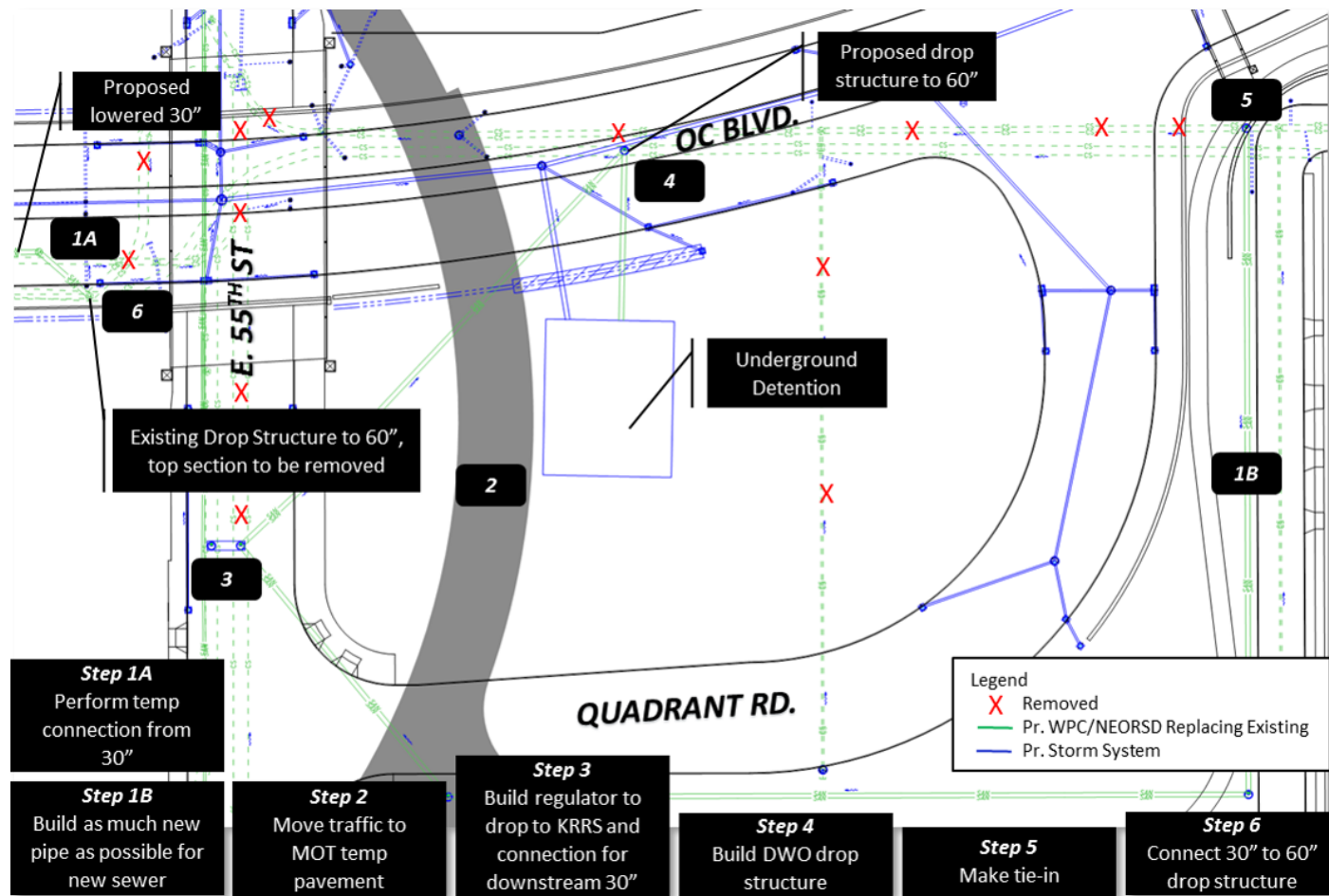


Figure B-5 – S-10 Regulator Relocation

B.3.iv – East 55th grade separation

Our approach to constructing OC Blvd under East 55th focuses on constructability of the design, with particular emphasis on phased construction to support utility relocations, storm and sanitary system upgrades, and earth retention during excavations necessary for the new boulevard trench.

a. Regulator coordination

Construction of regulator S-10A and associated drop structures is a deep, complex construction sequence that involves negotiating existing utilities and performing significant temporary shoring to access the Kingsbury Run Relief Sewer (KRRS). There is a limit to the excavation that may be performed at the bridge until the regulator is online and fully functioning, but a substantial amount of excavation can occur while the existing sewer remains functional within the footprint of the proposed East 55th Street Bridge. We propose to combine the

regulator S-10A and drop to KRRS into one vault to simplify detailing and constructability of these deep connections. As shown in Figure B-5, We have redesigned the 48" dry weather overflow (DWO) connection from regulator S-10A to the deep 60" sewer below OC Blvd, reducing risk by reducing the impact of deep sewer construction adjacent to private property at the southwest corner of OC Blvd and East 55th Street.

b. Utility coordination and relocation

Our proposed construction sequence at East 55th Street accommodates maintenance of utilities and facilitates traffic on East 55th Street. We have developed a phasing plan that allows the bridge to be constructed full width and utilizes top-down construction which minimizes utility impacts.

In a pre-phase, we will temporarily relocate the CPP, CEI, telecommunication, and waterlines to the east, generally following the alignment of the temporary runaround. Through prebid coordination with the utility

owner, we have identified that the existing gas lines can be temporarily taken out of service during bridge construction. The existing 16" sludge force main will be temporarily relocated west of its current position. During this pre-phase, a temporary traffic runaround will be constructed as shown in Figure B-5 and B-6.

Once the utilities are in their temporary locations and traffic is shifted to the runaround, the new S-10A regulator will be constructed under existing East 55th Street and the existing regulator and associated sewers taken out of service. This then allows the East 55th Street Bridge to be constructed full-width using a top-down method. Initial excavation will be to the bottom of beam seat elevation to install the cast-in-place piling foundations, footings, and beam seats. This minimizes the shoring needed to support the East 55th Street

roadway and adjacent utilities. After beam erection, all utilities will be moved back onto the structure and the permanent tie-ins for these facilities completed. The deck and remaining superstructure will then be completed and traffic shifted onto the new bridge.

c. Maintenance of traffic

The East 55th Street grade separation bridge will be built under the allowable long-term closure of I-490 and lane reduction of East 55th Street (Stationary B) and the nonconcurrent lane reductions of northbound and southbound East 55th Street (Stationary A). The lane reductions (Stationary A) will be largely dedicated to the construction of tie-ins of the temporary runaround of East 55th Street and the necessary pre-relocation work necessary to construct the bridge. The bridge will be built during the Stationary B closure of I-490 and runaround

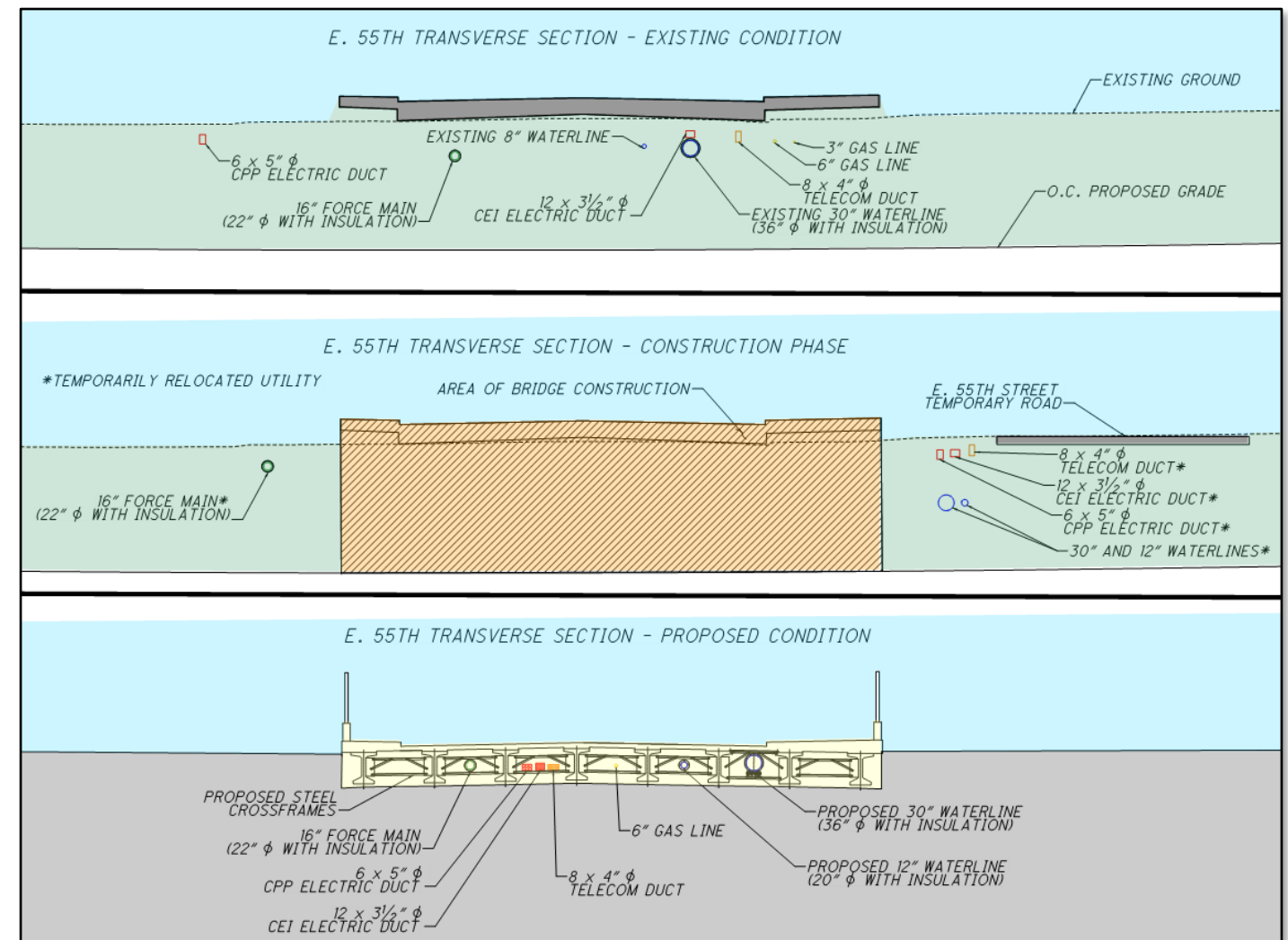


Figure B-6 – E. 55th Bridge Phasing



of East 55th Street. Access to the GCRTA station will be maintained at all times. We have already verified bus turning movements based on our pre-bid phasing and we will confirm our final MOT phases maintain bus access.

d. Drainage of the intersection

A successful drainage concept at East 55th Street must capture runoff both north and south of the bridge along East 55th Street (some surface runoff and some piped runoff) and navigate a crowded structural and utility environment to achieve positive discharge. Our concept does just that by coordinating pipe locations with structural elements. To avoid running a deep sewer parallel to the OC Blvd west of East 55th Street to discharge runoff from north of East 55th Street, we have designed and coordinated a solution in which the 18” sewer navigates between 24” pipe piles to tie to the OC Blvd trunk line underneath the East 55th Street Bridge. This sewer will be oversized and sleeved in steel pipe through the abutment to enhance durability. The trunk line and the East 55th Street drainage combine to discharge into underground detention prior to Outfall #1.

Outfall #1 presents a challenge, as reducing the grade of OC Blvd below East 55th Street to provide grade separation creates a 25’ deep sag that must be drained. Local combined sewers upstream of regulators are hydraulically inaccessible to the OC Blvd trunk line at East 55th Street. While the concept that is provided in the RFP utilized a combination of inline detention facilities and manufactured systems to treat stormwater for both quantity and quality, we propose using the existing deep 60” combined sewer at this intersection that is hydraulically accessible for discharge. Given the complex system of regulators upstream of this point, and given the NEORS D mandate of no increase of flows or volume to the combined sewer system, we are proposing underground detention to severely reduce the peak flow from this outfall. The scope outlined that the No. 3 sewer on the west approach to the OC Blvd/East 55th Street intersection is permitted to tie into the deep 60” combined sewer at this location. **We have inspected this manhole pre-bid to confirm its suitability for reuse.**

e. Bridge design

The East 55th Street Bridge over Opportunity Corridor will be a 108’ long single-span structure. The superstructure will consist of a reinforced cast-in-place concrete deck supported on prestressed concrete I-beams. The beams will be ODOT standard WF60-49 beams. Various utilities will be supported on the bridge, including gas, sewer, electric, phone, and water. The abutments will be semi-integral abutments constructed using a top-down method. They will consist of 24” closed-end pipe piles with a pile cap. A cast-in-place wall facing will be attached to the front row of piles.

f. Other potential risks

Each of the above challenges are interrelated and overlap. While each of the items are difficult in and of themselves, they are individually solvable. What makes this area particularly challenging is the fact that so many issues must be dealt with simultaneously: maintenance of traffic, utility relocation, stormwater, bridge, and structure constructability issues. Any missteps in coordinating these items has the potential to negatively affect schedule and the public with delays. Our approach to managing these challenges includes a thoroughly coordinated, collaborative effort. We’ve begun this process pre-bid, hosting full-day workshops and regular task force meetings specifically about this area to collaborate on the design and constructability challenges with this important grade separation. We will continue to have cross-discipline coordination and constructability reviews throughout design. Design, maintenance of traffic, utility relocations, and construction activities will be integrated into the critical path method schedule and the issues and actions list (risk register) will be updated at weekly project meetings. In construction, Kokosing will dedicate a superintendent to the East 55th Street area to facilitate coordination and expedite construction.

Additional design discussion

In addition to the four topics highlighted above, we understand that work involving GCRTA can be challenging on ODOT grade separation projects. We have tailored our approach to the OC Blvd crossing of Kingsbury Run and the GCRTA Test Track and OC Blvd crossing of Blue and Green Lines based upon the scope of services, site conditions, prior experience with



Figure B-7 – Incorporating Approved ATC #32 to Improve on Basic Configuration for OC Blvd over Kingsbury Run

GCRTA design projects, and approved Alternative Technical Concepts (ATC).

Our usage of ATC 32 in the design of the Kingsbury Run Bridge offers several benefits over the basic configuration. The reconfiguration of the GCRTA Test Loop approved in ATC 32 minimizes the short-term and long-term conflicts with GCRTA. In the Basic Configuration, a 560’ long bridge is constructed over multiple portions of the curved loop track. In our design, the bridge length is less than half the Basic Configuration and only crosses over a single perpendicular run of track. Our design reduces pier heights by more than 10’. This will reduce overall long-term maintenance costs and future conflicts with GCRTA for inspection and maintenance activities. Overall, the high-level complex structure that is proposed in the Basic Configuration has been modified to a standard ODOT bridge in our design. Furthermore, a 60” sewer, affected by the basic configuration, will be avoided by the bridge in our proposed design. The proposed superstructure will consist of a reinforced cast-in-place concrete deck supported on 60” ODOT Type IV prestressed concrete I-beams. Reinforced concrete piers and stub abutments will be supported by driven friction piling. Abutments will be constructed on spill-through slopes.

The proposed design at the GCRTA Blue and Green Line crossing is improved over the Basic Configuration,

which had shown both structures more than 500’ in length. Our proposed design reduces the length of each structure by more than 100’ by installing mechanically stabilized earth walls in lieu of additional span length. The structures are skewed and curved due to constraints, including GCRTA tracks, general topography, and a 60” sewer near Pier 1. We have performed three-dimensional finite-element modeling (see graphic below) of both the eastbound and westbound structures to accurately determine our proposed girder and cross frame sizes.

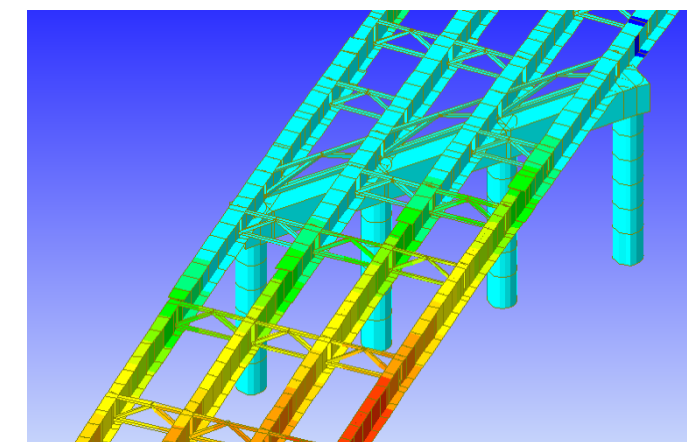


Figure B-8 – Refined Analysis Model of OC Blvd over RTA Blue and Green Lines to design curved, skewed superstructure

B.4 – Conceptual plan

The conceptual plans are included in Appendix 7.

C. Construction





Kokosing is one of the largest general contractors in the region and, coupled with the local expertise of Independence Excavating (IX), we offer ODOT a team of highly qualified firms and individuals. Our approach to project construction starts with providing a highly knowledgeable team that has delivered significant ODOT projects, including the I-670/71 Columbus Crossroads DB, \$500 million of I-75 and I-70 construction in Dayton, and more than \$225 million in reconstruction of I-75 in Toledo. Through the ATC process, we have provided considerable project value while enhancing long-term maintenance. Kokosing and IX have some of the best safety records in the industry and IX is a local leader in demolition and regulated materials handling.

C.1 – DB Construction Project Manager

DB Construction Project Manager Brad Mast
 Brad is currently employed by Kokosing as a Project Manager. As the DB Construction Project Manager, he will actively manage the overall construction of the project including all structural and roadway items. All field construction personnel, including subcontractors, will report to Brad and he will have the authority to leverage equipment and other resources to meet the demands of the project. His approach to managing the project will include:

- Co-location for the duration of the project, beginning with the design phase, to provide over-the-shoulder constructibility reviews and assist with preconstruction scheduling
- Administration of the on-site safety program including leading Monday morning safety meetings
- Lead construction team progress meetings, including participation by IX and other key subcontractors. These meetings will include collaboration of each superintendent’s three-week schedule into a combined work and resource plan.
- Leveling resources (personnel, equipment, materials) across the project
- Ensuring a diverse and local workforce by coordinating hiring needs with the project Diversity, Inclusion and Outreach Consultants (DIOC) and Contractor Diversity/Outreach Lead Manager Jill Harris.

Brad is a 22 year employee of Kokosing and has significant experience on heavy-highway construction projects, including design-build, construction over and for railroads, complex underground utilities, and city streets. He served as assistant construction manager to Kerry Hart on the I-670/71 Columbus Crossroads DB

project and recently completed a \$71 million third-lane widening of I-75 in Bowling Green that included ODOT’s first ever roll-in bridges. His local experience includes the \$90 million Cuyahoga I-77 widening, also with Kerry Hart.

Brad will supervise a team of highly experienced personnel as detailed in the organizational chart in Part A. The qualifications of some of these individuals are summarized in Table C-1.

C.2 – Plan for Construction

Construction Narrative
 The Kokosing DBT’s construction phasing plan has been developed to maximize work areas in each phase while reducing the number of traffic and rail shifts necessary to complete the work. Our team has developed a well-coordinated plan that minimizes utility impacts and limits shoring necessary to support adjacent facilities. This increases construction efficiencies and reduces project cost and duration.

We have organized the project into the following four major areas depicted in Figure C-1:

- Area 1:** west end of OC Blvd to the rear approach slab of the Kingsbury Run Bridge
- Area 2:** rear approach slab of Kingsbury Run Bridge to the forward approach slab of the GCRTA Blue and Green Lines Bridge
- Area 3:** forward approach slab of the GCRTA Blue and Green Lines Bridge to east of the Norfolk Southern Railroad (NS) Bridge
- Area 4:** east of NS Bridge to east end of OC Blvd

This breakdown allows us to streamline coordination of plan reviews with the appropriate agencies during the design phase, efficiently level and manage our construction resources and manage the critical path.

Value Added Staff	Duties	Key Qualifications
Lead Roadway/Utilities Superintendent <i>Dave Bevan (IX)</i>	<ul style="list-style-type: none"> • Oversee all roadway and underground utility construction 	<ul style="list-style-type: none"> • Twenty-nine years of experience • General Superintendent for similar scope of work on CCG1
Lead Structures Superintendent <i>Steve Linder (K)</i>	<ul style="list-style-type: none"> • Oversee all bridge and retaining wall construction 	<ul style="list-style-type: none"> • Twenty-four years of experience constructing similar work throughout northeast Ohio including the CCG6B DB project. Steve’s duties on CCG6B will be substantially complete prior to his OC3 role.
Environmental Manager <i>Colleen Loreda (IX)</i>	<ul style="list-style-type: none"> • Identify and direct remediation of regulated materials 	<ul style="list-style-type: none"> • Seventeen years of experience as an environmental manager, including TSCA, RCRA and VAP remediation, lead-impacted soil stabilization, industrial plant decommissioning, UST removals, and asbestos and regulated material abatement
Safety Manager <i>Tony Morres (K)</i>	<ul style="list-style-type: none"> • Assist the project in safety plan administration 	<ul style="list-style-type: none"> • Nine years of experience as Kokosing’s northeast Ohio safety specialist
Sustainability Consultant <i>Margaret Hewitt, LEED AP, ENV SP (CGT)</i>	<ul style="list-style-type: none"> • Lead the project sustainability process 	<ul style="list-style-type: none"> • Performed similar role on George V. Voinovich Bridge (CCG2), which achieved INVEST Platinum-level certification
Survey Manager <i>Bill Clifford, PS (K)</i>	<ul style="list-style-type: none"> • Manage all project survey for both design and construction 	<ul style="list-style-type: none"> • Twenty-five years of experience managing Kokosing’s survey department, including locating utilities during subsurface utility engineering and performing CMS611 performance inspections
DB Coordinator <i>Mike Luyster, PE (K)</i>	<ul style="list-style-type: none"> • Manage document control and responsibilities between all parties 	<ul style="list-style-type: none"> • Nine years of experience • Lead Engineer on \$225 million reconstruction of I-75 in downtown Toledo, including VECP affecting \$41 million of the project and saving ODOT more than \$550,000

Table C-1 – Value Added Personnel

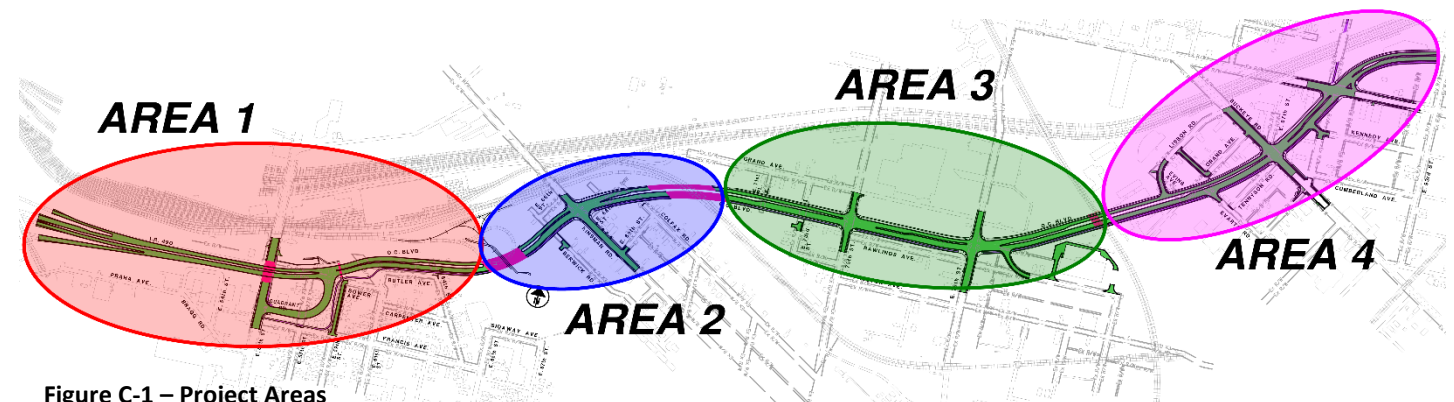


Figure C-1 – Project Areas

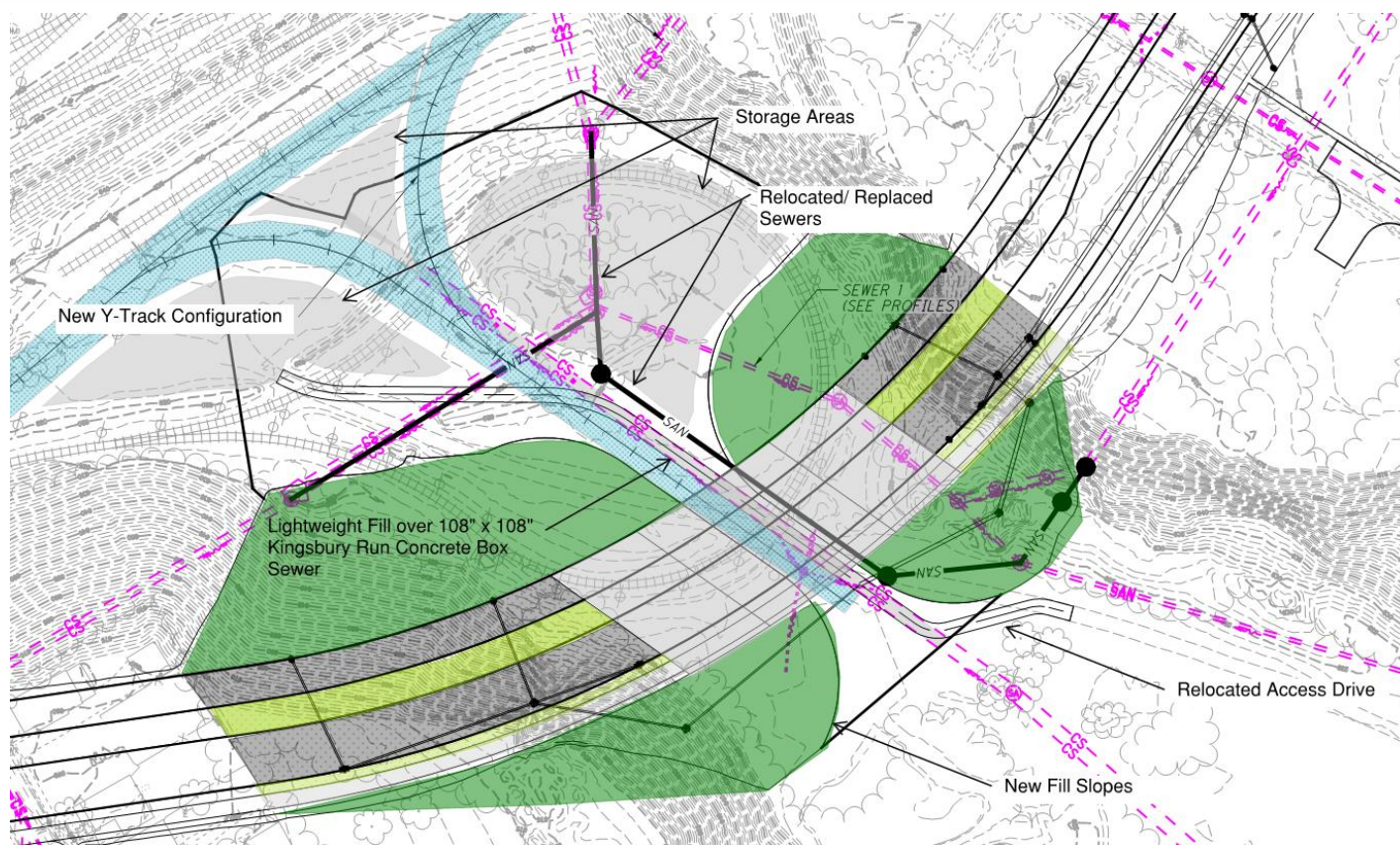


Figure C-2 –Incorporating Approved ATC #32 to Improve on Basic Configuration for OC Blvd over Kingsbury Run

To further enhance construction, the Kokosing DBT has utilized the Alternative Technical Concept (ATC) process to provide significant value to the project through improved constructibility and functionality while also reducing both the initial construction and long-term maintenance costs. Some of our significant construction improvements include:

ATC #32—Wye and OC Blvd Realignment at Kingsbury Run. By reconstructing the existing GCRTA test loop into a wye configuration and modifying the horizontal and vertical alignments of OC Blvd through the Kingsbury Run Valley, we have provided significant separation of the GCRTA and ODOT facilities. This allows for construction of a significantly shorter bridge than the RFP layout and provides an opportunity to use more than 100,000 CY of excavated material from the East 55th Street/OC Blvd grade separation as fill material in the bridge embankments, which otherwise would have been removed from the project. This material can be delivered to the valley in off-road trucks rather than

being transported in on-road trucks through the city street system to an off-site waste facility.

This ATC also provides improvements to the GCRTA facilities in the valley through incorporating new track and catenary lines along with upgraded drainage facilities. Current laydown areas that are susceptible to flooding will be raised and leveled. Stone or recycled material will be placed to create a stable all-weather surface. Shallow drainage facilities that are subject to additional live or dead loads will be replaced. The deep 108" combined sewer will be protected by removing a portion of the existing fill over the sewer and replacing it with lightweight Haydite fill to create a net-zero load change.

ATC #29—Chemical Stabilization of Subgrade. This ATC significantly reduces project cost and the impact to the surrounding community by minimizing the amount of undercut material hauled to waste and Type B granular material hauled back to the project for backfill. **This approach better balances the earthwork volume on the project while providing a**

superb subgrade for the proposed pavement. During the pre-bid process, Kokosing performed soil sampling and testing to verify chemical stabilization as a viable subgrade treatment option. We will perform additional testing in accordance with Supplement 1120 during the design phase to finalize the chemically stabilized subgrade mix design for points throughout the project.

ATC #6—Galvanized Stay-in-Place Forms and ATC #15—Weathering Steel. These ATCs will significantly improve safety and schedule at the OC Blvd bridges over the GCRTA Blue and Green Lines. The use of stay-in-place deck forms in the span over the rail lines provides a much quicker deck forming installation and eliminates deck form stripping in the interior bays. Coupled with the use of weathering steel, this dramatically decreases worker exposure over the GCRTA lines and GCRTA outages.

Sustainability

Kokosing understands and commits to the project sustainability requirement of a Silver INVEST rating. We have teamed with *Margaret Hewitt, LEED AP, ENV SP*, of The Construction Green Team as our Sustainability Consultant. Margaret has significant local experience with infrastructure rating, including on the George V. Voinovich Bridge, which achieved a Platinum certification.

Our process starts with an eco-charrette during which the design and construction team, along with ODOT, will collaboratively establish sustainability goals and the specific INVEST criteria to be pursued. A sustainability management plan will be developed that outlines tracking procedures and responsibilities that break down each potential credit into identifiable tasks which are assigned to team members. Regular meetings will be held during the life of the project to monitor the progress with a final Green Summary Narrative provided upon project completion.

Ensuring Construction Quality

The Kokosing DBT is responsible for the quality of the project. Our project management plan will fully detail the construction quality management program,

including quality control functions, verification, procedures, QC/QA specification requirements, document control, stop-work authority, and materials testing to ensure that the work is constructed in accordance with the contract, plans, and specifications. The Construction Quality Management Plan will be implemented by Construction QC Manager (CQCM) Nathan Reber, a 17 year Kokosing employee who has performed similar duties on numerous projects. These duties include:

- Control of the construction production processes and resulting work products
- Coordination of Kokosing DBT quality control personnel
- Quality control testing
- Construction-related document control

Our work crews are educated on the construction specifications and standards, including the quality control requirements of C&MS 455, 611 and Supplemental Specifications 840 and 878. The CQCM will coordinate with the design team to ensure that the plans clearly convey the construction specifications requirements for the various specifications needed for the OC3 project. Our superintendents and foreman will utilize tablet computers that are synced with the project SharePoint site for use in reviewing release for construction plans, engineered, working and shop drawings, specifications, and standard drawings. This real-time document sharing ensures that our mobile workforce, regardless of their location, is supplied

Morning Action Plan (MAP)

Construction quality will be covered in our morning action plan (MAP) meetings. Our MAP meetings are performed by every crew, every day, and for every operation. Quality checklists will be developed by the lead discipline superintendent and the Construction Quality Control Manager to capture quality components of the work to be performed and associated quality checkpoints. As a major topic in the MAP meetings, quality checklists will be reviewed for every operation to ensure that everyone on the crew understands the quality components of the day's work.



with the most up-to-date project information and eliminates nonconformance.

For all major work activities, we will execute a pre-activity meeting. These meetings are used as planning tools to identify aspects of work activities necessary to ensure success. This will include not only the quality components, such as quality checkpoints (QCP), but also safety, sequencing, staffing, access and staging, material deliveries, testing and utilities. These preplanning meetings include all crew members involved in the operation. QCPs will be performed by our superintendents and foremen as well as our subcontractors throughout the work. The QCPs will be established for the stages of construction listed in the contract documents.

The quality checklists that are discussed during the MAP meeting will be evaluated and completed as the work proceeds. The lead discipline superintendents will have overall responsibility for quality control within their disciplines of work and bring with them the authority to ensure that the work is planned and executed with the quality components in place.

Just as it applies to safety, all personnel on the project will have immediate stop-work authority if he or she identifies a potential quality issue. A supervisor will be notified and no further work on the element will occur until the issue is resolved.

Supervisors will be required to sign off on the quality checklists. This sign off will promote an accountability and responsibility for the quality of the work. If we discover deficiencies in the work a supervisor has signed off on, we will immediately address the issue with that supervisor and ensure that he or she understands where the deficiency was detected and how it can be addressed going forward.

Ensuring Sufficient Resources

As one of the largest contractors in Ohio, Kokosing has the ability to self-perform the majority of work on this project. We will provide the resources necessary to ensure successful safe and timely project completion. Kokosing has a history of staffing projects aggressively to meet or exceed the owner’s schedule, and its available manpower far exceeds the anticipated needs of this project. We will draw from our workforce of more than 3,000 skilled union workers, supported by the largest equipment fleet in the Midwest, boasting more than 2,500 pieces. The addition of IX as a dedicated roadway and utility subcontractor adds more than 400 tradespeople and 500 pieces of heavy equipment to our team.

Asphalt for the project will be produced and placed by Kokosing from one of its two asphalt plants within 10 miles of the project. IX has numerous waste sites throughout the Cleveland area that are capable of accommodating the significant volumes of earthwork coming off the project. Together, these resources support the local economy while their proximity minimizes impact to the local street system.

A key component to managing resources is through effective construction planning and scheduling. Figure C-3 details our multistep approach to this effort. Weekly construction coordination meetings are attended by our superintendents and engineers, quality control personnel, and subcontractors. In these meetings, we will discuss our three-week and three-month schedules, review and coordinate the design schedule with upcoming work, and plan actual construction activities. We will then communicate the schedules to ODOT, quality control personnel and other project team members as required. The three-month schedule is provided to ODOT at all progress meetings and serves as a tool for all parties to balance their workloads accordingly.

Anticipated Major Construction Work Area 1

Area 1 focuses on the closely coordinated sequencing of numerous facilities to construct the grade separation of the East 55th Street/OC Blvd intersection while maintaining access to the GCRTA Rapid Station. Area 1 will require phased maintenance of traffic to complete two major phases of construction.

Pre-Phase 1 involves the following operations to prepare for the proposed construction of East 55th Street

1. Temporary relocation of CPP, CEI, telecommunication, and 30” waterline east towards the temporary runaround location. The existing gas and smaller waterlines can be temporarily taken out of service.
2. Temporary relocation of the 16” sludge force main to the west, moving it away from the bridge construction.
3. Begin the No. 4 storm sewer relocation
4. Construct temporary pavement runaround along the east side of existing East 55th Street
5. Shift East 55th Street traffic to runaround

Phase 1 involves the full-width construction of the East 55th Street Bridge and the partial-width construction of the western half of the East 55th Street approach roadway. Prior to beginning the construction of the bridge, the following work must be completed:

1. Complete relocation of the No. 4 storm sewer
2. Construct the new S-10A regulator
3. Abandon or remove existing S-10 regulator and associated sewer piping.

Once the new regulator system is operational, the East 55th Street Bridge will be constructed using a top-down method. Initial excavation will be to the bottom of beam seat elevation to install the cast-in-place

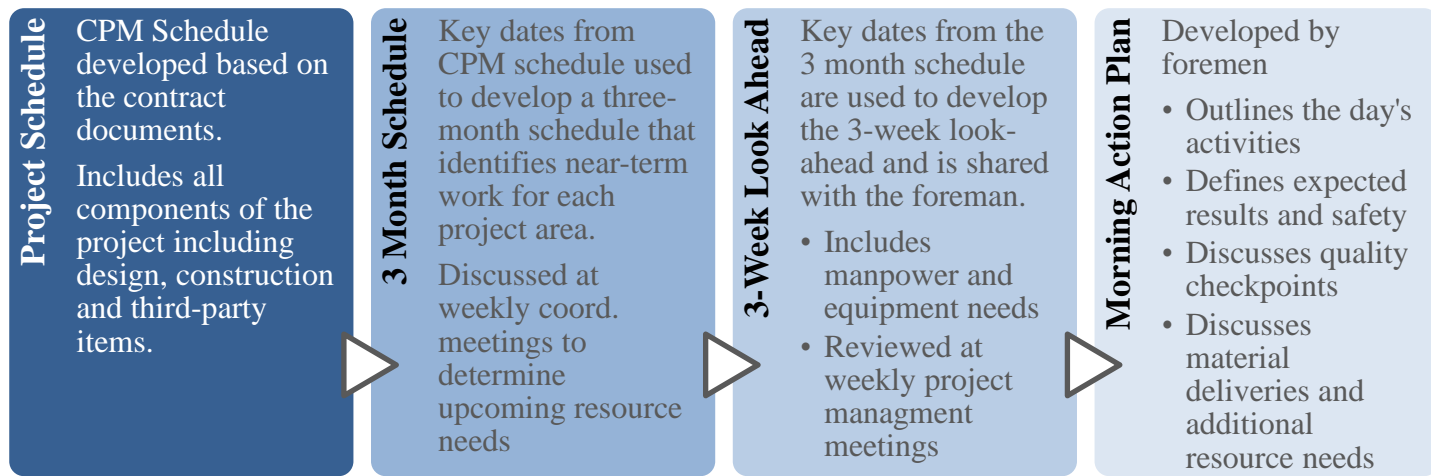


Figure C-3 – Schedule Communication and Planning

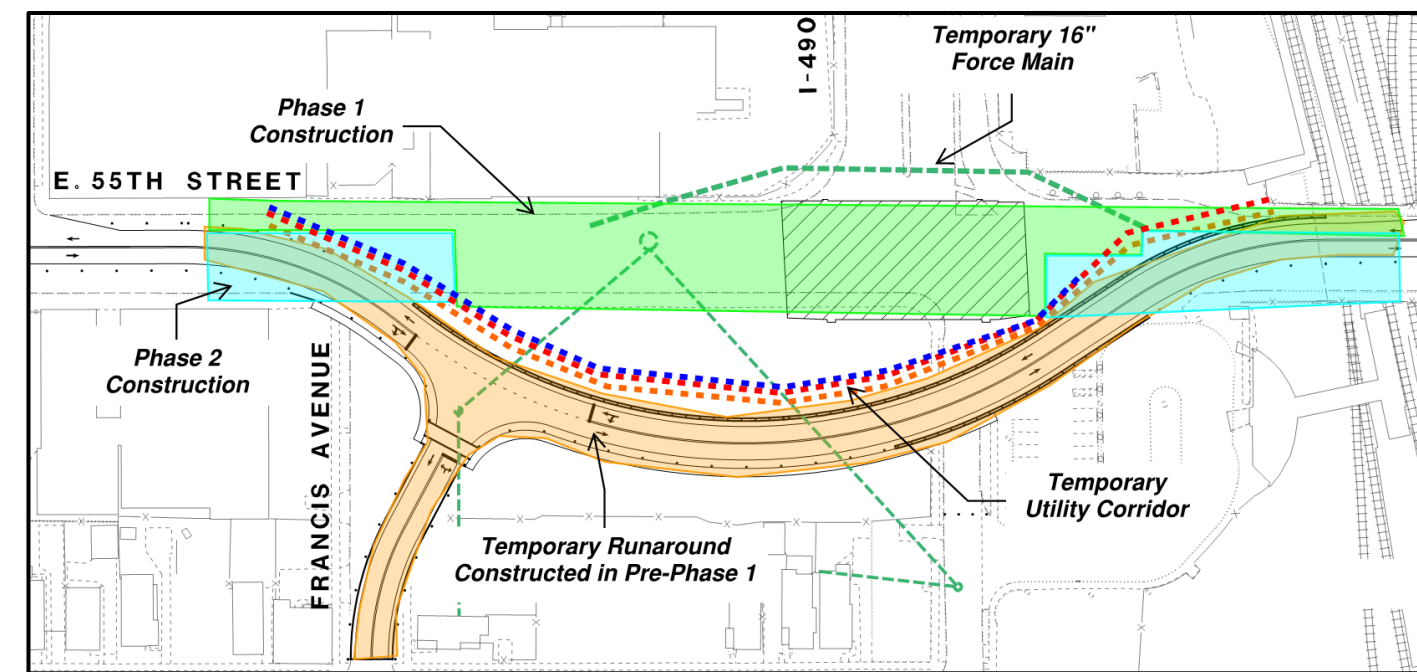


Figure C-4 – East 55th Street Phasing

piling foundations, footings, and beam seats. This minimizes the shoring needed to support the East 55th Street roadway and adjacent utilities. After beam erection, all utilities will be moved back onto the structure and the permanent tie-ins for these facilities completed. The deck and remaining superstructure will then be completed.

During bridge construction, the western half of the East 55th Street roadway will be completed.

Phase 2 shifts East 55th Street traffic onto the completed East 55th Street Bridge to construct the remaining Area 1 elements including:

- Eastern half of the East 55th Street roadway
- Quadrant roadway and adjacent retaining walls
- Excavation and cast-in-place abutment wall facings under the East 55th Street Bridge

Throughout both phases, the mainline retaining walls will be constructed and OC Blvd roadway work completed.

Area 2

Area 2 constructs the Kingsbury Run Bridge, the eastbound and westbound bridges over the GCRTA Blue and Green Lines, the adjoining segment of OC Blvd, and Kinsman Road.

At Kingsbury Run, we will coordinate track outages with GCRTA to replace underground utilities, place embankment, and perform track work. Once the test track is reconfigured, OC Blvd embankment will be constructed and the Kingsbury Run Bridge completed.

The bridges over the GCRTA Blue and Green Lines will be constructed concurrently in a single phase, as the bridge abutments share common retaining walls.

Two phases of construction are required to meet the maintenance of traffic requirements for Kinsman Road construction. **Phase 1** constructs the southbound lanes of Kinsman Road and **Phase 2** will construct the northbound lanes. This work will be performed utilizing the allowable 60 day lane restrictions on Kinsman Road, which will not be concurrent with the 730 day long-term lane restriction on East 55th Street (allowable long-term Stationary B).

Area 3

Area 3 constructs the following items:

- OC Blvd from Blue and Green Lines to NS

- East 75th Street
- East 79th Street and Rawlings
- NS Bridge and track work

Two phases of construction will be used for each city street reconstruction utilizing the allowable lane restrictions. Both phases of East 75th Street construction will be completed separately from the East 79th Street maintenance of traffic phasing. The East 79th Street construction will also be scheduled to avoid overlapping MOT restrictions during Kinsman Road construction.

Our proposed design and construction methods at the NS Bridge eliminate one of the temporary track shifts shown in ODOT's LD-01 documents. LD-01 shifted the tracks temporarily to the east to build the western half of the bridge and then had a second temporary shift onto the west half of the bridge to complete the structure. A third track shift was necessary to move the tracks into their final position. The Kokosing DBT phasing as depicted in Figure C-5 includes:

Pre-Phase 1 relocates the NS tracks and communication lines to the east along with building demolition within the proposed bridge footprint.

Phase 1 constructs approximately 80 percent of the structure through the use of short temporary shoring placed in accordance with all railroad specifications. As with the East 55th Street Bridge, the NS structure will be constructed using top-down methods that minimizes the shoring next to the railroad. The initial excavation will only be to the bottom of beam seats and pier cap.

Upon completion of the western portion of the bridge, the rail lines will move to their permanent location in what will be the middle of the final structure.

Phase 2 completes the bridge by constructing the eastern 20 percent while maintaining rail traffic in its final permanent location. At this point, the remaining OC Blvd earthwork can be completed while finishing the retaining walls adjacent to the structure.

Area 4

Area 4 completes construction of OC Blvd from east of the NS Bridge to the eastern project limits near

East 93rd Street. The Kokosing DBT will coordinate closely with the Kenneth L. Johnson Recreation Center and other adjacent stakeholders to maintain access at all times.

To accommodate the maintenance of traffic requirements for Buckeye Road and Woodland Avenue, two phases of construction will be utilized for each, using the allowable lane restrictions provided in the scope. Buckeye and Woodland closures will not be concurrent.

The 89th Street Pedestrian Bridge construction will accommodate maintenance of existing water lines that are carried by the structure. We will continue our pre-bid effort to coordinate temporary water line shutdowns; however, if they must remain active, we will perform a phased demolition operation that allows the water lines to remain in service in their current location while the new pedestrian bridge is built. Once the new bridge is completed and the water lines are transferred to their final location, the remainder of the existing structure will be demolished.

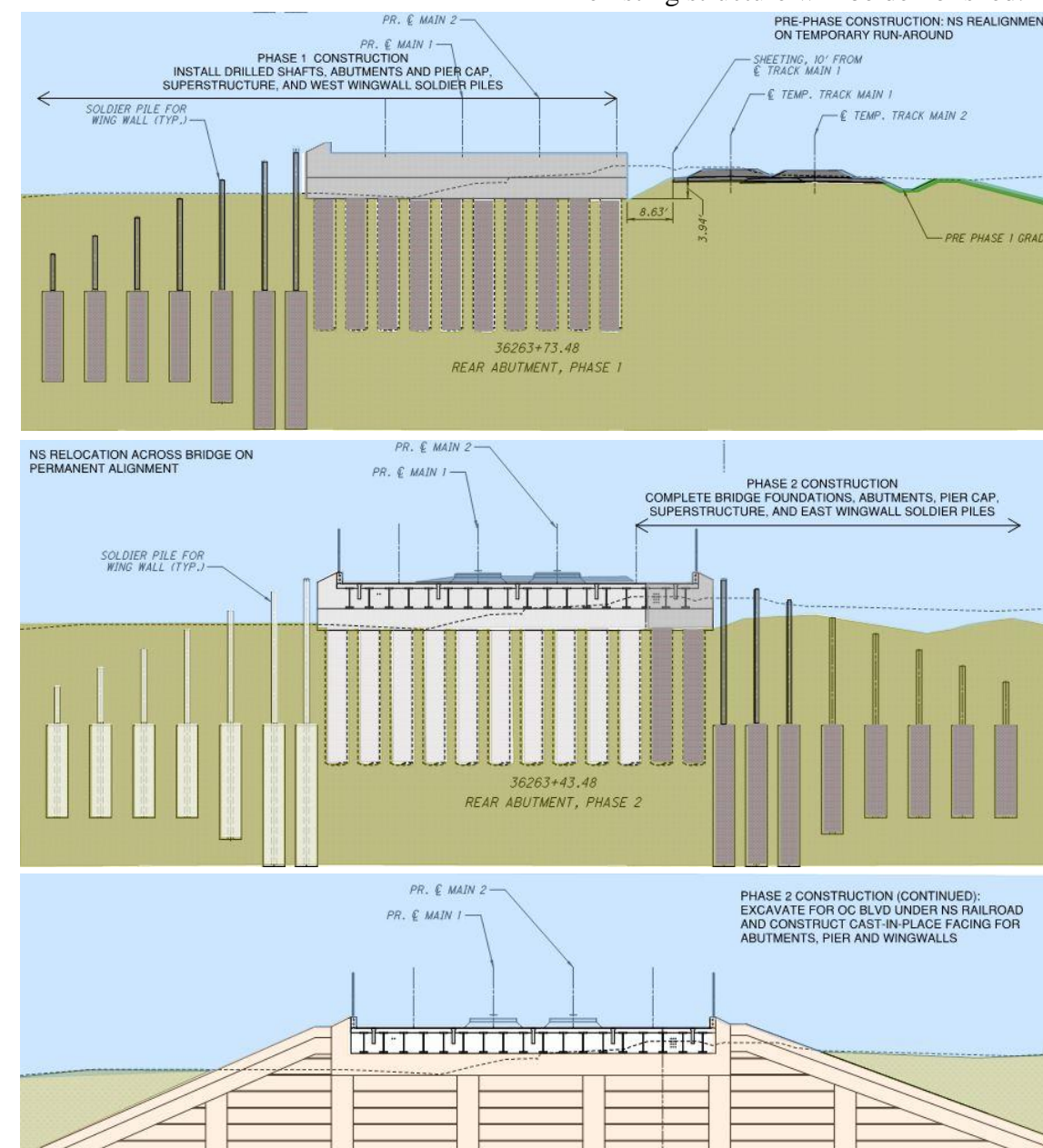


Figure C-5 – Phased Construction using Top-Down Construction with NS on Temporary Run-Around



Location	Risks	Mitigation
<i>OC Blvd under E. 55th including significant utility work</i>	Coordination of multiple utilities with bridge and wall construction and deep utility work pose safety and schedule risks	Our approach eliminates a phase of bridge construction compared to RFP MT-02. Temporary relocation of utilities allows full-width bridge construction. Top-down construction of both walls and bridge elements minimizes temporary shoring.
<i>Kingsbury Run</i>	Coordination with GCRTA and impacts to underlying utilities Pier placement and tall retaining wall construction	By constructing the GCRTA wye prior to OC Blvd roadway and bridge, we have significantly minimized coordination issues during construction. Shallow impacted utilities will be replaced while the deep 108" Kingsbury Run sewer will be protected from new loads through the use of lightweight fill. The ATC design eliminates the need for tall retaining walls in this area and simplified pier placement.
<i>Blue and Green Line Bridges</i>	Coordination and impacts to GCRTA Impacts to existing 72" sewer on west side of RR	ATCs #6 and #15 significantly minimize impacts to the GCRTA during both construction and long term maintenance. Pier placement and construction methods avoid the existing sewer.
<i>NS Grade Separation</i>	Schedule impacts due to multiple NS track relocations	The layout of the temporary track relocation and use of top-down bridge and wall construction allow enough structure to be constructed in the first phase to move the tracks to their permanent position. This eliminates an entire track move shown in the RFP LD-01 NS plans.
<i>Kenneth L. Johnson Recreation Center</i>	Coordination and communication	This property will be prioritized in our Public Information Plan. We will provide continued and frequent communication and outreach to the Rec Center through design and construction.
<i>City Street Reconstruction</i>	Impacts to the travelling public and local businesses	Significant coordination throughout both design and construction to provide thorough and relevant information to the public and local stakeholders. All maintenance of traffic and temporary access requirements will be adhered to, with restrictions minimized where possible.
<i>Haul Routes</i>	Material handling and impacts to the local road system and traffic	Our design minimizes the export of waste material from the project by incorporating over 100,000 cy of embankment into the Kingsbury Valley. Our local warm-mix asphalt plants provide a sustainable materials resource that minimizes trucking to the project.

Table C-2: Risks and Mitigations

Throughout all phases of construction in all areas of the project, we will follow the maintenance of traffic requirements set forth in Scope Section 20.

Risks and Mitigation

Our construction approach mitigates risk throughout the project. Table C-2 summarizes significant risk items that are mitigated by our approach.

C.3 Safety

The Kokosing DBT is committed to utilizing an integrated safety team approach to reach its goal of zero workplace incidents and communicate to the surrounding neighborhoods the goal of zero incidents involving public safety. We have committed Tony Morres, a nine-year Safety Specialist with Kokosing, to lead our safety efforts on this project. Our approach to safety starts with a well-defined safety kick-off meeting before construction work begins that will communicate the safety expectations for all members of the DBT, subcontractors, and ODOT during the project.

Kokosing's Safety Commitment

Kokosing's commitment is to provide a safe and healthy work environment for all stakeholders, including the necessary equipment, tools, training, information, and resources to complete our work without incident. Our number one core ideology is "safety first". It takes a tremendous commitment and is expected of each and every employee to help ensure the safety and health of our employees, customers, subcontractors, and the public.

Safety Considerations Specific to This Project

The Kokosing DBT recognizes that every project poses unique and challenging safety hazards. Prior to the start of construction, we will prepare a site-specific safety orientation, which will be developed with input from our safety representative, Project Manager, Construction Manager, superintendents, and engineers. Once completed, every person that enters the project will be required to receive the orientation. Some of the hazards specific to this project that have already been identified include:

Overhead and Underground Utility Lines

This project has a significant number of overhead utilities, some of which will be relocated and some of which need to be worked around. We will locate the affected utilities, identify the voltage, and mark each line with signage to help prevent equipment and dump trucks from contacting the lines. Kokosing has extensive policies that meet or exceed OSHA regulations which must be followed when working around energized power lines. We will also dedicate an engineer to notify and document calls to OUPS for underground utilities. At the areas on the project with multiple high importance underground utilities, such as East 55th Street and the NS Cleveland Mainline, our survey crews will map the areas after utility location, allowing us to verify utility locations as the markings are lost and refreshed. Our crews will pothole or vacuum excavate whenever digging within two feet of a marked utility.

Kokosing employs the use of our own active utility locate methods using RD8100 Radio-detection devices for supplemental verification. Additionally, our corporate policy extends the impact zone of OUPS markings from 18" to 24" on either side of the locate markings.



Public Safety

This project is located in a highly congested urban setting. A priority for the Kokosing DBT is the safety of pedestrians and the travelling public. Our DBT will use a public information consultant to work closely with the DBT and ODOT to keep the public fully informed of upcoming changes in maintenance of vehicular and pedestrian traffic. We will utilize portable concrete barrier, construction fencing, and signage to maintain a reasonable separation of the public and areas of work. All construction ingress and egress will be properly maintained to keep pedestrian and travelling motorists moving safely through the construction zone. Additionally, all foremen, superintendents, engineers, and managers at Kokosing have completed the Ohio Contractors Association



Traffic Control Supervisor Training, which meets the requirements of ODOT’s work zone traffic control supervisor training.

Work on and Above Railroad Property

OC3 consists of multiple locations for demolition and construction of NS and GCRTA facilities:

- OC Blvd over Kingsbury Run Valley (GCRTA)
- OC Blvd over GCRTA Blue and Green Lines
- NS over OC Blvd
- Demolition of NS structure over Grand Avenue
- Demolition of East 89th Street structure and replacement with pedestrian bridge (NS and GCRTA)

Along with bridge structure work, the project must coordinate with NS on the temporary and permanent track installation where OC Boulevard will underpass the tracks. Our Railroad Coordinator will work very closely with NS and GCRTA to ensure that their contract requirements are being met. A project startup meeting will be held to begin the railroad coordination efforts. The site-specific safety orientation will include some of the following railroad-specific requirements:

- Work within 25 feet of the centerline of the track will not occur without a certified railroad flagger
- No crossing of the tracks without specific flagger approval
- All workers on GCRTA property will go through a security check and must have a hard hat sticker provided by GCRTA
- All personnel working on the GCRTA right-of-way will be required to take *Rail Operations Rulebook Level C* training
- All personnel who will be utilized for flagging duties on the GCRTA shall attend right-of-way worker protection training and possess a current certification issued by GCRTA
- A daily morning safety briefing will occur with every crew member and the railroad flagger to address the particular hazards that may occur on that day
- When employees are warned by the railroad flagger that a train is coming, all equipment will be turned away from the tracks and employees will gather at a safe designated area

- Overhead protection will be installed to protect the catenary system and tracks during bridge demolition and reconstruction

Stop-Work Authority

All personnel on our work sites place the highest priority on public, team, and personal safety and have been given the authority to immediately stop work if they witness or encounter an unsafe situation.

This authority is personally backed by the CEO of Kokosing, Brian Burgett, with the issuance of a stop-work authority card at new hire orientation (see Figure C-6). The card includes Brian’s safety commitment and his personal cell phone to call if an employee feels a situation is not being resolved.

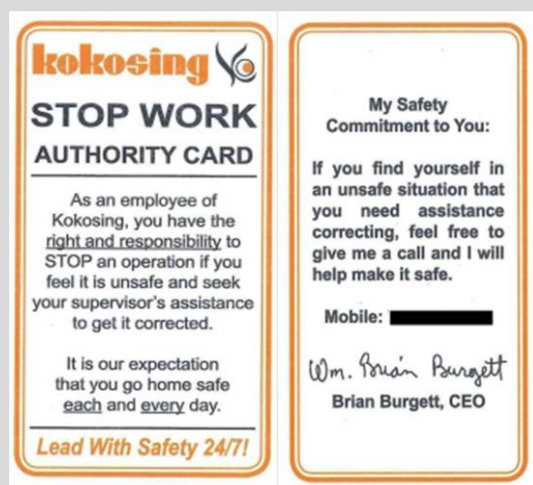


Figure C-6 - Front and Back of Stop Work Authority Card

Approach to Safety

Kokosing goes into all projects with the common goal of zero incidents when it comes to safety. Kokosing’s philosophy is to set a goal that is seemingly unattainable and make it attainable by breaking it down to the smallest level and building off that. That being said, our safety goals for this project are:

- Zero violations of our 100 percent personal protective equipment requirement
- One hundred percent participation in our site-specific safety orientation
- Zero lost-time injuries

- An OSHA incident rate of zero
- To help our employees reach these stringent goals, we have developed a very extensive approach to safety, which includes the following:

Expectation of Employees

Safety is a team effort, and Kokosing DBT expects all employees to incorporate safety, health, and incident prevention into their work using our safety processes, and protect employees through the use of the following controls:

- Engineering controls to identify, reduce, or eliminate hazards
- Administrative controls to minimize hazards
- Use of proper personal protective equipment to protect employees who are exposed to hazards
- Reports to supervisors regarding all issues and concerns
- Stop-work authority and ability to call upon all available resources necessary to correct unsafe situations before proceeding
- Never placing themselves, the public, ODOT, or other employees in a situation where there is danger of injury
- A 24/7 safety culture at home and work

Corporate Resources

Kokosing superintendents, foreman, engineers, and managers have an experienced safety department to rely on when it comes to in-depth hazard analysis and support on the job. This department consists of 25 full time safety specialists managed by Kokosing’s Vice President of Safety Nick Vranek. They are responsible for aiding in job planning, job inspection, in-depth safety training, and management of company safety programs and procedures. Additionally, outside services are hired as needed where additional hazard evaluation, certification, or third-party consultation is required. The Kokosing DBT also provides to its management team an online safety resources catalogue that lists all safety concerns, inspections, and operations hazard analyses for various tasks.

Accountability

Accountability for safety within the Kokosing DBT is the responsibility of each and every employee. Every construction man-hour worked is tracked directly back to a foreman, supervisor, project manager, area

manager, vice president, and ultimately, the president of the company. Not only do we count each man-hour worked safely, we also hold accountable all employees and managers for incidents and safety violations that occur on their projects. Accountability is measured using multiple tools, including:

- Project safety audits that ensures that operations hazard analyses are being performed.
- Morning action plan (MAP) observations
- Management performance audits that measure safety performance and support on each job

Subcontractors are also required to follow Kokosing’s and OSHA’s safety standards. Subcontractor expectations are addressed in their subcontracts as well as in a pre-planning meeting held prior to the start of work. Any employee or subcontractor who violates OSHA and Kokosing safety standards is held accountable. We understand that to develop an effective safety culture, disciplinary procedures must be used.

Safety and Health Training

Most construction industry incidents involve new hire employees. With our commitment to local hiring, the OC3 project will employ numerous individuals with little previous formal safety training. Therefore training will be a vital element of our safety program. Kokosing has created a new-hire orientation program for all newly hired employees. The employee will complete all necessary paperwork, complete a drug and alcohol screen, and view a custom orientation video. This video is a compilation of all general safety rules of our projects and facilities. Employees also receive emergency medical cards and safety hotline stickers to put in their hard hats during orientation. This is the first—but not last—time they are told they have stop-work authority.

Kokosing supports and encourages union training, but does not stop there. Kokosing’s foremen, superintendents, and managers are required to attend these training sessions, which include:

- OSHA 30 Hour
- OSHA 16 Hour Refresher
- Fall Protection Competent Person
- Manlift Training
- Confined Space Rescue and Competent Person



- Crane Safety
- Rigging and Signaling Training
- Trench Competent Person
- Workzone Traffic Supervisor
- CPR and First Aid

Process to Achieve Zero Workplace Incidents

The Kokosing DBT uses many processes and steps to reach its ultimate goal of zero incidents, all of which will be implemented on this project. A weekly safety report card focusing on previous incidents and statistical data is shared with all employees. A safety newsletter is sent to each employee. Monday morning safety meetings are conducted to discuss upcoming work and safety on the project. Every day during our daily MAP meetings, each crew reviews safety work processes for the day and any issues the crew might have. A stretching program has also been implemented at our MAP meetings.

We use an operations hazard analysis (OHA) process to break a task down to its smallest unit. The crew that will actually perform the operation meets with the safety department representatives and management staff and breaks down critical operations from beginning to end, and all hazards associated with each step are listed. Once all hazards are identified, the crew discusses the control measures they need to have in place for the operation to begin. This allows the crew to determine the most efficient and safe way to perform any given task. OHAs will be used to plan activities such as maintenance of traffic, bridge demolition, multiple bridge construction activities, MSE wall construction, cast-in-place wall construction, fall protection, pipework, earthwork, and road building operations.

A major component of safety is to have a job site safety team. We will have a team made up of individuals from the safety department, DB management team, subcontractors, craftspeople, and other disciplines as needed. Their primary role will be to review and plan job site safety. Numerous other processes are used to maintain a safe environment. The results of self-inspections, accident and incident investigations, and safety concerns are shared with all crews.

In 2016, Kokosing Construction worked 2,300,763 man-hours. Our incident, lost time, and experience modification rates are significantly below the industry average:

- 2016 Kokosing Incident Rate: 1.05
- 2016 Kokosing Lost Time Rate: 0.44
- 2016 Experience Modification Rate: 0.75

The Kokosing DBT will make use of all safety processes on the OC3 Project to make it safe for all involved. Evidence of our commitment and results is shown in Figure C-7 where Kokosing and IX recently received 2016 OCA safety awards.

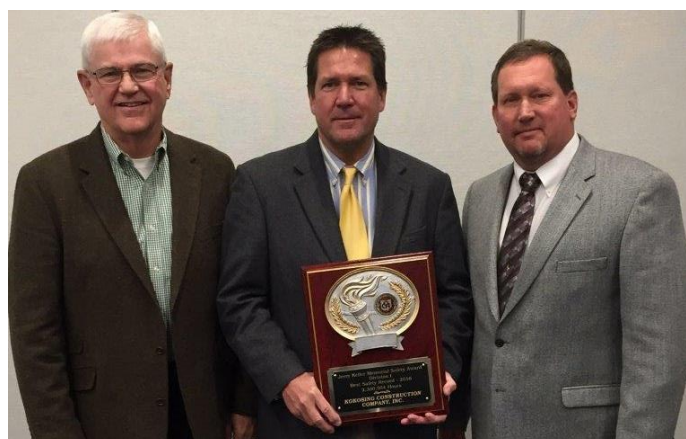


Figure C-7: Kokosing (top) and IX (bottom) were both recipients of 2016 OCA Jerry Keller Memorial Safety Awards

C.4 – Unknown Regulated Materials

The Kokosing DBT recognizes that building and bridge demolition and excavations may expose crews and the public to hazardous materials. Our DBT has extensive experience dealing with contaminated soils, water, and asbestos. The Kokosing DBT will prepare a spill prevention control and countermeasures plan, per the requirements of 40 CFR part 112. The plan will

detail procedures to follow in the event hazardous materials are encountered, including identification, control of the site, and disposal. Building and bridge demolition will be performed under the supervision of a trained competent person. If asbestos-containing material is encountered, it will be removed by a certified National Emission Standard for Hazardous Air Pollutants (NESHAP) specialist.

As the roadway, underground utility, and demolition subcontractor, IX or its subcontractors will perform work associated with known or unknown regulated materials. Colleen Loreda, a full-time IX employee, will serve as the Project Environmental Manager. She is a Certified Hazardous Material Manager, trained in RCRA provisions, has department of transportation training, CPSEC certification, and a current OSHA 40-hour certification. She actively oversees environmental projects that involve or could potentially involve management of regulated materials, including impacted soils, water, or building materials. Colleen is responsible for identifying applicable local, state, and federal regulations that apply to the job and actively preparing plans and submitting notifications, such as NESHAP, NPDES, and underground storage tank removal notifications. She identifies all known waste streams, including non-hazardous, hazardous, and TSCA-regulated wastes. Wastes are identified, sampled as necessary to characterize waste, and profiled for disposal.

The following procedures will be followed for management of unknown environmental conditions encountered during demolition or grading activities:

- Project site superintendent is directed to stop work if any unknown waste streams are encountered
- The site superintendent will contact IX’s Environmental Manager, a Kokosing and an ODOT representative, to verify that the area has not previously been identified as a known regulated material
- The unknown waste stream will be reviewed by the owner and IX Environmental Manager
 - Material will be sampled in a manner consistent with potential source chemistry
 - Sampling will include TC data to facilitate disposal

- Work will not continue in the questioned area until data from sampling is received and reviewed by contractor and Environmental Manager
- Appropriate mitigation measures will be implemented as necessary, such as covering stockpile(s) with visqueen pending final disposition plan
- Once data is generated, the following will occur:
 - Data will be reviewed by the project team
 - Concurrence on how best to manage the waste stream will be coordinated
 - Waste profile will be developed for the waste stream.
 - IX will proceed with disposal of regulated material

IX has managed a multitude of solid waste streams to support site work including hazardous waste, and TSCA regulated materials. Work has been performed on a variety of projects in conjunction with Brownfield redevelopment and site restoration, including RCRA corrective action, PCB remediation, heavy metal stabilization, petroleum contaminated soils, low-level radioactive soils and abatement of regulated materials from large scale industrial property demolition.



Figure C-8: IX remediation of regulated materials site

IX provides hazard communication training to all full-time employees, including information on how to identify and manage hazardous materials. **HAZWOPER-trained employees will be provided as site conditions dictate.** Additionally, IX provides silica awareness training, per the new OSHA standard, to its employees and all new hires to ensure OSHA compliance.

D. Community Involvement and Diversity & Inclusion





Ward 4 resident and DB Diversity/Outreach Lead Manager Wyatt Brownlee, partnered with Maurice Stevens and Joe Lopez, bring a combined 71 years of experience in creating and implementing diversity and inclusion strategies with a focus on the northeast Ohio community. Their expansive knowledge and thorough understanding of the challenges facing local residents and NSLE firms make them ideally qualified to positively impact the community and meet the subcontracting and workforce goals on the OC3 project. Our DIOP will encompass a variety of strategies to meet ODOT’s goals for business development, workforce development, and community outreach.

Introduction

As a team comprised of local leadership, the Kokosing DBT appreciates the importance of embracing and creating diversity, inclusion, and outreach throughout the transportation industry and the increased focus on the Opportunity Corridor projects. We have a strong history of meeting subcontracting goals and will bring this experience to meet the:

- 20% NSLE subcontracting goals
- 20% City of Cleveland Resident Workforce Goal, including the 4% low-income persons requirement
- Type 1 “Blue Collar” on-the-job training (OJT) goal of 20,000 hours
- Type 2 “Professional Services” OJT goal of 10,000 hours for City of Cleveland Wards 4, 5, and 6 residents.

The Kokosing DBT’s diversity, inclusion, and outreach team is outlined in Table D-1. As part of Kokosing’s commitment to the NSLE outreach, Project Manager Kerry Hart has personally overseen all outreach efforts during the preconstruction phase. These efforts have included:

- Attending ODOT’s Matchmaker event
- Leading Kokosing’s two outreach events
- Conducting face-to-face interviews with potential NSLE subcontractors
- Conducting weekly conference calls and meetings with the DIOC
- Attending multiple OCIAC meetings

The Kokosing DBT hosted pre-bid outreach events at the East Mt. Zion Church and the LaSagrada Famaia Church to engage the NSLE community. Numerous members of the Kokosing DBT participated in each

event, including representatives from Kokosing, Baker, Independence Excavating, Brownstone Grey, CDPS, and Artessa. This outreach strategy was an effort to learn as much as possible about the local community and key stakeholders. We established contact with 108 attendees at the East Mt Zion Church event and 89 attendees at the LaSagrada Famaia Church event. In addition to the outreach events, the Kokosing DBT sent out multiple mass communication e-blasts which resulted in conversations with additional new subcontractors, subconsultants, and suppliers.



Figure D-1: Outreach event for OC3 hosted by the Kokosing DBT

The DBT also coordinated and attended numerous meetings with local stakeholders, such as the Minority Business Assistance Center (MBAC), the Buckeye Area Development Corporation, the Burton Bell Carr Corporation, and the Fairfax Renaissance Development Corporation.

Wyatt Brownlee, Maurice Stevens, and Kerry Hart attended the January 18th, 2017 OCIAC meeting to begin our relationship with the committee. **Since then, we have attended every OCIAC meeting throughout 2017.** Key information was obtained on how to strengthen relationships with the local community. We have become keenly aware of some of the challenges of communicating with local residents. They may not have access to forms of communication such as email or transportation to and from the training locations. Additional communication should be focused on educating individuals interested in employment on how benefits through a workplace

might compare to the governmental benefits they are currently receiving. Input and feedback from OCIAC committee members will be continuously incorporated into our outreach strategy to address these challenges.

We listened to the needs of the NSLE contracting community. Our outreach process and the feedback received from the community guided our pre-bid approach for soliciting quotes from NSLE firms. At our events and through direct communication with firms, we learned that smaller packages were desirable for many firms. We encouraged NSLE firms to contact us directly to discuss the services they could provide, their capacity, and preferences for contract sizes. To accommodate as many companies as possible, we sent out both small and large bid packages. For example, seven separate curb and gutter and sidewalk packages were distributed with an option to bid any or all packages.

We will develop a public information plan at the project onset that will guide the project’s communications, outlining the internal processes of the DBT and describing the approach to public involvement and outreach for workforce and NSLE opportunities. A public information point of contact will be provided who will participate in weekly project communications meetings between the department and the DBT. Tina Rice of T. Rice Communications has been retained as our team’s Public Information Consultant, with over 25 years of experience providing similar services in the local community.

During the life of the project, Kerry Hart will maintain his high level of involvement in the diversity and inclusion efforts, community outreach, and NSLE goal attainment. To reinforce the Kokosing DBT’s commitment to diversity, inclusion, and outreach, Kokosing’s Regional Manager, Todd Lezon, participated in both of the Kokosing’s DBT pre-bid outreach events and interviewed numerous potential NSLE firms. Todd will continue these efforts post-bid and support Kerry in meeting these project goals.

The information presented in this section, along with our draft **Diversity, Inclusion, and Outreach Plan, (DIOP) presented in Appendix F.10**, demonstrates our approach to fulfilling the NSLE requirements.

Diversity Inclusion Outreach Team		Roles & Responsibility
Business Development	Workforce Development	
Wyatt Brownlee (Brownstone Grey), DB Diversity/Outreach Lead Manager		Manages the diversity and outreach program which includes business development, workforce development, and community outreach efforts
	Maurice Stevens (CDPS)	Delivers workforce development services and training to local residents
Joe Lopez (Artessa)		Provides mentoring and expands market-share to NSLE firms
	Mark Osbourne (Kokosing)	Fulfills Kokosing’s workforce needs and oversees Kokosing’s workforce development
Jill Harris (Kokosing), Contractor Diversity/Outreach Lead Manager		Coordinates business and workforce efforts and participates in outreach events. Monitors Kokosing’s efforts and assists in preparation of monthly DIO reports to OCIAC

Table D-1 – DIO Team



D.1 – DIOC Qualifications and Experience

Brownstone Grey LLC will serve as our Diversity, Inclusion, and Outreach Consultant (DIOC). Established by Wyatt Brownlee, Brownstone Grey brings 18 years of diversity, inclusion, and outreach experience. As a resident of Ward 4, Wyatt has a tremendous understanding of the local community and adjacent wards, with more than 15 years of experience in the northeast Ohio region developing minority and disadvantaged business enterprise initiatives and implementing inclusion protocols for public and governmental agencies.

Brownstone Grey’s inclusion and outreach efforts with NSLE businesses and residents of Cleveland Wards 4, 5, and 6 includes working on the CCG2 Innerbelt Bridge, Lakefront West, and Opportunity Corridor Section 1 (OC1) projects. Brownstone Grey’s efforts on these projects included:

- Identifying and recruiting qualified subcontractors and suppliers
- Mentoring and assisting contractors with access to capital, bonding, equipment, or insurance products and services
- Facilitating ODOT DBE certification workshops
- Assisting DBE contractors in completing the ODOT prequalification process

As part of Brownstone Grey’s efforts on the OC1 project, Wyatt drafted the initial local community outreach communication plan that was approved by ODOT and adopted by OhioMeansJobs. The OC1 outreach plan has served as the launching pad for the outreach efforts for the Opportunity Corridor group of projects.

Brownstone Grey has facilitated town hall meetings in the Cleveland area and across the state to gather information for ODOT regarding contractors’ experiences working on ODOT projects. In addition, Brownstone Grey has assisted ODOT in facilitating DBE certification workshops and DBE contractors with the ODOT prequalification process to increase the pool of DBE contractors bidding on ODOT projects.

Brownstone Grey attended all of ODOT’s regional disparity study meetings that BBC Research &

Consulting and Exstare Federal Services Group conducted. Wyatt participated in the interviewing processes of the NSLE firms in an effort to help gather data for the study. In conjunction with the disparity study, Wyatt led some of ODOT’s regional town hall meeting discussions, which were also used to gather data for the disparity study.

Diversity and Outreach Subconsultants

To further strengthen and support the diversity, inclusion, and outreach efforts on OC3, Brownstone Grey has engaged the following subconsultants:

Career Development and Placement Strategies (CDPS) will provide workforce development services to the DIOC. Led by President Maurice Stevens, CDPS brings more than 25 years of experience in the northeast Ohio region serving the disadvantaged workforce. Maurice is a nationally recognized leader in job training and workforce development and has assisted municipalities across the country in enhancing their workforce training. Since its inception in 2009, CDPS has provided workforce development training

to more than 3,500 individuals. A summary of these training efforts is outlined in Table D-2.

As part of the Opportunity Corridor Section 2 Project (OC2), CDPS expanded the social enterprise concept to engage residents living in Cleveland Wards 4, 5, and 6. Through CDPS’s partnership with local workforce development agencies, CDPS delivered a 224-hour carpentry training program and 40-hour training course in asbestos abatement. Employment preparation workshops during OC2 positively impacted 63 residents of Wards 4, 5, and 6. Ninety-four percent of the people who participated in the workshops found the information provided during the sessions to be very valuable in supporting their efforts to secure employment.

Artessa Building Group (Artessa) has been engaged to provide business development outreach strategies and opportunities to the disadvantaged business community. As President of Artessa, Joe Lopez brings 28 years of contracting experience and firsthand

knowledge of successfully managing and growing small, minority-owned businesses.

Artessa has a tremendous knowledge of the local businesses and will provide mentoring to firms to counteract disparity while also working to expand NSLE market-share. Artessa’s efforts will include:

- Developing a blueprint to standardize the process for ODOT certifications
- Evaluating firm capabilities and capacity
- Obtaining certifications for new and EDGE firms
- Improving business intelligence
- Educating firms on the auditing and bonding process while understanding state assistance auditing programs
- Enhancing the partnership between Hispanic and African American businesses

D.2 – Roles and Responsibilities of Diversity and Outreach Key Personnel

DB Diversity/Outreach Lead Manager Wyatt Brownlee

Wyatt is the Managing Principal of Brownstone Grey LLC. As a resident of Ward 4, he has more than 18 years of experience working with minority-owned, female-owned, and other disadvantaged business enterprise firms throughout Cuyahoga County and the metropolitan communities, which is summarized in Table D-3 on the next page. As the DB Diversity/Outreach Lead Manager, Wyatt will actively manage the project specific diversity and outreach program. In conjunction with ODOT, Wyatt will lead local community outreach efforts.

Wyatt Brownlee was recognized in the November issue of the 2006 National Minority Business News Magazine, for being one of the most influential men in the United States impacting minority businesses.

Wyatt will design and execute the strategy for the Diversity, Inclusion, and Outreach Plan (DIOP) and coordinate the project’s outreach efforts in collaboration with Jill Harris and the Kokosing DBT. He will leverage the DBT’s experience, contacts, and resources to ensure that socially and economically

CDPS Workforce Development Experience			
Program	Efforts	#	
		Trained	Placed
Rising Above	Assists citizens of the Greater Cleveland community by helping them prepare for the job market, gain employment, address child support issues, and improve their relationships with their children. The program’s credo is “a rising tide lifts all ships”, meaning that making a positive impact on one individual can ultimately benefit those surrounding that person.	1,167	688
Partnership with Cuyahoga County Fatherhood Initiative	Provide Workforce/Personal Development Training to residents of the Greater Cleveland area	525	245
Partnership with Council of Economic Opportunities of Greater Cleveland	Design and implement workforce training program that provided workforce and Personal development training to formerly incarcerated citizens of the Hough-Norwood area	46	27
Expert Reclaim in partnership with the Cleveland Foundation and Cuyahoga County Office of Reentry	Developed and implemented on-the-job training programs for Vacant Property Management, Deconstruction and Home Renovation with multiple organizations including: Cleveland Housing Network, A Piece of Cleveland and the Cuyahoga County Landbank	75	40

Table D-2 – CDPS Experience



Wyatt Brownlee Experience		
Partner	Program	Description
Greater Cleveland Partnership's Commission on Economic Inclusion	Minority Business Accelerator 2.5+	Assisted 10 companies per year with an average sales size of \$2.5 million or greater to grow 20 percent annually. Job creations for each firm were estimated at one new job for every \$150,000 of incremental sales growth. The average salary for each new job was \$40,000 annually.
Shore Bank Enterprises, Inc.	Access to Capital Loan Bank Fund	Provided financing for contractors over a two-year period and provided the necessary working capital needed to ensure that new, small, and disadvantaged contractors could participate on projects.
The Surety & Fidelity Association of America	Bonding Preparation	Improved MBE ability to obtain a bond or to increase MBE bonding capacity through construction management education and bond readiness workshops

Table D-3 – Wyatt Brownlee's Experience

disadvantaged businesses are included throughout the entire project and that the project workforce includes and reflects the needs of residents from Wards 4, 5, and 6.

During the past nine years, Wyatt Brownlee has worked with more than 30 of the region's largest public and private employers, including:

- Cleveland Clinic
- Cleveland Museum of Art
- Cleveland State University
- Cuyahoga County
- Horseshoe Casino
- Huntington Bank
- General Electric
- GCRTA
- University Hospital

Wyatt's individual work in the region has created more than 1,000 jobs and generated more than \$2 billion in revenue, impacting more than 250 small, minority, and disadvantaged businesses throughout Ohio.

Contractor Diversity/Outreach Lead Manager Jill Harris, PHR, SHRM-CP

As the Director of Human Resources for Kokosing, Jill develops and implements talent acquisition strategies

and programs to ensure that Kokosing proactively attracts a qualified, diverse, and high-performing workforce to support the achievement of the company's strategic objectives. Serving as the Contractor Diversity/Outreach Lead Manager, Jill will coordinate with Wyatt Brownlee and the Department to provide outreach efforts to the local community and assist the Kokosing DBT in reaching the subcontracting and workforce goals. She will be responsible for the Kokosing's internal diversity and inclusion efforts and monitoring.

As the previous Manager of Human Resources for Corna/Kokosing Construction, she managed all compliance reporting, EEO statistics, affirmative action plan, diversity, harassment, and substance abuse programs. She also served as chairperson for the company's diversity and outreach committee. Jill has developed relationships with many minority organizations in Ohio to support the development of minorities and minority companies for the construction industry.

Jill's previous project experience includes Ohio Health's Riverside Methodist Hospital Neuroscience Institute and Franklin County Hall of Justice Renovation projects. The \$231 million Riverside Hospital Neuroscience Institute project consisted of the addition of a 420,000 SF, 10-story neuroscience

and cardiac patient tower with 224 individual private beds (several ICU), linear accelerator, MRIs, interventional radiology, operating rooms, CTs, outpatient clinics, and many other supporting services. The \$45 million Hall of Justice renovation improved 237,500 SF of the Franklin County Law Library, offices for the Franklin County Probation Department, and new meeting rooms, along with the relocation of the Franklin County Building Complex Security Center. For both of these large projects, Jill managed outreach events while coordinating with DBE, MBE, WBE, and EDGE-certified subcontractors and suppliers.

Value Added Personnel

Business Development Subconsultant Maurice Stevens

Maurice will deliver workforce development services and training to local residents. Maurice has been implementing workforce training and educational programming since 1990. Prior to Maurice's role as president and CEO of CDPS, Maurice was Director of Career Development and Training at the Urban League of Greater Cleveland, where he developed and implemented a workforce development curriculum and facilitated employment readiness workshops to assist clients in making a successful transition to employment. As Director of Cooperative Education at Cuyahoga Community College, Maurice managed the Cooperative Education Program, which included recruiting, orientations, and evaluations of the Co-Op work site assignments. Refer to Table D-2 for some of Maurice's additional accomplishments.

Workforce Development Subconsultant Joe Lopez

As a Business Development Advisor, Joe has directly impacted in excess of \$310 million in projects in his role as a collaborative partner. He currently provides monthly consulting services for the Northeast Ohio Hispanic Center for Economic Development, where he developed "The Construction Capacity Initiative-Program Development" seminar series and individual one-on-one counseling. In addition, Joe provides seminars and workshops for the City of Cleveland through the Mayor's Office of Equal Opportunity on "Business Strategies for Construction."

Joe possesses expertise in working with agencies to establish the proper financial, technical, and operational resources needed to build potentially new, small, local, socially and economically disadvantaged subcontractors necessary to exceed the project's 20% goal. Some of Joe's previous local projects include:

- The Eaton World Headquarters
- University Hospital Parking Garage
- The Cleveland Art Museum
- GSA
- Cleveland Hopkins International Airport
- The Cleveland Convention Center
- The Hilton Hotel

Kokosing Corporate Workforce Manager Mark Osbourne

Mark manages Kokosing's workforce development group and oversees selection, development, and placement of the skilled trade personnel on Kokosing's projects. Mark has established relationships with trade unions, career centers, technical schools, traditional schools, military organizations, two-year colleges, and other areas throughout the state of Ohio and surrounding regions. Mark works with state, city, and regional organizations to recruit, mentor, and develop candidates while exposing them to the general contracting industry and careers in construction. On Kokosing's MLK project in Cincinnati, Mark participated in the "Pathways to Careers in Highway Construction," which involved monthly meetings, community events discussing careers in construction, and site visits for community programs. Mark facilitates Kokosing's Operate With Leadership (OWL) program, which exposes managers, superintendents, engineers, and foremen to the disciplines of leadership and opportunities for individual development.





D.3– Draft DIOP

The Opportunity Corridor transportation projects support local job growth and community engagement. The Kokosing DBT appreciates the importance of the local community surrounding the OC3 project and has invested a significant effort in the development of the Draft Diversity, Inclusion, and Outreach Plan (DIOP). We have assembled a diversity and inclusion team with substantial local knowledge and presence and are committed to providing a team representative from the local community. The draft DIOP is included in Appendix F.10. The plan outlines key strategies and specific action items the Kokosing DBT expects to achieve to deliver the successful outcomes desired by the department and the local community.

To properly track and report all of the team’s inclusion efforts on the project, the Kokosing DBT will utilize the web-based program B2Gnow. Through the B2Gnow program, the DIOP will accurately track the number of new potential companies contacted to participate on the project, the new companies contracted, the number of DBT employees from within the local geographic region that are directly working on the project, the breakdown of progress payments made to subcontractors that are identified to meet the goals, and the anticipated upcoming work for the subcontractors identified to meet the remaining goals. Key points from the draft DIOP are summarized below:

D.3.i –Business Development

The DIOP has developed a comprehensive communication database by merging ODOT’s DBE, the State of Ohio’s MBE/EDGE, the City of Cleveland’s MBE/FBE/SBE, and Cuyahoga County’s SBE lists of certified firms. All firms that attended previous Matchmaking sessions sponsored by ODOT, as well as all firms working on OC1 and OC2, were also added. All firms that could potentially be interested in submitting a quote were sent a pricing inquiry that describes the work types on the project and contact names for obtaining additional information about the project.

In an effort to recruit “new” firms, additional communication and pricing inquiries were sent to a number of local organizations, such as:

- Urban League of Greater Cleveland MBAC
- City of Cleveland Office of Equal Opportunity
- Cuyahoga County
- NEORS
- Cleveland Hopkins and
- Burke Lakefront Pricing
- Black Contractors Group
- American Center for Economic Equality

These organizations forwarded the Kokosing DBT pricing inquiries onto businesses registered with their offices.

The Kokosing DBT commits to mentoring a minimum of four businesses participating on the project, including one small business, one new business, one local business, and one EDGE business, with a minimum of one construction firm and one design firm.

Our workshops will assist NSLE firms to move beyond surviving to growing. We understand that strategic planning is not a one-size-fits-all model. Strategies that work for one company may not be right for another, but any company that commits to the process will see benefits. Wyatt will conduct a Strategic Planning Workshop that will include our six-step outline to guide our NSLE partners’ business development. This includes:

1. Establish an internal baseline
2. Establish an external baseline
3. Differentiate and innovate
4. Align and execute
5. Review and measure
6. Evaluate and modify

Developmental workshops focused on bonding, estimating, construction schedule, understanding costs of work, prequalification, project closeout, contract requirements, and strategic planning will continue through the life of the project. Table D-4 summarizes key Business Development points from our draft DIOP.

Topic	Key Points
Outreach Tracking	<ul style="list-style-type: none"> • Utilize web-based B2Gnow to track NSLE firm outreach efforts.
OCIAC Engagement	<ul style="list-style-type: none"> • Continued coordination and communication with the OCIAC to expand outreach efforts. Monthly reporting led by Maurice and Jill to document Kokosing DBT efforts.
a./b. Mentoring NSLE Businesses	<ul style="list-style-type: none"> • Commitment to mentor a minimum of four businesses with one from each subcontracting category (new, small, local, EDGE). At least one design and one construction firm will be formally mentored. • Conduct readiness assessments reviewing NSLE firms’ infrastructure, staff, certifications, and bonding. Evaluate firms’ access to capital qualification, capability, and capacity. • Hold quarterly workshops focused on best practices, common mistakes to avoid, management, leadership, the importance of marketing, and advertising. Assist in developing practices that will enable long-term viability for future construction projects.
c. Expansion of NSLE businesses	<ul style="list-style-type: none"> • Strategic Planning Workshop will provide a six-step framework to guide NSLE firms through their business plan. Quarterly Developmental Workshops will focus on bonding, estimating, scheduling, cost control, prequalification, and general contract knowledge. • Conduct branding workshops to introduce new innovative concepts to NSLE’s firms for branding their staff and vehicles, creating business slogans, and training their staff. Business expansion strategies will include social media marketing, search engine optimization, online reviews, networking with potential clients, and getting accredited.
d. NSLE Commitments	<ul style="list-style-type: none"> • Provided in Part D.4 of this Technical Proposal
e. Progress Payments	<ul style="list-style-type: none"> • Utilize B2GNow to track payments to NSLE subs and compared monthly to the overall percentage of work completed for the project to ensure that utilization is on track to meet or exceed NSLE goals.
f. Developmental Workshops	<ul style="list-style-type: none"> • The Kokosing DBT is planning several types of workshops: <ul style="list-style-type: none"> - Strategic Planning Workshop and quarterly Developmental Workshops offered to any interested firm - Readiness Assessments and Quarterly Mentoring Workshops for formally mentored firms
g. Ongoing Efforts Throughout the Life of the Project	<ul style="list-style-type: none"> • Workshops will be conducted throughout the life of the project, allowing ample opportunities for NSLE firm participation. • Continued solicitation of NSLE firms for work not committed at the time of bid or work added to the scope throughout the life of the project.
h. NSLE Firm Barriers and Solutions	<ul style="list-style-type: none"> • Diverse DIO team of Wyatt Brownlee, Maurice Stevens and Joe Lopez ability to effectively communicate with wide range of businesses • Utilization of past proven practices to remove barriers including prequalification, financing/bonding, and communication strategies

Table D-4 – Business Development Highlights



D.3.ii – Workforce Development

Wyatt Brownlee, Jill Harris, and Maurice Stevens will map out a project timeline to ensure that the 20,000-hour Type 1 and 10,000-hour Type 2 OJT requirements will be met, along with the local and low-income workforce requirements. They will work closely with Robin Kaufman, who manages Kokosing’s EEO policy and OJT program, and Mark Osborn, Kokosing’s Corporate Workforce Development Manager.

The DIOC has developed a vision for Opportunity Corridor Section 3 OJT program: “Through collaboration with state, community development centers, city council members, religious groups, and individual leaders, Black activists, Hispanic activists, and others, we aim to deliver quality information that increases public awareness and leads to a pipeline of potentially great prospects that aspire to be better.”

The Kokosing DBT’s plan to communicate employment opportunities will consist of a two-pronged approach using throughput and outreach and blended engagement. **Throughput** involves the Kokosing DBT actively soliciting and encouraging support from all NSLE businesses to provide employment opportunities to those who qualify. **Outreach and blended engagement** utilizes Kokosing’s own platform to communicate employment opportunities.

As part of our outreach and blended engagement, The Kokosing DBT will utilize a community ambassador to canvass the adjacent ward communities to inform residents of the various employment and training opportunities that are available on the OC3 project and throughout the Greater Cleveland area.

Our targeted outreach strategy will include meeting with community stakeholder groups on a monthly basis to encourage them to consistently send appropriate candidates to our recruitment sessions. Recruitment sessions will consist of providing

information on various opportunities and engaging participants in an orientation and prequalification process for the many jobs that are being offered on the OC3 project. Target outreach will be provided to the following groups:

Community Development Corporations
Buckeye Area Development Corporation ED, John Hopkins Ward #4
Burton Bell Carr Development Corporation ED, Timothy Tramble Ward #5
Fairfax Renaissance Development Corporation ED, Denise VanLeer Ward #6
University Circle Inc. President, Chris Ronayne
Slavic Village Development Corporation ED, Chris Alvarado
City Council Members
City Council Ward# 4 – Kenneth Johnson
City Council Ward# 5 – Phyllis Cleveland
City Council Ward# 6 – Blaine Griffin
City Council Ward# 12 – Anthony Brancetelli
City Council Ward# 2 – Zack Reed
City Council Ward# 9 – Kevin Conwell
Community Leaders, Organizations & Activist
The American Center for Economic Equality - Norm Edwards
The Hispanic Roundtable - Gus Hoyas
The NAACP - Hilton Smith
Urban League of Greater Cleveland - Marsha Mockabee

The Kokosing DBT commits to providing Kokosing’s two day Operate with Leadership (OWL) training session on-site at the OC3 project. Led by Mark Osborne, this leadership training will focus on the workforce developed in Wards 4, 5 and 6 to further promote leadership principals and personal development in the local community.



Topic	Key Points
a. Communicating employment opportunities	<ul style="list-style-type: none"> Outreach and Blended Engagement will make use of local Community Development Corporations, Neighborhood Centers, Community Ambassadors and Electronic Outreach Platforms. Throughput efforts will actively solicit and encourage support from all participating contractors to provide employment opportunities. Utilize CWB.World, which leverages the best of Facebook, Google Hangout, Skype, Coursera.org, and LinkedIn to create an online environment that is easy to access and one that promotes mastery of any content or subject area.
b. Type 1 OJT (20,000 hours)	<ul style="list-style-type: none"> Utilization of union apprenticeship programs Recruitment of qualified candidates from City of Cleveland
c. Type 2 OJT (10,000 hours)	<ul style="list-style-type: none"> Use of Ambassador Program, including Kokosing DBT Ambassador to generate interest and spread employment opportunity information. Use of construction subcontractors to assist in meeting goals
d./e. 20% Local Workforce including 4% low income persons	<ul style="list-style-type: none"> Kokosing’s Workforce Coordinator Mark Osborne will work closely with Workforce Specialist Maurice Stevens, the local union’s dispatch departments and apprenticeship programs. Major subcontractors will be required to meet the goals on their portions of the work. Engage local agencies and contractor's organizations such as the Black Contractors Group, Hispanic Contractors, and Hard Hatted Women to identify residents for construction work
b. – e.	<ul style="list-style-type: none"> Kokosing will hold quarterly job fairs through the life of the project, starting prior to construction in 2018. Additional job fairs will be conducted as-needed if additional workforce resources are required.
f. Residency/Low-Income Verification	<ul style="list-style-type: none"> Jill Harris has extensive knowledge of Section 188.01 of the Fannie M. Lewis Cleveland Resident Employment Law and will assure that all worker information is documented, tracked and reported accurately.
g. Continuing Workforce Development	<ul style="list-style-type: none"> Dedicated workforce development mentors will provide employee development throughout the project. Mentors will include DB Construction Manager Brad Mast, Workforce Coordinator Mark Osborne, and Workforce Specialist Maurice Stevens.

Table D-5 – Workforce Development Highlights



D.3.iii – Community outreach

The DBT’s plans and efforts for community engagement involve conducting strategic outreach communication meetings and events. We will ensure that socially and economically disadvantaged individuals have equal or better opportunities to participate on the project. This ensures that the project represents the individuals who live, work, and play in these communities. The Kokosing DBT’s goal is to leave a lasting legacy on the OC3 project with sustained community enrichment that will continue to positively impact the community long after the project is completed.

The approach to working with the OCIAC started by attending the January 18th 2017 OCIAC meeting to begin our relationship with the committee. We will continue to attend these monthly OCIAC meetings during the course of the OC3 project, as we have throughout the pursuit phase. We will prepare and share the required monthly OCIAC reports and explain in detail our outreach efforts and how our workshops are being accepted by the public and NLSE

companies. We will contribute to the OCIAC newsletter by providing outreach information and progress pictures. We will collaborate with the OCIAC team so that we can help and learn from each other on what outreach efforts are providing the most benefit so that the Opportunity Corridor Project can be a success.

Our community outreach approach will include engaging many diverse groups from inception to reflect the many perspectives of the area and to consciously give priority to increasing diversity. We welcome and highlight different sorts of contributions, special skills, and experiences and provide incentives and trade-offs to recruit diverse participants. We will set ground rules that maintain a safe and nurturing atmosphere. We will encourage and assist people to develop qualities such as patience, empathy, trust, tolerance, and a nonjudgmental attitude.

This plan invests significant up-front time in outreach and follow-up to build the community’s trust. Personal contact is important. We will tap into all of the DBT’s perspective networks, use word-of-mouth and

personal references to enhance our credibility. We’ll be prepared to operate in new ways, share control, and build trust. The Kokosing DBT respects the right of member organizations to maintain their own separatism if they wish.

Our neighborhood community and faith-based partners in this effort will include:

1. Urban League of Greater Cleveland
2. Towards Employment
3. Catholic Charities
4. Lutheran Metropolitan Ministries
5. Salvation Army Harbor Light Complex
6. Y-haven Open Doors Program
7. Council of Economic Opportunities of Greater Cleveland
8. Cuyahoga County Fatherhood Initiative
9. Cuyahoga County Families on track program
10. Healthy Fathering Collaborative and Cuyahoga County Office of Reentry
11. Neighborhood Connections
12. Quinn Chapel Church

13. Ministers Missionary Baptist
14. Damascus Baptist Church
15. Mt. Sini Baptist Church

Local youth and student engagement starts with making them aware of the opportunities to get connected with training, development, and project opportunities. We will target 11th and 12th grade students from high schools, including Benedictine, East Technical, John Adams, and Glenville. We will also engage younger students that have an interest in the project by contacting local elementary and middle schools, community recreation centers, and other neighborhood associations.

Our method to addressing language barriers will involve developing a multicultural collaboration and clear lines of communication. This includes not only communicating through non-traditional methods, but also facilitating an acceptance of unique communication cultures and styles throughout the project.



Figure D-2: Community Outreach Strategies

Topic	Key Points
a. Working with the OCIAC	<ul style="list-style-type: none"> The Kokosing DBT will attend monthly OCIAC meetings and provide updates on NSLE contracting and workforce development. We will be an active contributor to the OCIAC newsletter. We have attended every OCIAC meeting since January, 2017 developing a relationship with the organization and other attendees and furthering our understanding of their goals.
b. Local Youth and Student Engagement	<ul style="list-style-type: none"> Provide early and ongoing outreach to local education and youth organizations. Provide activities including project field trips, bus tours, and heavy equipment demonstrations. Facilitate a growing interest in the construction industry.
c. Approach to Community Engagement	<ul style="list-style-type: none"> Work with the community partners identified above. Conduct strategic outreach communication meetings and events.
d. Addressing Language Barriers	<ul style="list-style-type: none"> Ensure that adequate language translation (i.e. sign language or Spanish) is provided at events. Recognize and provide education on multicultural language barriers.

Table D-6 – Community Outreach Highlights



D.4 – New, Small, Local, & EDGE Commitments

The Kokosing DBT is committed to meeting the subcontracting goals for this project. Table D-7 contains a listing of the firms being utilized to meet these goals, along with the committed percentage of the total project. A more detailed listing containing the function of the firms, along with documentation from the firms confirming participation in the project, can be found in Appendix 9.

Firm	Goal Category	Committed Percentage
2295 EAST 55 LLC	New	0.3775%
2LMN INC.	Small	0.1387%
3D Visual Concepts	Small	0.0050%
All Crane	Local	0.0660%
American Roadway Logistics	Small	0.1392%
Americut Coring & Sawing, Inc.	Local	0.0167%
ARS Trucking	New	0.0905%
Artessa Building Group, LLC	New	0.0040%
Artistic Rock, LLC	Local	0.0067%
Asphalt Fabrics & Specialties	Local	0.0067%
Beagle Hill Services, LLC	EDGE	0.0309%
Behnke Associates, Inc.	Small	0.0836%
Boulevard Studios, LLC	New	0.0088%
BYLER'S SAWMILL	New	0.0410%
CAD Concepts, Inc (dba CCI Engineering Services)	Small	0.1772%
Career Development & Placement Strategies	New	0.0646%
CH2M Hill Engineers, Inc.	Local	1.4918%
CNT Trucking	Small	0.0501%
Coleman Development, Inc.	Local	0.0316%
Concrete Cutting & Breaking Co.	Local	0.0050%
Consulting Engineering, Inc.	Small	0.0455%
Cook Paving & Construction Co., Inc.	EDGE	3.8377%
Creekside Landscaping Services	New	0.3043%
Custom Repairs & Excavating, LLC	EDGE	0.0575%
Cuyahoga Fence, LLC	EDGE	0.2877%
Cuyahoga Supply & Tool Inc.	Local	0.0276%
Denise's Flagging and Construction	Small	0.4222%
Direct Health Solutions HR, LLC	Small	0.0161%
DNK	Small	0.0228%
Dot Diamond Core Drilling Inc.	Local	0.0100%
Dynotec Inc.	Small	0.1942%
E.L. Robinson Engineering	Local	1.6242%
Eggeman Engineering & Consulting, LLC	Small	0.0401%
Envision	Small	0.0067%
Ferguson Waterworks	Local	0.1184%
Follow the River	Small	0.0695%
Foundation Steel LLC	EDGE	1.3653%
Genesis Construction and Supply Inc.	EDGE	0.9296%
GRL Engineers, Inc.	Local	0.0599%
High Energy Associates LLC (dba Batteries Plus LLC)	Local	0.0002%
Hydracrete Pumping Co, Inc	Local	0.0653%
Immaculate Cleaning Co, LLC	New	0.0655%

Independence Excavating, Inc.	Local	6.8512%
Irizar Electric LLC	EDGE	0.6584%
J T Dillard, LLC dba ZayMat Distributors	Local	0.0923%
Kelly Construction Management Assoc., Inc.	Local	0.0074%
Kes Harris Trucking, LLC	Small	0.0334%
Key Cable and Supply	EDGE	0.2747%
Lafarge North America	Local	0.5254%
Lanham Engineering, LLC	Small	0.0482%
McKinley Industries LLC	New	1.0848%
Meliora Design	Small	0.0596%
Midland Concrete & Sand Transportation, Inc.	Local	0.0067%
Midwest Equipment Co.	Local	0.0322%
MJP Trucking, LLC	Small	0.0391%
National Lime & Stone Co.	Local	0.1166%
Native Construction LLC	EDGE	0.5278%
Barr Engineering (dba NEAS)	Local	0.3026%
Nelson Studs	Local	0.0120%
Ontario Stone Corp.	Local	0.1815%
PGT Construction Inc.	EDGE	0.3519%
ProTerra Inc.	Local	0.0060%
R Engineering Team, LLC	EDGE	0.1388%
R.L. Cole Ent., Inc.	EDGE	0.2147%
RAR Contracting Co., Inc.	EDGE	0.1995%
Ribway Engineering Group, Inc.	Small	0.0569%
Rockport Ready Mix	EDGE	0.1644%
RWJ Wiring Inc.	EDGE	0.9358%
SE Blueprint, Inc.	Local	0.0050%
Simplified Alternatives, Inc.	EDGE	0.6541%
Soil Testing & Engineering, Ltd.	Small	0.0481%
Solar Testing Laboratories, Inc.	Small	0.0856%
T Rice Communications, LLC	Small	0.0521%
Tech Ready Mix Inc.	EDGE	3.0265%
The CADD Department, Inc.	EDGE	0.2888%
The Construction Green Team	Small	0.1266%
Urban Recycling 216 LLC	Local	0.1394%
Veach Trucking, Inc.	EDGE	0.1173%
Vermillion Tree	Local	0.1580%
Williams Trenching, Inc.	Small	0.0833%

Table D-7

Our total project commitment includes over 14% EDGE participation and 61 New, Small and Local Firms!

Table D-8 Category	ODOT Percentage Goal	Kokosing Commitment	ODOT Minimum # of Firms	Kokosing # of Firms Commitment
New Business	2%	2.04%	2	9
Small Business (SBE)	2%	2.04%	2	24
Local Business	6%	11.96%	3	28
Other Socially & Economically Disadvantaged Business (EDGE)	10%	14.06%	5	19

E. Prequalification



Part E - Prequalification



Contractor Prequalification

As requested in the Instructions to Offerors, the tables below indicate the contractor or consultant intended to perform each work type. For construction work types where a specific subcontractor cannot be identified prior to final Technical Proposal production, and as allowed per the prebid Questions and Answers, Kokosing Construction Company, Inc. commits that an ODOT Prequalified Subcontractor will be utilized if that work type is performed on the project.

Work Type Code	Work Type Description	Contractor/Subcontractor(s) to Perform the Work
1	Clearing & Grubbing	Kokosing Construction Company, Inc. / Independence Excavating
2	Building Removal	Kokosing Construction Company, Inc. / Independence Excavating
3	Gas, Oil, Water Well Abandonments	Kokosing Construction Company, Inc. / Independence Excavating
4	Roadway Excavation & Embankment Construction	Kokosing Construction Company, Inc. / Independence Excavating
5	Major Roadway Excavations	Kokosing Construction Company, Inc. / Independence Excavating
6	Incidental Grading	Kokosing Construction Company, Inc. / Independence Excavating
7	Soil Stabilization	Kokosing Construction Company, Inc. / Independence Excavating
8	Temporary Soil Erosion & Sediment Control	Kokosing Construction Company, Inc.
9	Aggregate Bases	Kokosing Construction Company, Inc. / Independence Excavating
10	Flexible Paving	Kokosing Construction Company, Inc.
11	Apply Bituminous Treatments	Kokosing Construction Company, Inc.
12	Rigid Paving	Kokosing Construction Company, Inc.
13	Pavement Planning, Milling, Scarification	Kokosing Construction Company, Inc.
14	Concrete Texturing	ODOT Prequalified Subcontractor
15	Sawing	Kokosing Construction Company, Inc.
16	Flexible Replacement	Kokosing Construction Company, Inc.
17	Rigid Pavement Replacement	Kokosing Construction Company, Inc.
18	Pavement Rubblizing, Breaking, Pulverizing	ODOT Prequalified Subcontractor
19	Structure Removal	Kokosing Construction Company, Inc.
20	Level 1 Bridge	Kokosing Construction Company, Inc.
21	Level 2 Bridge	Kokosing Construction Company, Inc.
22	Level 3 Bridge	Kokosing Construction Company, Inc.
23	Reinforcing Steel	Kokosing Construction Company, Inc.

Work Type Code	Work Type Description	Contractor/Subcontractor(s) to Perform the Work
24	Structural Steel Erection	Kokosing Construction Company, Inc.
25	Stud Welding	Kokosing Construction Company, Inc.
26	Structural Steel Painting	ODOT Prequalified Subcontractor
27	Expansion & Contraction Joints, Joint Sealers, Bearing Devices	Kokosing Construction Company, Inc.
28	Caissons / Drilled Shafts	Kokosing Construction Company, Inc./ ODOT Prequalified Subcontractor
29	Structure Repairs	Kokosing Construction Company, Inc.
30	Hydrodemolition	ODOT Prequalified Subcontractor
31	Structural Steel Repairs	Kokosing Construction Company, Inc.
32	Heat Straightening	ODOT Prequalified Subcontractor
33	Tieback Installation	Kokosing Construction Company, Inc./ ODOT Prequalified Subcontractor
34	Earth Retaining Structures	Kokosing Construction Company, Inc.
35	Drainage (Culverts, Misc.)	Kokosing Construction Company, Inc. / Independence Excavating
36	Guardrail / Attenuators	ODOT Prequalified Subcontractor
37	Fence	ODOT Prequalified Subcontractor
38	Misc. Concrete	Kokosing Construction Company, Inc.
39	Maintenance of Traffic	Kokosing Construction Company, Inc.
40	Waterproofing	Kokosing Construction Company, Inc.
41	Raised Pavement Markers	ODOT Prequalified Subcontractor
42	Signing	ODOT Prequalified Subcontractor
43	Highway Lighting	ODOT Prequalified Subcontractor
44	Traffic Signals - Standard	ODOT Prequalified Subcontractor
45	Pavement Markings	Kokosing Construction Company, Inc./ ODOT Prequalified Subcontractor
46	Landscaping	Kokosing Construction Company, Inc./ ODOT Prequalified Subcontractor
47	Mowing	ODOT Prequalified Subcontractor
48	Trucking	ODOT Prequalified Subcontractor
49	Herbicide Spraying	ODOT Prequalified Subcontractor
50	Railroad Track Construction	ODOT Prequalified Subcontractor
51	Micro Tunneling	ODOT Prequalified Subcontractor
52	Tunneling	ODOT Prequalified Subcontractor
53	Piling	Kokosing Construction Company, Inc./ ODOT Prequalified Subcontractor



Work Type Code	Work Type Description	Contractor/Subcontractor(s) to Perform the Work
54	Post-Tensioning Bridge Members	Kokosing Construction Company, Inc./ ODOT Prequalified Subcontractor
55	Fiber Optic Cable Installation, Splicing, Termination and Testing – Traffic Signal System	ODOT Prequalified Subcontractor
56	Fiber Optic Cable Installation, Splicing, Termination and Testing – Intelligent Transportation System	ODOT Prequalified Subcontractor
57	Sealing of Concrete Surfaces with Epoxy or Non- Epoxy Sealers	ODOT Prequalified Subcontractor

Designer Prequalification

Prequalification Category	Consultant/Subconsultant to Perform the Design Work
ROADWAY	
Bicycle Facilities and Enhancement Design	Michael Baker International/E.L. Robinson
Complex Roadway Design	Michael Baker International/E.L. Robinson
SUBSURFACE UTILITY ENGINEER	Barr Engineering dba NEAS
BRIDGE DESIGN	
Level 2 Bridge Design	Michael Baker International/E.L. Robinson
Bridge Design Sub-factors: Complex geometry	Michael Baker International/E.L. Robinson
SOILS/GEOTECHNICAL SERVICES	
Geotechnical Engineering Services	Michael Baker International/E.L. Robinson
Geotechnical Testing Laboratory	Barr Engineering dba NEAS
Geotechnical Field Exploration Services	Barr Engineering dba NEAS
Geotechnical Drilling Inspection Services	Barr Engineering dba NEAS
TRAFFIC SIGNAL DESIGN	
Traffic Signal System Design	Michael Baker International
HIGHWAY LIGHTING DESIGN	
Complex Lighting Design	Michael Baker International
ENVIRONMENTAL DOCUMENTATION	
Environmental Site Assessment Phase II	Michael Baker International

IQF Prequalification

Prequalification Category	Consultant/Subconsultant to Perform the Design Work
ROADWAY	
Bicycle Facilities and Enhancement Design	REL/CH2M/Behnke
Complex Roadway Design	REL/CH2M
BRIDGE DESIGN	
Level 2 Bridge Design	REL/CH2M
Bridge Design Sub-factors: Complex geometry	REL/CH2M
SOILS/GEOTECHNICAL SERVICES	
Geotechnical Engineering Services	CH2M
TRAFFIC SIGNAL DESIGN	
Traffic Signal System Design	REL/CH2M
HIGHWAY LIGHTING DESIGN	
Complex Lighting Design	REL/CH2M
ENVIRONMENTAL DOCUMENTATION	
Environmental Site Assessment Phase II	CH2M

F: Appendices



F.1 Appendix 1 - Administrative Submittal (Forms A-1 and C-1)





Form A-1

FORM A-1 PROPOSAL LETTER

Name of Short-listed Offeror: Kokosing Construction Company, Inc.

Date: December 21, 2017

Ohio Department of Transportation
 Office of Contracts, First Floor
 1980 W. Broad Street
 Columbus, OH 43223

On behalf of the Short-listed Offeror, the undersigned submit the documents described in paragraph 1 of this Proposal Letter in response to the Request for Proposals for the Opportunity Corridor Section 3 Project (the “RFP”) issued by the Ohio Department of Transportation (the “Department”).

The Short-listed Offeror hereby acknowledges delivery by Short-listed Offeror to the Department of the enclosed Price Proposal. Together with the Technical Proposal, the submittal by the DBT shall collectively constitute the “Proposal” for the purposes of this letter.

If this Proposal is accepted by the Department, the Short-listed Offeror is prepared to enter this agreement without varying or amending its terms (except for modifications agreed to by the Department in its sole discretion), and to satisfy all other conditions to the award of the contract, including compliance with all commitments contained in this Proposal.

1. Enclosed with this Proposal Letter is the Technical Proposal and Price Proposal of the Short-listed Offeror consisting of all documents and information required by the RFP.
2. The following individual(s) is/are authorized to enter into negotiations with the Department on behalf of the Short-listed Offeror in connection with this RFP:

- Daniel J. Compston, President
- John D. Householder, Senior Vice-President
- Kerry A. Hart, DBIA, Project Manager
- Todd M. Lezon, Regional Manager
- Scott E. Mesick, Area Manager
- Robert B. Bowers, Assistant Vice-President
- Kevin A. Ohl, PE, DBIA, Manager of Alternative Contracting

3. The Short-listed Offeror acknowledges receipt of following Addenda:

Addendum No. 1	Addendum No. 2
Addendum No. 3	Addendum No. 4
Addendum No. 5	Addendum No. 6
Addendum No. 7	Addendum No. 8
Addendum No. 9	Addendum No. 10
Addendum No. 11	Addendum No. 12
Addendum No. 13	Addendum No. 14
Addendum No. 15	Addendum No. 16
Addendum No. 17	Addendum No. 18
Addendum No. 19	Addendum No. 20
Addendum No. 21	Addendum No. 22
4. The Short-listed Offeror hereby certifies that:
 - a) its Proposal is submitted without reservation, qualification, assumptions, deviations or conditions;
 - b) it has carefully examined and is fully familiar with all of the provisions of the RFP, has reviewed all materials provided, the Addenda and the Department’s responses to questions, and is satisfied that the RFP provides sufficient detail regarding the obligations to be performed by the Short-listed Offeror and does not contain internal inconsistencies;
 - c) it has conducted such other field investigations and additional design development as is prudent and reasonable in preparing this Proposal;
 - d) it has carefully checked all the words, figures and statements in the Proposal;
 - e) it has notified the Department of any deficiencies or omissions in the RFP or other documents provided by the Department;
 - f) the Lead Contractor has been prequalified for such work by the Department in accordance with the terms of the RFP;
 - g) neither the Proposer nor its employees, members, agents, consultants or advisors have entered either directly or indirectly into any agreement, participated in any collusion, or otherwise taken any action in restraint of free competitive selection in connection with its Proposal
5. The Short-listed Offeror represents that all statements made and information provided in the SOQ (except as amended, resubmitted and/or updated by the enclosed Technical Proposal) are true, correct and accurate as of the date of submission of this Technical Proposal.
6. The Short-listed Offeror further understands that all costs and expenses incurred in preparing the Technical Proposal and participating in the RFP Process will be borne solely by the Short-listed Offeror, except any stipend that may be paid in accordance with the RFP.
7. The Short-listed Offeror consents to the Department’s disclosure of its Technical Proposal pursuant to the Department’s public records policy to any persons as required by law after Award. The Short-listed Offeror acknowledges and agrees to the disclosure terms described in the RFP and expressly waives any right to contest such disclosures.
8. The Short-listed Offeror agrees that:



- a) The Department will not be responsible for any errors, omissions, inaccuracies or incomplete statements in the Proposal;
 - b) The Department's acceptance of the Proposal does not constitute any statement or determination as to its completeness, responsiveness or compliance with the requirements of the RFP;
 - c) If the Short-listed Offeror has the best value proposal, the Short-listed Offeror is committed to meeting the goals for New Business, Small Business, Local Business and EDGE Business involvement;
 - d) If the Short-listed Offeror has the best value proposal, the individuals identified as Key Personnel will be available on a full-time basis for the periods necessary to fulfill their Project-related responsibilities; and
 - e) in the event a substantive difference is identified before or after Award, between the terms for the Project offered by the Short-listed Offeror in its Proposal and any provision in the RFP, the provisions of the relevant Contract Document will prevail and the Short-listed Offeror will not be entitled to alter its Proposal, as applicable.
9. The Proposal shall be governed by and construed in all respects according to the law of the State of Ohio.
10. The Short-listed Offeror's business address:

886	McKinley Ave		
(No.)	(Street)	(Floor or Suite)	
Columbus	Ohio	43222	USA
(City)	(State or Province)	(ZIP or Postal Code)	(Country)

State/Country of Organization (if applicable): Ohio
 [Balance of page intentionally left blank]

Kokosing Construction Company, Inc.

By: *Daniel J. Compston*
 Name: Daniel J. Compston
 Title: President



CERTIFIED CORPORATE RESOLUTION
Kokosing Construction Company, Inc.

The Board of Directors of **Kokosing Construction Company, Inc.** (the "Corporation"), a corporation duly organized and existing under the laws of the State of Ohio, acting through its President and Chief Executive Officer, approved the following resolution in writing pursuant to Ohio Revised Code Section 1701.59 on August 1st, 2017, and that said resolution has not been modified, amended or rescinded and remains in full force and effect:

RESOLVED: That the following named individuals are authorized to hereby sign bid documents and contracts on behalf of the Corporation in accordance with the attached *Signature Authorization* dated August 1st, 2017:

- Wm. Brian Burgett – Chief Executive Officer
- Daniel J. Compston – President
- Wm. Barth Burgett - Executive Vice President and Assistant Secretary
- Timothy J. Freed – Treasurer and Assistant Secretary
- John D. Householder – Senior Vice President and Assistant Secretary
- Kenneth E. Lake - Vice President Operations
- Mike C. Koelbl - Vice President of West Virginia
- Thomas J. Graf - Assistant Vice President Structures
- Robert B. Bowers - Assistant Vice President Estimating
- Gordon Dean Rinehart - Assistant Vice President Equipment
- Thomas G. Muraski - Sr. Vice President, Heavy Industrial Division
- Aaron Harke - Assistant Vice President, Durocher Marine Division
- Scott B. Erick - Vice President Human Resources
- Nick E. Vranak – Vice President Safety
- Gabe J. Roehrenbeck - General Counsel
- Wm. Bryce Burgett - Secretary
- W. A. Wenger - Assistant Secretary
- Dustin J. Fisher - Assistant Secretary
- Leslie A. Karnes - Assistant Secretary
- Bart A. Moody - Assistant Secretary
- Thomas L. Roland - Assistant Secretary
- Lori M. Gillett - Assistant Secretary
- Brittney R. Burgett - Assistant Secretary

The undersigned hereby certifies that he is the duly elected, qualified and Acting Secretary of the Corporation, and that he is authorized to give this Certified Corporate Resolution.

Certified this 1st day of August, 2017.


Wm. Bryce Burgett, Secretary

KCCI-2017-07

ACTION BY WRITTEN CONSENT OF THE SOLE DIRECTOR OF
KOKOSING CONSTRUCTION COMPANY, INC.
CORPORATE SIGNATURE AUTHORIZATION

PURSUANT to the authority of Section 1701.54 of the Ohio Revised Code, the undersigned, being the sole duly elected director of **Kokosing Construction Company, Inc.**, an Ohio corporation (the "Corporation"), and the only person who would be entitled to notice of a meeting as the sole member of the Board of Directors of the Corporation (the "Board"), does hereby waive notice in writing of such a meeting and hereby adopt by this Action by Written Consent, the following resolutions with the same force and effect as if they had been unanimously adopted at a duly convened meeting of the Board as of the 1st day of August, 2017:

RESOLVED: That this resolution hereby replaces and supersedes any other resolutions relating to signature authority on behalf of the Corporation.

FURTHER RESOLVED: That the following individuals are hereby provided the following signature authority:

The Chief Executive Officer

All documents, contracts, and agreements on behalf of the Corporation.

President, Executive Vice President, Senior Vice Presidents, Vice Presidents, Robert B. Bowers, Todd Lezon, Bart A. Moody, and Troy Hargis

All contracts and contract change orders related to construction projects, proposals and bid documents, subcontracts, purchase orders and change orders, and other contracts or documents specifically related to construction projects.

Assistant Vice Presidents and Steven E. Malone

All contracts and contract change orders, proposals and bid documents, subcontracts, purchase orders and change orders, and other contracts or documents specifically related to construction projects up to \$30 million.

Assistant Vice President of Equipment

All contracts in relation to purchasing equipment or equipment maintenance services to be used in the course of the Corporation's construction projects.

Vice President of Human Resources

All contracts in relation to purchasing of insurance on behalf of the Corporation, employment proposals, contracts for training services, and settlements related to workers' compensation and insured liability claims.

Treasurer

All contracts related to bank financing, establishing bank accounts, equipment leases, credit applications, bonding agreements, execution of corporate tax returns, and amendments to the 401k plan.

General Counsel

All documents and contracts related to legal matters.

KCCI-2017-06



Vice President Safety

All contracts in relation to contracting of safety related services on behalf of the Corporation and regulatory filings related to safety.

Area Managers, Project Executives, Project Managers, James Elchert, Jeff Kerst, and Dustin Fisher.

Proposals, change orders, subcontracts, and purchase orders under \$500,000.

Project Engineers and Estimators

Proposals under \$50,000, and subcontracts, purchase orders and change orders under \$100,000.

Upon execution of this Action by Written Consent, the undersigned hereby direct that this Action by Written Consent be filed in the Corporation's minute book.

KCCI-2017-06



Michael Baker International Ethical Screen ("Firewall")



OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

December 15, 2017

Kevin Ohl, P.E., DBIA, Manager of Alternative Contracting
Kokosing Construction Company
886 McKinley Ave
Columbus OH 43222
Office Phone: 614-228-1029 | Mobile Phone: 614-309-4073 | Fax: 614-228-7065
E-Mail: kao@kokosing.biz

Re: Conflict of Interest Waiver – G. Hertler
Opportunity Corridor – Project 3
CUY IR 490/SR 010 02.09/19.28
PID 96833
Project 3000 (17)

Mr. Ohl

ODOT has reviewed and evaluated your request for the Department's confirmation of no real or perceived Conflict of Interests in regard to the recent employment of Mr. Hertler with Baker Engineering.

Due to Mr. Hertler's involvement with confidential information while with HNTB, any involvement with the Kokosing DBT's pursuit of this Project would be a Conflict of Interest.

However, the actions identified in your letter to me dated 11/28/17 that HNTB has taken in regards to Mr. Hertler and the Project, along with an executed Ethical Screen (Firewall) agreement that I have attached, appear to provide the necessary safeguards to prevent a conflict of interest.

Continue to:

- Isolate Mr. Hertler from all exposure to and involvement with the Project; and
- Insure Mr. Hertler does not have access to any OC3 documents nor is provided any OC3 documents (aka "Firewall").

Mr. Hertler must adhere to his Confidentiality and Non-Disclosure Agreement until such time that all Project confidential information is release by the Department.

No further actions will be taken by the Department in regards to this issue. Please include an executed Ethical Screen within the appropriate section of the Technical Proposal. If you thoroughly follow through on your stated actions, this issue would not jeopardize the responsiveness of your Proposal.

Respectfully,

Eric Kahlig, P.E.
Division of Construction Management
Alternative Project Delivery
1980 West Broad Street (Mail Stop 5100)
Columbus, Ohio 43223
Office: 614 387 2406

Ethical Screen ("Firewall")

The following Ethical Screen has been established. Please review and comply to the extent that it may, directly or indirectly, apply to any work you perform or information/files that you may handle.

Michael Baker International, Inc. ("CONSULTANT") has been or intends to be retained to be a member of the Kokosing DBT (led by Kokosing Construction Company, Inc) (the "DBT") for purposes of preparing and presenting a proposal to the Ohio Department of Transportation ("ODOT") for the CUY IR 490/SR 010 02.09/19.28, Project No. 3000(17), PID 96833 Project in Cleveland, Ohio ("PROJECT"). This PROJECT involves the design & construction of a new roadway from I-490 to E. 93rd Street and reconstruction of portions of several City streets, the construction of multiple new structures, NS track phasing and permanent track relocation, building demolitions, storm sewers and retention basins, sanitary sewers, combined sewer regulators, waterlines, power distribution systems, roadway lighting, traffic signals, traffic control and other miscellaneous work items, all within the City of Cleveland.

HNTB Inc, through a current CONSULTANT employee, Mr. Greg Hertler (HERTLER), provided certain preliminary work, ATC evaluations, and general preliminary engineering for the PROJECT under a separate contract between the HNTB and ODOT. Some of that work may be applicable to the PROJECT. All of the deliverables relating to those services have been provided to ODOT for purposes of being accessible to any interested party as a public record at the conclusion of the contract procurement.

ODOT has consented to CONSULTANT being Michael Baker International, Inc and has agreed to waive any conflict of interest or potential conflict of interest in connection with the prior services provided to ODOT by HERTLER while employed by HNTB. To protect the relevant confidentiality interests of the parties, an Ethical Screen applicable to HERTLER has been placed in operation so that any and all relevant confidential information or information that would provide the Kokosing DBT an unfair advantage is screened off.

We are establishing this Ethical Screen to prevent HERTLER, who worked on the PROJECT for ODOT through HNTB, from sharing any information with any CONSULTANT or Kokosing DBT personnel currently or previously working on the Kokosing DBT's Proposal for the PROJECT. Furthermore, HERTLER may not access any previously available information concerning the services provided to ODOT nor permit access to that information by any CONSULTANT personnel working on the Kokosing DBT's Proposal for the PROJECT. All CONSULTANT employees working on Kokosing DBT's Proposal for the PROJECT are to refrain from eliciting or seeking out any information (whether written, electronic or otherwise) relating any HNTB or HERTLER'S deliverables on the PROJECT unless the information sought is obtained from ODOT.

Furthermore, all employees of CONSULTANT, currently working on the PROJECT shall receive a copy of this Ethical Screening. This Ethical Screening shall sunset and cease to be applicable after the PROJECT is awarded by ODOT to the successful Design Build Team.

12/18/17

Consultant CEO or Director

Date

Greg Hertler, employee

12/18/17

Date

WWW.TRANSPORTATION.OHIO.GOV

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



IN WITNESS WHEREOF, the undersigned have executed this Written Consent as of the date first above written.

Directors

By: [Signature]
 Name: Thomas J. Campbell

By: [Signature]
 Name: Brian A. Lutes

By: [Signature]
 Name: Dale R. Spaulding

By: [Signature]
 Name: H. James McKnight

By: [Signature]
 Name: James M. Kempton

[Signature page to Written Consent in Lieu of a Meeting of the Board of Directors of Michael Baker International, Inc.]

Appendix A

Thomas J. Campbell	Chairman
Brian A. Lutes	President & Chief Executive Officer
Bonnie Shepard	Executive Vice President & Chief Practice Officer
Dale R. Spaulding	Executive Vice President & Chief Operating Officer
H. James McKnight	Executive Vice President, Chief Legal Officer & Corporate Secretary
James M. Kempton	Executive Vice President, Chief Financial Officer & Treasurer
Leanna Anderson	Executive Vice President & Chief Communications Officer
Martin Miner	Executive Vice President & Chief Technology Officer
Penny Mercadante	Executive Vice President & Chief Human Resources Officer
Andrea Ryon	Senior Vice President & Office Executive, Alexandria
Anna Y. Lantin	Senior Vice President, Business Development
Beth A. Drylie	Senior Vice President & Office Executive, Virginia Beach
Cory Wilder	Senior Vice President & Office Executive, Houston
Frank D. Terak	Senior Vice President, Federal Markets
Fredrick M. Muncy	Senior Vice President & Mid Atlantic Practice Lead, Water Supply/Wastewater
Gregory N. Fredrickson	Senior Vice President & National Practice Lead, Aviation
H. Dan Cessna	Senior Vice President & Regional Director, Pennsylvania Headquarters
James Koch	Senior Vice President & Regional Director, Mid-Atlantic
Jeffrey A. Baker	Senior Vice President & Regional Director, Mountain
Jeffrey Sparrow	Senior Vice President & National Market Lead, FEMA
Jennifer C. Lewis	Senior Vice President & Regional Director, Southeast Region
John Alberghini	Senior Vice President & Navy - National Market Lead
John C. Dietrick	Senior Vice President & Regional Practice Lead, Great Lakes
Juan Contreras	Senior Vice President & Regional Director, Gulf Region
Kenton P. Zinn	Senior Vice President & Regional Director, Great Lakes Region
Maher Sidani	Senior Vice President & Director, Project Delivery Excellence
Michael A. Tylman	Senior Vice President & Regional Practice Lead, Land Development
Michael Brescia	Senior Vice President & Regional Director, Northeast
Michael J. Conaboy	Senior Vice President & Regional Director, West
Richard A. Robyak	Senior Vice President & Office Executive, Moon Township
Robert D. Schlesinger	Senior Vice President & Office Executive, San Diego
Robert J. Hanson	Senior Vice President & National Practice Lead, Geospatial
Scott Roux	Senior Vice President & National Bridge Practice Leader
Susan J. Harden	Senior Vice President & National Practice Lead, Planning
Theodore J. Williams	Senior Vice President, Director, Engineering Operations Finance
Thomas J. Zagorski	Senior Vice President & National Practice Lead, Construction Services



Todd E. Lynn Senior Vice President & Corporate Controller
 A. Paul Gluck Vice President & Office Executive, Cleveland
 Adam Jones Vice President & Assistant Corporate Controller
 Allen Wainger Vice President & Practice Manager, GIT
 Anna C. Grimes Vice President & Civil Engineering Manager
 Anthony M. Machi Vice President, Shared Services
 Beth Steimle Vice President & Office Executive, Tampa
 Bradley R. Mielke Vice President & Structures Manager
 Brian C. Russell Vice President & Office Executive, Jacksonville
 Brian K. Oliver Vice President & Project Manager, Land Development
 Chad R. Davis Vice President & Practice Manager, Infrastructure
 Charles F. Duggar Vice President & Office Executive, Baton Rouge
 Craig Eddy Vice President & Office Executive, Richmond
 Craig Johnson Vice President & Project Manager, Land Development
 Darcie Zeliesko Vice President, Talent Acquisition
 Darin P. Johnson Vice President & Office Executive, Riverside
 Darren K. Riegler Vice President & Office Executive, Hamilton
 David Dawson Vice President & Director of Financial Planning & Analysis
 David Julia Vice President & Office Executive, Lakewood
 Don M. Treude Vice President, GCR Business Development
 Dwain G. Hathaway Vice President & Office Executive, Cary
 Edward Coffey Vice President, National Railroad and Transit
 Edward Stearn Vice President & Office Executive, Northern California
 Eric D. Frary Vice President & Office Executive, Horsham
 Fabio Escobar Jr. Vice President & Project Manager, Land Development
 Gary Warkentin Vice President & Transportation Planning Manager
 Glenn A. Lajoie Vice President & Department Manager, Planning
 Greg E. Cerminara Vice President & Practice Manager, Transportation
 Gregory G. Smay Vice President, Tax
 Harold E. Linnenkohl Vice President & Business Developer
 James A. Sinnema Vice President & Department Manager, Land Development
 James B. Williams Vice President & Office Executive, Louisville
 James R. Haughey Vice President & Regional Practice Lead, ADM
 Jeffrey C. Barfield Vice President & Project Manager, Planning
 Jerome A. Ruddins II Vice President & Department Manager, Construction Management
 Jill G. Bell Vice President & Assistant Treasurer
 John Andrew Vice President & Landscape Architecture Manager
 John D. Tanner III Vice President & Office Manager
 John H. Harris Vice President & Department Manager, Water Supply/Wastewater
 John McCarthy Vice President & Department Manager, Surface Water
 John Nagle Vice President & Project Manager, Water Supply/Wastewater

John P. O'Neil Vice President & Office Executive, Chicago
 John V. Walsh Vice President & Office Executive, Columbia
 John W. Mentz Vice President & Department Manager, Environmental Compliance
 Jorge M. Suarez Vice President & Director, Structural Engineering
 Kevin J. Gustorf Vice President, Assistant Corporate Secretary & Office Executive, Northern Califo
 Kurt D. Fritz Vice President & Office Executive, Idaho Falls
 Lawrence L. Truman Vice President & Department Manager, Survey/Mapping
 Lois M. Muller Vice President & Program Manager
 Lori Stump-Ganter Vice President & Director, Continuous Improvement
 Lorna Parkins Vice President, Transportation Planning
 Magdy M. Hagag Vice President & Office Executive, Newark
 Mark A. Childs Vice President, Cost Management
 Mark E. Kistler Vice President & Operations Manager V
 Mary Anne Buvens Vice President & Director, Learning and Development
 Mary Jo Hamman Vice President & Office Executive, Indianapolis
 Matthew J. Vernon Vice President & Office Manager
 Mauricio M. Iacueli Vice President & Project Manager, Land Development
 Michael E. Schwier Vice President & Office Executive, Tallahassee
 Michael H. Stengel Vice President & Office Executive, Little Rock
 Michael J. Bruz Vice President & Transportation Engineering Manager
 Michael S. Arens Vice President & Office Executive, Utah
 Michael S. Sutton Vice President & Office Manager
 Nick W. Papac Vice President & Department Manager, Construction Management
 Raymond P. Wattras Vice President & Business Developer, Environmental
 Richard A. Lucera Vice President & Department Manager, Surface Water
 Richard B. Beck Vice President & Natural Resources/Regulatory Manager
 Richard Carrell Vice President & Department Manager, Land Development
 Robert R. Gehrke Vice President & Project Manager, Land Development
 Ronald B. Craig Vice President & Regional Practice Lead, Water Supply/Wastewater
 Russell E. Hall Vice President & Office Executive, Charleston
 Scott M. Delesdernier Vice President & Office Executive, New England Operations
 Scott M. Taylor Vice President & Senior Engineer - Surface Water
 Shawn Snisarenko Vice President & Office Executive, Anchorage
 Stephen M. Hammel Vice President & Business Development Manager, Pittsburgh
 Stephen W. Wragg Vice President & Department Manager, Planning
 Steven B. Burick Vice President & Project Manager, Structures
 Steven Bein Vice President & Department Manager, GIT
 Steven J. Huff Vice President & Transportation Practice Lead, Southern California
 Steven L. Barber Vice President & Office Executive, Harrisburg
 Thomas C. Carmody Vice President & Project Manager, Land Development
 Thomas D. Montgomery Vice President & Office Executive, Norcross



James J. Katsafanas Associate Vice President & Director, Traffic
 Jeff W. Broadwater Associate Vice President & Department Manager, Bridge
 Jeffrey A. Hester Associate Vice President & Operations Manager
 Jeffrey D. Clevenger Associate Vice President & Client Manager, Design-Build, Mountain and West
 Jeffrey D. May Associate Vice President & Operations Manager
 Jeffrey G. Bergsten Associate Vice President & Director, Planning and Technical Services
 Jeffrey M. Jerrels Associate Vice President & Director, Architecture
 Jennifer Lynn Gastelum Associate Vice President & Technical Manager
 John J. Tricini Associate Vice President & Director, Highway
 Joseph A. Danyo Associate Vice President & Technical Manager, Transportation
 Joseph J. Romano Associate Vice President & Technical Manager, Structural Engineering
 Joseph P. Gardiner Associate Vice President & Director, Construction Services
 Kenneth J. Collins Associate Vice President & Transportation Manager
 Kenneth R. Mobley Associate Vice President & Practice Manager, Planning and Public Engagement
 Kevin J. Kugler Associate Vice President & Regional Finance Manager
 Kirk A. Weaver Associate Vice President & Technical Manager, Transportation
 Kirsten N. Bowen Associate Vice President & Department Manager, Highway
 Kristy L. DeChicchis Associate Vice President & Director, Proposal Production Center
 Lance Wanamaker Associate Vice President & Department Manager, Aviation
 Larry L. Bankert Associate Vice President & Project Manager, Toll Roads
 Laurence D. Gale Associate Vice President & Department Manager, Environmental
 Lisa Folb Associate Vice President & Project Manager, Federal
 Lori J. Duguid Associate Vice President & Office Manager
 Mark D. Petrosky Associate Vice President & Director of Financial Accounting
 Mark F. Russo Associate Vice President & Technical Manager, Bridge
 Mark S. Osler Associate Vice President & Practice Manager, Surface Water
 Marta H. Gerber Associate Vice President & Department Manager, Infrastructure/Business Develo
 Mary E. Flynn Associate Vice President & Construction Quality Manager
 Mary P. Rosick Associate Vice President & Director, Software
 Matthew J. Barkley Associate Vice President & NEPA Planner
 Max L. Heckman Associate Vice President & Director, NEPA and Transportation Planning
 Michael J. Reiter Associate Vice President & Engineer, Aviation
 Michael J. Waibel Associate Vice President & Technical Manager, Aviation Services
 Michael P. Anderson Associate Vice President & Technical Manager, GIT
 Michael Skowronek Associate Vice President & Office Manager
 Oscar K. Rucker Associate Vice President & Director, Right of Way Services
 Pamela Nelson Johns Associate Vice President & Technical Manager
 Patrick A. Leach Associate Vice President & Practice Manager, Construction Services
 Paul A. Carson Associate Vice President & Chief Engineer
 Paul D. McGuinness Associate Vice President & Chief Engineer, New England
 Paul Junker Associate Vice President & Technical Manager

Paul Strack Associate Vice President & Marketing Manager, Regional Aviation
 Paula C. Boardman Associate Vice President & Office Leader, GIT/Civil/Architecture
 Quintin B. Watkins Associate Vice President & Engineer, Aviation
 R. Joseph Chaffin Associate Vice President & Practice Manager, Architecture
 Ralph Eberhardt Associate Vice President & Office Manager
 Raymond G. Shrift Associate Vice President & Director, Contracts and Procurement
 Richard E. Bonelli Associate Vice President & Program Manager, Environmental Fuels
 Richard T. Bernet Associate Vice President & Program Manager
 Robert C. Gallup Associate Vice President & Director, Construction Services
 Robert Myers Associate Vice President & Business Developer
 Sarah M. Cathcart Associate Vice President, GCR Business Development
 Saul M. Mellman Associate Vice President & Department Manager, Transportation
 Scott D. Vannoy Associate Vice President & Director, Structural Engineering
 Scott M. Wardle Associate Vice President & Project Manager, Construction Services
 Scott R. Quast Associate Vice President & Water Supply/Wastewater Manager
 Stephen J. Clancy Associate Vice President & GIT Manager
 Tammy M. McAllister Associate Vice President & Global Payroll Manager
 Thomas W. Tiner Associate Vice President & Technical Manager, GIT
 Timothy D. Sewell Associate Vice President & Construction Services Manager
 Tracy L. Hollida Associate Vice President & Client Manager, Aviation
 William H. Lindenbaum III Associate Vice President & Construction Services Manager
 Angela R. Logan Assistant Corporate Secretary
 Matthew C. Urso Assistant Corporate Secretary
 Pam Warfield Assistant Corporate Secretary
 Steve Huff Assistant Corporate Secretary
 Terri A. Vojnovich Assistant Corporate Secretary

[Appendix A to Written Consent in Lieu of a Meeting of the Board of Directors of Michael Baker International, Inc.]



Form C-1 DBT Information

CUY IR 490/SR 010 02.09/19.28

PID 96833

DBT:	The Kokosing DBT
Contact Person:	Kevin Ohl, P.E., DBIA, Manager of Alternative Contracting
Address:	886 McKinley Avenue, Columbus, OH 43222
Telephone Number:	614-228-1029
Email Address:	kao@kokosing.biz

DB Contractor:	Kokosing Construction Company, Inc.
Contact Person:	Dan Compston, President
Address:	886 McKinley Avenue, Columbus, OH 43222
Telephone Number:	614-228-1029
Email Address:	djc@kokosing.biz

DB Designer:	Michael Baker International, Inc.
Contact Person:	A. Paul Gluck, P.E., DBIA, Vice President and Ohio Office Executive
Address:	1228 Euclid Avenue, Suite 1050, Cleveland, OH 44115
Telephone Number:	216-776-6608
Email Address:	pgluck@mbakerintl.com
Ohio Registration Number:	Michael Baker International, Inc., Firm No. 01642

IQF:	Richland Engineering Limited
Contact Person:	Dave Rinehart, P.E., Bridge Department Manager
Address:	29 North Park Street, Mansfield, OH 44902
Telephone Number:	419-524-0074
Email Address:	drinehart@r-e-l.com
Ohio Registration Number:	Richland Engineering Limited, Firm No. 01113



Acknowledgement of Addenda



OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

10/27/2016

Project 173000 **Addendum No. 1**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: March 17, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

For internet access to information referenced in this addendum, please see the ODOT web site at -> <ftp://ftp.dot.state.oh.us/pub/Contracts/Attach/CIJY-96833/>

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

11/3/2016

Project 173000 **Addendum No. 2**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: March 16, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

11/4/2016

Project 173000 **Addendum No. 3**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: March 16, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV
ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

11/16/2016

Project 173000 **Addendum No. 4**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: February 17, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV
ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES





OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

11/17/2016

Project 173000 **Addendum No. 5**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: February 17, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

www.Transportation.Ohio.Gov

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

12/6/2016

Project 173000 **Addendum No. 6**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: February 17, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

For internet access to information referenced in this addendum, please see the ODOT web site at -> <ftp://ftp.dot.state.oh.us/pub/Contracts/Attach/CUY-96833/>

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

www.Transportation.Ohio.Gov

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES





OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

12/22/2016

Project 173000 **Addendum No. 7**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: February 17, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

For internet access to information referenced in this addendum, please see the ODOT web site at -> <ftp://ftp.dot.state.oh.us/pub/Contracts/Attach/CUY-96833/>

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV
ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

1/23/2017

Project 173000 **Addendum No. 8**
PID No. 96833
CUY – IR 490/SR 10 – 02.09/19.28
New Construction
Letting: March 31, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV
ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

1/25/2017

Project 173000 **Addendum No. 9**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: March 31, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV
ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

2/22/2017

Project 173000 **Addendum No. 10**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: March 31, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV
ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

3/2/2017

Project 173000 **Addendum No. 11**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: March 31, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

www.Transportation.Ohio.Gov

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

3/9/2017

Project 173000 **Addendum No. 12**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: March 31, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

www.Transportation.Ohio.Gov

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

3/17/2017

Project 173000 **Addendum No. 13**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: March 31, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

3/17/2017

Project 173000 **Addendum No. 14**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: March 31, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

Proposal Addendum

WWW.TRANSPORTATION.OHIO.GOV

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

3/23/2017

Project 173000 **Addendum No. 15**
PID No. 96833
CUY – IR 490/SR 10 – 02.09/19.28
New Construction
Letting: April 21, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

4/7/2017

Project 173000 **Addendum No. 16**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: April 21, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

4/14/2017

Project 173000 **Addendum No. 17**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: May 19, 2017

Notice to all Bidders and Suppliers to please be advised that the above referenced project has been delayed from the Friday, April 21, 2017 Letting and is rescheduled to sell in the Friday, May 19, 2017 Letting.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

5/12/2017

Project 173000 **Addendum No. 18**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: June 16, 2017

Notice to all Bidders and Suppliers to please be advised that the above referenced project has been delayed from the Friday May 19, 2017 Letting and is rescheduled to sell in the Friday, June 16, 2017 Letting.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

6/9/2017

Project 173000 **Addendum No. 19**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: June 16, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION
CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

11/3/2017

Project 173000 **Addendum No. 20**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: December 21, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

For internet access to information referenced in this addendum, please see the ODOT web site at -> <ftp://ftp.dot.state.oh.us/pub/Contracts/Attach/CUY-96833/>

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

11/17/2017

Project 173000 **Addendum No. 21**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: December 21, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

For internet access to information referenced in this addendum, please see the ODOT web site at -> <ftp://ftp.dot.state.oh.us/pub/Contracts/Attach/CUY-96833/>

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES



OHIO DEPARTMENT OF TRANSPORTATION

CENTRAL OFFICE • 1980 WEST BROAD STREET • COLUMBUS, OH 43223
JOHN R. KASICH, GOVERNOR • JERRY WRAY, DIRECTOR

12/12/2017

Project 173000 **Addendum No. 22**
PID No. 96833
CUY – IR 490/SR 10 – 2.09/19.28
New Construction
Letting: December 21, 2017

Notice to all Bidders and Suppliers to please be advised of the attached Proposal Addendum.

For internet access to information referenced in this addendum, please see the ODOT web site at -> <ftp://ftp.dot.state.oh.us/pub/Contracts/Attach/CUY-96833/>

The Department utilizes Bid Express (<http://www.bidx.com>) as the official medium for electronic bid submittal. All bidders must prepare bids and submit them online via Bid Express.

Addenda amendments must be acknowledged in the miscellaneous section of the Expedite (EBS) file and all amendments loaded in order for your bid to be considered for award of this project. Bid express will not accept bids that do not have amendments incorporated. Failure to incorporate changed quantities or items in your Expedite (EBS) submissions will result in the rejection of your bid.

WWW.TRANSPORTATION.OHIO.GOV

ODOT IS AN EQUAL OPPORTUNITY EMPLOYER AND PROVIDER OF SERVICES

F.2 Appendix 2 - Project Management Key Personnel Resumes





DB Project Manager

Kerry Hart, DBIA

22 years of experience managing transportation projects

22 years with Kokosing

Kerry will serve as the DB Project Manager and will have ultimate responsibility for the DBT's performance, ensuring that personnel and other resources are made available in a timely manner. Kerry will also be the primary contact for ODOT regarding all contractual matters. He will be 100 percent dedicated to the Opportunity Corridor project during both the design and construction phases.



As a Senior Area Manager for Kokosing, Kerry has managed the construction of several highly complex, schedule-driven projects. His early career experience as a Utility Superintendent provides a solid background for the significant utility work and third-party coordination required on Opportunity Corridor. More recently, Kerry has served as Project Manager and Area Manager on some of ODOT's most significant projects. He is a certified Design-Build Professional through the Design-Build Institute of America. Kerry has worked on multiple previous projects with DB Construction Project Manager Brad Mast, on the Columbus Crossroads project with Design IQF Project Manager Dave Rinehart and with DB Utilities/Rail/City Coordinator Jason Wise on the I-77 DB Widening Project.



UNIQUE QUALIFICATIONS

- Major ODOT design-build experience
- Cuyahoga County experience
- Railroad coordination experience



EDUCATION

B.S., 1994, Civil Engineering
 Ohio Northern University

Certification and Training:

- Certified Design-Build Professional – Design-Build Institute of America
- First Aid/CPR/AED Certification
- OSHA 30 Hour
- Certified ODOT Work Zone Traffic Supervisor (WTS)
- CPM Scheduling & Supervisory Training
- Numerous additional safety training certifications



PROJECT EXPERIENCE

I-77 Widening (163019). Cuyahoga/Summit Counties, OH. DB (\$18M). ODOT District 12. Senior Area Manager. Kerry served as the Area Manager on this 2.5-mile widening of I-77 that included 127,000 TONS of warranty asphalt, 60,000 CY excavation and 30,000 CY embankment and 197,000 SY of cement stabilization. Kokosing informally partnered with ODOT on this project resulting in zero claims and all lanes open to traffic by the interim completion date. *Relevance: Cuyahoga County, ODOT DB Project, Roadway Work, MOT, Accelerated Schedule, Work with E.L. Robinson and Jason Wise*

Lucas County I-75 (Composite of ODOT Projects 140268, 140485, 140536). Toledo, OH. Design-Bid-Build (DBB) (\$225M). ODOT District 2. Senior Area Manager. Kerry is responsible for managing all aspects of this consecutive series of projects which, while procured separately, are being managed and constructed as a single large project. Six miles of I-75 in downtown Toledo are being completely reconstructed, including interchange upgrades and construction of a parkway with roundabouts. Nineteen bridges are being reconstructed, along with new MSE walls, cast in place retaining walls, and noise wall. Major items of work include 400,000 CY of excavation, 27,500 LF of storm sewers, and 11,500 LF of concrete barrier. Kokosing proposed a value engineering concept that affected almost \$41 million of the contract value, while saving the Department more than \$550,000, essentially turning a major portion of the project into a design-build. Kerry's duties on this project will be transitioned to alternate Kokosing managers so that he can be fully dedicated to OC3. *Relevance: Major ODOT Project, Major Design Coordination through VECP, Roadway and Structure, Major Utility Coordination, MOT, Accelerated Schedule*

I-670/I-71 Columbus Crossroads (113000). Columbus, OH. Design-Build (DB) (\$200M). ODOT District 6. DB Construction Manager. Kerry started this high-profile project as the Assistant Construction Manager and ultimately finished the project as the full Construction Manager, responsible for actively managing the day-to-day operations on the project. He was involved throughout the entire design phase. Work included design and complete reconstruction of a full system interchange, including 496,000 CY of excavation, 27,500 LF of drainage pipe, and 150,000 TONS of asphalt paving. Structure work involved 22 new bridges, including two flyovers of 1,700 LF and 1,050 LF in length along with 29 retaining walls that included 196,000 SF of MSE wall, 24,000 SF of cast-in-place wall, and 23,000 SF of precast T-wall. Kerry's responsibilities included overall construction coordination, project

safety, schedule, personnel, selection of proper equipment, cost control, quality control, material procurement, and subcontractor management. This project reached substantial completion with all proposed lanes open to traffic nearly seven months ahead of schedule. ODOT's OJT and DBE goals were exceeded and the project won numerous regional and national awards including the 2014 Don Conaway Partnering Award. *Relevance: ODOT DB Project, Worked with proposed Construction Manager Brad Mast and Design IQF Project Manager Dave Rinehart, Roadway and Structure Work, Utility Coordination, City Street Work, MOT, Accelerated Schedule*

I-77 Widening (080211). Cuyahoga County, OH. DBB (\$90M). ODOT District 12. Project Manager. Kerry served as the Project Manager on this 6.7-mile widening of I-77 that included 13 structures, 540,000 TONS of warranty asphalt, 8,800 CY variable-height concrete median retaining wall or barrier, 257,000 CY excavation and embankment, 550,000 SY of cement stabilization, and 4.6 miles of noise barrier. Kokosing informally partnered with ODOT on this project resulting in zero claims and all lanes open to traffic by the interim completion date. *Relevance: Cuyahoga County, ODOT Project, Worked with proposed Construction Manager Brad Mast, Roadway and Structure Work, MOT*

Cleveland Hopkins International Airport, Runway 6R-24L. Cuyahoga County, OH. DBB (\$40M). Project Manager. Kerry was the Project Manager on this extension and uncoupling of a runway and taxiway at Cleveland Hopkins Airport. Major items of work included 800,000 CY of earthwork, 94,000 SY of cement-treated base course and lime stabilization, 109,000 SY of 16" concrete pavement, and 29,000 LF of storm drainage. The project also included a \$7 million airport and navigational lighting contract. *Relevance: City of Cleveland/Cuyahoga County, Roadway Work, Significant Electrical Coordination*

I-71/Gemini Parkway Interchange. Columbus, OH. DBB (\$25M). ODOT District 6. Project Superintendent. Kerry was responsible for overall project construction including resource allocation, quality, subcontractor management, safety and schedule. The project constructed a new interchange and included widening of I-71. More than 200,000 CY of excavation and 400,000 CY of embankment were placed, along with 68,000 SF of MSE wall, 100,000 TONS of asphalt, and 7,500 LF of concrete barrier. Additionally, a new structure over I-71 was constructed. *Relevance: ODOT Project, Roadway and Structure Work*



DB Utilities/Rail/ City Coordinator

Jason Wise, PE

13 years of experience as a roadway/
geotechnical engineer and project
manager

3 years with E.L. Robinson

Jason will coordinate all aspects of the project with utilities, railroads, and city and local representatives, from project award through design and construction. Jason will commit 100 percent of his time to this project during design and construction.



Jason is a Project Manager and roadway and geotechnical engineer in E.L. Robinson's Cleveland Office. His experience includes managing and directing the design of new highways, new and rehabilitated structures, geotechnical design and stabilization, design-related construction services, construction administration, and coordination with associated third parties. He's established a local presence, knowledge and expertise working with various departments within the City of Cleveland with multi-agency coordination, and stakeholder involvement.



UNIQUE QUALIFICATIONS

- Project Manager for CCG2 EB Innerbelt Bridge project.
- Project Manager for more than 10 design projects
- Design experience on more than 50 roadway, bridge, and landslide stabilization projects
- Utility coordination experience
- DB experience
- Previous experience working with Kokosing on DB projects



EDUCATION

B.S., 2002, Civil Engineering, Ohio University
 M.S., 2004, Civil Engineering, Ohio University

Licensing and Registration: Professional Engineer: Ohio



PROJECT EXPERIENCE

CCG6b, Broadway Bridge Replacement (CUY-77-13.80)(PID82388). Cleveland, OH. DB (\$27M). ODOT District 12. Deputy Project Manager and Utility Coordinator This project consists of replacing the structure (CUY-77-1409) carrying Broadway Avenue (SR-14) over IR-77 as well as reconfiguring the ramps from IR-490EB/WB to IR-77SB to provide standard lane width and merge distances. The existing ramp from Broadway Avenue to IR-77SB will be reconstructed into Frontage Road to Pershing Avenue. Jason successfully coordinated with all utilities to minimize impacts by avoidance, relocation and accommodation through design. Specifically, he was able to negotiate removal of both CEI and Dominion off of the proposed structure, and lead his design team to detail a retaining wall to limit the amount of relocation work required by AT&T. Jason also assisted in the design of a retaining wall over top of an existing 60" combined NEORSR sewer that did not require deep foundations, hence eliminating a costly sewer relocation. Additional duties included coordinating the design and providing construction support. *Relevance: Utility Coordination, Design and Construction Support, Construction Administration, Project Management, Kokosing Constructed Project*

CCG2, I-90 EB Innerbelt Bridge Design-Build (CUY-90-14.90) (PID 82119). Cleveland, OH. DB (\$272M). ODOT District 12. Design Project Manager and Quality Oversight Manager. The project involved the replacement of the IR 90 Innerbelt Bridge over the Cuyahoga River, six approach structures and associated ramps, and city streets. The \$272 million project was originally planned as a design-bid-build project and, upon receiving funding from Ohio Turnpike bonds, was switched to a design-build project. Jason successfully transitioned the project after Stage 1 plans were complete into a design-build scope. Other project duties included obtaining City of Cleveland Planning Commission approval, hosting public meetings for project aesthetics approvals, overseeing the audits of the design-build plans, and providing technical interpretations of the project scope documents. Jason led the design reviews and coordination with various departments within the City of Cleveland; traffic, water, engineering, and construction and maintenance. In addition, he coordinated with affected MPOs, incorporating local preferences and long-term strategic plans. He also coordinated reviews with affected railroads (NS, GCRTA, CSX) and utilities (CPP, NEORSR, Cleveland Water, and First Energy) *Relevance: DB, City of Cleveland, MPO, Planning Commission, Railroad, Utility and GCRTA Coordination, Management Role*

Eddy Road Bridge Replacement (CUY-90-22.60)(PID 83500). Bratenahl and Cleveland, OH. DBB (\$12.4M). ODOT District 12. Project Manager. The project included the replacement of the three-span structure carrying Eddy Road over IR 90 with a single-span, precast, concrete beam structure. Associated work also included replacement of the eastbound exit and entrance ramps, which were originally slab bridges on cast-in-place walls. Existing utilities under the ramps consisting of a 69 kV oil-cooled power transmission lines and a 13.5'-diameter combined brick sewer. An adjacent railroad required a net-zero increase in load under the ramps, resulting in the use of cellular concrete fill with a MSE wall facing. Jason's management duties included coordinating a precast tunnel through the MSE walls for the transmission lines, addressing NEORD's concerns regarding its combined sewer and working with the cities of Bratenahl and Cleveland to find an acceptable aesthetic solution to the interchange and provide an acceptable MOT solution. *Relevance: Project Management, Utility Coordination, Railroad Coordination, Working with Kokosing*

CUY/SUM I-77 Add-Lane (CUY/SUM-77-0.00/32.73). Richfield Township and Brecksville, OH. DB (\$19M). ODOT District 12/4. Project Manager. Jason was responsible for the bidding, procurement, and management of all design, utility coordination, and third-party coordination for this \$19 million design-build project with the Kokosing Construction Company. The project involves reconstructing I-77 from south of the Ohio Turnpike to just south of the S.R. 82 interchange and adding a third lane in each direction. Deficient ramp terminal geometry was corrected at the Ohio Turnpike, requiring coordination with the turnpike commission. *Relevance: DB, Utility Coordination, Project Management, Working with Kokosing*

Cleveland Retaining Walls (PID86253). Cleveland, OH. DBB (\$3.2M). City of Cleveland. Project Manager. This project involved the rehabilitation of retaining walls on Nottingham Road and Madison Avenue in the City of Cleveland. Jason provided ODOT oversight, review, and coordination of design and construction issues on the project. Portions of the Madison Avenue walls were reconstructed immediately adjacent to an existing building foundation and the Nottingham walls required a unique approach to improve drainage behind the existing wall using drilled shafts filled with aggregate. The roadway had also been replaced after flooding damage in 2010. Both projects were located adjacent to overhead railroad bridges. Jason worked closely with the City of Cleveland coordinating design efforts to meet local preferences and ODOT design standards. *Relevance: City of Cleveland Coordination*

**F.3 Appendix 3 - Design and IQF
Key Personnel Resumes**





DB Project Manager Larry Ciborek, PE

35 years of experience as a Structural Engineer and Project Manager

14 years with Michael Baker

Larry will manage the overall design of this project and will be responsible for the structural and roadway design. He will also conduct activities between design team members, third-party coordination, and IQF reviews. Larry will commit 100% of his time to this project during the design phase and as much time as required during construction, estimated to be 40%.

Michael Baker

INTERNATIONAL

Larry is Michael Baker Cleveland’s Senior Project Manager and office QC/QA Manager. His experience includes managing and directing the design of major urban transportation facilities for highway and railroad traffic. He understands the special complexities of urban construction; in particular, the need for constant and consistent interdiscipline and interagency coordination. Larry is a prequalified Level 2 Bridge Designer with applicable Level 3 experience.



UNIQUE QUALIFICATIONS

- Project Manager for more than 25 projects.
- Design experience on more than 50 bridge projects
- Railroad/Right-of-Way/Utility Coordinator for CCG1
- Project Management Institute and Michael Baker project management training
- Previous experience working with Kokosing on DB pursuits
- Michael Baker’s Ohio QC/QA Manager



EDUCATION

Graduate Studies, Structural Engineering, University of Akron B.S., 1982, Civil Engineering, University of Akron

Licensing and Registration: Professional Engineer: Ohio



PROJECT EXPERIENCE

Vrooman Road Bridge Replacement (LAK-Vrooman Road) (PID 5669), Lake County, Ohio. DBB (\$31M). Lake County Engineers. Project Manager. Larry managed the environmental, preliminary, and final design phases for an 1,800’ long, high-level bridge over the Grand River Valley. Tasks performed included roadway on new alignment, major structure, and significant stakeholder and public outreach. **Relevance: Multidisciplinary design management**

Cleveland Innerbelt CCG1 Owner’s Representative (CUY-90-14.92) (PID 77332/85531). Cleveland, OH. DB (\$287M). ODOT District 12. Railroad, R/W and Utility Coordinator. Worked closely with ODOT’s district and statewide utility and railroad coordinators both pre- and post-bid to streamline the coordination efforts. Policies and procedures established by Larry on CCG1 have been duplicated on subsequent ODOT DB projects. **Relevance: Urban Environment, Design-Build, Intensive Railroad and Utility Coordination**

I-15 CORE. Utah County, Utah. DB (\$1.2B). Utah Department of Transportation. Design Oversight and Plan Reviewer. Directed design and performed QA review on two pairs of prestressed concrete bulb-tee bridges carrying I-15 over the Union Pacific Railroad. Baker performed complete design of a 4-mile segment of I-15, including three full interchanges. **Relevance: Design-Build, Large Bridge Project, Railroad Coordination**

I-75/US-25 Reconstruction (LUC-75-1.10). Lucas County, Ohio. DBB (\$200M+). ODOT District 2 (Subconsultant to Parson Brinkerhoff). Project Manager. Michael Baker performed preliminary engineering in development of structure type studies for five structures: LUC-246-0584 (Dorr Street over I.R. 75), LUC-75-0301 (Segur Ave over I.R 75), LUC-75-0167R (Mainline Viaduct over Swan Creek), LUC-75-0167P (Ramp B), and LUC-75-0198 (Ramp D). The project involves the reconstruction of I.R. 75 in Lucas County from the middle of the South Avenue interchange to the north of Dorr Street. Baker is currently preparing final design for the 0584, 0167R, and 0167P structures. The 0167R Bridge is a 1,860’-long curved viaduct, and the 0167P Bridge is a curved ramp bridge. **Relevance: Large Bridge Project, Major Utility Coordination, Urban Environment, Design Management**

I-4 Ultimate DB, Orlando, Florida (\$2.3B) HDR Engineering, Inc./Florida DOT. Senior QC Manager. As a subconsultant to HDR, Larry reviewed bridges for HDR Inc. as part of the I-4 reconstruction project in Orlando. Provided technical direction to the design teams as needed to ensure good design practices and contract conformance. **Relevance: DB, Urban Corridor Project, IQF Process**

Tappan Zee Bridge Replacement. Westchester/Rockland Counties, NY. DB (\$3.1B). New York State Thruway Authority (Subconsultant to HDR). Senior QA/QC Engineer. Larry performed QA/QC reviews on design and plan submittals. As a subconsultant to HDR, Michael Baker was responsible for the bridge design and plan production of two approach units consisting of three 350’ foot spans for a total length of 1,050’ each. **Relevance: Design-Build, Major Bridge Project**

Fulton Road Bridge Replacement (PID 05394). Cleveland, Ohio. DBB (\$48M). Cuyahoga County. Design Oversight and Plan Reviewer. Directed design and performed QA activities for the replacement of the bridge over NS, CSX, Big Creek, and Cleveland Zoo with a segmental, post-tensioned concrete arch structure. Performed interim and final QA review. **Relevance: Complex Structure, Urban Environment, Railroad Involvement, Constructed by Kokosing**

Replacement of Seven Bridges over I-77 (CUY-77-11.11/Various) (PID 25054), Cleveland, Newburgh Heights, and Cuyahoga Heights, Ohio. DBB (\$35M). ODOT District 12. Assistant Project Manager. Larry provided design direction, plan review, railroad coordination, and interagency coordination for the replacement of seven bridges over I-77 south of Cleveland. The seven bridges consist of two local roadway bridges and five railroad bridges. The railroads involved include CSX and the Newburgh & Southshore Railroad. Larry was responsible for the overall direction of the bridge design effort for the Fleet and Grant Avenue bridges. He was also responsible for overall direction of the effort necessary to prepare a preliminary structure type study for replacement of the CSX Bridge over I-77. Project features include development of phased maintenance-of-way plans for the CSX mainline and yard leads for the Newburgh & Southshore Railroad over I-77. **Relevance: Railroad and Utility Coordination, Urban Environment, Design Management**

Bellevue Yard Expansion. Bellevue, OH. DBB (\$139M). NS. Design Oversight and Plan Reviewer. Larry provided design direction and was responsible for QC/QA reviews. Michael Baker provided engineering services for the expansion of the Bellevue Rail Yard by doubling the size of the existing class yard and adding a hump bridge. Other improvements included constructing new retaining walls and a secondary access tunnel. Construction was completed in 2015. **Relevance: Railroad and Utility Coordination, Complex Structures**



DB Lead Structural Engineer

Chris Cummings, PE

18 years of experience as a structural engineer and project manager

16 years with Michael Baker



Chris will be the engineer of record responsible for the overall design of the bridge, walls, and other structural elements incorporated into the project. Chris will commit 100% of his time to this project during the design phase and as much time as required during construction, estimated to be 40%.

Michael Baker
INTERNATIONAL

Chris is a Project Manager and Bridge Department Manager in Michael Baker's Cleveland Office. Chris' experience includes the management, design, and inspection of bridge structures ranging from small local bridges to large interstate structures. He has worked closely with Kokosing on the Fulton Road project and recently on the DB pursuit for the Cleveland Innerbelt CCG2 Proposal.



UNIQUE QUALIFICATIONS

- Extensive DB experience, both on owner and contractor side
- Designed more than 30 bridge structures
- Significant design-build experience with Kokosing
- Experienced with rail bridges, specifically NS and GCRTA
- Experienced with highly skewed bridges and complex foundations



EDUCATION

M.B.A., 2007, Business Administration, Case Western Reserve University
 B.S., 1999, Civil Engineering, Case Western Reserve

Licensing and Registration: Professional Engineer: Ohio, Michigan. Surveyor Intern: Ohio. NS Roadway Worker Protection Certification



PROJECT EXPERIENCE

Evaluation of the Transit Track Bridges over Lorain Avenue, Cleveland, Ohio. DBB (\$264K Fee). GCRTA. Project Manager. Responsible for inspection, analysis, load rating, and rehabilitation plans related to large girder cracks found on two fracture-critical structures that carry the Greater Cleveland Regional Transit Authority over Lorain Avenue in Cleveland, Ohio. Baker built a bridge model using three-dimensional finite-element software and calibrated it to the bridge using strains that were collected during the field tests. Once calibrated, the model was then used to understand the web cracking mechanism, predict future potential crack locations, evaluate the feasibility of proposed retrofits, and load rate the bridges. *Relevance: Structure, GCRTA*

I-15 CORE. Utah County, Utah. DB (\$1.2B). Utah Department of Transportation. Bridge Engineer. Responsibilities included design and detailing of two pairs of prestressed concrete bulb tee bridges carrying I-15 over the Union Pacific Railroad. Michael Baker performed complete design of a 4-mile segment of I-15, including three full interchanges. *Relevance: Design-Build, Structures, Railroad*

CCG1, Cleveland Innerbelt Bridge Post Award Support (CUY-90-14.92) (PID 77332/85531). Cleveland, OH. DB (\$287M). ODOT District 12. Structures and Geotechnical Engineer. Served as primary structural reviewer and lead Geotechnical Engineer for the Innerbelt Design-Build Project (CCG1). Worked in project office as extension of ODOT staff for one year. Responsibilities included review of designs and drawings and coordination with ODOT staff. *Relevance: Design-Build, Structures*

I-90 Innerbelt Bridge CCG2 Proposal (CUY-90-14.92) (PID 82119). Cleveland, OH. DB (\$283M). Kokosing Construction Inc. (ODOT D12). Bridge Engineer. Led preliminary design and proposal efforts for main viaduct substructures, foundations, and eight approach structures. Substructures consisted of 90'-high hollow concrete piers founded on piles driven 150' to rock. Approach structure designs consisted of new prestressed I-beams and steel girders, in addition to rehabilitations of overpass structures. *Relevance: Design-Build Pursuit, Structure, Kokosing and Michael Baker Team*

Bridge Rehabilitation I-90 over CSX Railroad and Lake Avenue (LOR-90-12.42) (PID 24868), Elyria & Elyria Township, Ohio. Design Bid Build (DBB) (\$6M). ODOT District 3. Bridge Engineer. Responsibilities included pier and abutment design and plan preparation. This project consisted of field investigations, preliminary design studies,

and final plans for the phased removal and replacement of two structurally deficient mainline structures along I-90. *Relevance: Structures, Railroad*

Lake Avenue Bridge Replacement (ATB) (PID 80653). Ashtabula, Ohio. DBB (\$1.5M). City of Ashtabula. Project Manager. Responsible for railroad coordination, design, analysis, and plan preparation for the rehabilitation of the Lake Avenue bridge, a new superstructure to be founded on existing abutments. Michael Baker was retained to provide bridge, environmental, and traffic services for the major rehabilitation of a structure crossing NSRR. *Relevance: Structure, NSRR*

Fulton Road Bridge Replacement (PID 05394). Cleveland, Ohio. DBB (\$48M). Cuyahoga County. Bridge Engineer. Responsible for preliminary and final design activities in support of the replacement of the arch bridge over NSRR, CSX, Big Creek and Cleveland Zoo with a segmental, post-tensioned concrete arch structure. Performed design or analysis of superstructure and substructure components, including approach piers, abutments, spandrel columns, concrete deck, prestressed concrete I-beams, and retaining walls. *Relevance: Railroad Coordination, Structures, Collaborated with Kokosing Team Members*

Mayfield Station. Cleveland, OH. DBB (\$11.1M). Greater Cleveland Regional Transit Authority (GCRTA). Project Manager. Responsible for designs related to the incorporation of a new GCRTA Rapid Transit Station at Mayfield Road in the Little Italy neighborhood of Cleveland, Ohio. Oversaw the civil design related to new station utility connections. Developed track plans for the realignment of approximately 1,500' of eastbound GCRTA track. Designed the rehabilitation and structure relocation of GCRTA transit track bridge to accommodate the new station. Coordinated right-of-way and overall design with NSRR, the adjacent property owner. *Relevance: NSRR, GCRTA, Structures*

Opportunity Corridor Preliminary Environmental and Engineering Services, Cleveland, Ohio. Ohio Department of Transportation, District 12. Lead Inspector. Responsibilities included inspection, field measurement, and documentation of 15 bridges along a 2-mile rail corridor and compilation of existing plans and other data. Coordinated right of entry with Norfolk Southern, CSX, and GCRTA. Michael Baker provided preliminary environmental and engineering services for the completion of Step 2 of the Ohio Department of Transportation's Major Project Development Process for the Opportunity Corridor Project. *Relevance: Structures, NSRR, GCRTA*



DB Lead Roadway Engineer

Sean Milroy, PE, PMP

20 years of experience as a roadway engineer and project manager

16 years with Michael Baker

Sean will be the engineer of record responsible for the roadway design and the maintenance of traffic design. Sean will commit 100% of his time to this project during the design phase and as much time as required during construction, estimated to be 40%.



Sean is a Project Manager and Senior Roadway Engineer at Michael Baker International. Sean's experience includes management and roadway and MOT design on transportation projects, including experience with major and complex interstate and local roadway and bridge projects. He has experience directing the preliminary and final engineering and construction phases of multidisciplinary transportation projects. His design-build experience includes design work for contractors and owner support services, including preparation of procurement documents and technical support post-award services.



UNIQUE QUALIFICATIONS

- Extensive DB experience, both on owner and contractor side.
- Project manager and roadway lead on local projects, including CUY-87, only 1/2 mile from the OC
- Significant design-build experience with Kokosing
- Experience on City of Cleveland roadway projects



EDUCATION

Master's Certificate, 2010, Project Management, University of Pittsburgh, Katz Graduate School of Business
 B.S., 1996, Civil Engineering, Cleveland State University

Licensing and Registration: Professional Engineer: Ohio, Michigan, Minnesota
 NS Roadway Worker Protection Certification; Project Management Professional (PMP)



PROJECT EXPERIENCE

CUY-271-0.00 Final Design, Bedford, OH. DLZ Ohio, Inc./ODOT D12 (\$120M) Project Manager. Responsible for providing direction to other staff, including staff in other Michael Baker offices, to design MOT and drainage for the 6.5-mile corridor. Michael Baker will provide drainage design and design of temporary traffic control during construction for the widening of I-271 within a 6-mile combined section of the I-271/I-480 corridor located in the Ohio communities of Oakwood, Bedford, Bedford Heights, and Warrensville Heights. These services will facilitate the safe and efficient movement of traffic through the work zone, and ensure the constructability of elements within the project area. Michael Baker is part of the DLZ Ohio, Inc., team, selected by ODOT District 12. *Relevance: Local, Major MOT, Kokosing-Constructed*

CUY-87-4.24 Buckeye/Woodhill/Shaker Bridge Replacement. Cleveland, OH. DBB. ODOT District 12. (\$10M) Project Manager. Responsible for overall design of the project and engineering support during construction. Project involved replacement of culvert structures with new bridge over RTA Green and Blue Line Rapid tracks. Bridge was the middle of a five-point intersection of Buckeye, Woodhill, and Shaker boulevards. The project also relocated or maintained many public and private utilities crossing the structure and involved catenary design for the RTA lines. The project also needed to address drainage system failures discovered during construction. The drainage issues required accelerated design performed during construction. *Relevance: Same Stakeholders, 1/2 Mile from OC3, Major Utility Coordination*

CCG2, I-90 Eastbound Innerbelt Bridge (CUY-90-14.92, PID 82119) Preliminary Design – Stage 1 Plans (DB), Cleveland, OH. ODOT District 12 (\$1.2M) Roadway Engineer. Anticipated methods to develop the estimated traffic and the impacts on the maintenance of traffic. Michael Baker provided design services for replacement of the eastbound I-90 Central Viaduct Bridge over the Cuyahoga River. Michael Baker prepared a design report with preliminary drawings and sketches showing main girder, stringer, and floorbeam cross sections over the length of the bridge superstructure. Michael Baker provided utility coordination and assistance in facilitating a series of meetings to inform project stakeholders of the current project status, solicit input, and establish the scope of services that will address project enhancements. Michael Baker performed a traffic study to determine the adequacy of the existing intersections and street system adjacent to I-90 in the Central Interchange area. *Relevance: Major Cleveland Project, Similar Stakeholders, Utility Coordination, Work with REL*

CCG1, I-90 Westbound Innerbelt Bridge (CUY-90-14.92) Design-Build Procurement Support, OH. (\$287M) Engineer. Acted as an extension of the ODOT staff, reviewing plans, preparing and resolving comments, in a QA role. Also developed sections of the scope of services, including MOT, roadway, and drainage. Michael Baker assisted with the DB procurement for the new five-lane bridge, which allowed the state to meet the ARRA stipulations for construction. The project also included 17 other bridges. The contract documents were prepared using a highly collaborative process that engaged multiple people within ODOT, Michael Baker, and other subject matter experts. *Relevance: DB, Major Cleveland Project, Similar Stakeholders, Utility Coordination*

Replacement of Grant, Fleet and Newburgh South Shore Railroad Bridges, Cleveland, OH. ODOT District 12 (\$8M) Roadway Engineer. Responsibilities included drainage calculations, vertical and horizontal alignment, MOT, quantities and cost estimates, and utility coordination and adjustment. Michael Baker provided preliminary and final design engineering services for the replacement of eight bridges over I-77 south of Cleveland. The eight bridges consisted of three local roadway bridges and five railroad bridges. Part of the contract included the development of construction plans for the replacement of Fleet and Grant Avenue bridges and four Newburgh and South Shore Railroad bridges over I-77, and full-depth pavement replacement, storm sewer design, utility coordination, lighting, and pavement marking plans for the bridge approaches and roadway below. *Relevance: Work with Kokosing, Slavic Village, Utility Coordination, Similar Stakeholders*

S.R. 57 Widening Roadway and Bridge Design, Elyria, OH. KS Associates (ODOT D3) (\$24M) Baker Project Manager/Roadway Design Lead. Responsible for writing scope and fee, and for submitting quality construction plans and documents to client. Michael Baker provided analysis and roadway design for the I-80 (turnpike) ramps, the I-90 mainline and interchange ramps, and the 49th Street Bridge as part of the S.R. 57 widening project. Michael Baker also provided environmental services and traffic analysis, developed the project's purpose and need; performed an environmental analysis; and prepared various engineering tasks, including typical sections, horizontal and superelevations, and vertical profiles. Michael Baker performed a capacity analysis, determined drainage requirements, and performed preliminary hydraulic analysis. Additionally, Michael Baker provided intersection details and interchange geometry and grading details; developed a maintenance of traffic plan, and prepared a waterway permit submission. *Relevance: Northeast Ohio, Major Urban Arterial, Roadway Design Lead*



Design IQF Project Manager

Dave Rinehart, PE

25 years of experience as a structural engineer and project manager

30 years with Richland Engineering

Dave will manage the Design IQF effort of this project and will coordinate the Design IQF staff. He will also maintain the RFC plan set, incorporating post-RFC changes. Dave will commit 100% of his time to this project during the design phase and as much time as required during construction, estimated to be 50%.



Dave is a Project Manager, Structural Engineer, and Bridge Department Manager at Richland Engineering. His experience includes bridge design, construction contract plan preparation, design plan review, constructibility review, construction inspection, bridge inspection, load-rating analysis, and project management. He has served as the Independent Design Quality Manager on one of only four ODOT projects to use this role. He has a strong working relationship with Kokosing on DB projects and experience working as a reviewer on projects with multi-agency coordination and stakeholder involvement.



UNIQUE QUALIFICATIONS

- IDQM experience on \$200 million ODOT DB project.
- Design experience on more than 50 highway bridges and two railroad bridges.
- Four years of construction inspection and construction administration experience.
- Previous experience working with Kokosing on DB projects.



EDUCATION

B.S., 1987, Civil Engineering, The Ohio State University
 MBA, 2004, Ashland University

Licensing and Registration: Professional Engineer: Ohio
 Survey Intern: Ohio



PROJECT EXPERIENCE

ODOT FRA-71/670-17.76/4.19 (Columbus Crossroads). Franklin County, OH. Design Build (DB) (\$200M). Kokosing Construction Company, Inc. Independent Design Quality Manager. Managed review team for design verification of 22 interchange bridges, 29 retaining walls, three mainline and 16 ramp alignments, eight street alignments, and 15 traffic management plans. Attended Design Task Force meetings, presubmittal meetings, and comment resolution meetings with designer, contractor, ODOT, and City of Columbus. Provided final review before release-for-construction for all plans. Reviewed design changes and maintained conformed plan sets for contractor, independent construction quality team, and ODOT oversight team. Dave's team provided multiple reviews of 135 plan packages, typically with two- to three- day turnarounds. *Relevance: Design IQF Manager on Kokosing-Led DBT*

ODOT SUM-8-13.30/15.63/17.72. Akron, OH. Design Bid Build (DBB) (\$139M). ODOT District 4. Structures Design Review. Managed structure design review and construction contract plan review of three projects, including 17 new or rehabilitated bridges, one retaining wall, and seven MSE retaining walls. Richland Engineering provided plan review for the projects, which included the reconstruction of 4.1 miles of pavement on S.R. 8; a new interchange with Boston Mills Road, reconstruction of the interchange with the Ohio Turnpike, and modification of the interchange with IR 271. *Relevance: Design Review*

ODOT POR-Crain Avenue. Kent, OH. DBB (\$14M). ODOT District 4. Project Manager and Lead Reviewer. Design review and construction contract plan review of the relocated Crain Avenue Bridge over Cuyahoga River and CSX Railroad in Kent, Ohio. Project included review of new highway bridge, pile-supported tub retaining wall for railroad grade change, utility bridge, and 21 retaining walls. *Relevance: Design Review, Management Role*

ODOT SUM-82-4.14. Macedonia, OH. DBB (\$9M). ODOT District 4. Design Reviewer. Design review and construction contract plan review for a bridge replacement (NS Railway over S.R. 82) and two culvert extensions (NS Railway and S.R. 82, each over Indian Creek). *Relevance: Design Review, Railroad Review*

ODOT CUY-77-9.50. Independence, OH. DBB (\$27M). ODOT District 12. Project Manager (Preliminary Design). Responsible for conceptual and preliminary design activities for major bridge rehabilitation project, including deck replacement (350,000 SF) while

maintaining all lanes of through traffic and most ramp traffic on a curved 3,000'-long bridge over the Cuyahoga River Valley. Preliminary engineering study compared three alternative maintenance-of-traffic schemes, including construction, user, and right-of-way costs. Richland Engineering's services included project management, environmental document preparation, preliminary and final bridge design, public and stakeholder involvement, and ongoing services during construction. *Relevance: Project Management, Railroad Coordination*

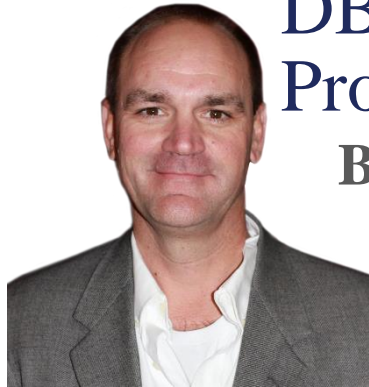
ODOT SUM-8-1.95. Akron, OH. DBB (\$5M). ODOT District 4. Project Manager and Preliminary Design. Responsible for project management and preliminary studies for rehabilitation of 1,500'-long deck truss over Little Cuyahoga River Valley. The work included bridge inspection, plan preparation, and gusset plate analysis. Richland Engineering developed minor rehabilitation plans for a deck overlay and truss repairs. *Relevance: Project Management*

ODOT LAK-90-23.42. Madison, OH. DBB (\$25M). ODOT District 12. Project Engineer. Dave performed in-depth bridge inspection, deck truss analysis, emergency gusset plate repairs, preliminary design studies for financial management analysis, and preliminary structure design for the IR 90 bridge replacement over the Grand River. Sixteen improvement alternatives were developed, including maintenance, deck replacement, strengthening, superstructure replacement, complete replacement, and alignment changes. *Relevance: Structure Design*

ODOT ERI-250-10.22 – NS Railroad over USR 250. Avery, OH. DBB (\$6M). ODOT District 3. Bridge Design Engineer. Bridge design engineer and construction plan preparation for a new five-span, three-track railroad bridge over USR 250; a simple-span steel beam bridge with reinforced concrete deck and wall-type piers with an overall length of 200'. Foundations are steel bearing piles. Project also included a five-span, two-track, timber and steel temporary bridge, and a cast-in-place curved retaining wall 18' tall. Richland Engineering provided surveying, roadway widening plans, temporary alignment plans for railroad, and drainage plans. *Relevance: Railroad Design, Railroad Coordination, Tall Retaining Wall Design*

F.4 Appendix 4 - Construction Key Personnel Resumes





DB Construction Project Manager

Brad Mast

22 years of experience managing transportation projects

22 years with Kokosing

Brad will serve as the DB Construction Project Manager and will actively manage the overall construction, ensuring that the project is built safely, on schedule, and per the plans and specifications. Brad has worked closely with DB Project Manager Kerry Hart on numerous previous projects and he will be 100% dedicated to the Opportunity Corridor project during the design and construction phases.



As a Project Manager and Superintendent for Kokosing, Brad has extensive experience in constructing large complex roadway projects as well as local city street work. His recent experience includes the I-670/71 Columbus Crossroad DB project and the I-75 widening around Bowling Green involving ODOT's first roll-in structure. Brad has local District 12 experience through his work on the I-77 Cuyahoga County widening, and he has successfully delivered multiple City of Columbus projects with similar scope to the city street work on OC3



UNIQUE QUALIFICATIONS

- ODOT design-build experience
- Railroad experience
- Cuyahoga County and ODOT D12 experience
- Complex underground utility experience
- City street expertise



EDUCATION

B.S., 1994, Construction Management, Bowling Green State University

Certification and Training:

- First Aid/CPR/AED Certification
- OSHA 30-Hour
- Trench Safety
- Crane and Rigging Safety
- Numerous additional safety training certifications



PROJECT EXPERIENCE

I-75 Third Lane Widening (140170). Bowling Green, OH. Design Bid Build (DBB) (\$71M). ODOT District 1. Project Manager. Brad was responsible for all aspects of the project management and construction on this major rehabilitation and widening of 8.8 miles of I-75. While maintaining 75,000 vehicles per day through the work zone, the project constructed 250,000 CY of excavation, 11,500 LF of storm drainage, 515,000 TONS of asphalt, and eight bridges. This project featured ODOT's first roll-in bridges, in which two concrete beam structures were built off-line and rolled into place during 59-hour weekend closures. Multiple value engineering proposals offered by Kokosing saved ODOT more than \$400,000 on this project. *Relevance: Similar Role, Similar Size Project, Roadway Work, Bridge Work*

I-670/I-71 Columbus Crossroads (113000). Columbus, OH. Design-Build (DB) (\$200M). ODOT District 6. Assistant Construction Manager. Brad was responsible for constructing the roadway and underground utilities. This included managing high volumes of traffic through the system interchange and maintaining local access on numerous city streets. Overall 496,000 CY of excavation, 27,500 LF of drainage pipe, and 150,000 TONS of asphalt were used on the project. Brad worked closely with ODOT, City of Columbus, and independent third-party inspection staff to ensure that the project was constructed safely, on time, and to high quality standards. This project reached substantial completion with all proposed lanes open to traffic nearly seven months ahead of schedule. ODOT's OJT and DBE goals were exceeded and the project won numerous regional and national awards, including the 2014 Don Conaway Partnering Award. *Relevance: ODOT DB Project, Worked with Proposed Project Manager Kerry Hart and Design IQF Project Manager Dave Rinehart, Roadway and Structure Work, City Street Work, MOT, Accelerated Schedule*

I-77 Widening (080211). Cuyahoga County, OH. DBB (\$90M). ODOT District 12. Project Superintendent. Brad served as a Project Superintendent on this 6.7-mile widening of I-77 that involved 257,000 CY of earthwork, 540,000 TONS of warranty asphalt, 8,800 CY of variable-height concrete median retaining wall or barrier, 550,000 SY of cement stabilization, and 4.6 miles of noise barrier. Brad was responsible for all roadway and utility construction, including coordinating the roadway operations with the reconstruction of 13 bridges. Kokosing informally partnered with ODOT on this project resulting in zero claims and all lanes open to traffic by the interim completion date. *Relevance: Cuyahoga County, ODOT Project, Worked with Proposed Project Manager Kerry Hart, Roadway and Structure Work, MOT*

Local Protection Floodwall Projects. Columbus, OH. DBB (\$30M). U.S. Army Corps of Engineers. Project Superintendent. Brad served as a Project Superintendent on a series of projects constructing the Scioto River floodwall. Consisting of sheet pile cut-off walls with architectural concrete above-grade, the project included restricted access due to the river and local communities. *Relevance: Third-Party Coordination, Structure Work, Limited Access*

McKinley Avenue Improvements. Columbus, OH. DBB (\$12M). City of Columbus. Project Superintendent. Brad served as the Project Superintendent on this full-depth replacement of 2 miles of McKinley Avenue for the City of Columbus. One-way traffic was maintained while the project was built in two major phases that included full-depth pavement removal, replacement of all water lines, sanitary lines, storm sewers, MELP facilities, traffic signals, and lighting. New concrete base and surface asphalt were installed. Close coordination with the City of Columbus and continual outreach to local residents and businesses added to the success of this project. *Relevance: Work Identical to OC3 City Streets, City Coordination, Utility Work, Phased Construction, MOT*

Trabue Rd/Dublin Rd/McKinley Avenue Improvements. Columbus, OH. DBB (\$4M). City of Columbus. Project Superintendent. Brad served as the Project Superintendent on this three-phase widening and complete roadway replacement project. Traffic was maintained during the full-depth pavement removal, installation of new storm and sanitary sewers, water line, and repaving. More than 10,100 LF of underground utilities were placed, including 1,200 LF of 36" prestressed water line. *Relevance: Work Identical to OC3 City Streets, City Coordination, Utility Work, Phased Construction, MOT*

Morrow S.R. 95 and I-71 Upgrade (050054). Morrow County, OH. DBB (\$5M). ODOT District 6. Project Manager. Brad served as the Project Manager on this project, which updagraded the I-71 and S.R. 95 interchange in Morrow County. Roadway work included wideing of S.R. 95 with full-depth asphalt pavement and planing, widening of the ramps, and planing and resurfacing of I-71. The S.R. 95 bridge over I-71 was widened and completely redecked. *Relevance: Structure Work, Maintenance of Traffic*

F.5 Appendix 5 - Community Involvement and Diversity & Inclusion Key Personnel Resumes





DB Diversity/Outreach Lead Manager

Wyatt Brownlee

17 Years of experience as a Diversity Inclusion and Outreach Specialist

3 years with Brownstone Grey

Wyatt will be responsible for the development and execution strategy of the DIOP and the coordination of the project's outreach efforts in collaboration with the DBT. Wyatt will lead the team's diversity and outreach efforts by ensuring inclusion and mentoring of both businesses and individuals. Wyatt will dedicate as much time as necessary to meet the project diversity and inclusion goals during the design and construction phases, estimated to be 75% of his time on the Opportunity Corridor Project 3.



PROJECT EXPERIENCE

Wyatt is the Principal Manager of Brownstone Grey LLC, a Minority Business Development/Supplier Diversity consulting company. He is a resident of City of Cleveland Ward 4 and has extensive experience with the local community. Specifically, having worked for ODOT on Opportunity Corridor Section 1, Wyatt's knowledge and experience elevates the team's ability to understand the nuances of the project diversity goals and the mechanisms needed to attain them.

Prior to launching Brownstone Grey, Wyatt was President and CEO of the Northern Ohio Minority Business Council with the responsibility to cover the entire Northern half of Ohio and getting over 400 MBE's certified. For over seven years, Wyatt held key management positions with the Greater Cleveland Partnership's Commission on Economic Inclusion which was the region's most dynamic program totally targeted on minority business development and growth in Northeast Ohio. He developed MBE training and development programs for MBE businesses in the construction industry along with implementing protocols to better align these organizations to provide services to major entities like NEORS, ODOT, Ohio Turnpike Commission and many other local governmental entities.

ODOT 140484, Opportunity Corridor Section 1, Cuyahoga County. Community Inclusion & Outreach Coordinator. As a consultant on behalf of ODOT, Wyatt worked with local community stakeholders to develop an outreach plan. He collaborated with ODOT, Community Development Corporations, City Council members, religious groups, and individual community leaders to increase public awareness, provide training and development, and create jobs. *Relevance: Similar Role on previous Opportunity Corridor Project*

Cuyahoga County Junevile Justice Center. Construction Owner Outreach. Wyatt provided the following services on this project:

- Introduce prime contractors to subcontractors
- Identify and develop interest of MBE firms within the construction community
- Pre-bid notification and construction package distribution
- Advising bidders on the solicitation process
- Work with the County to unbundle packages

Key outcomes of Wyatt's efforts included:

- MBE's received early project notification and were better able to respond

- Contracts were more obtainable for MBEs
- Greater number of contracts were awarded to MBEs

General MBE Training. While operating the Commission on Economic Inclusion, Wyatt worked with numerous owners during project pre-bid phases to enable MBEs including:

- *Gilbane Building Company* – hosted East Bank Flats Project community outreach event
- *University Hospital* – helped arrange Project Labor Agreement
- *Cleveland Museum of Art* – hosted community awareness and outreach event
- *North East Ohio Regional Sewer District* – facilitated bonding prep training and education workshops
- *STEM School* – hosted community outreach events and worked with owner and MBEs to guide them through the solicitation process
- *Eaton World Headquarters* – hosted community outreach events and worked with owner and MBEs to guide them through the solicitation process

MBE Training – Technical Education Assistance. Wyatt has provided numerous training programs and technical education for MBE companies including:

- *Bonding Prep Training* – 6 week education and training program with 60 MBEs participating over a three year period
- *Target Systems* – provided a higher level of project manager training
- *Corning Cable System Training/Hubbell Premise Wiring* – provided specialized data-cabling certification allowing Hispanic and African American MBEs access to otherwise closed markets

MBE Development. Provided customized one-on-one technical assistance to MBEs through the Minority Business Accelerator including:

- *Legacy Construction Services/VSK Group Construction Resources* – provided CPQ construction management services and assisted with Target Systems implementation
- Conducted SWOT analysis and project education and training workshops with MBE firms in conjunction with R.Y.P.E. Training and Consulting



UNIQUE QUALIFICATIONS

- Conducted six Third Party Business Assessment programs for targeted segments of minority businesses in Northeast Ohio.
- Created pilot initiative assessment process aimed at bringing attention to implementation of protocols for realignment.
- Developed an Eight Week MBE training and development program in collaboration with NEORS, R.Y.P.E.
- Led the transition of the Minority Business Accelerator 2.5+ program for use by MBDA throughout Northeast Ohio.
- Served as lead planner for the Commission's Bonding Prep program to "ready" MBE's for bonding.
- Created the first Access to Capital Loan Back Fund in collaboration with the former Shore Bank.



EDUCATION

Associate Degree of Applied Business Management, emphasis on entrepreneurship, 1999, Bryant & Stratton College

Certification and Training:

MBE Certification Specialist, National Minority Supplier Development Council (NMSDC); Asbestos Contractor Supervisor; Training Services International (TSI); Asbestos Hazard Abatement Specialist, Ohio 2016



Contractor Diversity/ Outreach Lead Manager

Jill Harris, PHR, SHRM-CP

25 years of recruitment, training and diversity/inclusion programing
16 years with the Kokosing Group

Jill will serve as the Contractor Diversity/Outreach Lead Manager and will be responsible for the DBT's performance in meeting the diversity, inclusion and outreach goals for the project. Jill will dedicate as much time as needed during both design and construction to the Opportunity Corridor project, estimated to be 40% of her time.



As the Director of Human Resources for Kokosing, Jill develops and implements talent acquisition strategies and programs to ensure that Kokosing proactively attracts a qualified, diverse and high performing workforce to support the achievement of the company's strategic objectives. Jill has managed compliance reporting, EEO statistics, Affirmative Action Plan, diversity, harassment, and substance abuse programs for the company. She also served as chairperson for the company's Diversity and Outreach Committee. Jill has developed relationships with many minority organizations in Ohio to support the development of minorities and minority companies for the construction industry.



UNIQUE QUALIFICATIONS

- Serves on the Ohio Construction Advisory Council for the Governor's Office of Workforce Transformation



EDUCATION

B.S., 1990, Central State University
 M.A., 1992, The Ohio State University

Certification and Training:

Certified Professional (SHRM-CP), Society of Human Resources Management; Professional in Human Resources (PHR), HR Certification Institute; Master Trainer and Certified Instructor, National Center for Construction Education and Research; Assessment Certification Training Program Primary Administrator, National Center for Construction Education and Research; Certified Training Manager/Director, Langevin Learning Services



PROJECT EXPERIENCE

Kokosing Construction. Director of Human Resources. Develop and maintain strategic partnership with all levels of management. Assist managers in meeting their strategic goals from an HR perspective. Oversee HR Operations including employee relations, employee development, benefits, recruiting, affirmative action and HRIS operations. Manage employee relations, including coaching and counseling employees and managers. Lead investigations, document findings and recommending a course of action to managers/supervisors. Ensure accurate compliance and reporting for all state and federal regulations. Manage vendor relationships.

Corna Kokosing Construction Company (part of the Kokosing Group of companies). Training and Education Manager. Developed strategic directives for training based on company's core values and objectives. Collaborated in the development of the Associate Development Plan including job descriptions, position profiles, annual and semi-annual evaluations, as well as training and mentoring programs for all levels of staff. Managed and delivered new hire orientation and training. Supervised the New Supervisory Training Program. Developed, implemented and delivered various training programs to field associates and supervisory associates. Developed, implemented and created materials for Project Engineer Mentoring Program and Foreman Training Program.

Corna Kokosing Construction. EEO and Compliance Administrator Monitored EEO and AA policies and requirements. Responsible for the coordination and completion of all government, regulatory, and compliance documents. Managed all compliance reporting, EEO statistics, Affirmative Action Plan, diversity, harassment, and substance abuse programs for the company.

In-house Apprenticeship Program for Corna Kokosing Construction. Training and Education Manager. Nationally recognized and award winning program. Administered the Program including recruitment, curriculum design and development, program management and budget.

Corna Kokosing Construction. Recruiter. Built relationships with career and technical schools, various organizations and colleges/universities to attract diverse candidates. Worked with such organizations as the Urban League, Hard Hatted Women, OTAP (Orientation to Trades and apprenticeships) and various state agencies to increase the diversity within the organization.

Minority Leadership Training Program (MLTP) Lead Cadre Trainer. Developed, updated, implemented, and facilitated 12 hour minority leadership training sessions, resulting in increased minority association involvement. She developed training materials including participant's manual and trainer's manual. Additionally, Jill chaired the team of cadre trainers.

As Corna Kokosing's (part of the Kokosing Group of companies), Manager of Human Resources, Jill was instrumental in meeting diversity and workforce goals for the following major projects:

Ohio Health's Riverside Methodist Hospital Neuroscience Institute Project (\$231M). Oversaw and organized outreach events for minority subcontractors and suppliers. Worked with DBE, MBE, WBE and EDGE firms and with project team to ensure proper administration of EEO and contract compliance. This project construction a 420,000 sf, 10 story neuroscience/cardiac patient tower including renovations to the existing surgery suites and a 600-car addition to an existing four-story parking garage.

Franklin County Hall of Justice Renovation Project. (\$45M). Oversaw and organized outreach events for minority subcontractors and suppliers. Worked with DBE, MBE, WBE and EDGE firms and with project team to ensure proper administration of EEO and contract compliance. This project included a 12-floor, 237,500 sf renovation to improve the Franklin County Law Library, office for the Franklin County Probation Department, and relocation of the Franklin County Building Complex Security Center.

In addition to her work experience, Jill serves or has served on numerous boards and committee including:

- Associated General Contractors of Ohio: EEO/DBE Committee
- Associated General Contractors of Ohio: Workforce Development Committee
- Builders Exchange of Central Ohio: Human Resources Advisory Council
- Columbus Education Association: Minority Involvement Program Committee
- Ohio Education Association: Minority Leadership Training Program (MLTP) Lead Cadre Trainer and Women's Leadership Training Program

F.6 Appendix 6 - Preliminary CPM Schedule & Narrative





F.6 - Preliminary CPM Schedule & Narrative

Introduction

The attached CPM schedule has been collaboratively developed throughout the prebid phase by Kokosing Project Management staff working directly with the Baker Design Leads and Richland Engineering IQF team. As outlined in the narrative below, the schedule is broken into distinct and manageable work areas and elements.

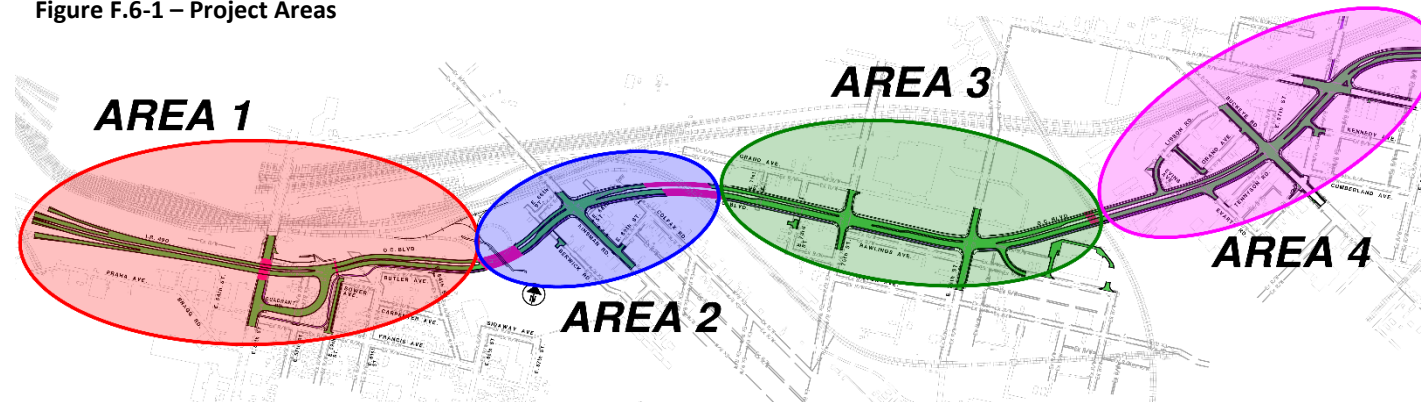
Our CPM schedule begins by incorporating administrative and maintenance of traffic milestones required by the contract including dates for technical and price proposal submission, score announcement, contract award, notice to proceed, substantial completion, project completion and allowable lane restriction durations. Our anticipated design submissions have been broken down into 29 logical and manageable Buildable Units (BU) along with IQF, ODOT, and third-party reviews. Early design BUs focus on maintenance of traffic, ROW plans, and the 55th Street area utilities, roadway and bridge as these are critical early construction items.

Permitting times have been considered and accounted for which relate to the various involved agencies. Shop drawing and fabrication times have been discussed with vendors and suppliers for their materials and those durations to have been included in the CPM before any material is needed on site.

Utilities have been given ample time for relocations as defined in the scope documents. Constructability and safety concerns have been addressed as part of the CPM Schedule by giving each particular activity sufficient time to perform work at a reasonable pace.

A detailed list of affected roadways with closures or lane restriction durations has been added the CPM Schedule in order to track the progress of construction and ensure that we are able to complete work and reopen to traffic to comply with the restrictions.

Figure F.6-1 – Project Areas



Schedule/Work Areas

As shown in Figure F.6-1, we have organized the project into the following four major areas:

- Area 1:** west end of OC Blvd to the rear approach slab of the Kingsbury Run Bridge
- Area 2:** rear approach slab of Kingsbury Run Bridge to the forward approach slab of the GCRTA Blue and Green Lines Bridge
- Area 3:** forward approach slab of the GCRTA Blue and Green Lines Bridge to east of the Norfolk Southern Railroad (NS) Bridge
- Area 4:** east of NS Bridge to east end of OC Blvd

Each area consists of two phases, with a pre-phase utilized in Areas 1 and 3 for maintenance of traffic, rail, and utility work.

We have also included a schedule section for Project Closeout Work which includes final surface paving, striping, resurfacing, and landscaping.

Critical Path

Our CPM follows two major sequences of work on the project.

The critical path includes the E. 55th St. area which then drives the construction of the Kingsbury Run Bridge. Through the use of ATC #32, much of the excavation generated at Quadrant Road and OC Blvd under E. 55th will be used as fill at the Kingsbury Run Bridge abutments. We have included anticipated staged embankment with waiting periods during construction of this embankment. This path generally follows the sequence of work below:

- Completion of design elements associated with Area 1 identified above.

- Relocation of existing utilities under E. 55th St. are the first major construction item to take place on the job. Work will begin at the start of the construction season in 2019.
- With utilities relocated out of the E. 55th roadway, traffic will then be placed on the temporary run around along with I-490 traffic closed and detoured to start the 730 day closure period.
- With traffic placed on the temporary run-around construction begins on the new NEORSD S-10A regulator, KSRS Drop Structure and associated storm system. The NEORSD regulator is a deep structure and 5 months of installation time is anticipated. E. 55th St. bridge construction cannot begin until the new NEORSD S-10A regulator is installed and in service. This is due to the new E. 55th St. bridge abutment piling that will conflict with the existing overflow regulator system.
- After the NEORSD regulator is completed and proper storm sewer tie-ins have been made, the new system will become active and E. 55th St. bridge work begins in late 2019.
- Completion of the bridge will be accomplished through a top down sequence of construction, with the bridge constructed full width while traffic continues to be maintained on the temporary runaround.
- During E. 55th St. bridge construction, the utilities which were temporarily relocated will be brought back to their final location across the structure.
- During the time of bridge construction the SB lanes of E. 55th St. will also be under construction. When the bridge superstructure is completed in mid-2020 and roadway pavement is tied into the bridge, traffic will then be shifted onto the new bridge.

- Once traffic is moved off of the temporary run-around then excavation as part of the top down construction can be completed. A substantial portion of the excavation will be utilized at the Kingsbury Run Ravine to provide embankment material for the new bridge construction.
- As the earthwork in Area 1 is completed, final surface drainage and paving will occur allowing I-490 to reopen to Quadrant Road and E. 55th within the required 730 day time period.
- As part of our procurement efforts our team has identified the potential need for settlement periods in the Kingsbury Run Ravine embankment area. These settlement period durations have been accounted for in the schedule with the last settlement period of 60 days occurring before substructure pile driving activities on the Kingsbury Run Bridge begin in late 2020.
- The Kingsbury Run Bridge continues with substructure and superstructure work into 2021 and finishes up in late October ahead of the November 1st, 2021 substantial completion date to have Opportunity Corridor opened for traffic and operational.
- Remaining activities to complete during 2022 ahead of the June 30th, 2022 project completion date are miscellaneous punch list items including topsoil, installing trees, mulch and various landscaping features.

The second sequence, outlined below, is slightly off the critical path and follows construction of the NS Bridge and associated track work and earthwork:

- Completion of design elements related to the NS structure and storm sewer outfall #4 which parallels the existing tracks.
- Construct temporary embankment, relocate NS tracks to a temporary alignment, and demo existing NS Bridge over Grand Ave.
- Relocate existing utilities out of the footprint of the new bridge.
- Place sheeting along the relocated temporary tracks and construct Phase 1 of the NS Bridge along with associated retaining walls 5A & 5C using a top-down construction method.



- After Phase 1 bridge construction, rail traffic will shift onto the new bridge in the permanent track alignment and Phase 2 of the bridge will commence with remaining retaining wall work at Walls 5B & 5D.
- Excavation under the bridge can then proceed along with finalizing drainage and roadway elements for OC Blvd.
- Placement of asphalt courses and roadway safety features will follow the excavation, and the OC Blvd will be opened before the substantial completion date of November 1st, 2021.

Work by Season

The following section outlines major work elements that are anticipated to occur in each calendar year of the project:

2018 Construction Season:

- Initiate design on critical BUs, establish Project Management Office
- Submit and implement the Draft, Inclusion, & Outreach Plan and begin post-bid Diversity & Outreach Efforts
- Obtain necessary environmental permits
- Begin environmental remediation

2019 Construction Season:

- Complete remaining design BUs.
- Generate shop drawings and initiate fabrication.
- Utility Relocations: Complete temporary utility relocations at E. 55th St. Bridge and NSRR Bridge location areas.
- E. 55th St. Utilities: Begin 730 day lane restrictions on E. 55th St. and I-490 and shift E. 55th St. traffic to temporary run-around pavement. Install new NEORSD regulator and associated storm sewer system.
- E. 55th St Roadway: Construct E. 55th St. southbound lanes
- E. 55th St Bridge: Begin substructure and superstructure work on bridge along with adjacent retaining walls 1A-1C.
- Quadrant Rd: Begin excavation and use material for Kingsbury Run Ravine embankment.

- Kingsbury Run Ravine: Reconfigure RTA tracks and laydown yard into new WYE configuration.
- GCRTA Blue/Green Bridges: Begin work on both EB and WB bridge substructures along with completing associated MSE Walls 4AB and 4CD.
- NS Bridge: Relocate tracks to temporary alignment and start bridge construction with associated retaining walls 5A & 5C after utilities are relocated. Demo NS Bridge over Grand Ave.
- E. 89th St Pedestrian Bridge: Demo portions of existing structure and begin construction of new bridge and associated MSE wall.
- OC Boulevard Roadway: Begin construction of roadway portions around Kinsman Ave, E. 75th St. to E. 79th St. and from Buckeye Rd to the east end of the project.
- E. 75th St and E. 79th St: Complete two phases of roadway reconstruction.
- Construct E. 73rd St.

2020 Construction Season:

- E. 55th St Roadway: Continue 730 day lane restrictions on E. 55th St. and I-490. Shift E. 55th St. traffic to the new SB lanes and new bridge. Construct E. 55th St. northbound lanes.
- E. 55th St Bridge: Complete bridge and adjacent retaining walls 1A-1E (wall facing completed in 2021)
- Quadrant Rd: Complete roadway and adjacent MSE Walls 2B & 3B.
- E. 59th St. Pedestrian Bridge: Begin construction of substructure and superstructure.
- Kingsbury Run Bridge: Complete embankment placement and settlement period durations. Begin work on bridge substructure.
- GCRTA Blue/Green Bridges: Complete work on both EB and WB bridge structures.
- NS Bridge: Complete Bridge Phase 1 and relocate tracks to permanent alignment on bridge. Begin Phase 2 bridge construction and remaining adjacent retaining walls 5B & 5D.
- E. 89th St Pedestrian Bridge: Complete bridge and demo remaining structure after utilities relocated off of existing structure.
- OC Boulevard Roadway: Excavate material under

- E. 55th St and complete roadway portions of OC Blvd through corridor except around Kingsbury Bridge and under NSRR Bridge.
- Side roads: Construct E. 59th St, Grand, Lisbon, Buckeye Rd, E. 89th St, Rawlings, Kennedy and Woodland Ave.

2021 Construction Season:

- E. 55th St Roadway: Complete E. 55th St. roadway and OC Blvd to Quadrant Rd to reopen in conjunction with completion of the 730 day lane restriction.
- E. 59th St. Pedestrian Bridge: Complete construction of structure.
- Kingsbury Run Bridge: Complete construction of structure.
- NS Bridge: Complete Phase 2 of bridge work and retaining walls 5A-5D.
- OC Boulevard Roadway: Complete remaining roadway portions, install safety features, and open roadway by November 1st, 2021 substantial completion.
- Side roads: Construct Kinsman Rd, Berwick Rd, and complete other side road resurfacing.
- Miscellaneous Work: Complete GCRTA parking lot reconfiguration, I-90 WB resurfacing, I-77 NB detour reconfiguration, and new overhead sign installations.

2022 Construction Season:

- Finalize asphalt surface (if needed), complete topsoil and landscaping by the project completion date of June 30th, 2022.

Detailed CPM Schedule

The attached CPM schedule includes all activities noted in the above narrative. A separate PDF file and Primavera P6 (.XER) file have also been submitted as required in the Instructions to Offerors.

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022				
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2			
ODOT 173000 - Opportunity Corridor Section #3 - Tech Proposal					612	21-Dec-17	27-Jun-22																		
Administration					612	21-Dec-17	27-Jun-22																		
A-1000	Technical & Price Proposals Due (12/21/17)	0	21-Dec-17		Technical & Price Proposals Due (12/21/17)																				
A-1010	Scores Announced (2/16/18)	58	21-Dec-17	16-Feb-18	Scores Announced (2/16/18)																				
A-1020	Anticipated Award Date (2/27/18)	11	17-Feb-18	27-Feb-18	Anticipated Award Date (2/27/18)																				
A-1030	Notice To Proceed	14	28-Feb-18	13-Mar-18	Notice To Proceed																				
A-1040	Mobilization	30	14-Mar-18	12-Apr-18	Mobilization																				
A-1050	Start Design	0	14-Mar-18		Start Design																				
A-1060	Start Construction	0	12-Jun-18		Start Construction																				
A-1070	Substantial Completion Date (No Later Than 11/01/2021)	0		20-Oct-21*	Substantial Completion Date																				
A-1080	Project Completion Date (No Later Than 6/30/2022)	0		27-Jun-22*	Project Completion Date																				
MOT Tracking					382	01-Apr-19	08-Sep-21																		
MOT-1010	E. 55th Outside Lane Reductions: 120 Days Max	58	01-Apr-19	28-May-19	E. 55th Outside Lane Reductions: 120 Days Max																				
MOT-1020	I-490 Full Closure: 730 Days Max	729	29-May-19	26-May-21	I-490 Full Closure: 730 Days Max																				
MOT-1030	E. 55th NB Lane Reductions: 730 Days Max	715	29-May-19	12-May-21	E. 55th NB Lane Reductions: 730 Days Max																				
MOT-1040	E. 55th SB Lane Reductions: 730 Days Max	715	29-May-19	12-May-21	E. 55th SB Lane Reductions: 730 Days Max																				
MOT-1050	Kinsman: Ph 1 - 60 Days Max, One Lane NB Only	60	14-May-21	12-Jul-21	Kinsman: Ph 1 - 60 Days Max, One Lane NB Only																				
MOT-1060	Kinsman: Ph 2 - 60 Days Max, One Lane Each Way	58	13-Jul-21	08-Sep-21	Kinsman: Ph 2 - 60 Days Max, One Lane Each Way																				
MOT-1070	E. 75th St: Ph 1/2 - 90 Days Max, One Lane SB Only	89	01-Apr-19	28-Jun-19	E. 75th St: Ph 1/2 - 90 Days Max, One Lane SB Only																				
MOT-1080	E. 79th St: Ph 1/2 - 120 Days Max, One Lane NB Only	110	01-Jul-19	18-Oct-19	E. 79th St: Ph 1/2 - 120 Days Max, One Lane NB Only																				
MOT-1090	Buckeye Rd: Ph 1/2 - 120 Days Max, One Lane Each Way	107	29-Jul-20	12-Nov-20	Buckeye Rd: Ph 1/2 - 120 Days Max, One Lane Each Way																				
MOT-1100	Woodland Ave: Ph 1/2 - 120 Days Max, One Lane Each Way	118	01-Apr-20	27-Jul-20	Woodland Ave: Ph 1/2 - 120 Days Max, One Lane Each Way																				
MOT-1110	E. 93rd St: 60 Days Max, One Lane Each Way	26	06-Apr-20	01-May-20	E. 93rd St: 60 Days Max, One Lane Each Way																				
MOT-1120	E. 59th St: 90 Days Max Closure	80	16-Mar-20	03-Jun-20	E. 59th St: 90 Days Max Closure																				
MOT-1130	Lisbon Rd: 60 Days Max Closure	53	02-Jun-20	24-Jul-20	Lisbon Rd: 60 Days Max Closure																				
MOT-1140	Grand Ave: 60 Days Max Closure	60	03-Apr-20	01-Jun-20	Grand Ave: 60 Days Max Closure																				
MOT-1160	E. 89th St: 45 Days Max Closure, Buckeye to Woodland (B)	45	29-Jul-20	11-Sep-20	E. 89th St: 45 Days Max Closure, Buckeye to Woodland (B)																				
MOT-1170	Kennedy Ave: 45 Days Max Closure	45	29-Jul-20	11-Sep-20	Kennedy Ave: 45 Days Max Closure																				
Scope Deliverables					245	28-Feb-18	05-Dec-19																		
SD-1000	Scope S1: Table of Buildable Units	1	14-Mar-18	14-Mar-18	Scope S1: Table of Buildable Units																				
SD-1010	Scope S2: Draft Project Management Plan (PMP)	30	28-Feb-18	29-Mar-18	Scope S2: Draft Project Management Plan (PMP)																				
SD-1020	Scope S2: Final Project Management Plan (PMP)	14	20-Apr-18	03-May-18	Scope S2: Final Project Management Plan (PMP)																				
SD-1040	Scope S4: Draft Public Information Plan (PIP)	30	14-Mar-18	12-Apr-18	Scope S4: Draft Public Information Plan (PIP)																				
SD-1050	Scope S4: Communications Planning Workshop	30	13-Apr-18	12-May-18	Scope S4: Communications Planning Workshop																				
SD-1060	Scope S4: Final Public Information Plan (PIP)	30	13-May-18	11-Jun-18	Scope S4: Final Public Information Plan (PIP)																				
SD-1070	Scope S4: Project Contact List	30	14-Mar-18	12-Apr-18	Scope S4: Project Contact List																				
SD-1075	Scope S4: Print First OC Quarterly Newsletter - April	30	14-Mar-18	12-Apr-18	Scope S4: Print First OC Quarterly Newsletter - April																				
SD-1080	Scope S4: Crisis Management Plan	30	28-Feb-18	29-Mar-18	Scope S4: Crisis Management Plan																				
SD-1085	Scope S4: Crisis Management Workshop	30	28-Feb-18	29-Mar-18	Scope S4: Crisis Management Workshop																				
SD-1087	Scope S4: Introductory Briefing w/Stakeholders	30	14-Mar-18	12-Apr-18	Scope S4: Introductory Briefing w/Stakeholders																				
SD-1090	Scope S5: Draft, Inclusion & Outreach Plan (DIOP)	14	28-Feb-18	13-Mar-18	Scope S5: Draft, Inclusion & Outreach Plan (DIOP)																				
SD-1100	Scope S5: Draft, Inclusion & Outreach Planning Meeting	60	28-Feb-18	28-Apr-18	Scope S5: Draft, Inclusion & Outreach Planning Meeting																				
SD-1110	Scope S5: Final Draft, Inclusion & Outreach Plan (DIOP)	30	29-Apr-18	28-May-18	Scope S5: Final Draft, Inclusion & Outreach Plan (DIOP)																				

█ Remaining Level of Effort ◆ Milestone
█ Actual Level of Effort ◀ Summary
█ Actual Work
█ Remaining Work
█ Critical Remaining Work

ODOT 173000 - Opportunity Corridor Section #3



Activity ID	Activity Name	Original Duration	Start	Finish	2018-2022																			
					2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
SD-1150	Scope S6: Written Notification of Haul Route Submittal	30	14-Mar-18	12-Apr-18	■ Scope S6: Written Notification of Haul Route Submittal																			
SD-1160	Scope S6: Kenneth L. Johnson Rec Center Section 6(f) Impact Submittal	365	22-Nov-18	21-Nov-19	■ Scope S6: Kenneth L. Johnson Rec Center Section 6(f) Impact Submittal																			
SD-1179	Scope S6: Rec Center Section 4(f) Occupation Date Submittal	14	22-Nov-19	05-Dec-19	■ Scope S6: Rec Center Section 4(f) Occupation Date Submittal																			
SD-1180	Scope S7: Utility Conflict Matrix	5	14-Mar-18	18-Mar-18	■ Scope S7: Utility Conflict Matrix																			
SD-1190	Scope S10: Vibration and Monitoring Plan	30	14-Mar-18	12-Apr-18	■ Scope S10: Vibration and Monitoring Plan																			
SD-1200	Scope S10: Final Project Soil Profile	180	08-Jun-19	04-Dec-19	■ Scope S10: Final Project Soil Profile																			
SD-1210	Scope S19: Optimized Intersection Signal Timing & Phasing Plan	30	14-Jan-19	13-Feb-19	■ Scope S19: Optimized Intersection Signal Timing & Phasing Plan																			
SD-1220	Scope S19: Shared Use-Path Signage Design Approval	30	11-Aug-18	09-Sep-18	■ Scope S19: Shared Use-Path Signage Design Approval																			
SD-1230	Scope S19: Re-Used Overhead Sign Support Plan	30	11-Aug-18	09-Sep-18	■ Scope S19: Re-Used Overhead Sign Support Plan																			
SD-1240	Scope S20: Traffic Management Plan (TMP)	30	14-Mar-18	12-Apr-18	■ Scope S20: Traffic Management Plan (TMP)																			
SD-1250	PN 096: NSLE Executed Subcontracts	14	28-Feb-18	13-Mar-18	■ PN 096: NSLE Executed Subcontracts																			
SD-1260	Final Drainage Design Report	30	14-Mar-18	12-Apr-18	■ Final Drainage Design Report																			
SD-1280	Foundation Design Report	30	14-Mar-18	12-Apr-18	■ Foundation Design Report																			
SD-1290	OC Blvd ML Rough Grading Plan	30	14-Mar-18	12-Apr-18	■ OC Blvd ML Rough Grading Plan																			
SD-1300	E. 55th St. Rough Grading Plan	30	14-Mar-18	12-Apr-18	■ E. 55th St. Rough Grading Plan																			
SD-1310	Side Streets Rough Grading Plan	30	14-Mar-18	12-Apr-18	■ Side Streets Rough Grading Plan																			
SD-1320	NSRR Rough Grading Plan	30	14-Mar-18	12-Apr-18	■ NSRR Rough Grading Plan																			
Scope Deliverable Reviews		79	30-Mar-18	22-Aug-18	▼ 22-Aug-18, Scope Deliverable Reviews																			
SDR-1010	Scope S2: Draft PMP ODOT Review	15	30-Mar-18	19-Apr-18	■ Scope S2: Draft PMP ODOT Review																			
SDR-1020	Scope S2: Final PMP ODOT Review	10	04-May-18	17-May-18	■ Scope S2: Final PMP ODOT Review																			
SDR-1030	Scope S7: Utility Owner Relocation Plan: DBT Review	14	09-Aug-18	22-Aug-18	■ Scope S7: Utility Owner Relocation Plan: DBT Review																			
IQF Review		4	13-Apr-18	19-Apr-18	▼ 19-Apr-18, IQF Review																			
SDR-1200	Scope S20: Traffic Management Plan (TMP)	5	13-Apr-18	19-Apr-18	■ Scope S20: Traffic Management Plan (TMP)																			
SDR-1260	Final Drainage Design Report	5	13-Apr-18	19-Apr-18	■ Final Drainage Design Report																			
SDR-1280	Foundation Design Report	5	13-Apr-18	19-Apr-18	■ Foundation Design Report																			
SDR-1290	OC Blvd ML Rough Grading Plan	5	13-Apr-18	19-Apr-18	■ OC Blvd ML Rough Grading Plan																			
SDR-1300	E. 55th St. Rough Grading Plan	5	13-Apr-18	19-Apr-18	■ E. 55th St. Rough Grading Plan																			
SDR-1310	Side Streets Rough Grading Plan	5	13-Apr-18	19-Apr-18	■ Side Streets Rough Grading Plan																			
SDR-1320	NSRR Rough Grading Plan	5	13-Apr-18	19-Apr-18	■ NSRR Rough Grading Plan																			
Design		187	14-Mar-18	30-Jul-19	▶ 30-Jul-19, Design																			
BU #1: I-77/ I-490/ E. 55th MOT		73	15-Mar-18	13-Aug-18	▶ 13-Aug-18, BU #1: I-77/ I-490/ E. 55th MOT																			
D-10000	Interim Plans: Prepare	30	15-Mar-18	25-Apr-18	■ Interim Plans: Prepare																			
D-10010	Interim Plans: Submit to IQF/ Submission Mtg.	1	26-Apr-18	26-Apr-18	■ Interim Plans: Submit to IQF/ Submission Mtg.																			
D-10020	Interim Plans: IQF Review	10	27-Apr-18	10-May-18	■ Interim Plans: IQF Review																			
D-10030	Interim Plans: ODOT Review	10	11-May-18	24-May-18	■ Interim Plans: ODOT Review																			
D-10031	Interim Plans: City of Cleveland Review	10	11-May-18	24-May-18	■ Interim Plans: City of Cleveland Review																			
D-10040	Final Plans: Prepare	20	25-May-18	22-Jun-18	■ Final Plans: Prepare																			
D-10050	Final Plans: Submit to IQF/ Submission Mtg.	1	25-Jun-18	25-Jun-18	■ Final Plans: Submit to IQF/ Submission Mtg.																			
D-10060	Final Plans: IQF Review	10	26-Jun-18	11-Jul-18	■ Final Plans: IQF Review																			
D-10070	Final Plans: ODOT Review	10	12-Jul-18	25-Jul-18	■ Final Plans: ODOT Review																			
D-10071	Final Plans: City of Cleveland Review	10	12-Jul-18	25-Jul-18	■ Final Plans: City of Cleveland Review																			
D-10080	RFC Plans: Prepare	10	26-Jul-18	08-Aug-18	■ RFC Plans: Prepare																			
D-10090	RFC Plans: Submit to IQF	1	08-Aug-18	08-Aug-18	■ RFC Plans: Submit to IQF																			
D-10100	RFC Plans: IQF Review/Signature/Stamp	3	09-Aug-18	13-Aug-18	■ RFC Plans: IQF Review/Signature/Stamp																			
BU #2: ROW Plans		81	15-Mar-18	27-Aug-18	▶ 27-Aug-18, BU #2: ROW Plans																			
D-10110	Interim Plans: Prepare	30	15-Mar-18	25-Apr-18	■ Interim Plans: Prepare																			
D-10120	Interim Plans: Submit to IQF/ Submission Mtg.	1	26-Apr-18	26-Apr-18	■ Interim Plans: Submit to IQF/ Submission Mtg.																			
D-10130	Interim Plans: IQF Review	10	27-Apr-18	10-May-18	■ Interim Plans: IQF Review																			
D-10140	Interim Plans: ODOT Review	10	11-May-18	24-May-18	■ Interim Plans: ODOT Review																			

Activity ID	Activity Name	Original Duration	Start	Finish	2018 2019 2020 2021 2022																			
					2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
D-10150	Final Plans: Prepare	20	25-May-18	22-Jun-18																				
D-10160	Final Plans: Submit to IQF/ Submission Mtg.	1	25-Jun-18	25-Jun-18																				
D-10170	Final Plans: IQF Review	10	26-Jun-18	11-Jul-18																				
D-10180	Final Plans: ODOT Review	10	12-Jul-18	25-Jul-18																				
D-10190	RFC Plans: Prepare	20	26-Jul-18	22-Aug-18																				
D-10200	RFC Plans: Submit to IQF	1	22-Aug-18	22-Aug-18																				
D-10210	RFC Plans: IQF Review/Signature/Stamp	3	23-Aug-18	27-Aug-18																				
BU #3: E. 55th St - Bridge		109	26-Apr-18	21-Nov-18	21-Nov-18, BU #3: E. 55th St - Bridge																			
D-10220	Interim Plans: Prepare	60	26-Apr-18	23-Jul-18																				
D-10230	Interim Plans: Submit to IQF/ Submission Mtg.	1	24-Jul-18	24-Jul-18																				
D-10240	Interim Plans: IQF Review	5	25-Jul-18	31-Jul-18																				
D-10250	Interim Plans: ODOT Review	10	01-Aug-18	14-Aug-18																				
D-10251	Interim Plans: City of Cleveland Review	10	01-Aug-18	14-Aug-18																				
D-10260	Final Plans: Prepare	30	15-Aug-18	26-Sep-18																				
D-10270	Final Plans: Submit to IQF/ Submission Mtg.	1	27-Sep-18	27-Sep-18																				
D-10280	Final Plans: IQF Review	5	28-Sep-18	04-Oct-18																				
D-10290	Final Plans: ODOT Review	10	05-Oct-18	19-Oct-18																				
D-10291	Final Plans: City of Cleveland Review	10	05-Oct-18	19-Oct-18																				
D-10300	RFC Plans: Prepare	20	22-Oct-18	16-Nov-18																				
D-10310	RFC Plans: Submit to IQF	1	16-Nov-18	16-Nov-18																				
D-10320	RFC Plans: IQF Review/Signature/Stamp	3	19-Nov-18	21-Nov-18																				
BU #4: E. 55th St - Walls 1A - 1E		109	26-Apr-18	21-Nov-18	21-Nov-18, BU #4: E. 55th St - Walls 1A - 1E																			
D-10330	Interim Plans: Prepare	60	26-Apr-18	23-Jul-18																				
D-10340	Interim Plans: Submit to IQF/ Submission Mtg.	1	24-Jul-18	24-Jul-18																				
D-10350	Interim Plans: IQF Review	5	25-Jul-18	31-Jul-18																				
D-10360	Interim Plans: ODOT Review	10	01-Aug-18	14-Aug-18																				
D-10361	Interim Plans: City of Cleveland Review	10	01-Aug-18	14-Aug-18																				
D-10370	Final Plans: Prepare	30	15-Aug-18	26-Sep-18																				
D-10380	Final Plans: Submit to IQF/ Submission Mtg.	1	27-Sep-18	27-Sep-18																				
D-10390	Final Plans: IQF Review	5	28-Sep-18	04-Oct-18																				
D-10400	Final Plans: ODOT Review	10	05-Oct-18	19-Oct-18																				
D-10401	Final Plans: City of Cleveland Review	10	05-Oct-18	19-Oct-18																				
D-10410	RFC Plans: Prepare	20	22-Oct-18	16-Nov-18																				
D-10420	RFC Plans: Submit to IQF	1	16-Nov-18	16-Nov-18																				
D-10430	RFC Plans: IQF Review/Signature/Stamp	3	19-Nov-18	21-Nov-18																				
BU #5: E. 55th St - Storm Sewer, Regulators, Sanitary Force Main		117	15-Mar-18	05-Nov-18	05-Nov-18, BU #5: E. 55th St - Storm Sewer, Regulators, Sanitary Force Main																			
D-10440	Interim Plans: Prepare	60	15-Mar-18	07-Jun-18																				
D-10450	Interim Plans: Submit to IQF/ Submission Mtg.	1	08-Jun-18	08-Jun-18																				
D-10460	Interim Plans: IQF Review	5	11-Jun-18	15-Jun-18																				
D-10470	Interim Plans: NEORS Review	20	18-Jun-18	16-Jul-18																				
D-10471	Interim Plans: WPC Review	20	18-Jun-18	16-Jul-18																				
D-10472	Interim Plans: ODOT Review	10	18-Jun-18	29-Jun-18																				
D-10480	Final Plans: Prepare	30	17-Jul-18	27-Aug-18																				
D-10490	Final Plans: Submit to IQF/ Submission Mtg.	1	28-Aug-18	28-Aug-18																				
D-10500	Final Plans: IQF Review	5	29-Aug-18	05-Sep-18																				
D-10510	Final Plans: NEORS Review	20	06-Sep-18	03-Oct-18																				
D-10511	Final Plans: ODOT Review	10	06-Sep-18	19-Sep-18																				
D-10512	Final Plans: WPC Review	20	06-Sep-18	03-Oct-18																				
D-10520	RFC Plans: Prepare	20	04-Oct-18	31-Oct-18																				
D-10530	RFC Plans: Submit to IQF	1	31-Oct-18	31-Oct-18																				

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
D-10801	Interim Plans: ODOT Review	10	29-Aug-18	12-Sep-18				■	Interim Plans: ODOT Review															
D-10802	Interim Plans: WPC Review	20	29-Aug-18	26-Sep-18				■	Interim Plans: WPC Review															
D-10810	Final Plans: Prepare	20	27-Sep-18	24-Oct-18				■	Final Plans: Prepare															
D-10820	Final Plans: Submit to IQF/ Submission Mtg.	1	25-Oct-18	25-Oct-18					Final Plans: Submit to IQF/ Submission Mtg.															
D-10830	Final Plans: IQF Review	5	26-Oct-18	01-Nov-18				■	Final Plans: IQF Review															
D-10840	Final Plans: NEORS Review	20	02-Nov-18	04-Dec-18				■	Final Plans: NEORS Review															
D-10841	Final Plans: ODOT Review	10	02-Nov-18	16-Nov-18				■	Final Plans: ODOT Review															
D-10842	Final Plans: WPC Review	20	02-Nov-18	04-Dec-18				■	Final Plans: WPC Review															
D-10850	RFC Plans: Prepare	10	05-Dec-18	18-Dec-18				■	RFC Plans: Prepare															
D-10860	RFC Plans: Submit to IQF	1	18-Dec-18	18-Dec-18					RFC Plans: Submit to IQF															
D-10870	RFC Plans: IQF Review/Signature/Stamp	3	19-Dec-18	21-Dec-18					RFC Plans: IQF Review/Signature/Stamp															
BU #10: Water Line		79	22-Jun-18	21-Dec-18	▼ 21-Dec-18; BU #10: Water Line																			
D-10880	Interim Plans: Prepare	40	22-Jun-18	20-Aug-18				■	Interim Plans: Prepare															
D-10890	Interim Plans: Submit to IQF/ Submission Mtg.	1	21-Aug-18	21-Aug-18					Interim Plans: Submit to IQF/ Submission Mtg.															
D-10900	Interim Plans: IQF Review	5	22-Aug-18	28-Aug-18				■	Interim Plans: IQF Review															
D-10910	Interim Plans: CWD Review	20	29-Aug-18	26-Sep-18				■	Interim Plans: CWD Review															
D-10911	Interim Plans: ODOT Review	10	29-Aug-18	12-Sep-18				■	Interim Plans: ODOT Review															
D-10920	Final Plans: Prepare	20	27-Sep-18	24-Oct-18				■	Final Plans: Prepare															
D-10930	Final Plans: Submit to IQF/ Submission Mtg.	1	25-Oct-18	25-Oct-18					Final Plans: Submit to IQF/ Submission Mtg.															
D-10940	Final Plans: IQF Review	5	26-Oct-18	01-Nov-18				■	Final Plans: IQF Review															
D-10950	Final Plans: CWD Review	20	02-Nov-18	04-Dec-18				■	Final Plans: CWD Review															
D-10951	Final Plans: ODOT Review	10	02-Nov-18	16-Nov-18				■	Final Plans: ODOT Review															
D-10960	RFC Plans: Prepare	10	05-Dec-18	18-Dec-18				■	RFC Plans: Prepare															
D-10970	RFC Plans: Submit to IQF	1	18-Dec-18	18-Dec-18					RFC Plans: Submit to IQF															
D-10980	RFC Plans: IQF Review/Signature/Stamp	3	19-Dec-18	21-Dec-18					RFC Plans: IQF Review/Signature/Stamp															
BU #11: CPP Duct Bank		79	22-Jun-18	25-Feb-19	▼ 25-Feb-19; BU #11: CPP Duct Bank																			
D-10990	Interim Plans: Prepare	60	22-Jun-18	18-Sep-18				■	Interim Plans: Prepare															
D-11000	Interim Plans: Submit to IQF/ Submission Mtg.	1	19-Sep-18	19-Sep-18					Interim Plans: Submit to IQF/ Submission Mtg.															
D-11010	Interim Plans: IQF Review	5	20-Sep-18	26-Sep-18				■	Interim Plans: IQF Review															
D-11020	Interim Plans: CPP Review	20	27-Sep-18	24-Oct-18				■	Interim Plans: CPP Review															
D-11021	Interim Plans: ODOT Review	10	27-Sep-18	11-Oct-18				■	Interim Plans: ODOT Review															
D-11030	Final Plans: Prepare	30	25-Oct-18	07-Dec-18				■	Final Plans: Prepare															
D-11040	Final Plans: Submit to IQF/ Submission Mtg.	1	10-Dec-18	10-Dec-18					Final Plans: Submit to IQF/ Submission Mtg.															
D-11050	Final Plans: IQF Review	5	11-Dec-18	17-Dec-18				■	Final Plans: IQF Review															
D-11060	Final Plans: CPP Review	20	18-Dec-18	23-Jan-19				■	Final Plans: CPP Review															
D-11061	Final Plans: ODOT Review	10	17-Dec-18	02-Jan-19				■	Final Plans: ODOT Review															
D-11070	RFC Plans: Prepare	20	24-Jan-19	20-Feb-19				■	RFC Plans: Prepare															
D-11080	RFC Plans: Submit to IQF	1	20-Feb-19	20-Feb-19					RFC Plans: Submit to IQF															
D-11090	RFC Plans: IQF Review/Signature/Stamp	3	21-Feb-19	25-Feb-19					RFC Plans: IQF Review/Signature/Stamp															
BU #12: Traffic Control - Signals and Duct Bank - City of Cleveland		79	22-Jun-18	14-Jan-19	▼ 14-Jan-19; BU #12: Traffic Control - Signals and Duct Bank - City of Cleveland																			
D-11100	Interim Plans: Prepare	50	22-Jun-18	04-Sep-18				■	Interim Plans: Prepare															
D-11110	Interim Plans: Submit to IQF/ Submission Mtg.	1	05-Sep-18	05-Sep-18					Interim Plans: Submit to IQF/ Submission Mtg.															
D-11120	Interim Plans: IQF Review	5	06-Sep-18	12-Sep-18				■	Interim Plans: IQF Review															
D-11130	Interim Plans: City of Cleveland Review	10	13-Sep-18	26-Sep-18				■	Interim Plans: City of Cleveland Review															
D-11131	Interim Plans: ODOT Review	10	13-Sep-18	26-Sep-18				■	Interim Plans: ODOT Review															
D-11140	Final Plans: Prepare	30	27-Sep-18	07-Nov-18				■	Final Plans: Prepare															
D-11150	Final Plans: Submit to IQF/ Submission Mtg.	1	08-Nov-18	08-Nov-18					Final Plans: Submit to IQF/ Submission Mtg.															
D-11160	Final Plans: IQF Review	5	09-Nov-18	15-Nov-18				■	Final Plans: IQF Review															
D-11170	Final Plans: City of Cleveland Review	10	16-Nov-18	03-Dec-18				■	Final Plans: City of Cleveland Review															
D-11171	Final Plans: ODOT Review	10	16-Nov-18	03-Dec-18				■	Final Plans: ODOT Review															

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
D-11180	RFC Plans: Prepare	20	04-Dec-18	09-Jan-19																				
D-11190	RFC Plans: Submit to IQF	1	09-Jan-19	09-Jan-19																				
D-11200	RFC Plans: IQF Review/Signature/Stamp	3	10-Jan-19	14-Jan-19																				
BU #13: Storm Sewer		122	15-Mar-18	21-Dec-18	21-Dec-18, BU #13: Storm Sewer																			
D-11210	Interim Plans: Prepare	80	15-Mar-18	09-Jul-18																				
D-11220	Interim Plans: Submit to IQF/ Submission Mtg.	1	10-Jul-18	10-Jul-18																				
D-11230	Interim Plans: IQF Review	5	11-Jul-18	17-Jul-18																				
D-11240	Interim Plans: NEORSD Review	20	18-Jul-18	14-Aug-18																				
D-11241	Interim Plans: ODOT Review	10	18-Jul-18	31-Jul-18																				
D-11242	Interim Plans: City of Cleveland Review	10	18-Jul-18	31-Jul-18																				
D-11243	Interim Plans: WPC Review	20	18-Jul-18	14-Aug-18																				
D-11250	Final Plans: Prepare	40	15-Aug-18	10-Oct-18																				
D-11260	Final Plans: Submit to IQF/ Submission Mtg.	1	11-Oct-18	11-Oct-18																				
D-11270	Final Plans: IQF Review	5	12-Oct-18	18-Oct-18																				
D-11280	Final Plans: NEORSD Review	20	19-Oct-18	16-Nov-18																				
D-11281	Final Plans: ODOT Review	10	19-Oct-18	01-Nov-18																				
D-11282	Final Plans: City of Cleveland Review	10	19-Oct-18	01-Nov-18																				
D-11283	Final Plans: WPC Review	20	19-Oct-18	16-Nov-18																				
D-11290	RFC Plans: Prepare	20	19-Nov-18	18-Dec-18																				
D-11300	RFC Plans: Submit to IQF	1	18-Dec-18	18-Dec-18																				
D-11310	RFC Plans: IQF Review/Signature/Stamp	3	19-Dec-18	21-Dec-18																				
BU #14: Roadway & Pavement - E. 55th / Quadrant Rd. / GCTRA Station Lot		117	15-Mar-18	06-Nov-18	06-Nov-18, BU #14: Roadway & Pavement - E. 55th / Quadrant Rd. / GCTRA Station Lot																			
D-11320	Interim Plans: Prepare	60	15-Mar-18	07-Jun-18																				
D-11330	Interim Plans: Submit to IQF/ Submission Mtg.	1	08-Jun-18	08-Jun-18																				
D-11340	Interim Plans: IQF Review	5	11-Jun-18	15-Jun-18																				
D-11350	Interim Plans: City of Cleveland Review	10	18-Jun-18	29-Jun-18																				
D-11351	Interim Plans: ODOT Review	10	18-Jun-18	29-Jun-18																				
D-11352	Interim Plans: GCRTA Review	30	16-Jun-18	15-Jul-18																				
D-11360	Final Plans: Prepare	30	16-Jul-18	24-Aug-18																				
D-11370	Final Plans: Submit to IQF/ Submission Mtg.	1	27-Aug-18	27-Aug-18																				
D-11380	Final Plans: IQF Review	5	28-Aug-18	04-Sep-18																				
D-11390	Final Plans: City of Cleveland Review	10	05-Sep-18	18-Sep-18																				
D-11391	Final Plans: ODOT Review	10	05-Sep-18	18-Sep-18																				
D-11392	Final Plans: GCRTA Review	30	05-Sep-18	04-Oct-18																				
D-11400	RFC Plans: Prepare	20	05-Oct-18	01-Nov-18																				
D-11410	RFC Plans: Submit to IQF	1	01-Nov-18	01-Nov-18																				
D-11420	RFC Plans: IQF Review/Signature/Stamp	3	02-Nov-18	06-Nov-18																				
BU #15: Roadway & Pavement - OH-10 / Side Streets / McTech Parking Lot		122	15-Mar-18	21-Nov-18	21-Nov-18, BU #15: Roadway & Pavement - OH-10 / Side Streets / McTech Parking Lot																			
D-11430	Interim Plans: Prepare	80	15-Mar-18	09-Jul-18																				
D-11440	Interim Plans: Submit to IQF/ Submission Mtg.	1	10-Jul-18	10-Jul-18																				
D-11450	Interim Plans: IQF Review	5	11-Jul-18	17-Jul-18																				
D-11460	Interim Plans: City of Cleveland Review	10	18-Jul-18	31-Jul-18																				
D-11461	Interim Plans: ODOT Review	10	18-Jul-18	31-Jul-18																				
D-11470	Final Plans: Prepare	40	01-Aug-18	26-Sep-18																				
D-11480	Final Plans: Submit to IQF/ Submission Mtg.	1	27-Sep-18	27-Sep-18																				
D-11490	Final Plans: IQF Review	5	28-Sep-18	04-Oct-18																				
D-11500	Final Plans: City of Cleveland Review	10	05-Oct-18	19-Oct-18																				
D-11501	Final Plans: ODOT Review	10	05-Oct-18	19-Oct-18																				
D-11510	RFC Plans: Prepare	20	22-Oct-18	16-Nov-18																				
D-11520	RFC Plans: Submit to IQF	1	16-Nov-18	16-Nov-18																				

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022	
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2
D-11530	RFC Plans: IQF Review/Signature/Stamp	3	19-Nov-18	21-Nov-18																		
BU #16: Bridge - E. 59th St. PED					42	27-Sep-18	01-May-19															
D-11540	Interim Plans: Prepare	60	27-Sep-18	21-Dec-18																		
D-11550	Interim Plans: Submit to IQF/ Submission Mtg.	1	02-Jan-19	02-Jan-19																		
D-11560	Interim Plans: IQF Review	5	03-Jan-19	09-Jan-19																		
D-11570	Interim Plans: City of Cleveland Review	10	10-Jan-19	24-Jan-19																		
D-11571	Interim Plans: ODOT Review	10	10-Jan-19	24-Jan-19																		
D-11580	Final Plans: Prepare	30	25-Jan-19	07-Mar-19																		
D-11590	Final Plans: Submit to IQF/ Submission Mtg.	1	08-Mar-19	08-Mar-19																		
D-11600	Final Plans: IQF Review	5	11-Mar-19	15-Mar-19																		
D-11610	Final Plans: City of Cleveland Review	10	18-Mar-19	29-Mar-19																		
D-11611	Final Plans: ODOT Review	10	18-Mar-19	29-Mar-19																		
D-11620	RFC Plans: Prepare	20	01-Apr-19	26-Apr-19																		
D-11630	RFC Plans: Submit to IQF	1	26-Apr-19	26-Apr-19																		
D-11640	RFC Plans: IQF Review/Signature/Stamp	3	29-Apr-19	01-May-19																		
BU #17: Bridge - Kingsbury Run					65	07-Dec-18	30-Jul-19															
D-11650	Interim Plans: Prepare	60	07-Dec-18	12-Mar-19																		
D-11660	Interim Plans: Submit to IQF/ Submission Mtg.	1	12-Mar-19	13-Mar-19																		
D-11670	Interim Plans: IQF Review	5	13-Mar-19	20-Mar-19																		
D-11680	Interim Plans: GCRTA Review	30	20-Mar-19	19-Apr-19																		
D-11681	Interim Plans: ODOT Review	10	20-Mar-19	03-Apr-19																		
D-11690	Final Plans: Prepare	30	19-Apr-19	03-Jun-19																		
D-11700	Final Plans: Submit to IQF/ Submission Mtg.	1	03-Jun-19	04-Jun-19																		
D-11710	Final Plans: IQF Review	5	04-Jun-19	11-Jun-19																		
D-11720	Final Plans: GCRTA Review	30	11-Jun-19	11-Jul-19																		
D-11721	Final Plans: ODOT Review	10	11-Jun-19	25-Jun-19																		
D-11730	RFC Plans: Prepare	10	11-Jul-19	25-Jul-19																		
D-11740	RFC Plans: Submit to IQF	1	24-Jul-19	25-Jul-19																		
D-11750	RFC Plans: IQF Review/Signature/Stamp	3	25-Jul-19	30-Jul-19																		
BU #18: Bridge - Kinsman Rd. Bridge Modifications					27	07-Dec-18	20-May-19															
D-11760	Interim Plans: Prepare	20	07-Dec-18	15-Jan-19																		
D-11770	Interim Plans: Submit to IQF/ Submission Mtg.	1	15-Jan-19	16-Jan-19																		
D-11780	Interim Plans: IQF Review	5	16-Jan-19	23-Jan-19																		
D-11790	Interim Plans: GCRTA Review	30	23-Jan-19	22-Feb-19																		
D-11791	Interim Plans: ODOT Review	10	23-Jan-19	06-Feb-19																		
D-11800	Final Plans: Prepare	20	22-Feb-19	22-Mar-19																		
D-11810	Final Plans: Submit to IQF/ Submission Mtg.	1	22-Mar-19	25-Mar-19																		
D-11820	Final Plans: IQF Review	5	25-Mar-19	01-Apr-19																		
D-11830	Final Plans: GCRTA Review	30	01-Apr-19	01-May-19																		
D-11831	Final Plans: ODOT Review	10	01-Apr-19	15-Apr-19																		
D-11840	RFC Plans: Prepare	10	01-May-19	15-May-19																		
D-11850	RFC Plans: Submit to IQF	1	14-May-19	15-May-19																		
D-11860	RFC Plans: IQF Review/Signature/Stamp	3	15-May-19	20-May-19																		
BU #19: Bridge - GCRTA Blue/Green EB & WB / Catenary Modifications					109	26-Apr-18	12-Dec-18															
D-11870	Interim Plans: Prepare	60	26-Apr-18	23-Jul-18																		
D-11880	Interim Plans: Submit to IQF/ Submission Mtg.	1	24-Jul-18	24-Jul-18																		
D-11890	Interim Plans: IQF Review	5	25-Jul-18	31-Jul-18																		
D-11900	Interim Plans: GCRTA Review	30	01-Aug-18	30-Aug-18																		
D-11901	Interim Plans: ODOT Review	10	01-Aug-18	14-Aug-18																		
D-11910	Final Plans: Prepare	30	31-Aug-18	12-Oct-18																		

Activity ID	Activity Name	Original Duration	Start	Finish	2018 2019 2020 2021 2022																											
					2018				2019				2020				2021				2022											
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4								
D-11920	Final Plans: Submit to IQF/ Submission Mtg.	1	15-Oct-18	15-Oct-18						Final Plans: Submit to IQF/ Submission Mtg.																						
D-11930	Final Plans: IQF Review	5	16-Oct-18	22-Oct-18						Final Plans: IQF Review																						
D-11940	Final Plans: GCRTA Review	30	22-Oct-18	21-Nov-18						Final Plans: GCRTA Review																						
D-11941	Final Plans: ODOT Review	10	22-Oct-18	05-Nov-18						Final Plans: ODOT Review																						
D-11950	RFC Plans: Prepare	10	21-Nov-18	07-Dec-18						RFC Plans: Prepare																						
D-11960	RFC Plans: Submit to IQF	1	06-Dec-18	07-Dec-18						RFC Plans: Submit to IQF																						
D-11970	RFC Plans: IQF Review/Signature/Stamp	3	07-Dec-18	12-Dec-18						RFC Plans: IQF Review/Signature/Stamp																						
BU #20: Walls 4AB & 4CD		104	26-Apr-18	06-Nov-18	06-Nov-18, BU #20: Walls 4AB & 4CD																											
D-11980	Interim Plans: Prepare	30	26-Apr-18	07-Jun-18						Interim Plans: Prepare																						
D-11990	Interim Plans: Submit to IQF/ Submission Mtg.	1	08-Jun-18	08-Jun-18						Interim Plans: Submit to IQF/ Submission Mtg.																						
D-12000	Interim Plans: IQF Review	5	11-Jun-18	15-Jun-18						Interim Plans: IQF Review																						
D-12010	Interim Plans: GCRTA Review	30	16-Jun-18	15-Jul-18						Interim Plans: GCRTA Review																						
D-12011	Interim Plans: ODOT Review	10	18-Jun-18	29-Jun-18						Interim Plans: ODOT Review																						
D-12020	Final Plans: Prepare	30	16-Jul-18	24-Aug-18						Final Plans: Prepare																						
D-12030	Final Plans: Submit to IQF/ Submission Mtg.	1	27-Aug-18	27-Aug-18						Final Plans: Submit to IQF/ Submission Mtg.																						
D-12040	Final Plans: IQF Review	5	28-Aug-18	04-Sep-18						Final Plans: IQF Review																						
D-12050	Final Plans: GCRTA Review	30	05-Sep-18	04-Oct-18						Final Plans: GCRTA Review																						
D-12051	Final Plans: ODOT Review	10	05-Sep-18	18-Sep-18						Final Plans: ODOT Review																						
D-12060	RFC Plans: Prepare	20	05-Oct-18	01-Nov-18						RFC Plans: Prepare																						
D-12070	RFC Plans: Submit to IQF	1	01-Nov-18	01-Nov-18						RFC Plans: Submit to IQF																						
D-12080	RFC Plans: IQF Review/Signature/Stamp	3	02-Nov-18	06-Nov-18						RFC Plans: IQF Review/Signature/Stamp																						
BU #21: Outfall #3 & #4 Retention Basin		27	26-Nov-18	20-May-19	20-May-19, BU #21: Outfall #3 & #4 Retention Basin																											
D-12090	Interim Plans: Prepare	30	26-Nov-18	15-Jan-19						Interim Plans: Prepare																						
D-12100	Interim Plans: Submit to IQF/ Submission Mtg.	1	16-Jan-19	16-Jan-19						Interim Plans: Submit to IQF/ Submission Mtg.																						
D-12110	Interim Plans: IQF Review	5	17-Jan-19	23-Jan-19						Interim Plans: IQF Review																						
D-12120	Interim Plans: NSRR Review	30	24-Jan-19	22-Feb-19						Interim Plans: NSRR Review																						
D-12121	Interim Plans: ODOT Review	10	24-Jan-19	06-Feb-19						Interim Plans: ODOT Review																						
D-12122	Interim Plans: City of Cleveland Review	10	24-Jan-19	06-Feb-19						Interim Plans: City of Cleveland Review																						
D-12123	Interim Plans: NEORSD Review	20	24-Jan-19	21-Feb-19						Interim Plans: NEORSD Review																						
D-12124	Interim Plans: WPC Review	20	24-Jan-19	21-Feb-19						Interim Plans: WPC Review																						
D-12130	Final Plans: Prepare	20	25-Feb-19	22-Mar-19						Final Plans: Prepare																						
D-12140	Final Plans: Submit to IQF/ Submission Mtg.	1	25-Mar-19	25-Mar-19						Final Plans: Submit to IQF/ Submission Mtg.																						
D-12150	Final Plans: IQF Review	5	26-Mar-19	01-Apr-19						Final Plans: IQF Review																						
D-12160	Final Plans: NSRR Review	30	01-Apr-19	01-May-19						Final Plans: NSRR Review																						
D-12161	Final Plans: ODOT Review	10	01-Apr-19	15-Apr-19						Final Plans: ODOT Review																						
D-12162	Final Plans: City of Cleveland Review	10	01-Apr-19	15-Apr-19						Final Plans: City of Cleveland Review																						
D-12163	Final Plans: NEORSD Review	20	01-Apr-19	29-Apr-19						Final Plans: NEORSD Review																						
D-12164	Final Plans: WPC Review	20	01-Apr-19	29-Apr-19						Final Plans: WPC Review																						
D-12170	RFC Plans: Prepare	10	01-May-19	15-May-19						RFC Plans: Prepare																						
D-12180	RFC Plans: Submit to IQF	1	14-May-19	15-May-19						RFC Plans: Submit to IQF																						
D-12190	RFC Plans: IQF Review/Signature/Stamp	3	15-May-19	20-May-19						RFC Plans: IQF Review/Signature/Stamp																						
BU #22: Bridge - NSRR / NSRR Perm & Temp Track Work / NSRR Demo Over Grand		104	26-Apr-18	06-Nov-18	06-Nov-18, BU #22: Bridge - NSRR / NSRR Perm & Temp Track Work / NSRR Demo Over Grand																											
D-12200	Interim Plans: Prepare	40	26-Apr-18	21-Jun-18						Interim Plans: Prepare																						
D-12210	Interim Plans: Submit to IQF/ Submission Mtg.	1	22-Jun-18	22-Jun-18						Interim Plans: Submit to IQF/ Submission Mtg.																						
D-12220	Interim Plans: IQF Review	5	25-Jun-18	29-Jun-18						Interim Plans: IQF Review																						
D-12230	Interim Plans: NSRR Review	30	30-Jun-18	29-Jul-18						Interim Plans: NSRR Review																						
D-12231	Interim Plans: ODOT Review	10	02-Jul-18	16-Jul-18						Interim Plans: ODOT Review																						
D-12240	Final Plans: Prepare	30	30-Jul-18	10-Sep-18						Final Plans: Prepare																						
D-12250	Final Plans: Submit to IQF/ Submission Mtg.	1	11-Sep-18	11-Sep-18						Final Plans: Submit to IQF/ Submission Mtg.																						
D-12260	Final Plans: IQF Review	5	12-Sep-18	18-Sep-18						Final Plans: IQF Review																						

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022				
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		
D-12270	Final Plans: NSRR Review	30	19-Sep-18	18-Oct-18				■	Final Plans: NSRR Review;																
D-12271	Final Plans: ODOT Review	10	19-Sep-18	02-Oct-18				■	Final Plans: ODOT Review																
D-12280	RFC Plans: Prepare	10	19-Oct-18	01-Nov-18				■	RFC Plans: Prepare																
D-12290	RFC Plans: Submit to IQF	1	01-Nov-18	01-Nov-18					RFC Plans: Submit to IQF																
D-12300	RFC Plans: IQF Review/Signature/Stamp	3	02-Nov-18	06-Nov-18				■	RFC Plans: IQF Review/Signature/Stamp																
BU #23: Walls 5A - 5D		104	26-Apr-18	06-Nov-18	▶ 06-Nov-18, BU #23: Walls 5A - 5D																				
D-12310	Interim Plans: Prepare	40	26-Apr-18	21-Jun-18				■	Interim Plans: Prepare																
D-12320	Interim Plans: Submit to IQF/ Submission Mtg.	1	22-Jun-18	22-Jun-18					Interim Plans: Submit to IQF/ Submission Mtg.																
D-12330	Interim Plans: IQF Review	5	25-Jun-18	29-Jun-18				■	Interim Plans: IQF Review																
D-12340	Interim Plans: NSRR Review	30	30-Jun-18	29-Jul-18				■	Interim Plans: NSRR Review																
D-12341	Interim Plans: ODOT Review	10	02-Jul-18	16-Jul-18				■	Interim Plans: ODOT Review																
D-12350	Final Plans: Prepare	30	30-Jul-18	10-Sep-18				■	Final Plans: Prepare																
D-12360	Final Plans: Submit to IQF/ Submission Mtg.	1	11-Sep-18	11-Sep-18					Final Plans: Submit to IQF/ Submission Mtg.																
D-12370	Final Plans: IQF Review	5	12-Sep-18	18-Sep-18				■	Final Plans: IQF Review																
D-12380	Final Plans: NSRR Review	30	19-Sep-18	18-Oct-18				■	Final Plans: NSRR Review																
D-12381	Final Plans: ODOT Review	10	19-Sep-18	02-Oct-18				■	Final Plans: ODOT Review																
D-12390	RFC Plans: Prepare	10	19-Oct-18	01-Nov-18				■	RFC Plans: Prepare																
D-12400	RFC Plans: Submit to IQF	1	01-Nov-18	01-Nov-18					RFC Plans: Submit to IQF																
D-12410	RFC Plans: IQF Review/Signature/Stamp	3	02-Nov-18	06-Nov-18				■	RFC Plans: IQF Review/Signature/Stamp																
BU #24: Outfall #4 Sewer		18	11-Oct-18	27-Mar-19	▶ 27-Mar-19, BU #24: Outfall #4 Sewer																				
D-12420	Interim Plans: Prepare	30	11-Oct-18	21-Nov-18				■	Interim Plans: Prepare																
D-12430	Interim Plans: Submit to IQF/ Submission Mtg.	1	26-Nov-18	26-Nov-18					Interim Plans: Submit to IQF/ Submission Mtg.																
D-12440	Interim Plans: IQF Review	5	27-Nov-18	03-Dec-18				■	Interim Plans: IQF Review																
D-12450	Interim Plans: NSRR Review	30	03-Dec-18	02-Jan-19				■	Interim Plans: NSRR Review																
D-12451	Interim Plans: ODOT Review	10	03-Dec-18	17-Dec-18				■	Interim Plans: ODOT Review																
D-12452	Interim Plans: City of Cleveland Review	10	03-Dec-18	17-Dec-18				■	Interim Plans: City of Cleveland Review																
D-12453	Interim Plans: NEORS Review	20	03-Dec-18	02-Jan-19				■	Interim Plans: NEORS Review																
D-12454	Interim Plans: WPC Review	20	03-Dec-18	02-Jan-19				■	Interim Plans: WPC Review																
D-12460	Final Plans: Prepare	20	02-Jan-19	30-Jan-19				■	Final Plans: Prepare																
D-12470	Final Plans: Submit to IQF/ Submission Mtg.	1	30-Jan-19	31-Jan-19					Final Plans: Submit to IQF/ Submission Mtg.																
D-12480	Final Plans: IQF Review	5	31-Jan-19	07-Feb-19				■	Final Plans: IQF Review																
D-12490	Final Plans: NSRR Review	30	07-Feb-19	09-Mar-19				■	Final Plans: NSRR Review																
D-12491	Final Plans: ODOT Review	10	07-Feb-19	22-Feb-19				■	Final Plans: ODOT Review																
D-12492	Final Plans: City of Cleveland Review	10	07-Feb-19	22-Feb-19				■	Final Plans: City of Cleveland Review																
D-12493	Final Plans: NEORS Review	20	07-Feb-19	08-Mar-19				■	Final Plans: NEORS Review																
D-12494	Final Plans: WPC Review	20	07-Feb-19	08-Mar-19				■	Final Plans: WPC Review																
D-12500	RFC Plans: Prepare	10	11-Mar-19	22-Mar-19				■	RFC Plans: Prepare																
D-12510	RFC Plans: Submit to IQF	1	22-Mar-19	22-Mar-19					RFC Plans: Submit to IQF																
D-12520	RFC Plans: IQF Review/Signature/Stamp	3	25-Mar-19	27-Mar-19				■	RFC Plans: IQF Review/Signature/Stamp																
BU #25: Bridge: E. 89th St. PED		78	25-Jun-18	06-Feb-19	▶ 06-Feb-19, BU #25: Bridge: E. 89th St. PED																				
D-12530	Interim Plans: Prepare	60	25-Jun-18	19-Sep-18				■	Interim Plans: Prepare																
D-12540	Interim Plans: Submit to IQF/ Submission Mtg.	1	20-Sep-18	20-Sep-18					Interim Plans: Submit to IQF/ Submission Mtg.																
D-12550	Interim Plans: IQF Review	5	21-Sep-18	27-Sep-18				■	Interim Plans: IQF Review																
D-12560	Interim Plans: City of Cleveland Review	10	28-Sep-18	12-Oct-18				■	Interim Plans: City of Cleveland Review																
D-12561	Interim Plans: GCRTA Review	30	28-Sep-18	27-Oct-18				■	Interim Plans: GCRTA Review																
D-12562	Interim Plans: ODOT Review	10	28-Sep-18	12-Oct-18				■	Interim Plans: ODOT Review																
D-12563	Interim Plans: CWD Review	20	28-Sep-18	26-Oct-18				■	Interim Plans: CWD Review																
D-12564	Interim Plans: Telecom Review	20	28-Sep-18	26-Oct-18				■	Interim Plans: Telecom Review																
D-12570	Final Plans: Prepare	30	29-Oct-18	11-Dec-18				■	Final Plans: Prepare																
D-12580	Final Plans: Submit to IQF/ Submission Mtg.	1	12-Dec-18	12-Dec-18					Final Plans: Submit to IQF/ Submission Mtg.																

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022				
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		
D-12960	RFC Plans: IQF Review/Signature/Stamp	3	05-Jun-19	07-Jun-19																					
BU #29: Landscaping, Finish Grading, Seeding		37	11-Jan-19	07-Jun-19																					
D-12970	Interim Plans: Prepare	40	11-Jan-19	07-Mar-19																					
D-12980	Interim Plans: Submit to IQF/ Submission Mtg.	1	08-Mar-19	08-Mar-19																					
D-12990	Interim Plans: IQF Review	5	11-Mar-19	15-Mar-19																					
D-13000	Interim Plans: City of Cleveland Review	10	18-Mar-19	29-Mar-19																					
D-13001	Interim Plans: ODOT Review	10	18-Mar-19	29-Mar-19																					
D-13010	Final Plans: Prepare	20	01-Apr-19	26-Apr-19																					
D-13020	Final Plans: Submit to IQF/ Submission Mtg.	1	29-Apr-19	29-Apr-19																					
D-13030	Final Plans: IQF Review	5	30-Apr-19	06-May-19																					
D-13040	Final Plans: City of Cleveland Review	10	06-May-19	20-May-19																					
D-13041	Final Plans: ODOT Review	10	06-May-19	20-May-19																					
D-13050	RFC Plans: Prepare	10	21-May-19	04-Jun-19																					
D-13060	RFC Plans: Submit to IQF	1	04-Jun-19	04-Jun-19																					
D-13070	RFC Plans: IQF Review/Signature/Stamp	3	05-Jun-19	07-Jun-19																					
Construction Submittals		92	07-Nov-18	06-Sep-19																					
CS-1280	Scope S16: Demo Plan - Kinsman Rd. Bridge	50	20-May-19	09-Jul-19																					
CS-1285	Scope S16: Demo Plan - NSRR over Grand Ave Bridge Demo Plan	50	07-Nov-18	26-Dec-18																					
CS-1290	Scope S16: Demo Plan - E. 89th St. PED Bridge	50	07-Feb-19	28-Mar-19																					
CS-1300	Erection Plan - E. 55th St. Bridge	30	22-Nov-18	21-Dec-18																					
CS-1310	Erection Plan - E. 59th over OC PED Bridge	30	02-May-19	31-May-19																					
CS-1320	Erection Plan - Kingsbury Bridge	30	30-Jul-19	29-Aug-19																					
CS-1330	Erection Plan - OC EB over GCRTA Blue/Green Bridge	30	12-Dec-18	11-Jan-19																					
CS-1340	Erection Plan - OC WB over GCRTA Blue/Green Bridge	30	12-Dec-18	11-Jan-19																					
CS-1350	Erection Plans - NSRR over OC Bridge	30	07-Nov-18	06-Dec-18																					
CS-1360	Erection Plans - E. 89th St. over GCRTA PED Bridge	30	07-Feb-19	08-Mar-19																					
CS-1400	RTA Temporary Protective Structure - Blue/Green EB & WB Bridges	30	12-Dec-18	11-Jan-19																					
CS-1410	RTA Temporary Protective Structure - E. 89th PED Bridge	30	07-Feb-19	08-Mar-19																					
IQF Review		87	07-Dec-18	06-Sep-19																					
CSR-1280	S16: Demo Plan - Kinsman Rd. Bridge	5	09-Jul-19	16-Jul-19																					
CSR-1285	S16: Demo Plan - NSRR over Grand Ave Bridge Demo Plan	5	02-Jan-19	08-Jan-19																					
CSR-1290	S16: Demo Plan - E. 89th St. PED Bridge	5	29-Mar-19	04-Apr-19																					
CSR-1300	Erection Plan - E. 55th St. Bridge	5	02-Jan-19	08-Jan-19																					
CSR-1310	Erection Plan - OC/ E. 59th PED Bridge	5	03-Jun-19	07-Jun-19																					
CSR-1320	Erection Plan - Kingsbury Bridge	5	29-Aug-19	06-Sep-19																					
CSR-1330	Erection Plan - OC EB over GCRTA Blue/Green Bridge	5	11-Jan-19	18-Jan-19																					
CSR-1340	Erection Plan - OC WB over GCRTA Blue/Green Bridge	5	11-Jan-19	18-Jan-19																					
CSR-1350	Erection Plan - NSRR over OC Bridge	5	07-Dec-18	13-Dec-18																					
CSR-1360	Erection Plan - E. 89th St. PED Bridge	5	11-Mar-19	15-Mar-19																					
Right-of-Way Acquisition		33	21-Dec-17	01-Jun-18																					
ROW-1000	2925 E. 55TH ST	0		21-Dec-17*	2925 E. 55TH ST																				
ROW-1010	6811 KINSMAN RD	0		01-Jun-18*	◆ 6811 KINSMAN RD																				
ROW-1020	6829 COLFAX RD	0		01-Jun-18*	◆ 6829 COLFAX RD																				
ROW-1030	6835 COLFAX RD	0		01-Jun-18*	◆ 6835 COLFAX RD																				
ROW-1040	2787 E. 73RD ST	0		01-Feb-18*	◆ 2787 E. 73RD ST																				
ROW-1050	7622 RAWLINGS AVE	0		21-Dec-17*	7622 RAWLINGS AVE																				
ROW-1060	2756 E. 79TH ST	0		21-Dec-17*	2756 E. 79TH ST																				
ROW-1070	2685 E. 79TH ST	0		01-Feb-18*	◆ 2685 E. 79TH ST																				
ROW-1090	Perk Co. GRAND AVE	0		01-Feb-18*	◆ Perk Co. GRAND AVE																				

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022		
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
ROW-1100	2742 GRAND AVE	0		01-Feb-18*	◆																		
ROW-1110	2770 GRAND AVE	0		21-Dec-17*	◆																		
ROW-1120	2800 GRAND AVE	0		01-Apr-18*	◆																		
ROW-1130	8714 BUCKEYE RD	0		21-Dec-17*	◆																		
ROW-1140	8715 BUCKEYE RD	0		21-Dec-17*	◆																		
ROW-1150	8701 BUCKEYE RD	0		21-Dec-17*	◆																		
ROW-1160	2639 E. 87TH ST	0		21-Dec-17*	◆																		
ROW-1170	2622 E. 87TH ST	0		21-Dec-17*	◆																		
ROW-1180	8800 WOODLAND AVE	0		21-Dec-17*	◆																		
ROW-1190	8708 WOODLAND AVE	0		21-Dec-17*	◆																		
ROW-1400	Section #1 Latest Roadway Parcel Clear (#2001 - #2084)	0		01-Jun-18*	◆																		
ROW-1410	Section #2 Latest Roadway Parcel Clear (#2087 - #2176)	0		01-Jun-18*	◆																		
ROW-1420	Section #3 Latest Roadway Parcel Clear (#2177 - #2287)	0		01-Feb-18*	◆																		
ROW-1430	Section #4 Latest Roadway Parcel Clear (#2290 - #2426)	0		01-Apr-18*	◆																		
Permits		190	14-Mar-18	02-Aug-19	◆ Section #1 Latest Roadway Parcel Clear (#2001 - #2084) ◆ Section #2 Latest Roadway Parcel Clear (#2087 - #2176) ◆ Section #3 Latest Roadway Parcel Clear (#2177 - #2287) ◆ Section #4 Latest Roadway Parcel Clear (#2290 - #2426) 02-Aug-19, Permits Scope S6: City of Cleveland Noise Permit/Variance Scope S8: Storm Sewer Crossing NSRR & GCRTA Permit City of Cleveland Street Work Permit 02-Aug-19, City of Cleveland & OEPA Demolition Permits																		
P-1050	Scope S6: City of Cleveland Noise Permit/Variance	5	12-Jun-18	16-Jun-18	Scope S6: City of Cleveland Noise Permit/Variance																		
P-1060	Scope S8: Storm Sewer Crossing NSRR & GCRTA Permit	50	25-Mar-19	14-May-19	Scope S8: Storm Sewer Crossing NSRR & GCRTA Permit																		
P-1070	City of Cleveland Street Work Permit	14	14-Mar-18	02-Apr-18	City of Cleveland Street Work Permit																		
City of Cleveland & OEPA Demolition Permits		151	13-Jun-18	02-Aug-19	02-Aug-19, City of Cleveland & OEPA Demolition Permits Scope S6: Section 1 Properties: E. 55th Scope S6: Section 2 Properties: Kinsman, Colfax Scope S6: Section 3 Properties: Rawlings, E. 73rd, E. 79th Scope S6: Section 4 Properties: Grand, Buckeye, E. 87th, Woodland Scope S6: Bridge Demo: Kinsman Rd over GCRTA Scope S6: Bridge Demo: NSRR over Grand Ave. Scope S6: Bridge #1812440 Demo: E. 89th over NS/GCRTA 14-Dec-18, Building Demolition & Abatement																		
P-1000	Scope S6: Section 1 Properties: E. 55th	10	13-Jun-18	29-Jun-18	Scope S6: Section 1 Properties: E. 55th																		
P-1010	Scope S6: Section 2 Properties: Kinsman, Colfax	10	13-Jun-18	29-Jun-18	Scope S6: Section 2 Properties: Kinsman, Colfax																		
P-1020	Scope S6: Section 3 Properties: Rawlings, E. 73rd, E. 79th	10	13-Jun-18	29-Jun-18	Scope S6: Section 3 Properties: Rawlings, E. 73rd, E. 79th																		
P-1030	Scope S6: Section 4 Properties: Grand, Buckeye, E. 87th, Woodland	10	13-Jun-18	29-Jun-18	Scope S6: Section 4 Properties: Grand, Buckeye, E. 87th, Woodland																		
P-1040	Scope S6: Bridge Demo: Kinsman Rd over GCRTA	10	17-Jul-19	02-Aug-19	Scope S6: Bridge Demo: Kinsman Rd over GCRTA																		
P-1090	Scope S6: Bridge Demo: NSRR over Grand Ave.	10	09-Jan-19	29-Jan-19	Scope S6: Bridge Demo: NSRR over Grand Ave.																		
P-1100	Scope S6: Bridge #1812440 Demo: E. 89th over NS/GCRTA	10	05-Apr-19	24-Apr-19	Scope S6: Bridge #1812440 Demo: E. 89th over NS/GCRTA																		
Building Demolition & Abatement		74	02-Jul-18	14-Dec-18	14-Dec-18, Building Demolition & Abatement 2925 E. 55TH ST 6811 KINSMAN RD 6829 COLFAX RD 6835 COLFAX RD 2787 E. 73RD ST 7622 RAWLINGS AVE 2756 E. 79TH ST 2685 E. 79TH ST Perk Co. GRAND AVE 2742 GRAND AVE 2770 GRAND AVE 2800 GRAND AVE 8714 BUCKEYE RD 8715 BUCKEYE RD 8701 BUCKEYE RD 2639 E. 87TH ST 2622 E. 87TH ST 8800 WOODLAND AVE 8708 WOODLAND AVE 27-Nov-18, Environmental Scope S6: Earth Disturbing Activity Acreage Submittal Scope S6: ODOT Submit NOI to OEPA																		
ROW-1200	2925 E. 55TH ST	6	02-Jul-18	11-Jul-18	2925 E. 55TH ST																		
ROW-1210	6811 KINSMAN RD	6	02-Jul-18	11-Jul-18	6811 KINSMAN RD																		
ROW-1220	6829 COLFAX RD	6	13-Jul-18	23-Jul-18	6829 COLFAX RD																		
ROW-1230	6835 COLFAX RD	6	24-Jul-18	01-Aug-18	6835 COLFAX RD																		
ROW-1240	2787 E. 73RD ST	6	02-Jul-18	11-Jul-18	2787 E. 73RD ST																		
ROW-1250	7622 RAWLINGS AVE	6	13-Jul-18	23-Jul-18	7622 RAWLINGS AVE																		
ROW-1260	2756 E. 79TH ST	6	24-Jul-18	01-Aug-18	2756 E. 79TH ST																		
ROW-1270	2685 E. 79TH ST	6	03-Aug-18	13-Aug-18	2685 E. 79TH ST																		
ROW-1290	Perk Co. GRAND AVE	12	02-Jul-18	23-Jul-18	Perk Co. GRAND AVE																		
ROW-1300	2742 GRAND AVE	12	24-Jul-18	13-Aug-18	2742 GRAND AVE																		
ROW-1310	2770 GRAND AVE	12	14-Aug-18	31-Aug-18	2770 GRAND AVE																		
ROW-1320	2800 GRAND AVE	12	04-Sep-18	25-Sep-18	2800 GRAND AVE																		
ROW-1330	8714 BUCKEYE RD	6	26-Sep-18	05-Oct-18	8714 BUCKEYE RD																		
ROW-1340	8715 BUCKEYE RD	6	08-Oct-18	17-Oct-18	8715 BUCKEYE RD																		
ROW-1350	8701 BUCKEYE RD	6	19-Oct-18	30-Oct-18	8701 BUCKEYE RD																		
ROW-1360	2639 E. 87TH ST	6	31-Oct-18	12-Nov-18	2639 E. 87TH ST																		
ROW-1370	2622 E. 87TH ST	6	13-Nov-18	23-Nov-18	2622 E. 87TH ST																		
ROW-1380	8800 WOODLAND AVE	6	26-Nov-18	04-Dec-18	8800 WOODLAND AVE																		
ROW-1390	8708 WOODLAND AVE	6	05-Dec-18	14-Dec-18	8708 WOODLAND AVE																		
Environmental		122	14-Mar-18	27-Nov-18	27-Nov-18, Environmental Scope S6: Earth Disturbing Activity Acreage Submittal Scope S6: ODOT Submit NOI to OEPA																		
E-10010	Scope S6: Earth Disturbing Activity Acreage Submittal	30	14-Mar-18	12-Apr-18	Scope S6: Earth Disturbing Activity Acreage Submittal																		
E-10020	Scope S6: ODOT Submit NOI to OEPA	10	13-Apr-18	22-Apr-18	Scope S6: ODOT Submit NOI to OEPA																		

Activity ID	Activity Name	Original Duration	Start	Finish	2018-2022																			
					2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
E-10030	Scope S6: OEPA issue NPDES Permit	21	23-Apr-18	13-May-18																				
E-10050	Scope S6: SWPPP	60	14-Mar-18	12-May-18																				
E-10055	Scope S6: SWPPP Review	14	13-May-18	26-May-18																				
E-10060	Scope S6: Spill Prevention Control and Countermeasures Plan Submittal	30	14-Mar-18	12-Apr-18																				
E-10200	Scope S6: Tree Removal (10/1 - 3/31) for Indiana & Northern Long-Eared Bat	30	01-Oct-18	27-Nov-18																				
E-11000	Remediate Property #22/23, (2925 & 2937 E. 55th St)	5	13-Jul-18	20-Jul-18																				
E-11010	Remediate Property #121, (6814-6906 Grand Ave.)	5	23-Jul-18	30-Jul-18																				
E-11020	Remediate Property #124, (6926-7014 Grand Ave.)	5	31-Jul-18	07-Aug-18																				
E-11030	Remediate Property #243, (2742 Grand Ave.)	5	14-Aug-18	21-Aug-18																				
E-11040	Remediate Property #127, (E. 73rd / Wagner Ave.)	5	22-Aug-18	29-Aug-18																				
E-11050	Remediate Property #250, (8701-8707 Buckeye Rd & 2639 E. 87th St)	5	13-Nov-18	21-Nov-18																				
Shop Drawings		103	07-Nov-18	28-Sep-19																				
SDWG-1490	E. 55th St Bridge Pre-Cast Concrete Beams	60	22-Nov-18	20-Jan-19																				
SDWG-1500	E. 55th St Bridge Bearings	60	22-Nov-18	20-Jan-19																				
SDWG-1520	E. 55th St Bridge Ornamental Fencing	60	22-Nov-18	20-Jan-19																				
SDWG-1530	E. 55th St Bridge "Reno" Lighting	60	22-Nov-18	20-Jan-19																				
SDWG-1540	E. 55th St Bridge Utility Duct Supports	60	22-Nov-18	20-Jan-19																				
SDWG-1550	OC PED Bridge Pre-Cast Concrete Beams	60	02-May-19	30-Jun-19																				
SDWG-1560	OC PED Bridge Bearings	60	02-May-19	30-Jun-19																				
SDWG-1580	OC PED Bridge Ornamental Fencing	60	02-May-19	30-Jun-19																				
SDWG-1590	OC PED Bridge "Reno" Lighting	60	02-May-19	30-Jun-19																				
SDWG-1640	Kingsbury Bridge Pre-Cast Concrete Beams	60	30-Jul-19	28-Sep-19																				
SDWG-1650	Kingsbury Bridge Bearings	60	30-Jul-19	28-Sep-19																				
SDWG-1670	Kingsbury Bridge Ornamental Fencing	60	30-Jul-19	28-Sep-19																				
SDWG-1680	Kingsbury Bridge "Reno" Lighting	60	30-Jul-19	28-Sep-19																				
SDWG-1690	Kingsbury Bridge Utility Duct Supports	60	30-Jul-19	28-Sep-19																				
SDWG-1700	OC EB over GCRTA Blue/Green Bridge Girders	60	12-Dec-18	10-Feb-19																				
SDWG-1710	OC EB over GCRTA Blue/Green Bridge Bearings	60	12-Dec-18	10-Feb-19																				
SDWG-1730	OC EB over GCRTA Blue/Green Bridge Ornamental Fencing	60	12-Dec-18	10-Feb-19																				
SDWG-1740	OC EB over GCRTA Blue/Green Bridge "Reno" Lighting	60	12-Dec-18	10-Feb-19																				
SDWG-1750	OC EB over GCRTA Blue/Green Bridge Utility Duct Supports	60	12-Dec-18	10-Feb-19																				
SDWG-1760	OC WB over GCRTA Blue/Green Bridge Girders	60	12-Dec-18	10-Feb-19																				
SDWG-1770	OC WB over GCRTA Blue/Green Bridge Bearings	60	12-Dec-18	10-Feb-19																				
SDWG-1790	OC WB over GCRTA Blue/Green Bridge Ornamental Fencing	60	12-Dec-18	10-Feb-19																				
SDWG-1840	OC WB over GCRTA Blue/Green Bridge "Reno" Lighting	60	12-Dec-18	10-Feb-19																				
SDWG-1850	OC WB over GCRTA Blue/Green Bridge Utility Duct Supports	60	12-Dec-18	10-Feb-19																				
SDWG-1860	NSRR over OC Bridge Girders	60	07-Nov-18	05-Jan-19																				
SDWG-1870	NSRR over OC Bridge Bearings	60	07-Nov-18	05-Jan-19																				
SDWG-1880	NSRR over OC Bridge Fencing and Handrail	60	07-Nov-18	05-Jan-19																				
SDWG-1890	NSRR over OC Bridge Utility Duct Supports	60	07-Nov-18	05-Jan-19																				
SDWG-1900	E. 89th St. PED Bridge Pre-Cast Concrete Beams	60	07-Feb-19	07-Apr-19																				
SDWG-1910	E. 89th St. PED Bridge Bearings	60	07-Feb-19	07-Apr-19																				
SDWG-1920	E. 89th St. PED Bridge Utility Duct Supports	60	07-Feb-19	07-Apr-19																				
SDWG-1930	E. 89th St. PED Bridge Ornamental Fencing	60	07-Feb-19	07-Apr-19																				
SDWG-1940	E. 89th St. PED Bridge "Reno" Lighting	60	07-Feb-19	07-Apr-19																				
SDWG-1950	RTA Catenary Supports	60	12-Dec-18	10-Feb-19																				
SDWG-1970	Wall #2B/3B MSE Panels	60	08-Jun-19	06-Aug-19																				
SDWG-1990	Wall #4AB MSE Panels	45	07-Nov-18	21-Dec-18																				
SDWG-2000	Wall #4CD MSE Panels	45	07-Nov-18	21-Dec-18																				

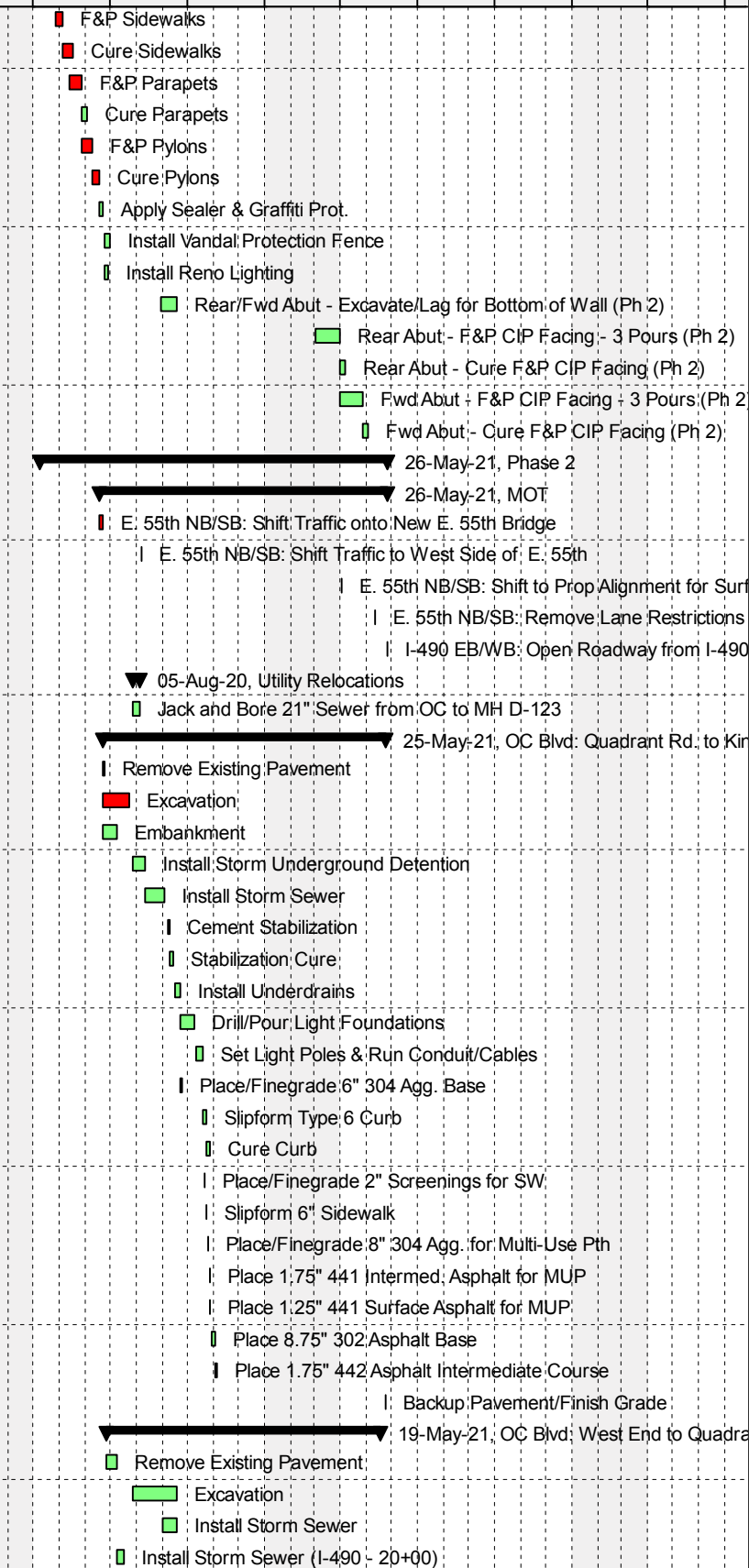
Activity ID	Activity Name	Original Duration	Start	Finish	2018																				2019				2020				2021				2022	
					Q1				Q2				Q3				Q4				Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2								
Fabrication																													26-Jan-20; Fabrication									
FAB-1100	E. 55th St Bridge Pre-Cast Concrete Beams	120	22-Dec-18	26-Jan-20																									E. 55th St Bridge Pre-Cast Concrete Beams									
FAB-1110	E. 55th St Bridge Bearings	90	21-Jan-19	20-Apr-19																									E. 55th St Bridge Bearings									
FAB-1130	E. 55th St Bridge Ornamental Fencing	90	21-Jan-19	20-Apr-19																									E. 55th St Bridge Ornamental Fencing									
FAB-1140	E. 55th St Bridge "Reno" Lighting	90	21-Jan-19	20-Apr-19																									E. 55th St Bridge "Reno" Lighting									
FAB-1150	E. 55th St Bridge Utility Duct Supports	90	21-Jan-19	20-Apr-19																									E. 55th St Bridge Utility Duct Supports									
FAB-1160	OC/ E. 59th PED Bridge Pre-Cast Concrete Beams	120	01-Jul-19	28-Oct-19																									OC/ E. 59th PED Bridge Pre-Cast Concrete Beams									
FAB-1170	OC/ E. 59th PED Bridge Bearings	90	01-Jul-19	28-Sep-19																									OC/ E. 59th PED Bridge Bearings									
FAB-1190	OC/ E. 59th PED Bridge Ornamental Fencing	90	01-Jul-19	28-Sep-19																									OC/ E. 59th PED Bridge Ornamental Fencing									
FAB-1200	OC/ E. 59th PED Bridge "Reno" Lighting	90	01-Jul-19	28-Sep-19																									OC/ E. 59th PED Bridge "Reno" Lighting									
FAB-1210	Kingsbury Bridge Pre-Cast Concrete Beams	120	28-Sep-19	26-Jan-20																									Kingsbury Bridge Pre-Cast Concrete Beams									
FAB-1220	Kingsbury Bridge Bearings	90	28-Sep-19	27-Dec-19																									Kingsbury Bridge Bearings									
FAB-1240	Kingsbury Bridge Ornamental Fencing	90	28-Sep-19	27-Dec-19																									Kingsbury Bridge Ornamental Fencing									
FAB-1250	Kingsbury Bridge "Reno" Lighting	90	28-Sep-19	27-Dec-19																									Kingsbury Bridge "Reno" Lighting									
FAB-1260	Kingsbury Bridge Utility Duct Supports	90	28-Sep-19	27-Dec-19																									Kingsbury Bridge Utility Duct Supports									
FAB-1270	OC EB over GCRTA Blue/Green Bridge Girders	180	10-Feb-19	09-Aug-19																									OC EB over GCRTA Blue/Green Bridge Girders									
FAB-1280	OC EB over GCRTA Blue/Green Bridge Bearings	90	10-Feb-19	11-May-19																									OC EB over GCRTA Blue/Green Bridge Bearings									
FAB-1300	OC EB over GCRTA Blue/Green Bridge Ornamental Fencing	90	10-Feb-19	11-May-19																									OC EB over GCRTA Blue/Green Bridge Ornamental Fencing									
FAB-1310	OC EB over GCRTA Blue/Green Bridge "Reno" Lighting	90	10-Feb-19	11-May-19																									OC EB over GCRTA Blue/Green Bridge "Reno" Lighting									
FAB-1320	OC EB over GCRTA Blue/Green Bridge Utility Duct Supports	90	10-Feb-19	11-May-19																									OC EB over GCRTA Blue/Green Bridge Utility Duct Supports									
FAB-1330	OC WB over GCRTA Blue/Green Bridge Girders	180	10-Feb-19	09-Aug-19																									OC WB over GCRTA Blue/Green Bridge Girders									
FAB-1340	OC WB over GCRTA Blue/Green Bridge Bearings	90	10-Feb-19	11-May-19																									OC WB over GCRTA Blue/Green Bridge Bearings									
FAB-1360	OC WB over GCRTA Blue/Green Bridge Ornamental Fencing	90	10-Feb-19	11-May-19																									OC WB over GCRTA Blue/Green Bridge Ornamental Fencing									
FAB-1370	OC WB over GCRTA Blue/Green Bridge "Reno" Lighting	90	10-Feb-19	11-May-19																									OC WB over GCRTA Blue/Green Bridge "Reno" Lighting									
FAB-1380	OC WB over GCRTA Blue/Green Bridge Utility Duct Supports	90	10-Feb-19	11-May-19																									OC WB over GCRTA Blue/Green Bridge Utility Duct Supports									
FAB-1390	NSRR over OC Bridge Girders	210	06-Jan-19	03-Aug-19																									NSRR over OC Bridge Girders									
FAB-1400	NSRR over OC Bridge Bearings	90	06-Jan-19	05-Apr-19																									NSRR over OC Bridge Bearings									
FAB-1410	NSRR over OC Bridge Fencing and Handrail	90	06-Jan-19	05-Apr-19																									NSRR over OC Bridge Fencing and Handrail									
FAB-1420	NSRR over OC Bridge Utility Duct Supports	90	06-Jan-19	05-Apr-19																									NSRR over OC Bridge Utility Duct Supports									
FAB-1430	E. 89th St. PED Bridge Pre-Cast Concrete Beams	120	08-Apr-19	05-Aug-19																									E. 89th St. PED Bridge Pre-Cast Concrete Beams									
FAB-1440	E. 89th St. PED Bridge Bearings	90	08-Apr-19	06-Jul-19																									E. 89th St. PED Bridge Bearings									
FAB-1455	E. 89th St. PED Bridge Utility Duct Supports	90	08-Apr-19	06-Jul-19																									E. 89th St. PED Bridge Utility Duct Supports									
FAB-1460	E. 89th St. PED Bridge Ornamental Fencing	90	08-Apr-19	06-Jul-19																									E. 89th St. PED Bridge Ornamental Fencing									
FAB-1470	E. 89th St. PED Bridge "Reno" Lighting	90	08-Apr-19	06-Jul-19																									E. 89th St. PED Bridge "Reno" Lighting									
FAB-1480	RTA Catenary Supports	120	10-Feb-19	10-Jun-19																									RTA Catenary Supports									
FAB-1810	Wall #2B/3B MSE Panels	30	07-Aug-19	05-Sep-19																									Wall #2B/3B MSE Panels									
FAB-1840	Wall #4AB MSE Panels	30	22-Dec-18	20-Jan-19																									Wall #4AB MSE Panels									
FAB-1850	Wall #4CD MSE Panels	30	22-Dec-18	20-Jan-19																									Wall #4CD MSE Panels									
Construction Section 1: West End to West of BR: Kingsbury																													28-May-21; Construction Section 1: West									
Pre-Phase																													14-Jun-19; Pre-Phase									
MOT																													28-May-19; MOT									
S1-Pre-10050	E. 55th: Close Outside Thru Lane	2	01-Apr-19*	02-Apr-19																									E. 55th: Close Outside Thru Lane									
S1-Pre-10060	E. 55th: Open Outside Thru Lane	1	28-May-19	28-May-19																									E. 55th: Open Outside Thru Lane									
Utility Relocations																													14-Jun-19; Utility Relocations									
S1-Pre-20000	Remove Existing CEI Poles/Lines Along Bower Ave	30	30-Mar-19	28-Apr-19																									Remove Existing CEI Poles/Lines Along Bower Ave									
S1-Pre-20005	Temp Relocate CPP Electric Lines Under 55th to East of E. 55th	10	03-Apr-19	22-Apr-19																									Temp Relocate CPP Electric Lines Under 55th to East of E. 55th									
S1-Pre-20010	Temp Relocate Telecom Lines Under 55th to East of E. 55th	30	03-Apr-19	02-May-19																									Temp Relocate Telecom Lines Under 55th to East of E. 55th									
S1-Pre-20020	Shut Down 3"/6" Gas Lines Under 55th	1	02-Apr-19	03-Apr-19																									Shut Down 3"/6" Gas Lines Under 55th									
S1-Pre-20030	Temp Relocate 8"/30" Water Lines Under 55th to East of 55th	14	03-Apr-19	30-Apr-19																									Temp Relocate 8"/30" Water Lines Under 55th to East of 55th									

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022		
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
S1-Pre-20040	Temp Relocate 16" Sludge Force Main Under 55th to West of 55th	7	03-Jun-19	14-Jun-19																			
Roadway																							
S1-Pre-30200	Install 30" Storm Sewer around Quadrant Rd	15	07-Nov-18	24-May-19																			
S1-Pre-30201	Install 30" Storm Sewer Under Temp Pavement	5	17-Apr-19	26-Apr-19																			
S1-Pre-30205	Temp Conn. #3 30" Sewer to Existing DWO Drop (West of 55th)	5	29-Apr-19	06-May-19																			
S1-Pre-30405	Excavate and Grade for Temp Pvmnt Run-around	6	29-Apr-19	07-May-19																			
S1-Pre-30415	Place Temp Pvmnt for Temp 55th Run-around	4	08-May-19	14-May-19																			
S1-Pre-30425	Install Shoring: Fwd Abut, RT Side New E. 55th Bridge	6	15-May-19	24-May-19																			
Phase 1																							
MOT																							
S1-PH1-10050	I-490 EB/WB: Close 490 between I-77 and E. 55th St.	2	29-May-19	31-May-19																			
S1-PH1-10060	E. 55th NB/SB: Reduce to One Lane Each Way & Place on Temp Pvmnt	2	29-May-19	31-May-19																			
S1-PH1-10100	59th St: Close Roadway	1	16-Mar-20	16-Mar-20																			
S1-PH1-10110	59th St: Open Roadway	1	03-Jun-20	03-Jun-20																			
Utility Relocations																							
Drop Structure																							
S1-PH1-20440	Install Liner Plate and Excavation (~40' deep)	22	07-May-19	17-Jun-19																			
S1-PH1-20450	Pour Mat	3	18-Jun-19	21-Jun-19																			
S1-PH1-20460	Cure Mat	7	21-Jun-19	28-Jun-19																			
S1-PH1-20470	Sidewall Pour #1	8	25-Jun-19	08-Jul-19																			
S1-PH1-20480	Cure Sidewall	7	08-Jul-19	15-Jul-19																			
S1-PH1-20490	Sidewall Pour #2	8	12-Jul-19	26-Jul-19																			
S1-PH1-20500	Cure Sidewall	7	26-Jul-19	02-Aug-19																			
S1-PH1-20510	Sidewall Pour #3	8	30-Jul-19	09-Aug-19																			
S1-PH1-20520	Cure Sidewall	7	09-Aug-19	16-Aug-19																			
S1-PH1-20530	Pour Structure Cap	7	13-Aug-19	23-Aug-19																			
S1-PH1-20540	Cure Structure Cap	7	23-Aug-19	30-Aug-19																			
S1-PH1-20570	Pour Baffle Slabs	10	26-Aug-19	11-Sep-19																			
S1-PH1-20580	Cure Baffle Slabs	7	11-Sep-19	18-Sep-19																			
S1-PH1-20590	Install Interior Fill and Flow Channel	2	16-Sep-19	18-Sep-19																			
NEORS S-10A Regulator & KSRS Drop Structure																							
S1-PH1-20330	Install Shoring and Excavation (~45' deep)	30	03-Jun-19	26-Jul-19																			
S1-PH1-20340	Pour Mat	5	29-Jul-19	02-Aug-19																			
S1-PH1-20350	Cure Mat	7	02-Aug-19	09-Aug-19																			
S1-PH1-20360	Sidewall Pour #1	9	06-Aug-19	20-Aug-19																			
S1-PH1-20370	Cure Sidewall	7	20-Aug-19	27-Aug-19																			
S1-PH1-20380	Sidewall Pour #2	9	26-Aug-19	10-Sep-19																			
S1-PH1-20390	Cure Sidewall	7	10-Sep-19	17-Sep-19																			
S1-PH1-20400	Sidewall Pour #3	9	16-Sep-19	01-Oct-19																			
S1-PH1-20410	Cure Sidewall	7	01-Oct-19	08-Oct-19																			
S1-PH1-20420	Pour Structure Cap	6	07-Oct-19	16-Oct-19																			
S1-PH1-20430	Cure Structure Cap	7	16-Oct-19	23-Oct-19																			
S1-PH1-20435	Pour Interior Fill & Weirs	4	18-Oct-19	25-Oct-19																			
S1-PH1-20445	Cure Weirs	7	25-Oct-19	01-Nov-19																			
S1-PH1-20550	Tie in 30" Sewer from Quadrant Rd to Regulator	2	25-Oct-19	28-Oct-19																			
S1-PH1-20552	Tie in 30" Sewer from New DWO Drop Structure	2	29-Oct-19	30-Oct-19																			
S1-PH1-20555	Backfill Regulator Structure	2	04-Nov-19	06-Nov-19																			
S1-PH1-20560	Tie in 30" Sewer to Existing #3 at Quadrant and OC	2	01-Nov-19	04-Nov-19																			
Quadrant Rd																							
S1-P1-30360	Excavation	13	03-Jun-19	25-Jun-19																			

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022						
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3				
S1-P1-30490	Install Storm Sewer	8	03-Jun-20	17-Jun-20											█	Install Storm Sewer											
S1-P1-30780	Cement Stabilization	1	19-Jun-20	19-Jun-20												Cement Stabilization											
S1-P1-30790	Stabilization Cure	5	19-Jun-20	24-Jun-20											█	Stabilization Cure											
S1-P1-30800	Install Underdrains	2	26-Jun-20	29-Jun-20												Install Underdrains											
S1-P1-30805	Drill/Pour Light Foundations	3	30-Jun-20	02-Jul-20												Drill/Pour Light Foundations											
S1-P1-30806	Set Light Poles & Run Conduit/Cables	2	03-Jul-20	06-Jul-20											█	Set Light Poles & Run Conduit/Cables											
S1-P1-30810	Place/Finegrade 6" 304 Agg. Base	1	30-Jun-20	30-Jun-20												Place/Finegrade 6" 304 Agg. Base											
S1-P1-30820	Slipform Type 6 Curb	1	08-Jul-20	08-Jul-20												Slipform Type 6 Curb											
S1-P1-30830	Cure Curb	5	08-Jul-20	13-Jul-20											█	Cure Curb											
S1-P1-30880	Place/Finegrade 8" 304 Agg. for Multi-Use Pth	1	08-Jul-20	08-Jul-20												Place/Finegrade 8" 304 Agg. for Multi-Use Pth											
S1-P1-30890	Place 1.75" 441 Intermed. Asphalt for MUP	1	09-Jul-20	09-Jul-20												Place 1.75" 441 Intermed. Asphalt for MUP											
S1-P1-30900	Place 1.25" 441 Surface Asphalt for MUP	1	10-Jul-20	10-Jul-20												Place 1.25" 441 Surface Asphalt for MUP											
S1-P1-30910	Place 9" 302 Asphalt Base	1	15-Jul-20	15-Jul-20												Place 9" 302 Asphalt Base											
S1-P1-30920	Place 1.75" 441 Asphalt Intermed. Course	1	16-Jul-20	16-Jul-20												Place 1.75" 441 Asphalt Intermed. Course											
S1-P1-30930	Place 1.25" 441 Asphalt Surface Course	1	17-Jul-20	17-Jul-20												Place 1.25" 441 Asphalt Surface Course											
S1-P1-30940	Backup Pavement/Finish Grade	2	20-Jul-20	22-Jul-20												Backup Pavement/Finish Grade											
S1-P1-30950	Place Topsoil and & Seeding	5	23-Jul-20	30-Jul-20											█	Place Topsoil and & Seeding											
S1-P1-30960	Install Trees and Mulch	5	31-Jul-20	07-Aug-20											█	Install Trees and Mulch											
E. 55th St (SB)		100	03-Jun-19	20-Apr-20																							
S1-P1-30500	Remove Existing Pavement	2	03-Jun-19	04-Jun-19												Remove Existing Pavement											
S1-P1-30770	Excavation	3	05-Jun-19	10-Jun-19											█	Excavation											
S1-P1-30860	Embankment	1	12-Jun-19	12-Jun-19												Embankment											
S1-P1-30865	Install Sanitary Sewer	5	14-Jun-19	21-Jun-19											█	Install Sanitary Sewer											
S1-P1-30895	Install Storm Sewer	3	24-Jun-19	26-Jun-19												Install Storm Sewer											
S1-P1-30970	Install Waterline	5	28-Jun-19	05-Jul-19											█	Install Waterline											
S1-P1-30990	Install CPP Duct Bank	5	08-Jul-19	15-Jul-19											█	Install CPP Duct Bank											
S1-P1-31000	Cement Stabilization	1	17-Jul-19	17-Jul-19												Cement Stabilization											
S1-P1-31010	Stabilization Cure	5	17-Jul-19	22-Jul-19											█	Stabilization Cure											
S1-P1-31020	Install Underdrains	2	23-Jul-19	24-Jul-19												Install Underdrains											
S1-P1-31030	Place/Finegrade 6" 304 Agg. Base	1	08-Nov-19	08-Nov-19												Place/Finegrade 6" 304 Agg. Base											
S1-P1-31040	Slipform Type 6 Curb	1	11-Nov-19	11-Nov-19												Slipform Type 6 Curb											
S1-P1-31050	Cure Curb	5	11-Nov-19	16-Nov-19											█	Cure Curb											
S1-P1-31055	Place 8.75" 302 Asphalt Base	1	15-Apr-20	15-Apr-20												Place 8.75" 302 Asphalt Base											
S1-P1-31056	Place 1.75" 442 Asphalt Intermediate Course	1	17-Apr-20	17-Apr-20												Place 1.75" 442 Asphalt Intermediate Course											
S1-P1-31080	Place/Finegrade 2" Screenings for SW	1	01-Apr-20	01-Apr-20												Place/Finegrade 2" Screenings for SW											
S1-P1-31090	Slipform 6" Sidewalk	1	03-Apr-20	03-Apr-20												Slipform 6" Sidewalk											
S1-P1-31160	Backup Pavement/Finish Grade	1	20-Apr-20	20-Apr-20												Backup Pavement/Finish Grade											
E. 59th St		33	01-Apr-20	02-Jun-20																							
S1-P1-31060	Remove Existing Pavement	2	01-Apr-20	03-Apr-20												Remove Existing Pavement											
S1-P1-31100	Excavation	1	06-Apr-20	06-Apr-20												Excavation											
S1-P1-31200	Cement Stabilization	1	04-May-20	04-May-20												Cement Stabilization											
S1-P1-31210	Stabilization Cure	5	04-May-20	09-May-20											█	Stabilization Cure											
S1-P1-31220	Install Underdrains	2	11-May-20	13-May-20												Install Underdrains											
S1-P1-31230	Place/Finegrade 6" 304 Agg. Base	1	15-May-20	15-May-20												Place/Finegrade 6" 304 Agg. Base											
S1-P1-31240	Slipform Type 6 Curb	1	18-May-20	18-May-20												Slipform Type 6 Curb											
S1-P1-31250	Cure Curb	5	18-May-20	23-May-20											█	Cure Curb											
S1-P1-31290	Slipform 6" Sidewalk	1	26-May-20	26-May-20												Slipform 6" Sidewalk											
S1-P1-31300	Place 9" 302 Asphalt Base	1	26-May-20	26-May-20												Place 9" 302 Asphalt Base											
S1-P1-31310	Place 1.75" 441 Asphalt Intermed. Course	1	27-May-20	27-May-20												Place 1.75" 441 Asphalt Intermed. Course											
S1-P1-31320	Place 1.25" 441 Asphalt Surface Course	1	29-May-20	29-May-20												Place 1.25" 441 Asphalt Surface Course											

Activity ID	Activity Name	Original Duration	Start	Finish	2018-2022																			
					2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
S1-P1-31330	Backup Pavement/Finish Grade	2	01-Jun-20	02-Jun-20																				Backup Pavement/Finish Grade
Side Road Re-Surfacing		16	07-May-21	28-May-21																				28-May-21, Side Road Re-Surfacing
S1-P1-25000	Mill/Fill Bragg Rd	2	07-May-21	10-May-21																				Mill/Fill Bragg Rd
S1-P1-25010	Mill/Fill Francis Ave	2	12-May-21	14-May-21																				Mill/Fill Francis Ave
S1-P1-25020	Mill/Fill Bower Ave	2	17-May-21	18-May-21																				Mill/Fill Bower Ave
S1-P1-25030	Mill/Fill Butler Ave	2	19-May-21	21-May-21																				Mill/Fill Butler Ave
S1-P1-25040	Mill/Fill Maurice Ave	2	24-May-21	25-May-21																				Mill/Fill Maurice Ave
S1-P1-25050	Mill/Fill Belford Ave	2	26-May-21	28-May-21																				Mill/Fill Belford Ave
Wall 1A, 1C		51	03-Jun-19	30-Aug-19																				30-Aug-19, Wall 1A, 1C
S1-P1-30000	Wall 1A: Access and Level Wall Area	1	03-Jun-19	03-Jun-19																				Wall 1A: Access and Level Wall Area
S1-P1-30010	Wall 1A: Drill/Pour/Set Soldier Piles	20	04-Jun-19	09-Jul-19																				Wall 1A: Drill/Pour/Set Soldier Piles
S1-P1-30260	Wall 1C: Access and Level Wall Area	1	04-Jun-19	04-Jun-19																				Wall 1C: Access and Level Wall Area
S1-P1-30270	Wall 1C: Drill/Pour/Set Soldier Piles	30	10-Jul-19	30-Aug-19																				Wall 1C: Drill/Pour/Set Soldier Piles
Wall 2B/3C: MSE		96	16-Mar-20	02-Sep-20																				02-Sep-20, Wall 2B/3C: MSE
S1-P1-30620	Excavate for Wall	10	16-Mar-20*	01-Apr-20																				Excavate for Wall
S1-P1-30630	Place Granular Type C	3	03-Apr-20	07-Apr-20																				Place Granular Type C
S1-P1-30640	F&P Leveling Pad	4	08-Apr-20	15-Apr-20																				F&P Leveling Pad
S1-P1-30650	Erect Panels/Place SGB	25	17-Apr-20	02-Jun-20																				Erect Panels/Place SGB
S1-P1-30660	F&P Coping	8	03-Jun-20	17-Jun-20																				F&P Coping
S1-P1-30670	Watercure Coping	7	17-Jun-20	24-Jun-20																				Watercure Coping
S1-P1-30680	F&P Moment Slab	15	26-Jun-20	22-Jul-20																				F&P Moment Slab
S1-P1-30690	Watercure Moment Slab	7	22-Jul-20	29-Jul-20																				Watercure Moment Slab
S1-P1-30700	F&P Parapets	12	30-Jul-20	18-Aug-20																				F&P Parapets
S1-P1-30710	Cure Parapets	7	18-Aug-20	25-Aug-20																				Cure Parapets
S1-P1-30720	Apply Sealer & Graffiti Prot.	3	27-Aug-20	31-Aug-20																				Apply Sealer & Graffiti Prot.
S1-P1-30730	Install Vandal Protection Fence	2	01-Sep-20	02-Sep-20																				Install Vandal Protection Fence
Bridge: E. 55th over OCB		176	06-Nov-19	04-May-21																				04-May-21, Bridge: E. 55th over OCB
S1-P1-40000	Rear Abut - Excavate for Footing/Beam Seat	2	06-Nov-19	08-Nov-19																				Rear Abut - Excavate for Footing/Beam Seat
S1-P1-40010	Rear Abut - Drive CIP Pipe Piling	5	11-Nov-19	20-Nov-19																				Rear Abut - Drive CIP Pipe Piling
S1-P1-40020	Rear Abut - F&P Footing/Beam Seat	5	22-Nov-19	29-Nov-19																				Rear Abut - F&P Footing/Beam Seat
S1-P1-40030	Rear Abut - Cure Footing/Beam Seat	7	29-Nov-19	06-Dec-19																				Rear Abut - Cure Footing/Beam Seat
S1-P1-40040	Fwd Abut - Excavate for Footing/Beam Seat	2	11-Nov-19	13-Nov-19																				Fwd Abut - Excavate for Footing/Beam Seat
S1-P1-40050	Fwd Abut - Drive CIP Pipe Piling	5	22-Nov-19	29-Nov-19																				Fwd Abut - Drive CIP Pipe Piling
S1-P1-40060	Fwd Abut - F&P Footing/Beam Seat	5	02-Dec-19	09-Dec-19																				Fwd Abut - F&P Footing/Beam Seat
S1-P1-40070	Fwd Abut - Cure Footing/Beam Seat	7	09-Dec-19	16-Dec-19																				Fwd Abut - Cure Footing/Beam Seat
S1-P1-40080	Erect/Detail Precast Conc I-Beams	5	17-Dec-19	27-Dec-19																				Erect/Detail Precast Conc I-Beams
S1-P1-40090	Erect/Detail 16" Sanitary Force Main	5	30-Dec-19	08-Jan-20																				Erect/Detail 16" Sanitary Force Main
S1-P1-40095	Erect/Detail 6" Gas Line	5	30-Dec-19	08-Jan-20																				Erect/Detail 6" Gas Line
S1-P1-40100	Erect/Detail CPP/CEI/Telecom Ducts	5	10-Jan-20	20-Jan-20																				Erect/Detail CPP/CEI/Telecom Ducts
S1-P1-40105	Erect/Detail 12" Waterline	5	10-Jan-20	20-Jan-20																				Erect/Detail 12" Waterline
S1-P1-40106	Erect/Detail 30" Waterline	5	22-Jan-20	29-Jan-20																				Erect/Detail 30" Waterline
S1-P1-40135	False Decking	5	31-Jan-20	10-Feb-20																				False Decking
S1-P1-40140	Form & Rebar Deck & Diaphragms	15	02-Mar-20	31-Mar-20																				Form & Rebar Deck & Diaphragms
S1-P1-40150	Pour Deck & Diaphragms	1	01-Apr-20	01-Apr-20																				Pour Deck & Diaphragms
S1-P1-40160	Cure Deck	7	01-Apr-20	08-Apr-20																				Cure Deck
S1-P1-40162	Backfill Abut	2	03-Apr-20	06-Apr-20																				Backfill Abut
S1-P1-40165	F&P Sleeper Slabs	3	07-Apr-20	10-Apr-20																				F&P Sleeper Slabs
S1-P1-40166	Cure Sleeper Slabs	7	10-Apr-20	17-Apr-20																				Cure Sleeper Slabs
S1-P1-40170	F&P Approach Slabs	5	15-Apr-20	22-Apr-20																				F&P Approach Slabs
S1-P1-40180	Cure Approach Slabs	7	22-Apr-20	29-Apr-20																				Cure Approach Slabs

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
S1-P1-40185	F&P Sidewalks	5	27-Apr-20	04-May-20																				
S1-P1-40187	Cure Sidewalks	7	05-May-20	18-May-20																				
S1-P1-40190	F&P Parapets	8	13-May-20	27-May-20																				
S1-P1-40200	Cure Parapets	7	27-May-20	03-Jun-20																				
S1-P1-40210	F&P Pylons	8	29-May-20	10-Jun-20																				
S1-P1-40220	Cure Pylons	7	10-Jun-20	17-Jun-20																				
S1-P1-40225	Apply Sealer & Graffiti Prot.	3	19-Jun-20	23-Jun-20																				
S1-P1-40230	Install Vandal Protection Fence	5	24-Jun-20	01-Jul-20																				
S1-P1-40240	Install Reno Lighting	3	24-Jun-20	29-Jun-20																				
S1-P1-40242	Rear/Fwd Abut - Excavate/Lag for Bottom of Wall (Ph 2)	10	31-Aug-20	18-Sep-20																				
S1-P1-40243	Rear Abut - F&P CIP Facing - 3 Pours (Ph 2)	15	01-Mar-21	30-Mar-21																				
S1-P1-40244	Rear Abut - Cure F&P CIP Facing (Ph 2)	7	30-Mar-21	06-Apr-21																				
S1-P1-40246	Fwd Abut - F&P CIP Facing - 3 Pours (Ph 2)	15	31-Mar-21	27-Apr-21																				
S1-P1-40247	Fwd Abut - Cure F&P CIP Facing (Ph 2)	7	27-Apr-21	04-May-21																				
Phase 2		183	08-Apr-20	26-May-21																				
MOT		145	19-Jun-20	26-May-21																				
S1-P2-10070	E. 55th NB/SB: Shift Traffic onto New E. 55th Bridge	2	19-Jun-20	22-Jun-20																				
S1-P2-10072	E. 55th NB/SB: Shift Traffic to West Side of E. 55th	1	07-Aug-20	07-Aug-20																				
S1-P2-10075	E. 55th NB/SB: Shift to Prop Alignment for Surface Paving	1	02-Apr-21	02-Apr-21																				
S1-P2-10080	E. 55th NB/SB: Remove Lane Restrictions	2	11-May-21	12-May-21																				
S1-P2-10090	I-490 EB/WB: Open Roadway from I-490 to Quadrant/E.55th	1	26-May-21	26-May-21																				
Utility Relocations		8	27-Jul-20	05-Aug-20																				
S1-P2-30885	Jack and Bore 21" Sewer from OC to MH D-123	7	27-Jul-20	05-Aug-20																				
OC Blvd: Quadrant Rd. to Kingsbury Bridge		142	23-Jun-20	25-May-21																				
S1-P2-30350	Remove Existing Pavement	2	23-Jun-20	24-Jun-20																				
S1-P2-30370	Excavation	20	23-Jun-20	24-Jul-20																				
S1-P2-30460	Embankment	10	23-Jun-20	08-Jul-20																				
S1-P2-30465	Install Storm Underground Detention	10	27-Jul-20	11-Aug-20																				
S1-P2-30470	Install Storm Sewer	14	12-Aug-20	04-Sep-20																				
S1-P2-30570	Cement Stabilization	2	08-Sep-20	09-Sep-20																				
S1-P2-30580	Stabilization Cure	5	09-Sep-20	14-Sep-20																				
S1-P2-30590	Install Underdrains	3	16-Sep-20	21-Sep-20																				
S1-P2-30595	Drill/Pour Light Foundations	10	22-Sep-20	09-Oct-20																				
S1-P2-30596	Set Light Poles & Run Conduit/Cables	5	12-Oct-20	19-Oct-20																				
S1-P2-30600	Place/Finegrade 6" 304 Agg. Base	3	22-Sep-20	25-Sep-20																				
S1-P2-30610	Slipform Type 6 Curb	3	19-Oct-20	23-Oct-20																				
S1-P2-30620	Cure Curb	5	23-Oct-20	28-Oct-20																				
S1-P2-30650	Place/Finegrade 2" Screenings for SW	1	21-Oct-20	21-Oct-20																				
S1-P2-30660	Slipform 6" Sidewalk	1	23-Oct-20	23-Oct-20																				
S1-P2-30670	Place/Finegrade 8" 304 Agg. for Multi-Use Pth	1	26-Oct-20	26-Oct-20																				
S1-P2-30680	Place 1.75" 441 Intermed. Asphalt for MUP	1	27-Oct-20	27-Oct-20																				
S1-P2-30690	Place 1.25" 441 Surface Asphalt for MUP	1	28-Oct-20	28-Oct-20																				
S1-P2-30700	Place 8.75" 302 Asphalt Base	2	30-Oct-20	02-Nov-20																				
S1-P2-30710	Place 1.75" 442 Asphalt Intermediate Course	1	04-Nov-20	04-Nov-20																				
S1-P2-30730	Backup Pavement/Finish Grade	2	24-May-21	25-May-21																				
OC Blvd: West End to Quadrant Rd.		135	26-Jun-20	19-May-21																				
S1-P2-30300	Remove Existing Pavement	8	26-Jun-20	08-Jul-20																				
S1-P2-30320	Excavation	30	27-Jul-20	18-Sep-20																				
S1-P2-30340	Install Storm Sewer	9	01-Sep-20	18-Sep-20																				
S1-P2-30345	Install Storm Sewer (I-490 - 20+00)	6	09-Jul-20	17-Jul-20																				



Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022				
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3		
S1-P2-30380	Cement Stabilization	5	21-Sep-20	28-Sep-20																					Cement Stabilization
S1-P2-30390	Stabilization Cure	5	28-Sep-20	03-Oct-20																					Stabilization Cure
S1-P2-30400	Install Underdrains	6	05-Oct-20	14-Oct-20																					Install Underdrains
S1-P2-30405	Drill/Pour Light Foundations	11	16-Oct-20	06-Nov-20																					Drill/Pour Light Foundations
S1-P2-30406	Set Light Poles & Run Conduit/Cables	5	09-Nov-20	02-Apr-21																					Set Light Poles & Run Conduit/Cables
S1-P2-30410	Place/Finegrade 6" 304 Agg. Base	7	16-Oct-20	28-Oct-20																					Place/Finegrade 6" 304 Agg. Base
S1-P2-30420	Slipform Type 6 Curb	8	13-Nov-20	14-Apr-21																					Slipform Type 6 Curb
S1-P2-30430	Cure Curb	5	14-Apr-21	19-Apr-21																					Cure Curb
S1-P2-30510	Place 8.75" 302 Asphalt Base	5	20-Apr-21	27-Apr-21																					Place 8.75" 302 Asphalt Base
S1-P2-30520	Place 1.75" 442 Asphalt Intermediate Course	3	28-Apr-21	03-May-21																					Place 1.75" 442 Asphalt Intermediate Course
S1-P2-30540	Backup Pavement/Finish Grade	2	17-May-21	19-May-21																					Backup Pavement/Finish Grade
E. 55th St (NB)		97	10-Aug-20	10-May-21																					10-May-21, E. 55th St (NB)
S1-P2-31170	Remove Existing Pavement	2	10-Aug-20	11-Aug-20																					Remove Existing Pavement
S1-P2-31190	Excavation	3	12-Aug-20	17-Aug-20																					Excavation
S1-P2-31260	Embankment	1	18-Aug-20	18-Aug-20																					Embankment
S1-P2-31270	Install Storm Sewer	3	19-Aug-20	24-Aug-20																					Install Storm Sewer
S1-P2-31280	Install 30" Waterline	10	25-Aug-20	11-Sep-20																					Install 30" Waterline
S1-P2-31285	Install 8" Waterline & 12" Main	9	14-Sep-20	29-Sep-20																					Install 8" Waterline & 12" Main
S1-P2-31340	Install Fire Hydrant Service Lines	3	30-Sep-20	05-Oct-20																					Install Fire Hydrant Service Lines
S1-P2-31350	Install CPP Duct Bank	6	07-Oct-20	16-Oct-20																					Install CPP Duct Bank
S1-P2-31360	Cement Stabilization	1	19-Oct-20	19-Oct-20																					Cement Stabilization
S1-P2-31370	Stabilization Cure	5	19-Oct-20	24-Oct-20																					Stabilization Cure
S1-P2-31380	Install Underdrains	2	26-Oct-20	27-Oct-20																					Install Underdrains
S1-P2-31385	Drill/Pour Light Foundations	3	28-Oct-20	02-Nov-20																					Drill/Pour Light Foundations
S1-P2-31386	Set Light Poles & Run Conduit/Cables	1	04-Nov-20	04-Nov-20																					Set Light Poles & Run Conduit/Cables
S1-P2-31390	Place/Finegrade 6" 304 Agg. Base	1	28-Oct-20	28-Oct-20																					Place/Finegrade 6" 304 Agg. Base
S1-P2-31400	Slipform Type 6 Curb	1	06-Nov-20	06-Nov-20																					Slipform Type 6 Curb
S1-P2-31410	Cure Curb	5	06-Nov-20	11-Nov-20																					Cure Curb
S1-P2-31440	Place/Finegrade 2" Screenings for SW	1	06-Nov-20	06-Nov-20																					Place/Finegrade 2" Screenings for SW
S1-P2-31450	Slipform 6" Sidewalk	1	09-Nov-20	09-Nov-20																					Slipform 6" Sidewalk
S1-P2-31460	Place/Finegrade 8" 304 Agg. for Multi-Use Pth	1	11-Nov-20	11-Nov-20																					Place/Finegrade 8" 304 Agg. for Multi-Use Pth
S1-P2-31470	Place 1.75" 441 Intermed. Asphalt for MUP	1	12-Nov-20	12-Nov-20																					Place 1.75" 441 Intermed. Asphalt for MUP
S1-P2-31480	Place 1.25" 441 Surface Asphalt for MUP	1	04-May-21	04-May-21																					Place 1.25" 441 Surface Asphalt for MUP
S1-P2-31490	Place 8.75" 302 Asphalt Base	1	12-Nov-20	12-Nov-20																					Place 8.75" 302 Asphalt Base
S1-P2-31500	Place 1.75" 442 Asphalt Intermediate Course	1	13-Nov-20	13-Nov-20																					Place 1.75" 442 Asphalt Intermediate Course
S1-P2-31510	Place 1.5" 442 Asphalt Surface Course	2	04-May-21	05-May-21																					Place 1.5" 442 Asphalt Surface Course
S1-P2-31520	Backup Pavement/Finish Grade	2	07-May-21	10-May-21																					Backup Pavement/Finish Grade
Wall 1A: SPL with Facing		74	31-Aug-20	28-Apr-21																					28-Apr-21, Wall 1A: SPL with Facing
S1-P2-30020	Excavate/Install Lagging	10	31-Aug-20	18-Sep-20																					Excavate/Install Lagging
S1-P2-30030	F&P CIP Facing Panels - 9 Pours	30	21-Sep-20	16-Nov-20																					F&P CIP Facing Panels - 9 Pours
S1-P2-30040	Cure CIP Facing Panels	7	16-Nov-20	23-Nov-20																					Cure CIP Facing Panels
S1-P2-30090	F&P Coping	10	24-Nov-20	26-Mar-21																					F&P Coping
S1-P2-30100	Watercure Coping	7	26-Mar-21	02-Apr-21																					Watercure Coping
S1-P2-30110	Apply Sealer & Graffiti Prot.	3	16-Apr-21	20-Apr-21																					Apply Sealer & Graffiti Prot.
S1-P2-30120	Install Vandal Protection Fence	5	21-Apr-21	28-Apr-21																					Install Vandal Protection Fence
Wall 1B: SPL with Facing		116	27-Jul-20	21-May-21																					21-May-21, Wall 1B: SPL with Facing
S1-P2-30130	Access and Level Wall Area	1	27-Jul-20	27-Jul-20																					Access and Level Wall Area
S1-P2-30140	Drill/Pour/Set Soldier Piles	30	28-Jul-20	18-Sep-20																					Drill/Pour/Set Soldier Piles
S1-P2-30150	Excavate/Install Lagging	20	21-Sep-20	26-Oct-20																					Excavate/Install Lagging
S1-P2-30160	F&P CIP Facing Panels - 16 Pours	40	07-Oct-20	23-Dec-20																					F&P CIP Facing Panels - 16 Pours

Activity ID	Activity Name	Original Duration	Start	Finish	2018																				2019				2020				2021				2022	
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4										
					Gantt Chart Data																																	
S1-P2-40410	Cure Deck	7	21-Oct-20	28-Oct-20	Cure Deck																																	
S1-P2-40420	F&P Parapets	8	30-Oct-20	13-Nov-20	F&P Parapets																																	
S1-P2-40430	Cure Parapets	7	13-Nov-20	20-Nov-20	Cure Parapets																																	
S1-P2-40440	F&P Pylons	8	02-Apr-21	16-Apr-21	F&P Pylons																																	
S1-P2-40450	Cure Pylons	7	16-Apr-21	23-Apr-21	Cure Pylons																																	
S1-P2-40455	Apply Sealer & Graffiti Prot.	3	04-May-21	07-May-21	Apply Sealer & Graffiti Prot.																																	
S1-P2-40460	Install Vandal Protection Fence	5	10-May-21	18-May-21	Install Vandal Protection Fence																																	
S1-P2-40470	Install Reno Lighting	3	19-May-21	24-May-21	Install Reno Lighting																																	
Construction Section 2: BR: Kingsbury thru BR: RTA Blue/Green		416	07-Nov-18	19-Oct-21	19-Oct-21, Construction S																																	
Phase 1		416	07-Nov-18	19-Oct-21	19-Oct-21, Phase 1																																	
MOT		83	14-May-21	10-Sep-21	10-Sep-21, MOT																																	
S2-PH1-10200	Kinsman: Reduce to One Lane NB, 60 days	1	14-May-21	14-May-21	Kinsman: Reduce to One Lane NB, 60 day																																	
S2-PH1-10240	Berwick: Close at E. 66th	1	10-Sep-21	10-Sep-21	Berwick: Close at E. 66th																																	
OC Blvd: Kingsbury Bridge to Kinsman		44	01-Apr-19	21-Jun-19	21-Jun-19, OC Blvd: Kingsbury Bridge to Kinsman																																	
S2-PH1-31530	Remove Existing Pavement	2	01-Apr-19	02-Apr-19	Remove Existing Pavement																																	
S2-PH1-31550	Excavation	2	03-Apr-19	05-Apr-19	Excavation																																	
S2-PH1-31560	Embankment	3	08-Apr-19	12-Apr-19	Embankment																																	
S2-PH1-31570	Install Storm Sewer	15	15-Apr-19	10-May-19	Install Storm Sewer																																	
S2-PH1-31580	Install 8" Waterline (66th Ave.)	4	13-May-19	17-May-19	Install 8" Waterline (66th Ave.)																																	
S2-PH1-31610	Cement Stabilization	1	20-May-19	20-May-19	Cement Stabilization																																	
S2-PH1-31620	Stabilization Cure	5	20-May-19	25-May-19	Stabilization Cure																																	
S2-PH1-31630	Install Underdrains	2	28-May-19	29-May-19	Install Underdrains																																	
S2-PH1-31635	Drill/Pour Light Foundations	3	31-May-19	04-Jun-19	Drill/Pour Light Foundations																																	
S2-PH1-31636	Set Light Poles & Run Conduit/Cables	2	05-Jun-19	07-Jun-19	Set Light Poles & Run Conduit/Cables																																	
S2-PH1-31640	Place/Finegrade 6" 304 Agg. Base	2	31-May-19	03-Jun-19	Place/Finegrade 6" 304 Agg. Base																																	
S2-PH1-31650	Slipform Type 6 Curb	1	10-Jun-19	10-Jun-19	Slipform Type 6 Curb																																	
S2-PH1-31660	Cure Curb	5	10-Jun-19	15-Jun-19	Cure Curb																																	
S2-PH1-31690	Place/Finegrade 2" Screenings for SW	1	10-Jun-19	10-Jun-19	Place/Finegrade 2" Screenings for SW																																	
S2-PH1-31700	Slipform 6" Sidewalk	1	12-Jun-19	12-Jun-19	Slipform 6" Sidewalk																																	
S2-PH1-31710	Place/Finegrade 8" 304 Agg. for Multi-Use Pth	1	14-Jun-19	14-Jun-19	Place/Finegrade 8" 304 Agg. for Multi-Use Pth																																	
S2-PH1-31720	Place 1.75" 441 Intermed. Asphalt for MUP	1	17-Jun-19	17-Jun-19	Place 1.75" 441 Intermed. Asphalt for MUP																																	
S2-PH1-31730	Place 1.25" 441 Surface Asphalt for MUP	1	18-Jun-19	18-Jun-19	Place 1.25" 441 Surface Asphalt for MUP																																	
S2-PH1-31740	Place 8.75" 302 Asphalt Base	1	17-Jun-19	17-Jun-19	Place 8.75" 302 Asphalt Base																																	
S2-PH1-31750	Place 1.75" 442 Asphalt Intermediate Course	1	18-Jun-19	18-Jun-19	Place 1.75" 442 Asphalt Intermediate Course																																	
S2-PH1-31770	Backup Pavement/Finish Grade	2	19-Jun-19	21-Jun-19	Backup Pavement/Finish Grade																																	
OC Blvd: Kinsman to RTA Blue/Green Bridge		39	15-Apr-19	25-Jun-19	25-Jun-19, OC Blvd: Kinsman to RTA Blue/Green Bridge																																	
S2-PH1-31590	Remove Existing Pavement	2	15-Apr-19	16-Apr-19	Remove Existing Pavement																																	
S2-PH1-31800	Excavation	2	17-Apr-19	19-Apr-19	Excavation																																	
S2-PH1-31810	Embankment	2	22-Apr-19	24-Apr-19	Embankment																																	
S2-PH1-31820	Install Storm Sewer	9	26-Apr-19	10-May-19	Install Storm Sewer																																	
S2-PH1-31830	Install 8" Waterline (66th Ave.)	4	13-May-19	17-May-19	Install 8" Waterline (66th Ave.)																																	
S2-PH1-31840	Cement Stabilization	1	20-May-19	20-May-19	Cement Stabilization																																	
S2-PH1-31850	Stabilization Cure	5	20-May-19	25-May-19	Stabilization Cure																																	
S2-PH1-31860	Install Underdrains	2	28-May-19	29-May-19	Install Underdrains																																	
S2-PH1-31865	Drill/Pour Light Foundations	4	31-May-19	05-Jun-19	Drill/Pour Light Foundations																																	
S2-PH1-31866	Set Light Poles & Run Conduit/Cables	2	07-Jun-19	10-Jun-19	Set Light Poles & Run Conduit/Cables																																	
S2-PH1-31870	Place/Finegrade 6" 304 Agg. Base	2	31-May-19	03-Jun-19	Place/Finegrade 6" 304 Agg. Base																																	
S2-PH1-31880	Slipform Type 6 Curb	2	10-Jun-19	12-Jun-19	Slipform Type 6 Curb																																	
S2-PH1-31890	Cure Curb	5	12-Jun-19	17-Jun-19	Cure Curb																																	
S2-PH1-31920	Place/Finegrade 2" Screenings for SW	1	12-Jun-19	12-Jun-19	Place/Finegrade 2" Screenings for SW																																	

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022					
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3			
S2-PH1-31930	Slipform 6" Sidewalk	2	14-Jun-19	17-Jun-19																						
S2-PH1-31940	Place/Finegrade 8" 304 Agg. for Multi-Use Pth	1	18-Jun-19	18-Jun-19																						
S2-PH1-31950	Place 1.75" 441 Intermed. Asphalt for MUP	1	19-Jun-19	19-Jun-19																						
S2-PH1-31960	Place 1.25" 441 Surface Asphalt for MUP	1	21-Jun-19	21-Jun-19																						
S2-PH1-31970	Place 8.75" 302 Asphalt Base	1	18-Jun-19	18-Jun-19																						
S2-PH1-31980	Place 1.75" 442 Asphalt Intermediate Course	1	19-Jun-19	19-Jun-19																						
S2-PH1-32000	Backup Pavement/Finish Grade	2	24-Jun-19	25-Jun-19																						
Kinsman Rd (Construct SB - 60 days)		39	17-May-21	12-Jul-21																						
S2-PH1-32030	Remove Existing Pavement	2	17-May-21	19-May-21																						
S2-PH1-32050	Excavation	2	21-May-21	24-May-21																						
S2-PH1-32070	Install Storm Sewer	6	21-May-21	01-Jun-21																						
S2-PH1-32080	Install 12" Waterline	3	02-Jun-21	07-Jun-21																						
S2-PH1-32090	Install Fire Hydrant/Service Lines	3	08-Jun-21	11-Jun-21																						
S2-PH1-32100	Install CPP Duct Bank	1	14-Jun-21	14-Jun-21																						
S2-PH1-32110	Cement Stabilization	1	16-Jun-21	16-Jun-21																						
S2-PH1-32120	Stabilization Cure	5	16-Jun-21	21-Jun-21																						
S2-PH1-32130	Install Underdrains	2	22-Jun-21	23-Jun-21																						
S2-PH1-32135	Drill/Pour Light Foundations	1	25-Jun-21	25-Jun-21																						
S2-PH1-32136	Set Light Poles & Run Conduit/Cables	1	28-Jun-21	28-Jun-21																						
S2-PH1-32140	Place/Finegrade 6" 304 Agg. Base	1	25-Jun-21	25-Jun-21																						
S2-PH1-32150	Slipform Type 6 Curb	1	29-Jun-21	29-Jun-21																						
S2-PH1-32160	Cure Curb	5	29-Jun-21	04-Jul-21																						
S2-PH1-32190	Place/Finegrade 2" Screenings for SW	1	29-Jun-21	29-Jun-21																						
S2-PH1-32200	Slipform 6" Sidewalk	1	30-Jun-21	30-Jun-21																						
S2-PH1-32240	Place 8.75" 302 Asphalt Base	1	06-Jul-21	06-Jul-21																						
S2-PH1-32250	Place 1.75" 442 Asphalt Intermediate Course	1	07-Jul-21	07-Jul-21																						
S2-PH1-32270	Backup Pavement/Finish Grade	2	09-Jul-21	12-Jul-21																						
Berwick Rd		16	13-Sep-21	04-Oct-21																						
S2-PH1-32210	Excavation/ Embankment	1	13-Sep-21	13-Sep-21																						
S2-PH1-32300	Cement Stabilization	1	14-Sep-21	14-Sep-21																						
S2-PH1-32310	Stabilization Cure	5	14-Sep-21	19-Sep-21																						
S2-PH1-32320	Install Underdrains	1	20-Sep-21	20-Sep-21																						
S2-PH1-32330	Place/Finegrade 6" 304 Agg. Base	1	21-Sep-21	21-Sep-21																						
S2-PH1-32340	Slipform Type 6 Curb	1	22-Sep-21	22-Sep-21																						
S2-PH1-32350	Cure Curb	5	22-Sep-21	27-Sep-21																						
S2-PH1-32360	Place 9" 302 Asphalt Base	1	28-Sep-21	28-Sep-21																						
S2-PH1-32370	Place 1.75" 441 Asphalt Intermed. Course	1	29-Sep-21	29-Sep-21																						
S2-PH1-32380	Place 1.25" 441 Asphalt Surface Course	1	01-Oct-21	01-Oct-21																						
S2-PH1-32390	Backup Pavement/Finish Grade	1	04-Oct-21	04-Oct-21																						
Wall 4AB: RTA Blue/Green Bridge Rear Abut		43	07-Nov-18	10-Jun-19																						
S2-PH1-40000	Excavate for Wall	10	07-Nov-18	26-Nov-18																						
S2-PH1-40010	Place Granular Type C	2	01-Apr-19	02-Apr-19																						
S2-PH1-40020	F&P Leveling Pad	4	03-Apr-19	10-Apr-19																						
S2-PH1-40030	Erect Panels/Place SGB	20	15-Apr-19	20-May-19																						
S2-PH1-40040	F&P Coping	7	21-May-19	03-Jun-19																						
S2-PH1-40050	Watercure Coping	7	03-Jun-19	10-Jun-19																						
Wall 4CD: RTA Blue/Green Bridge Fwd Abut		86	27-Nov-18	04-Sep-19																						
S2-PH1-40060	Excavate for Wall	10	27-Nov-18	13-Mar-19																						
S2-PH1-40070	Place Granular Type C	2	01-Apr-19	02-Apr-19																						
S2-PH1-40080	F&P Leveling Pad	3	03-Apr-19	08-Apr-19																						

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022					
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3			
					Gantt Chart																					
S2-PH1-40090	Erect Panels/Place SGB	45	29-May-19	16-Aug-19																						
S2-PH1-40100	F&P Coping	7	19-Aug-19	28-Aug-19																						
S2-PH1-40110	Watercure Coping	7	28-Aug-19	04-Sep-19																						
RTA Track and Catenary Work					44	03-Jun-19	19-Aug-19																			
S2-PH1-60000	WYE Tracks - Embankment for RTA Yard	6	03-Jun-19	12-Jun-19																						
S2-PH1-60010	WYE Tracks - Place/FG Sub-Ballast	10	14-Jun-19	01-Jul-19																						
S2-PH1-60020	WYE Tracks - Place Ballast & Reconfigure to WYE Tracks	5	02-Jul-19	09-Jul-19																						
S2-PH1-60030	WYE Tracks - Install New Catenary Poles and Line	20	10-Jul-19	13-Aug-19																						
S2-PH1-60035	WYE Tracks - Excavate/ Grade Service Road	3	15-Aug-19	19-Aug-19																						
S2-PH1-60040	Blue/Green - Catenary Pole/Line Modifications	20	12-Jun-19	17-Jul-19																						
Bridge: OCB over Kingsbury Run Ravine					378	03-Jun-19	19-Oct-21																			
S2-PH1-50000	Embankment Stage #1	15	03-Jun-19	28-Jun-19																						
S2-PH1-50001	Settlement Period #1	20	28-Jun-19	18-Jul-19																						
S2-PH1-50002	Embankment Stage #2	15	19-Jul-19	12-Aug-19																						
S2-PH1-50003	Settlement Period #2	20	12-Aug-19	01-Sep-19																						
S2-PH1-50004	Embankment Stage #3	15	23-Jun-20	16-Jul-20																						
S2-PH1-50005	Settlement Period #3	20	16-Jul-20	05-Aug-20																						
S2-PH1-50006	Embankment Stage #4	15	07-Aug-20	01-Sep-20																						
S2-PH1-50007	Settlement Period Final	60	01-Sep-20	31-Oct-20																						
S2-PH1-50009	Rear Abut - Drive CIP Pipe Piling	8	02-Nov-20	18-Nov-20																						
S2-PH1-50010	Rear Abut - F&P Footing	4	20-Nov-20	25-Nov-20																						
S2-PH1-50020	Rear Abut - Cure Footing	7	25-Nov-20	02-Dec-20																						
S2-PH1-50030	Rear Abut - F&P Beam Seat	5	30-Nov-20	08-Mar-21																						
S2-PH1-50040	Rear Abut - Cure Beam Seat	7	08-Mar-21	15-Mar-21																						
S2-PH1-50050	Rear Abut - F&P Back Wall	4	12-Mar-21	19-Mar-21																						
S2-PH1-50060	Rear Abut - Cure Back Wall	7	19-Mar-21	26-Mar-21																						
S2-PH1-50070	Rear Abut - Backfill Abutment	2	29-Mar-21	30-Mar-21																						
S2-PH1-50090	Pier 1 - Drive CIP Pipe Piling	10	20-Nov-20	07-Dec-20																						
S2-PH1-50100	Pier 1 - F&P Footing	6	01-Mar-21	12-Mar-21																						
S2-PH1-50110	Pier 1 - Cure Footing	7	12-Mar-21	19-Mar-21																						
S2-PH1-50120	Pier 1 - F&P Columns	6	17-Mar-21	26-Mar-21																						
S2-PH1-50130	Pier 1 - Cure Columns	7	26-Mar-21	02-Apr-21																						
S2-PH1-50140	Pier 1 - F&P Cap	8	30-Mar-21	12-Apr-21																						
S2-PH1-50150	Pier 1 - Cure Cap	7	12-Apr-21	19-Apr-21																						
S2-PH1-50160	Pier 2 - Drive CIP Pipe Piling	10	08-Dec-20	28-Dec-20																						
S2-PH1-50170	Pier 2 - F&P Footing	6	15-Mar-21	24-Mar-21																						
S2-PH1-50180	Pier 2 - Cure Footing	7	24-Mar-21	31-Mar-21																						
S2-PH1-50190	Pier 2 - F&P Columns	6	29-Mar-21	06-Apr-21																						
S2-PH1-50200	Pier 2 - Cure Columns	7	06-Apr-21	13-Apr-21																						
S2-PH1-50210	Pier 2 - F&P Cap	8	14-Apr-21	27-Apr-21																						
S2-PH1-50220	Pier 2 - Cure Cap	7	27-Apr-21	04-May-21																						
S2-PH1-50230	Fwd Abut - Drive CIP Pipe Piling	8	01-Mar-21	17-Mar-21																						
S2-PH1-50240	Fwd Abut - F&P Footing	4	19-Mar-21	24-Mar-21																						
S2-PH1-50250	Fwd Abut - Cure Footing	7	24-Mar-21	31-Mar-21																						
S2-PH1-50260	Fwd Abut - F&P Beam Seat	5	29-Mar-21	05-Apr-21																						
S2-PH1-50270	Fwd Abut - Cure Beam Seat	7	05-Apr-21	12-Apr-21																						
S2-PH1-50280	Fwd Abut - F&P Back Wall	4	09-Apr-21	16-Apr-21																						
S2-PH1-50290	Fwd Abut - Cure Back Wall	7	16-Apr-21	23-Apr-21																						
S2-PH1-50300	Fwd Abut - Backfill Abutment	2	26-Apr-21	27-Apr-21																						
S2-PH1-50310	Erect/Detail Beams	14	05-May-21	01-Jun-21																						

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022		
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
S2-PH1-50315	False Decking	7	02-Jun-21	15-Jun-21																			False Decking
S2-PH1-50320	Form & Rebar Deck	20	07-Jun-21	13-Jul-21																			Form & Rebar Deck
S2-PH1-50330	Pour Deck	1	14-Jul-21	14-Jul-21																			Pour Deck
S2-PH1-50340	Cure Deck	7	14-Jul-21	21-Jul-21																			Cure Deck
S2-PH1-50342	F&P Sidewalk (Deck)	7	23-Jul-21	02-Aug-21																			F&P Sidewalk (Deck)
S2-PH1-50343	Cure Sidewalk (Deck)	7	03-Aug-21	13-Aug-21																			Cure Sidewalk (Deck)
S2-PH1-50346	F&P Sleeper Slabs	4	28-Apr-21	04-May-21																			F&P Sleeper Slabs
S2-PH1-50347	Cure Sleeper Slabs	7	04-May-21	11-May-21																			Cure Sleeper Slabs
S2-PH1-50350	F&P Approach Slabs	8	16-Jul-21	28-Jul-21																			F&P Approach Slabs
S2-PH1-50360	Cure Approach Slabs	7	28-Jul-21	04-Aug-21																			Cure Approach Slabs
S2-PH1-50370	F&P Sidewalk (Approach Slab)	2	05-Aug-21	06-Aug-21																			F&P Sidewalk (Approach Slab)
S2-PH1-50380	Cure Sidewalk (Approach Slab)	7	06-Aug-21	13-Aug-21																			Cure Sidewalk (Approach Slab)
S2-PH1-50390	F&P Parapets	12	12-Aug-21	31-Aug-21																			F&P Parapets
S2-PH1-50400	Cure Parapets	7	31-Aug-21	07-Sep-21																			Cure Parapets
S2-PH1-50410	F&P Pylons	6	01-Sep-21	13-Sep-21																			F&P Pylons
S2-PH1-50420	Cure Pylons	7	13-Sep-21	20-Sep-21																			Cure Pylons
S2-PH1-50430	Apply Sealer & Graffiti Prot.	10	08-Sep-21	24-Sep-21																			Apply Sealer & Graffiti Prot.
S2-PH1-50440	Install Vandal Protection Fence	8	27-Sep-21	08-Oct-21																			Install Vandal Protection Fence
S2-PH1-50450	Install Reno Lighting	5	11-Oct-21	19-Oct-21																			Install Reno Lighting
	Bridge: OCB EB over GCRTA Blue & Green Lines	213	14-Dec-18	25-Aug-20																			25-Aug-20, Bridge: OCB EB over GCRTA Blue & Green Lines
S2-PH1-50550	Rear Abut - Drive CIP Pipe Piling	3	03-Apr-19	08-Apr-19																			Rear Abut - Drive CIP Pipe Piling
S2-PH1-50560	Rear Abut - F&P Footing	4	21-May-19	28-May-19																			Rear Abut - F&P Footing
S2-PH1-50570	Rear Abut - Cure Footing	7	28-May-19	04-Jun-19																			Rear Abut - Cure Footing
S2-PH1-50580	Rear Abut - F&P Beam Seat	5	03-Jun-19	10-Jun-19																			Rear Abut - F&P Beam Seat
S2-PH1-50590	Rear Abut - Cure Beam Seat	7	10-Jun-19	17-Jun-19																			Rear Abut - Cure Beam Seat
S2-PH1-50600	Rear Abut - F&P Back Wall	4	14-Jun-19	19-Jun-19																			Rear Abut - F&P Back Wall
S2-PH1-50610	Rear Abut - Cure Back Wall	7	19-Jun-19	26-Jun-19																			Rear Abut - Cure Back Wall
S2-PH1-50620	Rear Abut - Backfill Abutment	2	28-Jun-19	01-Jul-19																			Rear Abut - Backfill Abutment
S2-PH1-50625	Pier 1 - Install Shoring	5	14-Dec-18	21-Dec-18																			Pier 1 - Install Shoring
S2-PH1-50630	Pier 1 - Excavate	1	15-Mar-19	15-Mar-19																			Pier 1 - Excavate
S2-PH1-50640	Pier 1 - Pre-Bore for Piling	3	15-Apr-19	17-Apr-19																			Pier 1 - Pre-Bore for Piling
S2-PH1-50650	Pier 1 - Drive CIP Pipe Piling	8	30-Apr-19	13-May-19																			Pier 1 - Drive CIP Pipe Piling
S2-PH1-50660	Pier 1 - F&P Footing	5	14-May-19	21-May-19																			Pier 1 - F&P Footing
S2-PH1-50670	Pier 1 - Cure Footing	7	21-May-19	28-May-19																			Pier 1 - Cure Footing
S2-PH1-50680	Pier 1 - F&P Columns	5	28-May-19	04-Jun-19																			Pier 1 - F&P Columns
S2-PH1-50690	Pier 1 - Cure Columns	7	04-Jun-19	11-Jun-19																			Pier 1 - Cure Columns
S2-PH1-50700	Pier 1 - F&P Cap	8	10-Jun-19	24-Jun-19																			Pier 1 - F&P Cap
S2-PH1-50710	Pier 1 - Cure Cap	7	24-Jun-19	01-Jul-19																			Pier 1 - Cure Cap
S2-PH1-50720	Pier 1 - F&P Crash Wall	8	25-Jun-19	08-Jul-19																			Pier 1 - F&P Crash Wall
S2-PH1-50730	Pier 1 - Cure Crash Wall	7	08-Jul-19	15-Jul-19																			Pier 1 - Cure Crash Wall
S2-PH1-50740	Pier 2 - Excavate	1	18-Mar-19	18-Mar-19																			Pier 2 - Excavate
S2-PH1-50750	Pier 2 - Drive CIP Pipe Piling	9	10-Jun-19	25-Jun-19																			Pier 2 - Drive CIP Pipe Piling
S2-PH1-50760	Pier 2 - F&P Footing	5	26-Jun-19	03-Jul-19																			Pier 2 - F&P Footing
S2-PH1-50770	Pier 2 - Cure Footing	7	03-Jul-19	10-Jul-19																			Pier 2 - Cure Footing
S2-PH1-50780	Pier 2 - F&P Columns	5	08-Jul-19	15-Jul-19																			Pier 2 - F&P Columns
S2-PH1-50790	Pier 2 - Cure Columns	7	15-Jul-19	22-Jul-19																			Pier 2 - Cure Columns
S2-PH1-50800	Pier 2 - F&P Cap	8	19-Jul-19	31-Jul-19																			Pier 2 - F&P Cap
S2-PH1-50810	Pier 2 - Cure Cap	7	31-Jul-19	07-Aug-19																			Pier 2 - Cure Cap
S2-PH1-50820	Pier 2 - F&P Crash Wall	8	02-Aug-19	14-Aug-19																			Pier 2 - F&P Crash Wall
S2-PH1-50830	Pier 2 - Cure Crash Wall	7	14-Aug-19	21-Aug-19																			Pier 2 - Cure Crash Wall

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022					
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3			
S2-PH1-50840	Fwd Abut - Drive CIP Pipe Piling	3	14-May-19	17-May-19																						
S2-PH1-50850	Fwd Abut - F&P Footing	3	19-Aug-19	21-Aug-19																						
S2-PH1-50860	Fwd Abut - Cure Footing	7	21-Aug-19	28-Aug-19																						
S2-PH1-50870	Fwd Abut - F&P Beam Seat	4	26-Aug-19	29-Aug-19																						
S2-PH1-50880	Fwd Abut - Cure Beam Seat	7	29-Aug-19	05-Sep-19																						
S2-PH1-50890	Fwd Abut - F&P Back Wall	4	03-Sep-19	09-Sep-19																						
S2-PH1-50900	Fwd Abut - Cure Back Wall	7	09-Sep-19	16-Sep-19																						
S2-PH1-50910	Fwd Abut - Backfill Abutment	2	17-Sep-19	18-Sep-19																						
S2-PH1-50920	Erect/Detail Girders	15	20-Sep-19	16-Oct-19																						
S2-PH1-50925	Install Temp RTA Protection & False Decking	10	18-Oct-19	04-Nov-19																						
S2-PH1-50930	Form & Rebar Deck	20	06-Nov-19	30-Mar-20																						
S2-PH1-50935	Install Expansion Joints	4	06-Nov-19	13-Nov-19																						
S2-PH1-50940	Pour Deck	1	08-Apr-20	08-Apr-20																						
S2-PH1-50950	Cure Deck	7	08-Apr-20	15-Apr-20																						
S2-PH1-50955	F&P Sleeper Slabs	4	20-Sep-19	25-Sep-19																						
S2-PH1-50956	Cure Sleeper Slabs	7	25-Sep-19	02-Oct-19																						
S2-PH1-50960	F&P Approach Slabs	6	15-Apr-20	24-Apr-20																						
S2-PH1-50970	Cure Approach Slabs	7	24-Apr-20	01-May-20																						
S2-PH1-50980	F&P Sidewalk	6	04-May-20	13-May-20																						
S2-PH1-50990	Cure Sidewalk	7	13-May-20	20-May-20																						
S2-PH1-51000	F&P Parapets	18	18-May-20	19-Jun-20																						
S2-PH1-51010	Cure Parapets	7	19-Jun-20	26-Jun-20																						
S2-PH1-51020	F&P Pylons	6	29-Jun-20	06-Jul-20																						
S2-PH1-51030	Cure Pylons	7	06-Jul-20	13-Jul-20																						
S2-PH1-51040	Apply Sealer & Graffiti Prot.	10	15-Jul-20	30-Jul-20																						
S2-PH1-51050	Install Vandal Protection Fence	10	31-Jul-20	17-Aug-20																						
S2-PH1-51060	Install Reno Lighting	5	18-Aug-20	25-Aug-20																						
Bridge: OCB WB over GCRTA Blue & Green Lines		240	18-Mar-19	02-Oct-20																						
S2-PH1-51080	Rear Abut - Drive CIP Pipe Piling	2	10-Apr-19	12-Apr-19																						
S2-PH1-51090	Rear Abut - F&P Footing	3	29-May-19	03-Jun-19																						
S2-PH1-51100	Rear Abut - Cure Footing	7	03-Jun-19	10-Jun-19																						
S2-PH1-51110	Rear Abut - F&P Beam Seat	4	07-Jun-19	14-Jun-19																						
S2-PH1-51120	Rear Abut - Cure Beam Seat	7	14-Jun-19	21-Jun-19																						
S2-PH1-51130	Rear Abut - F&P Back Wall	3	18-Jun-19	21-Jun-19																						
S2-PH1-51140	Rear Abut - Cure Back Wall	7	21-Jun-19	28-Jun-19																						
S2-PH1-51150	Rear Abut - Backfill Abutment	2	01-Jul-19	02-Jul-19																						
S2-PH1-51160	Pier 1 - Excavate	1	18-Mar-19	18-Mar-19																						
S2-PH1-51180	Pier 1 - Drive CIP Pipe Piling	8	15-Apr-19	29-Apr-19																						
S2-PH1-51190	Pier 1 - F&P Footing	5	30-Apr-19	07-May-19																						
S2-PH1-51200	Pier 1 - Cure Footing	7	07-May-19	14-May-19																						
S2-PH1-51210	Pier 1 - F&P Columns	5	05-Jun-19	14-Jun-19																						
S2-PH1-51220	Pier 1 - Cure Columns	7	14-Jun-19	21-Jun-19																						
S2-PH1-51230	Pier 1 - F&P Cap	8	18-Jun-19	01-Jul-19																						
S2-PH1-51240	Pier 1 - Cure Cap	7	01-Jul-19	08-Jul-19																						
S2-PH1-51250	Pier 2 - Excavate	1	20-Mar-19	20-Mar-19																						
S2-PH1-51270	Pier 2 - Drive CIP Pipe Piling	6	29-May-19	07-Jun-19																						
S2-PH1-51280	Pier 2 - F&P Footing	5	10-Jun-19	18-Jun-19																						
S2-PH1-51290	Pier 2 - Cure Footing	7	18-Jun-19	25-Jun-19																						
S2-PH1-51300	Pier 2 - F&P Columns	5	24-Jun-19	01-Jul-19																						
S2-PH1-51310	Pier 2 - Cure Columns	7	01-Jul-19	08-Jul-19																						

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
S2-PH1-51320	Pier 2 - F&P Cap	8	05-Jul-19	19-Jul-19							█													
S2-PH1-51330	Pier 2 - Cure Cap	7	19-Jul-19	26-Jul-19							█													
S2-PH1-51340	Pier 2 - F&P Crash Wall	8	22-Jul-19	02-Aug-19							█													
S2-PH1-51350	Pier 2 - Cure Crash Wall	7	02-Aug-19	09-Aug-19							█													
S2-PH1-51360	Fwd Abut - Drive CIP Pipe Piling	5	20-May-19	28-May-19							█													
S2-PH1-51370	Fwd Abut - F&P Footing	3	23-Aug-19	27-Aug-19							█													
S2-PH1-51380	Fwd Abut - Cure Footing	7	27-Aug-19	03-Sep-19							█													
S2-PH1-51390	Fwd Abut - F&P Beam Seat	4	03-Sep-19	09-Sep-19							█													
S2-PH1-51400	Fwd Abut - Cure Beam Seat	7	09-Sep-19	16-Sep-19							█													
S2-PH1-51410	Fwd Abut - F&P Back Wall	4	13-Sep-19	18-Sep-19							█													
S2-PH1-51420	Fwd Abut - Cure Back Wall	7	18-Sep-19	25-Sep-19							█													
S2-PH1-51430	Fwd Abut - Backfill Abutment	2	27-Sep-19	30-Sep-19							█													
S2-PH1-51440	Erect/Detail Girders	10	18-Oct-19	04-Nov-19							█													
S2-PH1-51445	Install Temp RTA Protection & False Decking	10	06-Nov-19	26-Nov-19							█													
S2-PH1-51450	Form & Rebar Deck	15	27-Nov-19	07-Apr-20							█													
S2-PH1-51455	Install Expansion Joints	4	01-Apr-20	07-Apr-20							█													
S2-PH1-51460	Pour Deck	1	17-Apr-20	17-Apr-20							█													
S2-PH1-51470	Cure Deck	7	17-Apr-20	24-Apr-20							█													
S2-PH1-51475	F&P Sleeper Slabs	4	01-Oct-19	07-Oct-19							█													
S2-PH1-51476	Cure Sleeper Slabs	7	07-Oct-19	14-Oct-19							█													
S2-PH1-51480	F&P Approach Slabs	6	27-Apr-20	05-May-20							█													
S2-PH1-51490	Cure Approach Slabs	7	05-May-20	12-May-20							█													
S2-PH1-51500	F&P Sidewalk	8	13-May-20	27-May-20							█													
S2-PH1-51510	Cure Sidewalk	7	27-May-20	03-Jun-20							█													
S2-PH1-51520	F&P Parapets	20	22-Jun-20	23-Jul-20							█													
S2-PH1-51530	Cure Parapets	7	23-Jul-20	30-Jul-20							█													
S2-PH1-51540	F&P Pylons	6	31-Jul-20	10-Aug-20							█													
S2-PH1-51550	Cure Pylons	7	10-Aug-20	17-Aug-20							█													
S2-PH1-51560	Apply Sealer & Graffiti Prot.	10	18-Aug-20	02-Sep-20							█													
S2-PH1-51570	Install Vandal Protection Fence	10	04-Sep-20	23-Sep-20							█													
S2-PH1-51580	Install Reno Lighting	5	25-Sep-20	02-Oct-20							█													
Bridge: Kinsman		27	17-May-21	23-Jun-21																			▼	23-Jun-21, Bridge: Kinsman
S2-PH1-50500	Demo Ex Sidewalk	2	17-May-21	18-May-21																			█	Demo Ex Sidewalk
S2-PH1-50510	F&P Barrier and Curb	4	19-May-21	25-May-21																			█	F&P Barrier and Curb
S2-PH1-50520	Cure Barrier and Curb	7	25-May-21	01-Jun-21																			█	Cure Barrier and Curb
S2-PH1-50530	F&P Sidewalk	8	02-Jun-21	16-Jun-21																			█	F&P Sidewalk
S2-PH1-50540	Cure Sidewalk	7	16-Jun-21	23-Jun-21																			█	Cure Sidewalk
Phase 2		41	13-Jul-21	08-Sep-21																			▼	08-Sep-21, Phase:2
MOT		41	13-Jul-21	08-Sep-21																			▼	08-Sep-21, MOT
S2-PH2-10210	Kinsman: Reduce to One Lane Each Way (60 days), Shift to NB side	2	13-Jul-21	14-Jul-21																			█	Kinsman: Reduce to One Lane Each
S2-PH2-10220	Kinsman: Shift to Prop Alignment for Surface Paving	1	25-Aug-21	25-Aug-21																			█	Kinsman: Shift to Prop Alignment
S2-PH2-10230	Kinsman: Remove Lane Restrictions	2	07-Sep-21	08-Sep-21																			█	Kinsman: Remove Lane Restricti
Kinsman Rd (Construct NB - 60 days)		36	16-Jul-21	03-Sep-21																			▼	03-Sep-21, Kinsman Rd (Cons
S2-PH2-32220	Remove Existing Pavement	2	16-Jul-21	19-Jul-21																			█	Remove Existing Pavement
S2-PH2-32280	Excavation	4	20-Jul-21	26-Jul-21																			█	Excavation
S2-PH2-32400	Install Storm Sewer	4	20-Jul-21	26-Jul-21																			█	Install Storm Sewer
S2-PH2-32440	Cement Stabilization	2	27-Jul-21	28-Jul-21																			█	Cement Stabilization
S2-PH2-32450	Stabilization Cure	5	28-Jul-21	02-Aug-21																			█	Stabilization Cure
S2-PH2-32460	Install Underdrains	2	04-Aug-21	05-Aug-21																			█	Install Underdrains
S2-PH2-32465	Drill/Pour Light Foundations	1	06-Aug-21	06-Aug-21																			█	Drill/Pour Light Foundations

Activity ID	Activity Name	Original Duration	Start	Finish	2018-2022																			
					2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
S2-PH2-32466	Set Light Poles & Run Conduit/Cables	1	09-Aug-21	09-Aug-21																				
S2-PH2-32470	Place/Finegrade 6" 304 Agg. Base	2	06-Aug-21	09-Aug-21																				
S2-PH2-32480	Slipform Type 6 Curb	2	11-Aug-21	12-Aug-21																				
S2-PH2-32490	Cure Curb	5	12-Aug-21	17-Aug-21																				
S2-PH2-32520	Place/Finegrade 2" Screenings for SW	1	11-Aug-21	11-Aug-21																				
S2-PH2-32530	Slipform 6" Sidewalk	3	12-Aug-21	16-Aug-21																				
S2-PH2-32540	Place 8.75" 302 Asphalt Base	2	18-Aug-21	19-Aug-21																				
S2-PH2-32550	Place 1.75" 442 Asphalt Intermediate Course	2	20-Aug-21	23-Aug-21																				
S2-PH2-32560	Place 1.5" 442 Asphalt Surface Course	3	26-Aug-21	30-Aug-21																				
S2-PH2-32570	Backup Pavement/Finish Grade	3	31-Aug-21	03-Sep-21																				
Construction Section 3: East of RTA Blue/Green Bridge to NSRR Bridge		334	07-Nov-18	23-Jun-21																				
Pre-Phase 1		47	07-Nov-18	18-Jun-19																				
S3-PP1-20100	Temp Relocate Utilities for Temp Tracks (By Others)	30	07-Nov-18	06-Dec-18																				
S3-PP1-20110	12" Waterline Abandoned, Out of Service	1	07-Dec-18	07-Dec-18																				
S3-PP1-20200	Pre-Ph - Excavate/Grade for Relocated Tracks	7	01-Apr-19	12-Apr-19																				
S3-PP1-20210	Pre-Ph - Embankment for Relocated Tracks	5	15-Apr-19	22-Apr-19																				
S3-PP1-20220	Pre-Ph - Place/FG Sub-Ballast	10	24-Apr-19	10-May-19																				
S3-PP1-20250	Pre-Ph - NS - Place Ballast & Temporarily Relocate Tracks	20	13-May-19	18-Jun-19																				
Phase 1		231	01-Apr-19	21-Sep-20																				
MOT		49	01-Apr-19	01-Jul-19																				
S3-PH1-10250	E. 75th: Reduce to One Lane SB, move to NB side	1	01-Apr-19	01-Apr-19																				
S3-PH1-10260	E. 79th: Reduce to One Lane NB, move to SB side	1	01-Jul-19	01-Jul-19																				
Utility Relocations		5	20-Dec-19	08-Apr-20																				
S3-PH1-20100	Relocate Utilities Across Completed NSRR Bridge (By Others)	30	20-Dec-19	19-Jan-20																				
S3-PH1-20110	Relocate Waterline Across Completed NSRR Bridge	5	01-Apr-20	08-Apr-20																				
OC Blvd: RTA Blue/Green Bridge to E.75th		82	23-Sep-19	03-Jul-20																				
S3-PH1-32410	Remove Existing Pavement	2	23-Sep-19	24-Sep-19																				
S3-PH1-32430	Excavation	6	25-Sep-19	04-Oct-19																				
S3-PH1-32580	Embankment	6	07-Oct-19	16-Oct-19																				
S3-PH1-32590	Install Storm Sewer	23	18-Oct-19	15-Apr-20																				
S3-PH1-32600	Install 12" Waterline (71st St)	1	17-Apr-20	17-Apr-20																				
S3-PH1-326002	Install 12" Waterline (73rd St)	1	20-Apr-20	20-Apr-20																				
S3-PH1-32610	Install 12" Waterline	6	21-Apr-20	29-Apr-20																				
S3-PH1-32620	Install CPP Duct Bank	10	01-May-20	19-May-20																				
S3-PH1-32630	Cement Stabilization	2	20-May-20	22-May-20																				
S3-PH1-32640	Stabilization Cure	5	22-May-20	27-May-20																				
S3-PH1-32650	Install Underdrains	2	29-May-20	01-Jun-20																				
S3-PH1-32655	Drill/Pour Light Foundations	7	02-Jun-20	12-Jun-20																				
S3-PH1-32656	Set Light Poles & Run Conduit/Cables	3	15-Jun-20	19-Jun-20																				
S3-PH1-32660	Place/Finegrade 6" 304 Agg. Base	3	02-Jun-20	05-Jun-20																				
S3-PH1-32670	Slipform Type 6 Curb	3	19-Jun-20	23-Jun-20																				
S3-PH1-32680	Cure Curb	5	23-Jun-20	28-Jun-20																				
S3-PH1-32710	Place/Finegrade 2" Screenings for SW	1	22-Jun-20	22-Jun-20																				
S3-PH1-32720	Slipform 6" Sidewalk	3	23-Jun-20	26-Jun-20																				
S3-PH1-32730	Place/Finegrade 8" 304 Agg. for Multi-Use Pth	1	29-Jun-20	29-Jun-20																				
S3-PH1-32740	Place 1.75" 441 Intermed. Asphalt for MUP	1	30-Jun-20	30-Jun-20																				
S3-PH1-32750	Place 1.25" 441 Surface Asphalt for MUP	1	01-Jul-20	01-Jul-20																				
S3-PH1-32760	Place 8.75" 302 Asphalt Base	2	29-Jun-20	30-Jun-20																				
S3-PH1-32770	Place 1.75" 442 Asphalt Intermediate Course	1	01-Jul-20	01-Jul-20																				
S3-PH1-32790	Backup Pavement/Finish Grade	2	02-Jul-20	03-Jul-20																				

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
OC Blvd: E.75th to E. 79th					20-Sep-19, OC Blvd: E.75th to E. 79th																			
S3-PH1-32820	Remove Existing Pavement	2	21-May-19	22-May-19	Remove Existing Pavement																			
S3-PH1-32840	Excavation	3	24-May-19	29-May-19	Excavation																			
S3-PH1-32850	Embankment	1	31-May-19	31-May-19	Embankment																			
S3-PH1-32860	Install Storm Sewer	15	03-Jun-19	28-Jun-19	Install Storm Sewer																			
S3-PH1-32870	Install 16" Waterline	10	01-Jul-19	17-Jul-19	Install 16" Waterline																			
S3-PH1-32880	Install Fire Hydrant Service Lines	2	19-Jul-19	22-Jul-19	Install Fire Hydrant Service Lines																			
S3-PH1-32890	Install CPP Duct Bank	10	23-Jul-19	06-Aug-19	Install CPP Duct Bank																			
S3-PH1-32900	Cement Stabilization	2	08-Aug-19	09-Aug-19	Cement Stabilization																			
S3-PH1-32910	Stabilization Cure	5	09-Aug-19	14-Aug-19	Stabilization Cure																			
S3-PH1-32920	Install Underdrains	2	15-Aug-19	16-Aug-19	Install Underdrains																			
S3-PH1-32925	Drill/Pour Light Foundations	7	19-Aug-19	29-Aug-19	Drill/Pour Light Foundations																			
S3-PH1-32926	Set Light Poles & Run Conduit/Cables	3	30-Aug-19	04-Sep-19	Set Light Poles & Run Conduit/Cables																			
S3-PH1-32930	Place/Finegrade 6" 304 Agg. Base	3	19-Aug-19	22-Aug-19	Place/Finegrade 6" 304 Agg. Base																			
S3-PH1-32940	Slipform Type 6 Curb	3	04-Sep-19	09-Sep-19	Slipform Type 6 Curb																			
S3-PH1-32950	Cure Curb	5	09-Sep-19	14-Sep-19	Cure Curb																			
S3-PH1-32980	Place/Finegrade 2" Screenings for SW	1	06-Sep-19	06-Sep-19	Place/Finegrade 2" Screenings for SW																			
S3-PH1-32990	Slipform 6" Sidewalk	3	09-Sep-19	11-Sep-19	Slipform 6" Sidewalk																			
S3-PH1-33000	Place/Finegrade 8" 304 Agg. for Multi-Use Pth	1	13-Sep-19	13-Sep-19	Place/Finegrade 8" 304 Agg. for Multi-Use Pth																			
S3-PH1-33010	Place 1.75" 441 Intermed. Asphalt for MUP	1	16-Sep-19	16-Sep-19	Place 1.75" 441 Intermed. Asphalt for MUP																			
S3-PH1-33020	Place 1.25" 441 Surface Asphalt for MUP	1	17-Sep-19	17-Sep-19	Place 1.25" 441 Surface Asphalt for MUP																			
S3-PH1-33030	Place 8.75" 302 Asphalt Base	2	16-Sep-19	18-Sep-19	Place 8.75" 302 Asphalt Base																			
S3-PH1-33040	Place 1.75" 442 Asphalt Intermediate Course	1	20-Sep-19	20-Sep-19	Place 1.75" 442 Asphalt Intermediate Course																			
S3-PH1-33060	Backup Pavement/Finish Grade	2	18-Sep-19	20-Sep-19	Backup Pavement/Finish Grade																			
E. 73rd St					24-Jul-19, E. 73rd St																			
S3-PH1-33340	Excavation/ Embankment	1	02-Jul-19	02-Jul-19	Excavation/ Embankment																			
S3-PH1-33350	Cement Stabilization	1	03-Jul-19	03-Jul-19	Cement Stabilization																			
S3-PH1-33360	Stabilization Cure	5	03-Jul-19	08-Jul-19	Stabilization Cure																			
S3-PH1-33370	Install Underdrains	1	09-Jul-19	09-Jul-19	Install Underdrains																			
S3-PH1-33380	Place/Finegrade 6" 304 Agg. Base	1	10-Jul-19	10-Jul-19	Place/Finegrade 6" 304 Agg. Base																			
S3-PH1-33390	Slipform Type 6 Curb	1	12-Jul-19	12-Jul-19	Slipform Type 6 Curb																			
S3-PH1-33400	Cure Curb	5	12-Jul-19	17-Jul-19	Cure Curb																			
S3-PH1-33410	Place 9" 302 Asphalt Base	1	19-Jul-19	19-Jul-19	Place 9" 302 Asphalt Base																			
S3-PH1-33420	Place 1.75" 441 Asphalt Intermed. Course	1	22-Jul-19	22-Jul-19	Place 1.75" 441 Asphalt Intermed. Course																			
S3-PH1-33430	Place 1.25" 441 Asphalt Surface Course	1	23-Jul-19	23-Jul-19	Place 1.25" 441 Asphalt Surface Course																			
S3-PH1-33440	Backup Pavement/Finish Grade	1	24-Jul-19	24-Jul-19	Backup Pavement/Finish Grade																			
E. 75th St (Construct SB)					10-May-19, E. 75th St (Construct SB)																			
S3-PH1-33450	Remove Existing Pavement	2	02-Apr-19	03-Apr-19	Remove Existing Pavement																			
S3-PH1-33470	Excavation/Embankment	1	05-Apr-19	05-Apr-19	Excavation/Embankment																			
S3-PH1-33490	Install Storm Sewer	4	05-Apr-19	12-Apr-19	Install Storm Sewer																			
S3-PH1-33500	Install 12" Waterline	1	15-Apr-19	15-Apr-19	Install 12" Waterline																			
S3-PH1-33530	Cement Stabilization	1	16-Apr-19	16-Apr-19	Cement Stabilization																			
S3-PH1-33540	Stabilization Cure	5	16-Apr-19	21-Apr-19	Stabilization Cure																			
S3-PH1-33550	Install Underdrains	1	22-Apr-19	22-Apr-19	Install Underdrains																			
S3-PH1-33560	Place/Finegrade 6" 304 Agg. Base	1	24-Apr-19	24-Apr-19	Place/Finegrade 6" 304 Agg. Base																			
S3-PH1-33570	Slipform Type 6 Curb	1	26-Apr-19	26-Apr-19	Slipform Type 6 Curb																			
S3-PH1-33580	Cure Curb	5	26-Apr-19	01-May-19	Cure Curb																			
S3-PH1-33620	Slipform 6" Sidewalk	1	07-May-19	07-May-19	Slipform 6" Sidewalk																			
S3-PH1-33640	Place 9" 302 Asphalt Base	1	03-May-19	03-May-19	Place 9" 302 Asphalt Base																			
S3-PH1-33650	Place 1.75" 441 Asphalt Intermed. Course	1	06-May-19	06-May-19	Place 1.75" 441 Asphalt Intermed. Course																			

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022		
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
S3-PH1-33670	Backup Pavement/Finish Grade	2	08-May-19	10-May-19																			
E. 79th St (Construct NB)																							
S3-PH1-33480	Remove Existing Pavement	2	02-Jul-19	03-Jul-19																			
S3-PH1-33590	Excavation/Embankment	3	05-Jul-19	09-Jul-19																			
S3-PH1-33610	Install 12" Waterline	3	10-Jul-19	15-Jul-19																			
S3-PH1-33680	Install CPP Duct Bank	1	17-Jul-19	17-Jul-19																			
S3-PH1-33690	Cement Stabilization	1	19-Jul-19	19-Jul-19																			
S3-PH1-33700	Stabilization Cure	5	19-Jul-19	24-Jul-19																			
S3-PH1-33710	Install Underdrains	1	26-Jul-19	26-Jul-19																			
S3-PH1-33715	Drill/Pour Light Foundations	1	29-Jul-19	29-Jul-19																			
S3-PH1-33716	Set Light Poles & Run Conduit/Cables	1	30-Jul-19	30-Jul-19																			
S3-PH1-33720	Place/Finegrade 6" 304 Agg. Base	1	29-Jul-19	29-Jul-19																			
S3-PH1-33730	Slipform Type 6 Curb	1	30-Jul-19	30-Jul-19																			
S3-PH1-33740	Cure Curb	5	30-Jul-19	04-Aug-19																			
S3-PH1-33780	Slipform 6" Sidewalk	1	05-Aug-19	05-Aug-19																			
S3-PH1-33820	Place 8.75" 302 Asphalt Base	2	05-Aug-19	06-Aug-19																			
S3-PH1-33830	Place 1.75" 442 Asphalt Intermediate Course	1	08-Aug-19	08-Aug-19																			
S3-PH1-33850	Backup Pavement/Finish Grade	1	09-Aug-19	09-Aug-19																			
Rawlings Ave																							
S3-PH1-33520	Excavation/Embankment	2	19-Aug-20	21-Aug-20																			
S3-PH1-33800	Cement Stabilization	1	24-Aug-20	24-Aug-20																			
S3-PH1-33810	Stabilization Cure	5	24-Aug-20	29-Aug-20																			
S3-PH1-33860	Install Underdrains	1	31-Aug-20	31-Aug-20																			
S3-PH1-33865	Drill/Pour Electric Foundations	1	01-Sep-20	01-Sep-20																			
S3-PH1-33866	Set Electric Poles & Run Conduit/Cables	1	02-Sep-20	02-Sep-20																			
S3-PH1-33870	Place/Finegrade 6" 304 Agg. Base	1	01-Sep-20	01-Sep-20																			
S3-PH1-33880	Slipform Type 6 Curb	2	04-Sep-20	08-Sep-20																			
S3-PH1-33890	Cure Curb	5	08-Sep-20	13-Sep-20																			
S3-PH1-33930	Slipform 6" Sidewalk	1	14-Sep-20	14-Sep-20																			
S3-PH1-33940	Place 9" 302 Asphalt Base	1	14-Sep-20	14-Sep-20																			
S3-PH1-33950	Place 1.75" 441 Asphalt Intermed. Course	1	16-Sep-20	16-Sep-20																			
S3-PH1-33960	Place 1.25" 441 Asphalt Surface Course	1	18-Sep-20	18-Sep-20																			
S3-PH1-33970	Backup Pavement/Finish Grade	1	21-Sep-20	21-Sep-20																			
Side Road Re-Surfacing																							
S3-PH1-25050	Holton Ave	3	16-Oct-19	21-Oct-19																			
S3-PH1-25060	Rawlings Ave	2	22-Oct-19	23-Oct-19																			
Wall 5A/ 5C																							
S3-PH1-30000	Wall 5A: Access and Level Wall Area	1	30-Jul-19	30-Jul-19																			
S3-PH1-30010	Wall 5A: Drill/Pour/Set Soldier Piles	3	25-Sep-19	30-Sep-19																			
S3-PH1-30180	Wall 5C: Access and Level Wall Area	1	31-Jul-19	31-Jul-19																			
S3-PH1-30190	Wall 5C: Drill/Pour/Set Soldier Piles	2	02-Aug-19	05-Aug-19																			
Bridge: NSRR over OCB																							
S3-PH1-40000	Install Shoring along RR	6	19-Jun-19	28-Jun-19																			
S3-PH1-40010	Rear Abut - Excavate for Footing/Beam Seat	2	01-Jul-19	02-Jul-19																			
S3-PH1-40020	Rear Abut - Install Drilled Shafts w/ Rock Sockets	16	03-Jul-19	31-Jul-19																			
S3-PH1-40060	Rear Abut - F&P Footing/Beam Seat	8	02-Aug-19	14-Aug-19																			
S3-PH1-40070	Rear Abut - Cure Footing/Beam Seat	7	14-Aug-19	21-Aug-19																			
S3-PH1-40080	Rear Abut - F&P Back Wall	4	19-Aug-19	23-Aug-19																			
S3-PH1-40090	Rear Abut - Cure Back Wall	7	23-Aug-19	30-Aug-19																			
S3-PH1-40100	Rear Abut - Backfill Abutment	2	03-Sep-19	04-Sep-19																			

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022		
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
S3-PH1-40120	Pier 1 - Excavate Bench	2	03-Jul-19	05-Jul-19																			
S3-PH1-40130	Pier 1 - Install Drilled Shafts w/ Rock Sockets	12	06-Aug-19	26-Aug-19																			
S3-PH1-40190	Pier 1 - F&P Cap	8	27-Aug-19	09-Sep-19																			
S3-PH1-40200	Pier 1 - Cure Cap	7	09-Sep-19	16-Sep-19																			
S3-PH1-40220	Fwd Abut - Excavate for Footing/Beam Seat	2	08-Jul-19	09-Jul-19																			
S3-PH1-40230	Fwd Abut - Install Drilled Shafts w/ Rock Sockets	16	27-Aug-19	24-Sep-19																			
S3-PH1-40270	Fwd Abut - F&P Footing/Beam Seat	8	25-Sep-19	08-Oct-19																			
S3-PH1-40280	Fwd Abut - Cure Footing/Beam Seat	7	08-Oct-19	15-Oct-19																			
S3-PH1-40290	Fwd Abut - F&P Back Wall	4	14-Oct-19	21-Oct-19																			
S3-PH1-40300	Fwd Abut - Cure Back Wall	7	21-Oct-19	28-Oct-19																			
S3-PH1-40310	Fwd Abut - Backfill Abutment	2	29-Oct-19	30-Oct-19																			
S3-PH1-40320	Erect/Detail Girders	20	06-Nov-19	16-Dec-19																			
S3-PH1-40330	Erect/Detail 2" Diam Duct Bank	3	17-Dec-19	20-Dec-19																			
S3-PH1-40340	False Decking	7	23-Dec-19	08-Jan-20																			
S3-PH1-40350	Form & Rebar Deck	20	16-Mar-20	21-Apr-20																			
S3-PH1-40360	Pour Deck	1	22-Apr-20	22-Apr-20																			
S3-PH1-40370	Cure Deck	7	22-Apr-20	29-Apr-20																			
S3-PH1-40380	F&P Parapet	12	01-May-20	22-May-20																			
S3-PH1-40390	Cure Parapet	7	22-May-20	29-May-20																			
S3-PH1-40395	Apply Sealer & Graffiti Prot.	6	01-Jun-20	09-Jun-20																			
S3-PH1-40400	Apply Butyl Rubber Membrane Waterproofing	5	01-Jun-20	08-Jun-20																			
S3-PH1-40410	Install Asphaltic Panels	5	09-Jun-20	17-Jun-20																			
S3-PH1-40420	Place/Finegrade Sub-ballast	4	19-Jun-20	24-Jun-20																			
S3-PH1-40430	Install Vandal Protection Fence	5	10-Jun-20	19-Jun-20																			
Bridge Demo: NSRR over Grand Ave.		20	19-Jun-19	24-Jul-19																			
S3-PH1-40440	Demo Superstructure NSRR over Grand	5	19-Jun-19	26-Jun-19																			
S3-PH1-40450	Demo Substructure NSRR over Grand	5	28-Jun-19	05-Jul-19																			
S3-PH1-40460	Embankment	10	08-Jul-19	24-Jul-19																			
Phase 2		307	13-May-19	23-Jun-21																			
MOT		87	13-May-19	18-Oct-19																			
S3-PH2-10270	E. 75th: Shift SB only lane back to SB side	1	13-May-19	13-May-19																			
S3-PH2-10280	E. 75th: Shift to Prop Alignment for Surface Paving	1	24-Jun-19	24-Jun-19																			
S3-PH2-10290	E. 75th: Remove Lane Restrictions	1	28-Jun-19	28-Jun-19																			
S3-PH2-10300	E. 79th: Shift NB only lane back to NB side	2	12-Aug-19	13-Aug-19																			
S3-PH2-10310	E. 79th: Shift to Prop Alignment for Surface Paving	1	11-Oct-19	11-Oct-19																			
S3-PH2-10320	E. 79th: Remove Lane Restrictions	2	16-Oct-19	18-Oct-19																			
OC Blvd: E. 79th to NSRR Bridge		109	30-Jul-20	17-May-21																			
S3-PH2-33090	Excavation	12	30-Jul-20	18-Aug-20																			
S3-PH2-33100	Install Storm Sewer Outfall #4 Along NSRR/ Jack & Bore	40	19-Aug-20	04-Nov-20																			
S3-PH2-33105	Install 12"/15" Sanitary Sewer	7	19-Aug-20	31-Aug-20																			
S3-PH2-33110	Install Storm Sewer	8	01-Sep-20	16-Sep-20																			
S3-PH2-33120	Install 16" Waterline	10	18-Sep-20	05-Oct-20																			
S3-PH2-33130	Install Fire Hydrant Service Lines	6	07-Oct-20	16-Oct-20																			
S3-PH2-33140	Install CPP Duct Bank	15	18-Sep-20	14-Oct-20																			
S3-PH2-33150	Cement Stabilization	3	06-Nov-20	11-Nov-20																			
S3-PH2-33160	Stabilization Cure	5	11-Nov-20	16-Nov-20																			
S3-PH2-33170	Install Underdrains	3	02-Apr-21	06-Apr-21																			
S3-PH2-33175	Drill/Pour Light Foundations	7	07-Apr-21	20-Apr-21																			
S3-PH2-33176	Set Light Poles & Run Conduit/Cables	3	21-Apr-21	26-Apr-21																			
S3-PH2-33180	Place/Finegrade 6" 304 Agg. Base	4	07-Apr-21	14-Apr-21																			

Activity ID	Activity Name	Original Duration	Start	Finish	2018-2022																			
					2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
S3-PH2-33190	Slipform Type 6 Curb	5	27-Apr-21	04-May-21																	Slipform Type 6 Curb			
S3-PH2-33200	Cure Curb	5	04-May-21	09-May-21																	Cure Curb			
S3-PH2-33230	Place/Finegrade 2" Screenings for SW	1	27-Apr-21	27-Apr-21																	Place/Finegrade 2" Screenings for SW			
S3-PH2-33240	Slipform 6" Sidewalk	5	28-Apr-21	05-May-21																	Slipform 6" Sidewalk			
S3-PH2-33250	Place/Finegrade 8" 304 Agg. for Multi-Use Path	2	07-May-21	10-May-21																	Place/Finegrade 8" 304 Agg. for Multi-Use			
S3-PH2-33260	Place 1.75" 441 Intermed. Asphalt for MUP	1	11-May-21	11-May-21																	Place 1.75" 441 Intermed. Asphalt for MUP			
S3-PH2-33270	Place 1.25" 441 Surface Asphalt for MUP	1	12-May-21	12-May-21																	Place 1.25" 441 Surface Asphalt for MUP			
S3-PH2-33280	Place 8.75" 302 Asphalt Base	3	10-May-21	12-May-21																	Place 8.75" 302 Asphalt Base			
S3-PH2-33290	Place 1.75" 442 Asphalt Intermediate Course	2	14-May-21	17-May-21																	Place 1.75" 442 Asphalt Intermediate Course			
S3-PH2-33310	Backup Pavement/Finish Grade	2	14-May-21	17-May-21																	Backup Pavement/Finish Grade			
E. 75th St (Construct NB)		24	14-May-19	26-Jun-19																	26-Jun-19; E. 75th St (Construct NB)			
S3-PH2-33600	Remove Existing Pavement	2	14-May-19	15-May-19																	Remove Existing Pavement			
S3-PH2-33770	Excavation/Embankment	2	17-May-19	20-May-19																	Excavation/Embankment			
S3-PH2-33920	Install Storm Sewer	5	21-May-19	29-May-19																	Install Storm Sewer			
S3-PH2-33980	Install 16" Waterline	2	21-May-19	22-May-19																	Install 16" Waterline			
S3-PH2-34000	Install CPP Duct Bank	2	24-May-19	28-May-19																	Install CPP Duct Bank			
S3-PH2-34010	Cement Stabilization	1	31-May-19	31-May-19																	Cement Stabilization			
S3-PH2-34020	Stabilization Cure	5	31-May-19	05-Jun-19																	Stabilization Cure			
S3-PH2-34030	Install Underdrains	1	07-Jun-19	07-Jun-19																	Install Underdrains			
S3-PH2-34035	Drill/Pour Electric Foundations	3	10-Jun-19	14-Jun-19																	Drill/Pour Electric Foundations			
S3-PH2-34036	Set Electric Poles & Run Conduit/Cables	1	17-Jun-19	17-Jun-19																	Set Electric Poles & Run Conduit/Cables			
S3-PH2-34040	Place/Finegrade 6" 304 Agg. Base	1	10-Jun-19	10-Jun-19																	Place/Finegrade 6" 304 Agg. Base			
S3-PH2-34050	Slipform Type 6 Curb	1	12-Jun-19	12-Jun-19																	Slipform Type 6 Curb			
S3-PH2-34060	Cure Curb	5	12-Jun-19	17-Jun-19																	Cure Curb			
S3-PH2-34100	Slipform 6" Sidewalk	1	18-Jun-19	18-Jun-19																	Slipform 6" Sidewalk			
S3-PH2-34110	Place 9" 302 Asphalt Base	2	18-Jun-19	19-Jun-19																	Place 9" 302 Asphalt Base			
S3-PH2-34120	Place 1.75" 441 Asphalt Intermed. Course	1	21-Jun-19	21-Jun-19																	Place 1.75" 441 Asphalt Intermed. Course			
S3-PH2-34130	Place 1.25" 441 Asphalt Surface Course	1	25-Jun-19	25-Jun-19																	Place 1.25" 441 Asphalt Surface Course			
S3-PH2-34140	Backup Pavement/Finish Grade	1	26-Jun-19	26-Jun-19																	Backup Pavement/Finish Grade			
E. 79th St (Construct SB)		32	15-Aug-19	15-Oct-19																	15-Oct-19, E. 79th St (Construct SB)			
S3-PH2-33790	Remove Existing Pavement	2	15-Aug-19	16-Aug-19																	Remove Existing Pavement			
S3-PH2-34090	Excavation/Embankment	2	19-Aug-19	20-Aug-19																	Excavation/Embankment			
S3-PH2-34150	Install Fire Hydrant Service Lines	2	22-Aug-19	23-Aug-19																	Install Fire Hydrant Service Lines			
S3-PH2-34160	Install CPP Duct Bank	6	26-Aug-19	04-Sep-19																	Install CPP Duct Bank			
S3-PH2-34170	Cement Stabilization	1	06-Sep-19	06-Sep-19																	Cement Stabilization			
S3-PH2-34180	Stabilization Cure	5	06-Sep-19	11-Sep-19																	Stabilization Cure			
S3-PH2-34190	Install Underdrains	2	13-Sep-19	16-Sep-19																	Install Underdrains			
S3-PH2-34195	Drill/Pour Light Foundations	1	18-Sep-19	18-Sep-19																	Drill/Pour Light Foundations			
S3-PH2-34196	Set Light Poles & Run Conduit/Cables	1	20-Sep-19	20-Sep-19																	Set Light Poles & Run Conduit/Cables			
S3-PH2-34200	Place/Finegrade 6" 304 Agg. Base	5	18-Sep-19	25-Sep-19																	Place/Finegrade 6" 304 Agg. Base			
S3-PH2-34210	Slipform Type 6 Curb	1	27-Sep-19	27-Sep-19																	Slipform Type 6 Curb			
S3-PH2-34220	Cure Curb	5	27-Sep-19	02-Oct-19																	Cure Curb			
S3-PH2-34250	Slipform 6" Sidewalk	1	04-Oct-19	04-Oct-19																	Slipform 6" Sidewalk			
S3-PH2-34260	Place 8.75" 302 Asphalt Base	2	04-Oct-19	07-Oct-19																	Place 8.75" 302 Asphalt Base			
S3-PH2-34270	Place 1.75" 442 Asphalt Intermediate Course	1	09-Oct-19	09-Oct-19																	Place 1.75" 442 Asphalt Intermediate Course			
S3-PH2-34280	Place 1.5" 442 Asphalt Surface Course	1	14-Oct-19	14-Oct-19																	Place 1.5" 442 Asphalt Surface Course			
S3-PH2-34290	Backup Pavement/Finish Grade	1	15-Oct-19	15-Oct-19																	Backup Pavement/Finish Grade			
NSRR Rail Work		78	01-Nov-19	29-Jul-20																	29-Jul-20, NSRR Rail Work			
S3-PH2-20030	Exc/Emb/Grade for Perm Track Alignment	10	01-Nov-19	03-Apr-20																	Exc/Emb/Grade for Perm Track Alignment			
S3-PH2-20040	Place/FG Sub-Ballast	10	06-Apr-20	22-Apr-20																	Place/FG Sub-Ballast			

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022					
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3			
S3-PH2-20050	NS - Place Ballast & Relocate Tracks to Perm Alignment	20	26-Jun-20	29-Jul-20																						
Wall 5A: NSRR Bridge NW Quadrant					100	11-Aug-20	14-May-21																			
S3-PH2-30020	Excavate/Install Lagging	5	11-Aug-20	18-Aug-20																						
S3-PH2-30030	F&P CIP Facing Panels - 2 Pours	3	09-Nov-20	13-Nov-20																						
S3-PH2-30040	Cure CIP Facing Panels	7	13-Nov-20	20-Nov-20																						
S3-PH2-30050	F&P Coping	4	23-Nov-20	27-Nov-20																						
S3-PH2-30060	Watercure Coping	7	27-Nov-20	04-Dec-20																						
S3-PH2-30070	Apply Sealer & Graffiti Prot.	3	04-May-21	07-May-21																						
S3-PH2-30080	Install Vandal Protection Fence	3	10-May-21	14-May-21																						
Wall 5B: NSRR Bridge NE Quadrant					106	03-Aug-20	14-May-21																			
S3-PH2-30090	Access and Level Wall Area	1	03-Aug-20	03-Aug-20																						
S3-PH2-30100	Drill/Pour/Set Soldier Piles	2	10-Aug-20	11-Aug-20																						
S3-PH2-30110	Excavate/Install Lagging	5	01-Sep-20	09-Sep-20																						
S3-PH2-30120	F&P CIP Facing Panels - 2 Pours	3	16-Nov-20	20-Nov-20																						
S3-PH2-30130	Cure CIP Facing Panels	7	20-Nov-20	27-Nov-20																						
S3-PH2-30140	F&P Coping	4	30-Nov-20	19-Mar-21																						
S3-PH2-30150	Watercure Coping	7	19-Mar-21	26-Mar-21																						
S3-PH2-30160	Apply Sealer & Graffiti Prot.	3	04-May-21	07-May-21																						
S3-PH2-30170	Install Vandal Protection Fence	3	10-May-21	14-May-21																						
Wall 5C: NSRR Bridge SW Quadrant					98	13-Aug-20	14-May-21																			
S3-PH2-30200	Excavate/Install Lagging	5	13-Aug-20	20-Aug-20																						
S3-PH2-30210	F&P CIP Facing Panels - 2 Pours	3	23-Nov-20	25-Nov-20																						
S3-PH2-30220	Cure CIP Facing Panels	7	25-Nov-20	02-Dec-20																						
S3-PH2-30230	F&P Coping	4	16-Mar-21	22-Mar-21																						
S3-PH2-30240	Watercure Coping	7	22-Mar-21	29-Mar-21																						
S3-PH2-30250	Apply Sealer & Graffiti Prot.	3	04-May-21	07-May-21																						
S3-PH2-30260	Install Vandal Protection Fence	3	10-May-21	14-May-21																						
Wall 5D: NSRR Bridge SE Quadrant					100	11-Aug-20	14-May-21																			
S3-PH2-30270	Access and Level Wall Area	1	11-Aug-20	11-Aug-20																						
S3-PH2-30280	Drill/Pour/Set Soldier Piles	3	24-Aug-20	27-Aug-20																						
S3-PH2-30290	Excavate/Install Lagging	5	01-Sep-20	09-Sep-20																						
S3-PH2-30300	F&P CIP Facing Panels - 2 Pours	3	27-Nov-20	16-Mar-21																						
S3-PH2-30310	Cure CIP Facing Panels	7	16-Mar-21	23-Mar-21																						
S3-PH2-30320	F&P Coping	4	24-Mar-21	30-Mar-21																						
S3-PH2-30330	Watercure Coping	7	30-Mar-21	06-Apr-21																						
S3-PH2-30340	Apply Sealer & Graffiti Prot.	3	04-May-21	07-May-21																						
S3-PH2-30350	Install Vandal Protection Fence	3	10-May-21	14-May-21																						
Bridge: NSRR over OCB					135	30-Jul-20	23-Jun-21																			
S3-PH2-40000	Rear Abut - Excavate for Footing/Beam Seat	2	30-Jul-20	31-Jul-20																						
S3-PH2-40010	Rear Abut - Install Drilled Shafts w/ Rock Sockets	4	03-Aug-20	07-Aug-20																						
S3-PH2-40050	Rear Abut - F&P Footing/Beam Seat	3	10-Aug-20	13-Aug-20																						
S3-PH2-40060	Rear Abut - Cure Footing/Beam Seat	7	13-Aug-20	20-Aug-20																						
S3-PH2-40070	Rear Abut - F&P Back Wall	3	17-Aug-20	20-Aug-20																						
S3-PH2-40080	Rear Abut - Cure Back Wall	7	20-Aug-20	27-Aug-20																						
S3-PH2-40090	Rear Abut - Backfill Abutment	2	28-Aug-20	31-Aug-20																						
S3-PH2-40100	Pier 1 - Excavate Bench	2	04-Aug-20	06-Aug-20																						
S3-PH2-40110	Pier 1 - Install Drilled Shafts w/ Rock Sockets	2	13-Aug-20	14-Aug-20																						
S3-PH2-40120	Pier 1 - Excavate to Btm of Pier	3	17-Aug-20	20-Aug-20																						
S3-PH2-40130	Pier 1 - F&P Stem Base	4	21-Aug-20	27-Aug-20																						
S3-PH2-40140	Pier 1 - Cure Stem Base	7	27-Aug-20	03-Sep-20																						

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022						
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3				
S3-PH2-40150	Pier 1 - F&P Arches	6	31-Aug-20	09-Sep-20																							█ Pier 1 - F&P Arches
S3-PH2-40160	Pier 1 - Cure Arches	7	09-Sep-20	16-Sep-20																							█ Pier 1 - Cure Arches
S3-PH2-40170	Pier 1 - F&P Cap	4	18-Sep-20	23-Sep-20																							█ Pier 1 - F&P Cap
S3-PH2-40180	Pier 1 - Cure Cap	7	23-Sep-20	30-Sep-20																							█ Pier 1 - Cure Cap
S3-PH2-40190	Fwd Abut - Excavate for Footing/Beam Seat	2	07-Aug-20	10-Aug-20																							█ Fwd Abut - Excavate for Footing/Beam Seat
S3-PH2-40200	Fwd Abut - Install Drilled Shafts w/ Rock Sockets	4	17-Aug-20	21-Aug-20																							█ Fwd Abut - Install Drilled Shafts w/ Rock Sockets
S3-PH2-40240	Fwd Abut - F&P Footing/Beam Seat	3	24-Aug-20	27-Aug-20																							█ Fwd Abut - F&P Footing/Beam Seat
S3-PH2-40250	Fwd Abut - Cure Footing/Beam Seat	7	27-Aug-20	03-Sep-20																							█ Fwd Abut - Cure Footing/Beam Seat
S3-PH2-40260	Fwd Abut - F&P Back Wall	3	31-Aug-20	02-Sep-20																							█ Fwd Abut - F&P Back Wall
S3-PH2-40270	Fwd Abut - Cure Back Wall	7	02-Sep-20	09-Sep-20																							█ Fwd Abut - Cure Back Wall
S3-PH2-40280	Fwd Abut - Backfill Abutment	2	11-Sep-20	14-Sep-20																							█ Fwd Abut - Backfill Abutment
S3-PH2-40281	Rear/Fwd Abut - Exc/Shotcrete for Wall Facing (Ph 1 & Ph 2)	10	24-Aug-20	09-Sep-20																							█ Rear/Fwd Abut - Exc/Shotcrete for Wall Facing (Ph 1 & Ph 2)
S3-PH2-40282	Rear Abut - F&P CIP Facing Panels (Ph 1 & Ph 2)	15	11-Sep-20	07-Oct-20																							█ Rear Abut - F&P CIP Facing Panels (Ph 1 & Ph 2)
S3-PH2-40283	Rear Abut - Cure CIP Facing Panels (Ph 1 & Ph 2)	7	07-Oct-20	14-Oct-20																							█ Rear Abut - Cure CIP Facing Panels (Ph 1 & Ph 2)
S3-PH2-40285	Fwd Abut - F&P CIP Facing Panels (Ph 1 & Ph 2)	15	09-Oct-20	06-Nov-20																							█ Fwd Abut - F&P CIP Facing Panels (Ph 1 & Ph 2)
S3-PH2-40286	Fwd Abut - Cure CIP Facing Panels (Ph 1 & Ph 2)	7	06-Nov-20	13-Nov-20																							█ Fwd Abut - Cure CIP Facing Panels (Ph 1 & Ph 2)
S3-PH2-40290	Erect/Detail Girders	5	16-Nov-20	24-Nov-20																							█ Erect/Detail Girders
S3-PH2-40300	Erect/Detail 1.5" Diam Duct Bank	5	25-Nov-20	02-Dec-20																							█ Erect/Detail 1.5" Diam Duct Bank
S3-PH2-40310	Form & Rebar Deck	7	16-Mar-21	29-Mar-21																							█ Form & Rebar Deck
S3-PH2-40320	Pour Deck	1	02-Apr-21	02-Apr-21																							█ Pour Deck
S3-PH2-40330	Cure Deck	7	02-Apr-21	09-Apr-21																							█ Cure Deck
S3-PH2-40340	F&P Parapet	10	12-Apr-21	28-Apr-21																							█ F&P Parapet
S3-PH2-40350	Cure Parapet	7	28-Apr-21	05-May-21																							█ Cure Parapet
S3-PH2-40355	Apply Sealer & Graffiti Prot.	6	07-May-21	18-May-21																							█ Apply Sealer & Graffiti Prot.
S3-PH2-40360	Apply Butyl Rubber Membrane Waterproofing	2	07-May-21	10-May-21																							█ Apply Butyl Rubber Membrane Waterproofing
S3-PH2-40370	Install Asphaltic Panels	2	12-May-21	14-May-21																							█ Install Asphaltic Panels
S3-PH2-40380	Place/Finegrade Sub-ballast	1	17-May-21	17-May-21																							█ Place/Finegrade Sub-ballast
S3-PH2-40390	Install Vandal Protection Fence	5	19-May-21	26-May-21																							█ Install Vandal Protection Fence
S3-PH2-40400	Paint Girders	20	19-May-21	23-Jun-21																							█ Paint Girders
Construction Section 4: NSRR Bridge to East End		370	11-Mar-19	20-Aug-21																							20-Aug-21, Construction Section 4
Phase 1		370	11-Mar-19	20-Aug-21																							20-Aug-21, Phase 1
MOT		102	01-Apr-20	11-Sep-20																							11-Sep-20, MOT
S4-PH1-10330	Buckeye: Reduce to One Lane Each Way	2	29-Jul-20	30-Jul-20																							█ Buckeye: Reduce to One Lane Each Way
S4-PH1-10340	Woodland: Reduce to One Lane Each Way	1	01-Apr-20	01-Apr-20																							█ Woodland: Reduce to One Lane Each Way
S4-PH1-10350	Lisbon Rd: Close Roadway at New Grand Ave.	1	02-Jun-20	02-Jun-20																							█ Lisbon Rd: Close Roadway at New Grand Ave.
S4-PH1-10360	Lisbon Rd: Reopen Roadway	1	24-Jul-20	24-Jul-20																							█ Lisbon Rd: Reopen Roadway
S4-PH1-10370	Grand Ave: Close Roadway by Everts	1	03-Apr-20	03-Apr-20																							█ Grand Ave: Close Roadway by Everts
S4-PH1-10380	Grand Ave: Reopen Roadway	1	01-Jun-20	01-Jun-20																							█ Grand Ave: Reopen Roadway
S4-PH1-10390	E. 89th/Kennedy: Close Roadway Woodland to Buckeye	1	29-Jul-20	29-Jul-20																							█ E. 89th/Kennedy: Close Roadway Woodland to Buckeye
S4-PH1-10400	E. 89th/Kennedy: Reopen Roadway	1	11-Sep-20	11-Sep-20																							█ E. 89th/Kennedy: Reopen Roadway
S4-PH1-10470	E. 93rd: Reduce to One Lane Each Way	1	06-Apr-20	06-Apr-20																							█ E. 93rd: Reduce to One Lane Each Way
S4-PH1-10480	E. 93rd: Remove Lane Restrictions	1	01-May-20	01-May-20																							█ E. 93rd: Remove Lane Restrictions
Utility Relocations		13	07-Apr-20	29-Apr-20																							29-Apr-20, Utility Relocations
S4-PH1-20000	E. 93rd - Drill/Pour Electric Foundations	8	07-Apr-20	21-Apr-20																							█ E. 93rd - Drill/Pour Electric Foundations
S4-PH1-20010	E. 93rd - Set Electric Poles & Run Conduit/Cables	5	22-Apr-20	29-Apr-20																							█ E. 93rd - Set Electric Poles & Run Conduit/Cables
OC Blvd: NSRR Bridge to Buckeye Rd		176	30-Jul-20	20-Aug-21																							20-Aug-21, OC Blvd: NSRR Bridge
S4-PH1-34300	Remove Existing Pavement	2	30-Jul-20	31-Jul-20																							█ Remove Existing Pavement
S4-PH1-34320	Excavation	12	19-Aug-20	09-Sep-20																							█ Excavation
S4-PH1-34330	Embankment	1	11-Sep-20	11-Sep-20																							█ Embankment
S4-PH1-34335	Install 12"/15" Sanitary Sewer	15	14-Sep-20	12-Oct-20																							█ Install 12"/15" Sanitary Sewer

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
S4-PH1-34340	Install Storm Sewer	21	13-Oct-20	07-Apr-21																	█	Install Storm Sewer		
S4-PH1-34350	Install 16" Waterline	14	09-Apr-21	04-May-21																	█	Install 16" Waterline		
S4-PH1-34360	Install Fire Hydrant Service Lines	2	05-May-21	07-May-21																	█	Install Fire Hydrant Service Lines		
S4-PH1-34370	Install CPP Duct Bank	20	10-May-21	16-Jun-21																	█	Install CPP Duct Bank		
S4-PH1-34380	Cement Stabilization	3	18-Jun-21	22-Jun-21																	█	Cement Stabilization		
S4-PH1-34390	Stabilization Cure	5	22-Jun-21	27-Jun-21																	█	Stabilization Cure		
S4-PH1-34400	Install Underdrains	3	28-Jun-21	30-Jun-21																	█	Install Underdrains		
S4-PH1-34405	Drill/Pour Light Foundations	9	02-Jul-21	19-Jul-21																	█	Drill/Pour Light Foundations		
S4-PH1-34406	Set Light Poles & Run Conduit/Cables	4	20-Jul-21	26-Jul-21																	█	Set Light Poles & Run Conduit/Cables		
S4-PH1-34410	Place/Finegrade 6" 304 Agg. Base	4	02-Jul-21	09-Jul-21																	█	Place/Finegrade 6" 304 Agg. Base		
S4-PH1-34420	Slipform Type 6 Curb	5	27-Jul-21	02-Aug-21																	█	Slipform Type 6 Curb		
S4-PH1-34430	Cure Curb	5	02-Aug-21	07-Aug-21																	█	Cure Curb		
S4-PH1-34460	Place/Finegrade 2" Screenings for SW	1	27-Jul-21	27-Jul-21																	█	Place/Finegrade 2" Screenings for SW		
S4-PH1-34470	Slipform 6" Sidewalk	2	28-Jul-21	29-Jul-21																	█	Slipform 6" Sidewalk		
S4-PH1-34480	Place/Finegrade 8" 304 Agg. for Multi-Use Pth	1	30-Jul-21	30-Jul-21																	█	Place/Finegrade 8" 304 Agg. for Multi-Use Pth		
S4-PH1-34490	Place 1.75" 441 Intermed. Asphalt for MUP	1	02-Aug-21	02-Aug-21																	█	Place 1.75" 441 Intermed. Asphalt for MUP		
S4-PH1-34500	Place 1.25" 441 Surface Asphalt for MUP	1	03-Aug-21	03-Aug-21																	█	Place 1.25" 441 Surface Asphalt for MUP		
S4-PH1-34510	Place 8.75" 302 Asphalt Base	3	09-Aug-21	12-Aug-21																	█	Place 8.75" 302 Asphalt Base		
S4-PH1-34520	Place 1.75" 442 Asphalt Intermediate Course	3	13-Aug-21	18-Aug-21																	█	Place 1.75" 442 Asphalt Intermediate Course		
S4-PH1-34540	Backup Pavement/Finish Grade	2	19-Aug-21	20-Aug-21																	█	Backup Pavement/Finish Grade		
OC Blvd: Buckeye Rd to Woodland Ave		56	01-Apr-19	12-Jul-19																				
S4-PH1-34570	Remove Existing Pavement	2	01-Apr-19	02-Apr-19																				
S4-PH1-34590	Excavation	2	03-Apr-19	05-Apr-19																				
S4-PH1-34600	Embankment	2	08-Apr-19	10-Apr-19																				
S4-PH1-34610	Install Storm Sewer	11	12-Apr-19	01-May-19																	█	Install Storm Sewer		
S4-PH1-34620	Install 12" Waterline (E. 89th St)	4	03-May-19	08-May-19																	█	Install 12" Waterline (E. 89th St)		
S4-PH1-34621	Install 16" Waterline (E. 89th St)	4	10-May-19	15-May-19																	█	Install 16" Waterline (E. 89th St)		
S4-PH1-34622	Install 16" Waterline (OC Blvd)	3	17-May-19	21-May-19																	█	Install 16" Waterline (OC Blvd)		
S4-PH1-34630	Install Fire Hydrant Service Lines	1	22-May-19	22-May-19																	█	Install Fire Hydrant Service Lines		
S4-PH1-34640	Install CPP Duct Bank	6	24-May-19	04-Jun-19																	█	Install CPP Duct Bank		
S4-PH1-34650	Cement Stabilization	2	05-Jun-19	07-Jun-19																	█	Cement Stabilization		
S4-PH1-34660	Stabilization Cure	5	07-Jun-19	12-Jun-19																	█	Stabilization Cure		
S4-PH1-34670	Install Underdrains	1	14-Jun-19	14-Jun-19																	█	Install Underdrains		
S4-PH1-34675	Drill/Pour Light Foundations	4	17-Jun-19	21-Jun-19																	█	Drill/Pour Light Foundations		
S4-PH1-34676	Set Light Poles & Run Conduit/Cables	2	24-Jun-19	25-Jun-19																	█	Set Light Poles & Run Conduit/Cables		
S4-PH1-34680	Place/Finegrade 6" 304 Agg. Base	3	17-Jun-19	19-Jun-19																	█	Place/Finegrade 6" 304 Agg. Base		
S4-PH1-34690	Slipform Type 6 Curb	2	26-Jun-19	28-Jun-19																	█	Slipform Type 6 Curb		
S4-PH1-34700	Cure Curb	5	28-Jun-19	03-Jul-19																	█	Cure Curb		
S4-PH1-34730	Place/Finegrade 2" Screenings for SW	1	26-Jun-19	26-Jun-19																	█	Place/Finegrade 2" Screenings for SW		
S4-PH1-34740	Slipform 6" Sidewalk	2	28-Jun-19	01-Jul-19																	█	Slipform 6" Sidewalk		
S4-PH1-34750	Place/Finegrade 8" 304 Agg. for Multi-Use Pth	1	02-Jul-19	02-Jul-19																	█	Place/Finegrade 8" 304 Agg. for Multi-Use Pth		
S4-PH1-34760	Place 1.75" 441 Intermed. Asphalt for MUP	1	03-Jul-19	03-Jul-19																	█	Place 1.75" 441 Intermed. Asphalt for MUP		
S4-PH1-34770	Place 1.25" 441 Surface Asphalt for MUP	1	05-Jul-19	05-Jul-19																	█	Place 1.25" 441 Surface Asphalt for MUP		
S4-PH1-34780	Place 8.75" 302 Asphalt Base	2	05-Jul-19	08-Jul-19																	█	Place 8.75" 302 Asphalt Base		
S4-PH1-34790	Place 1.75" 442 Asphalt Intermediate Course	1	09-Jul-19	09-Jul-19																	█	Place 1.75" 442 Asphalt Intermediate Course		
S4-PH1-34810	Backup Pavement/Finish Grade	2	10-Jul-19	12-Jul-19																	█	Backup Pavement/Finish Grade		
OC Blvd: Woodland Ave to East End		86	15-Jul-19	05-May-20																				
S4-PH1-34860	Excavation	4	15-Jul-19	22-Jul-19																				
S4-PH1-34870	Embankment	3	23-Jul-19	26-Jul-19																				
S4-PH1-34875	Install 12"/15" Sanitary Sewer	9	29-Jul-19	09-Aug-19																	█	Install 12"/15" Sanitary Sewer		

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
S4-PH1-34880	Install Storm Sewer	13	12-Aug-19	03-Sep-19									█	█	█	█								
S4-PH1-34890	Install 12" Waterline (E. 89th St)	5	04-Sep-19	11-Sep-19									█	█	█	█								
S4-PH1-34900	Install 16" Waterline (E. 89th St)	5	13-Sep-19	23-Sep-19									█	█	█	█								
S4-PH1-34905	Install Fire Hydrant Service Lines	1	24-Sep-19	24-Sep-19									█	█	█	█								
S4-PH1-34910	Install CPP Duct Bank	15	25-Sep-19	23-Oct-19									█	█	█	█								
S4-PH1-34920	Cement Stabilization	2	25-Oct-19	28-Oct-19									█	█	█	█								
S4-PH1-34930	Stabilization Cure	5	28-Oct-19	02-Nov-19									█	█	█	█								
S4-PH1-34940	Install Underdrains	2	04-Nov-19	06-Nov-19									█	█	█	█								
S4-PH1-34945	Drill/Pour Light Foundations	7	08-Nov-19	03-Apr-20									█	█	█	█								
S4-PH1-34946	Set Light Poles & Run Conduit/Cables	4	06-Apr-20	10-Apr-20									█	█	█	█								
S4-PH1-34950	Place/Finegrade 6" 304 Agg. Base	2	08-Nov-19	11-Nov-19									█	█	█	█								
S4-PH1-34960	Slipform Type 6 Curb	3	13-Apr-20	17-Apr-20									█	█	█	█								
S4-PH1-34970	Cure Curb	5	17-Apr-20	22-Apr-20									█	█	█	█								
S4-PH1-35000	Place/Finegrade 2" Screenings for SW	5	13-Apr-20	21-Apr-20									█	█	█	█								
S4-PH1-35010	Slipform 6" Sidewalk	3	22-Apr-20	27-Apr-20									█	█	█	█								
S4-PH1-35020	Place/Finegrade 8" 304 Agg. for Multi-Use Pth	1	28-Apr-20	28-Apr-20									█	█	█	█								
S4-PH1-35030	Place 1.75" 441 Intermed. Asphalt for MUP	1	29-Apr-20	29-Apr-20									█	█	█	█								
S4-PH1-35040	Place 1.25" 441 Surface Asphalt for MUP	1	01-May-20	01-May-20									█	█	█	█								
S4-PH1-35050	Place 8.75" 302 Asphalt Base	2	24-Apr-20	27-Apr-20									█	█	█	█								
S4-PH1-35060	Place 1.75" 442 Asphalt Intermediate Course	1	28-Apr-20	28-Apr-20									█	█	█	█								
S4-PH1-35080	Backup Pavement/Finish Grade	2	04-May-20	05-May-20									█	█	█	█								
Buckeye Rd (Construct WB)		35	31-Jul-20	18-Sep-20																				
S4-PH1-34840	Remove Existing Pavement	2	31-Jul-20	03-Aug-20									█	█	█	█								
S4-PH1-35110	Excavation	3	04-Aug-20	07-Aug-20									█	█	█	█								
S4-PH1-35130	Install Storm Sewer	3	04-Aug-20	07-Aug-20									█	█	█	█								
S4-PH1-35140	Install 12" Waterline	2	10-Aug-20	11-Aug-20									█	█	█	█								
S4-PH1-35160	Install CPP Duct Bank	2	12-Aug-20	14-Aug-20									█	█	█	█								
S4-PH1-35170	Cement Stabilization	1	17-Aug-20	17-Aug-20									█	█	█	█								
S4-PH1-35180	Stabilization Cure	5	17-Aug-20	22-Aug-20									█	█	█	█								
S4-PH1-35190	Install Underdrains	2	24-Aug-20	25-Aug-20									█	█	█	█								
S4-PH1-35195	Drill/Pour Light Foundations	4	26-Aug-20	01-Sep-20									█	█	█	█								
S4-PH1-35196	Set Light Poles & Run Conduit/Cables	2	02-Sep-20	04-Sep-20									█	█	█	█								
S4-PH1-35200	Place/Finegrade 6" 304 Agg. Base	1	26-Aug-20	26-Aug-20									█	█	█	█								
S4-PH1-35210	Slipform Type 6 Curb	2	04-Sep-20	08-Sep-20									█	█	█	█								
S4-PH1-35220	Cure Curb	5	08-Sep-20	13-Sep-20									█	█	█	█								
S4-PH1-35260	Slipform 6" Sidewalk	2	14-Sep-20	16-Sep-20									█	█	█	█								
S4-PH1-35300	Place 8.75" 302 Asphalt Base	1	14-Sep-20	14-Sep-20									█	█	█	█								
S4-PH1-35310	Place 1.75" 442 Asphalt Intermediate Course	1	16-Sep-20	16-Sep-20									█	█	█	█								
S4-PH1-35330	Backup Pavement/Finish Grade	1	18-Sep-20	18-Sep-20									█	█	█	█								
Woodland Ave (Construct EB)		31	01-Apr-20	29-May-20																				
S4-PH1-35150	Remove Existing Pavement	2	01-Apr-20	03-Apr-20									█	█	█	█								
S4-PH1-35270	Excavation	2	06-Apr-20	07-Apr-20									█	█	█	█								
S4-PH1-35280	Embankment	2	06-Apr-20	07-Apr-20									█	█	█	█								
S4-PH1-35290	Install Storm Sewer (Deep Tie-in)	5	08-Apr-20	17-Apr-20									█	█	█	█								
S4-PH1-35340	Install 12" Waterline	2	20-Apr-20	21-Apr-20									█	█	█	█								
S4-PH1-35345	Install Fire Hydrant Service Lines	3	22-Apr-20	27-Apr-20									█	█	█	█								
S4-PH1-35350	Install CPP Duct Bank	1	22-Apr-20	22-Apr-20									█	█	█	█								
S4-PH1-35360	Cement Stabilization	1	28-Apr-20	28-Apr-20									█	█	█	█								
S4-PH1-35370	Stabilization Cure	5	28-Apr-20	03-May-20									█	█	█	█								
S4-PH1-35380	Install Underdrains	2	04-May-20	05-May-20									█	█	█	█								

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022						
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3				
S4-PH1-35385	Drill/Pour Light Foundations	3	05-May-20	08-May-20																							
S4-PH1-35386	Set Light Poles & Run Conduit/Cables	2	11-May-20	13-May-20																							
S4-PH1-35390	Place/Finegrade 6" 304 Agg. Base	1	06-May-20	06-May-20																							
S4-PH1-35400	Slipform Type 6 Curb	1	15-May-20	15-May-20																							
S4-PH1-35410	Cure Curb	5	15-May-20	20-May-20																							
S4-PH1-35440	Slipform 6" Sidewalk	2	22-May-20	26-May-20																							
S4-PH1-35450	Place 8.75" 302 Asphalt Base	2	22-May-20	26-May-20																							
S4-PH1-35460	Place 1.75" 442 Asphalt Intermediate Course	1	27-May-20	27-May-20																							
S4-PH1-35480	Backup Pavement/Finish Grade	1	29-May-20	29-May-20																							
Lisbon Rd		34	03-Jun-20	23-Jul-20																							
S4-PH1-35490	Remove Existing Pavement	2	03-Jun-20	05-Jun-20																							
S4-PH1-35510	Excavation/Embankment	2	08-Jun-20	09-Jun-20																							
S4-PH1-35515	Install Storm Sewer	3	10-Jun-20	15-Jun-20																							
S4-PH1-35540	Install 12" Waterline	3	17-Jun-20	22-Jun-20																							
S4-PH1-35545	Install Fire Hydrant Service Lines	3	23-Jun-20	26-Jun-20																							
S4-PH1-35570	Cement Stabilization	2	29-Jun-20	30-Jun-20																							
S4-PH1-35580	Stabilization Cure	5	30-Jun-20	05-Jul-20																							
S4-PH1-35590	Install Underdrains	1	06-Jul-20	06-Jul-20																							
S4-PH1-35595	Drill/Pour Electric Foundations	1	08-Jul-20	08-Jul-20																							
S4-PH1-35596	Set Electric Poles & Run Conduit/Cables	1	09-Jul-20	09-Jul-20																							
S4-PH1-35600	Place/Finegrade 6" 304 Agg. Base	2	08-Jul-20	09-Jul-20																							
S4-PH1-35610	Slipform Type 6 Curb	1	10-Jul-20	10-Jul-20																							
S4-PH1-35620	Cure Curb	5	10-Jul-20	15-Jul-20																							
S4-PH1-35660	Slipform 6" Sidewalk	1	16-Jul-20	16-Jul-20																							
S4-PH1-35670	Place 9" 302 Asphalt Base	2	16-Jul-20	17-Jul-20																							
S4-PH1-35680	Place 1.75" 441 Asphalt Intermed. Course	1	20-Jul-20	20-Jul-20																							
S4-PH1-35690	Place 1.25" 441 Asphalt Surface Course	1	22-Jul-20	22-Jul-20																							
S4-PH1-35700	Backup Pavement/Finish Grade	1	23-Jul-20	23-Jul-20																							
Grand Ave		29	06-Apr-20	29-May-20																							
S4-PH1-35550	Excavation/Embankment	2	06-Apr-20	07-Apr-20																							
S4-PH1-35555	Install Storm Sewer	5	08-Apr-20	17-Apr-20																							
S4-PH1-35560	Install 8" Waterline	3	20-Apr-20	22-Apr-20																							
S4-PH1-35561	Install 12" Waterline	2	24-Apr-20	27-Apr-20																							
S4-PH1-35562	Install 16" Waterline	1	28-Apr-20	28-Apr-20																							
S4-PH1-35563	Install Fire Hydrant Service Lines	1	29-Apr-20	29-Apr-20																							
S4-PH1-35650	Cement Stabilization	1	01-May-20	01-May-20																							
S4-PH1-35710	Stabilization Cure	5	01-May-20	06-May-20																							
S4-PH1-35720	Install Underdrains	1	08-May-20	08-May-20																							
S4-PH1-35725	Drill/Pour Electric Foundations	1	11-May-20	11-May-20																							
S4-PH1-35726	Set Electric Poles & Run Conduit/Cables	1	13-May-20	13-May-20																							
S4-PH1-35730	Place/Finegrade 6" 304 Agg. Base	1	11-May-20	11-May-20																							
S4-PH1-35740	Slipform Type 6 Curb	1	15-May-20	15-May-20																							
S4-PH1-35750	Cure Curb	5	15-May-20	20-May-20																							
S4-PH1-35780	Slipform 6" Sidewalk	1	22-May-20	22-May-20																							
S4-PH1-35790	Place 9" 302 Asphalt Base	1	22-May-20	22-May-20																							
S4-PH1-35800	Place 1.75" 441 Asphalt Intermed. Course	1	26-May-20	26-May-20																							
S4-PH1-35810	Place 1.25" 441 Asphalt Surface Course	1	27-May-20	27-May-20																							
S4-PH1-35820	Backup Pavement/Finish Grade	1	29-May-20	29-May-20																							
Kennedy/89th St		29	30-Jul-20	09-Sep-20																							
S4-PH1-35520	Excavation/Embankment	2	30-Jul-20	31-Jul-20																							

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022			
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	
S4-PH1-35530	Install Storm Sewer/ Ex Tie-ins	3	03-Aug-20	05-Aug-20																				
S4-PH1-35850	Install CPP Duct Bank	2	07-Aug-20	10-Aug-20																				
S4-PH1-35860	Cement Stabilization	1	11-Aug-20	11-Aug-20																				
S4-PH1-35870	Stabilization Cure	5	11-Aug-20	16-Aug-20																				
S4-PH1-35880	Install Underdrains	1	17-Aug-20	17-Aug-20																				
S4-PH1-35885	Drill/Pour Electric Foundations	4	17-Aug-20	21-Aug-20																				
S4-PH1-35886	Set Electric Poles & Run Conduit/Cables	3	24-Aug-20	26-Aug-20																				
S4-PH1-35890	Place/Finegrade 6" 304 Agg. Base	2	18-Aug-20	19-Aug-20																				
S4-PH1-35900	Slipform Type 6 Curb	1	26-Aug-20	26-Aug-20																				
S4-PH1-35910	Cure Curb	5	26-Aug-20	31-Aug-20																				
S4-PH1-35950	Slipform 6" Sidewalk	1	01-Sep-20	01-Sep-20																				
S4-PH1-35960	Place/Finegrade 8" 304 Agg. for Multi-Use Pth	1	02-Sep-20	02-Sep-20																				
S4-PH1-35970	Place 1.75" 441 Intermed. Asphalt for MUP	1	04-Sep-20	04-Sep-20																				
S4-PH1-35980	Place 1.25" 441 Surface Asphalt for MUP	1	08-Sep-20	08-Sep-20																				
S4-PH1-35990	Place 9" 302 Asphalt Base	2	01-Sep-20	02-Sep-20																				
S4-PH1-36000	Place 1.75" 441 Asphalt Intermed. Course	1	04-Sep-20	04-Sep-20																				
S4-PH1-36010	Place 1.25" 441 Asphalt Surface Course	1	08-Sep-20	08-Sep-20																				
S4-PH1-36020	Backup Pavement/Finish Grade	1	09-Sep-20	09-Sep-20																				
Side Road Re-Surfacing		5	04-May-21	10-May-21																				
S4-PH1-25070	Evarts Rd	2	04-May-21	05-May-21																				
S4-PH1-25080	E. 89th St.	2	07-May-21	10-May-21																				
MSE Wall: E. 89th PED Bridge Rear Abut		24	22-May-19	05-Jul-19																				
S4-PH1-40000	Excavate for Wall	1	22-May-19	22-May-19																				
S4-PH1-40010	Place Granular Type C	1	24-May-19	24-May-19																				
S4-PH1-40020	F&P Leveling Pad	2	31-May-19	03-Jun-19																				
S4-PH1-40030	Erect Panels/Place SGB	10	04-Jun-19	21-Jun-19																				
S4-PH1-40040	F&P Coping	4	24-Jun-19	28-Jun-19																				
S4-PH1-40050	Watercure Coping	7	28-Jun-19	05-Jul-19																				
Bridge: E. 89th Pedestrian Bridge		168	24-May-19	03-Aug-20																				
S4-PH1-50007	Rear Abut - Install Drilled Shafts w/ Rock Sockets	2	28-May-19	29-May-19																				
S4-PH1-50010	Rear Abut - F&P Footing	3	05-Jul-19	09-Jul-19																				
S4-PH1-50020	Rear Abut - Cure Footing	7	09-Jul-19	16-Jul-19																				
S4-PH1-50030	Rear Abut - F&P Beam Seat	3	15-Jul-19	19-Jul-19																				
S4-PH1-50040	Rear Abut - Cure Beam Seat	7	19-Jul-19	26-Jul-19																				
S4-PH1-50050	Rear Abut - Backfill Beam Seat	2	29-Jul-19	30-Jul-19																				
S4-PH1-50060	Pier 1 - Excavate	1	24-May-19	24-May-19																				
S4-PH1-50065	Pier 1 - Install Drilled Shafts w/ Rock Sockets	3	31-May-19	04-Jun-19																				
S4-PH1-50090	Pier 1 - F&P Stem	6	05-Jun-19	17-Jun-19																				
S4-PH1-50100	Pier 1 - Cure Stem	7	17-Jun-19	24-Jun-19																				
S4-PH1-50110	Pier 1 - F&P Cap	8	21-Jun-19	03-Jul-19																				
S4-PH1-50120	Pier 1 - Cure Cap	7	03-Jul-19	10-Jul-19																				
S4-PH1-50130	Pier 2 - Excavate	1	28-May-19	28-May-19																				
S4-PH1-50140	Pier 2 - Install Drilled Shafts w/ Rock Sockets	3	05-Jun-19	10-Jun-19																				
S4-PH1-50150	Pier 2 - F&P Stem	6	22-Jul-19	30-Jul-19																				
S4-PH1-50160	Pier 2 - Cure Stem	7	30-Jul-19	06-Aug-19																				
S4-PH1-50170	Pier 2 - F&P Cap	8	05-Aug-19	16-Aug-19																				
S4-PH1-50180	Pier 2 - Cure Cap	7	16-Aug-19	23-Aug-19																				
S4-PH1-50187	Fwd Abut - Excavate	2	29-May-19	31-May-19																				
S4-PH1-50190	Fwd Abut - Install Drilled Shafts w/ Rock Sockets	2	12-Jun-19	14-Jun-19																				
S4-PH1-50200	Fwd Abut - F&P Footing	3	19-Aug-19	21-Aug-19																				

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022		
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3
S4-PH1-50210	Fwd Abut - Cure Footing	7	21-Aug-19	28-Aug-19																			
S4-PH1-50220	Fwd Abut - F&P Beam Seat	3	26-Aug-19	28-Aug-19																			
S4-PH1-50230	Fwd Abut - Cure Beam Seat	7	28-Aug-19	04-Sep-19																			
S4-PH1-50240	Fwd Abut - Backfill Beam Seat	2	06-Sep-19	09-Sep-19																			
S4-PH1-50250	Erect/Detail Precast Conc I-Beams	5	10-Sep-19	18-Sep-19																			
S4-PH1-50260	F&P Intermed. Diaphragms	5	20-Sep-19	27-Sep-19																			
S4-PH1-50270	Cure Intermed. Diaphragms	7	27-Sep-19	04-Oct-19																			
S4-PH1-50280	Erect/Detail 16" Water Line	7	07-Oct-19	18-Oct-19																			
S4-PH1-50290	Erect/Detail 12" Water Line	7	21-Oct-19	30-Oct-19																			
S4-PH1-50300	Erect/Detail Electrical Duct	5	01-Nov-19	11-Nov-19																			
S4-PH1-50305	False Decking	5	13-Nov-19	22-Nov-19																			
S4-PH1-50310	Form & Rebar Deck	12	25-Nov-19	30-Mar-20																			
S4-PH1-50320	Pour Deck	1	29-Apr-20	29-Apr-20																			
S4-PH1-50330	Cure Deck	7	29-Apr-20	06-May-20																			
S4-PH1-50335	Install Expansion Joints	2	08-May-20	11-May-20																			
S4-PH1-50340	F&P Parapets	12	13-May-20	03-Jun-20																			
S4-PH1-50350	Cure Parapets	7	03-Jun-20	10-Jun-20																			
S4-PH1-50352	F&P Pylons	12	12-Jun-20	02-Jul-20																			
S4-PH1-50355	Cure Pylons	7	02-Jul-20	09-Jul-20																			
S4-PH1-50357	Apply Sealer & Graffiti Prot.	5	10-Jul-20	17-Jul-20																			
S4-PH1-50360	Install Vandal Protection Fence	5	20-Jul-20	27-Jul-20																			
S4-PH1-50410	Install 'Reno' Lighting	5	28-Jul-20	03-Aug-20																			
Bridge Demo: E. 89th St.		121	11-Mar-19	11-Nov-19																			
S4-PH1-50365	Install Temp Protective Structure	10	11-Mar-19	29-Mar-19																			
S4-PH1-50370	Partial Demo Superstructure E. 89th St.	5	26-Apr-19	03-May-19																			
S4-PH1-50380	Partial Demo Substructure E. 89th St.	10	06-May-19	21-May-19																			
S4-PH1-50390	Complete Demo Superstructure E. 89th St. after WL Relocation	5	01-Nov-19	11-Nov-19																			
Phase 2		115	01-Jun-20	12-Nov-20																			
MOT		115	01-Jun-20	12-Nov-20																			
S4-PH2-10410	Buckeye: Shift traffic to WB side	2	21-Sep-20	22-Sep-20																			
S4-PH2-10420	Buckeye: Shift to Prop Alignment for Surface Paving	1	06-Nov-20	06-Nov-20																			
S4-PH2-10430	Buckeye: Remove Lane Restrictions	1	12-Nov-20	12-Nov-20																			
S4-PH2-10440	Woodland: Shift traffic to EB side	2	01-Jun-20	02-Jun-20																			
S4-PH2-10450	Woodland: Shift to Prop Alignment for Surface Paving	1	22-Jul-20	22-Jul-20																			
S4-PH2-10460	Woodland: Remove Lane Restrictions	1	27-Jul-20	27-Jul-20																			
Buckeye Rd (Construct EB)		36	23-Sep-20	11-Nov-20																			
S4-PH2-35830	Remove Existing Pavement	2	23-Sep-20	25-Sep-20																			
S4-PH2-35940	Excavation	2	28-Sep-20	29-Sep-20																			
S4-PH2-36040	Install Storm Sewer	2	30-Sep-20	02-Oct-20																			
S4-PH2-36060	Install Fire Hydrant Service Lines	2	05-Oct-20	07-Oct-20																			
S4-PH2-36070	Install CPP Duct Bank	2	09-Oct-20	12-Oct-20																			
S4-PH2-36080	Cement Stabilization	1	13-Oct-20	13-Oct-20																			
S4-PH2-36090	Stabilization Cure	5	13-Oct-20	18-Oct-20																			
S4-PH2-36100	Install Underdrains	2	19-Oct-20	21-Oct-20																			
S4-PH2-36110	Place/Finegrade 6" 304 Agg. Base	1	23-Oct-20	23-Oct-20																			
S4-PH2-36120	Slipform Type 6 Curb	1	26-Oct-20	26-Oct-20																			
S4-PH2-36130	Cure Curb	5	26-Oct-20	31-Oct-20																			
S4-PH2-36170	Slipform 6" Sidewalk	2	02-Nov-20	04-Nov-20																			
S4-PH2-36210	Place 8.75" 302 Asphalt Base	1	02-Nov-20	02-Nov-20																			
S4-PH2-36220	Place 1.75" 442 Asphalt Intermediate Course	1	04-Nov-20	04-Nov-20																			

Activity ID	Activity Name	Original Duration	Start	Finish	2018				2019				2020				2021				2022						
					Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4	Q1	Q2	Q3				
S4-PH2-36230	Place 1.5" 442 Asphalt Surface Course	1	09-Nov-20	09-Nov-20																							
S4-PH2-36240	Backup Pavement/Finish Grade	1	11-Nov-20	11-Nov-20																							
Woodland Ave (Construct WB)		35	03-Jun-20	24-Jul-20																							
S4-PH2-36050	Remove Existing Pavement	2	03-Jun-20	05-Jun-20																							
S4-PH2-36150	Excavation	2	08-Jun-20	09-Jun-20																							
S4-PH2-36160	Embankment	2	10-Jun-20	12-Jun-20																							
S4-PH2-36180	Install Storm Sewer	3	15-Jun-20	19-Jun-20																							
S4-PH2-36190	Install 6" Waterline	1	15-Jun-20	15-Jun-20																							
S4-PH2-36200	Install Fire Hydrant Service Lines	2	17-Jun-20	19-Jun-20																							
S4-PH2-36250	Install CPP Duct Bank	5	22-Jun-20	29-Jun-20																							
S4-PH2-36260	Cement Stabilization	1	30-Jun-20	30-Jun-20																							
S4-PH2-36270	Stabilization Cure	5	30-Jun-20	05-Jul-20																							
S4-PH2-36280	Install Underdrains	2	06-Jul-20	08-Jul-20																							
S4-PH2-36285	Drill/Pour Light Foundations	1	08-Jul-20	08-Jul-20																							
S4-PH2-36286	Set Light Poles & Run Conduit/Cables	1	09-Jul-20	09-Jul-20																							
S4-PH2-36290	Place/Finegrade 6" 304 Agg. Base	1	09-Jul-20	09-Jul-20																							
S4-PH2-36300	Slipform Type 6 Curb	1	10-Jul-20	10-Jul-20																							
S4-PH2-36310	Cure Curb	5	10-Jul-20	15-Jul-20																							
S4-PH2-36350	Slipform 6" Sidewalk	2	16-Jul-20	17-Jul-20																							
S4-PH2-36360	Place 8.75" 302 Asphalt Base	2	16-Jul-20	17-Jul-20																							
S4-PH2-36370	Place 1.75" 442 Asphalt Intermediate Course	1	20-Jul-20	20-Jul-20																							
S4-PH2-36380	Place 1.5" 442 Asphalt Surface Course	1	23-Jul-20	23-Jul-20																							
S4-PH2-36390	Backup Pavement/Finish Grade	1	24-Jul-20	24-Jul-20																							
Project Closeout Work		457	03-Jun-19	27-Jun-22																							
MOT		379	03-Jun-19	20-Oct-21																							
S5-11000	Perm Stripe OC Blvd	5	10-Sep-21	17-Sep-21																							
S5-11010	Install Final Traffic Signals Along OC Blvd	20	27-Jul-21	27-Aug-21																							
S5-11100	Open Remaining Portion of OC Blvd	1	20-Oct-21	20-Oct-21																							
S5-11110	I-77 NB Ramp Restoration	5	28-May-21	07-Jun-21																							
S5-12000	Install Perm Overhead Signs and Foundations	40	03-Jun-19	12-Aug-19																							
Asphalt		89	04-May-21	08-Sep-21																							
S5-30900	Place 1.5" 442 Asphalt Surface: OC Blvd West End to Quadrant	6	04-May-21	14-May-21																							
S5-30950	Place 1.5" 442 Asphalt Surface: OC Blvd Quadrant to Kinsman	4	17-May-21	21-May-21																							
S5-31000	Place 1.5" 442 Asphalt Surface: OC Blvd Kinsman to East End	12	19-Aug-21	08-Sep-21																							
S5-31010	I-90 WB Resurfacing	7	28-May-21	08-Jun-21																							
S5-31020	GCRTA Parking Lot Restoration/Reconfiguration	5	14-May-21	21-May-21																							
Final Seeding & Landscaping		77	22-Oct-21	27-Jun-22																							
S5-40000	OC Blvd: Place Topsoil & Final Seeding	15	22-Oct-21	20-May-22																							
S5-40010	OC Blvd: Install Trees and Mulch	20	23-May-22	27-Jun-22																							

F.7 Appendix 7 - Conceptual Plans





F.7 Conceptual Plans

The conceptual plans are included in Binder 2 of 2.