

DETAILED PROJECT WORK PLAN

Wilmington Rail Realignment

Version 1 – October 6, 2020



City of Wilmington, NC

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I. INTRODUCTION

On November 18, 2014 the City of Wilmington, NC (“City”) City Council encouraged the Wilmington Metropolitan Planning Organization (“WMPO”), North Carolina Department of Transportation (“NCDOT”) and CSX Transportation (“CSX”) to complete a feasibility study which evaluated the relocation of the CSX rail line from Navassa (Davis) Yard to the North Carolina State Ports Authority’s (“NCSPA” or “Port”) Port of Wilmington, traversing across the Cape Fear River via a route which would provide shorter, more direct access to the Port while also eliminating rail traffic through the heart of the City’s urban area.

Approximately ten months later, on August 18, 2015, the City Council supported the allocation of funds, in part, with additional support from WMPO and NCDOT, for the completion of a feasibility study to evaluate the relocation of the existing rail line from the heart of the City Wilmington to a new location. The effort became known as the Wilmington Rail Realignment Project (“Project”), and on June 17, 2017 the completed feasibility study titled the “Wilmington Rail Realignment and Right of Way Use Alternatives Feasibility Study” was adopted by City Council. The Project’s feasibility study found no fatal flaws. City Council supported maintaining the City’s interest as lead agency and recommended continued development of the project.

City Council, on September 4, 2018, authorized the submission of a grant application to the Federal Railroad Administration (“FRA”) for grant funding from the Consolidated Rail Infrastructure and Safety Improvements (“CRISI”) grant program to support further preliminary engineering and environmental and historic studies pursuant to the National Environmental Policy Act (“NEPA”) for the Project.

The City’s Project was announced as a recipient of up to \$2 million in FRA CRISI grant program funds on June 12, 2019. The grant was awarded on April 30, 2020 to provide Track 2 funding for preliminary engineering and NEPA work.

II. PROJECT DESCRIPTION

The Project seeks to replace and improve the existing freight rail route between Navassa (Davis) Yard and NCSPA’s Port of Wilmington by creating a new railroad bypass connecting CSX’s Davis Yard in Navassa, NC with the Port. The bypass will route trains away from some of City’s busiest streets and most densely populated areas. Once a new freight route is in operation, the City would seek to repurpose the existing route for public use. The Project work described herein will be comprised of preliminary engineering up to 30% design as well as environmental and historic reviews pursuant to NEPA.

The current and only available route (see Figure 1 below) for freight rail to serve the Port follows the CSX Wilmington Subdivision “Beltline” along a circuitous 8.5-mile corridor in a densely populated section of the City and passes through 32 at-grade roadway crossings. Within the Port, freight rail continues onto track owned by the North Carolina State Port

Authority and operated by the Wilmington Terminal Railroad (“WTRY”), a short line railroad owned by Rail Link, Inc., a subsidiary of Genesee and Wyoming, Inc. Currently, one to two CSX freight trains serve the Port per week at speeds below 10 mph. The Port’s shipping projections estimate planned growth up to eight freight trains per week (approximately once daily) by 2025 with 10,000-foot trains. The current route for freight rail access exposes local residents to hazards from potential freight derailments and blocks multiple at-grade crossings, which encumbers the local roadway transportation network. In addition to the impacts on the local roads and population, the slow speed and circuitous route limits the ability for the Port to increase productivity and access the efficiencies of shipping freight by rail.

The relocation of CSX freight traffic from the current CSX Wilmington Subdivision Beltline route, to the proposed new and shorter alignment west of the Cape Fear River (see Figure 2) is expected to increase the efficiency of freight rail service to the Port, improve quality of life, enhance community safety conditions along the existing route through the City and spur economic development in the region.

The Project is consistent with Wilmington City Council’s adopted Focus Areas of Create a Safe Place, Foster a Prosperous, Thriving Economy, Support Efficient Transportation Systems and Engage in Civic Partnerships. Furthermore, the project is incorporated as a strategic project in both the Comprehensive State Rail Plan published by NCDOT and the Cape Fear Transportation 2040 long range plan published by the WMPO.

The primary Project stakeholders include the City of Wilmington, NCDOT, NCSPA, WTRY, WMPO, CSXT, FRA, U.S. Army Corps of Engineers, U.S. Coast Guard and North Carolina State Historic Preservation Office.

The Project work is comprised of the following five (5) tasks, each with associated deliverables, as depicted in Table 1. Tasks 2 and 3 include activities required to complete the environmental review and conceptual engineering to support the NEPA process. Within Tasks 2 and 3, certain activities are planning in nature and will occur prior to the formal initiation of the NEPA process – “Pre-NEPA.” Pre-NEPA activities will commence upon award of funding in the FY18 CRISI grant, including the publication of a “Start of Study” notice. The “formal” NEPA process begins when FRA issues a determination of the “Class of Action” to define the project as either an Environmental Assessment (EA) or Environmental Impact Statement (EIS), subject to the applicable environmental regulations.

Note: On September 9, 2020, FRA defined an EA as the Class of Action for this Project.

Table 1

Task #	Description	Deliverables/Activities (by WBS #)
1	Detailed Project Work Plan (“PWP”), Budget and Schedule	1.1. Detailed PWP 1.2. Detailed Project Schedule / Approved Project Schedule revised as applicable

		1.3. Detailed Project Budget / Approved Project Budget revised as applicable
2	Environmental Review	2.0 *Pre-NEPA Methodology Report 2.1. *Screening Report 2.3. *Alternatives Analysis Report 2.4. Draft NEPA Document (Draft EA) 2.6. Final NEPA Document (Final EA) 2.8. NEPA Decision Document (Finding of No Significant Impact aka "FONSI")
3	Conceptual Engineering "CE"	3.1-3.6. *CE Roll Plots for Screening Report 3.7. *CE for Preliminary Alternatives Analysis Report 3.8. Summary Cost Estimates
4	Preliminary Engineering "PE"	4.1-4.3. PE Roll Plot Progress Prints as required 4.1-4.3. Associated CADD files in .dgn format 4.3. PE (30% Design) 4.4. Engineer's Opinion of Probable Cost 4.6. Financial Planning Documentation
5	Project Management	5.1. Final Performance Report

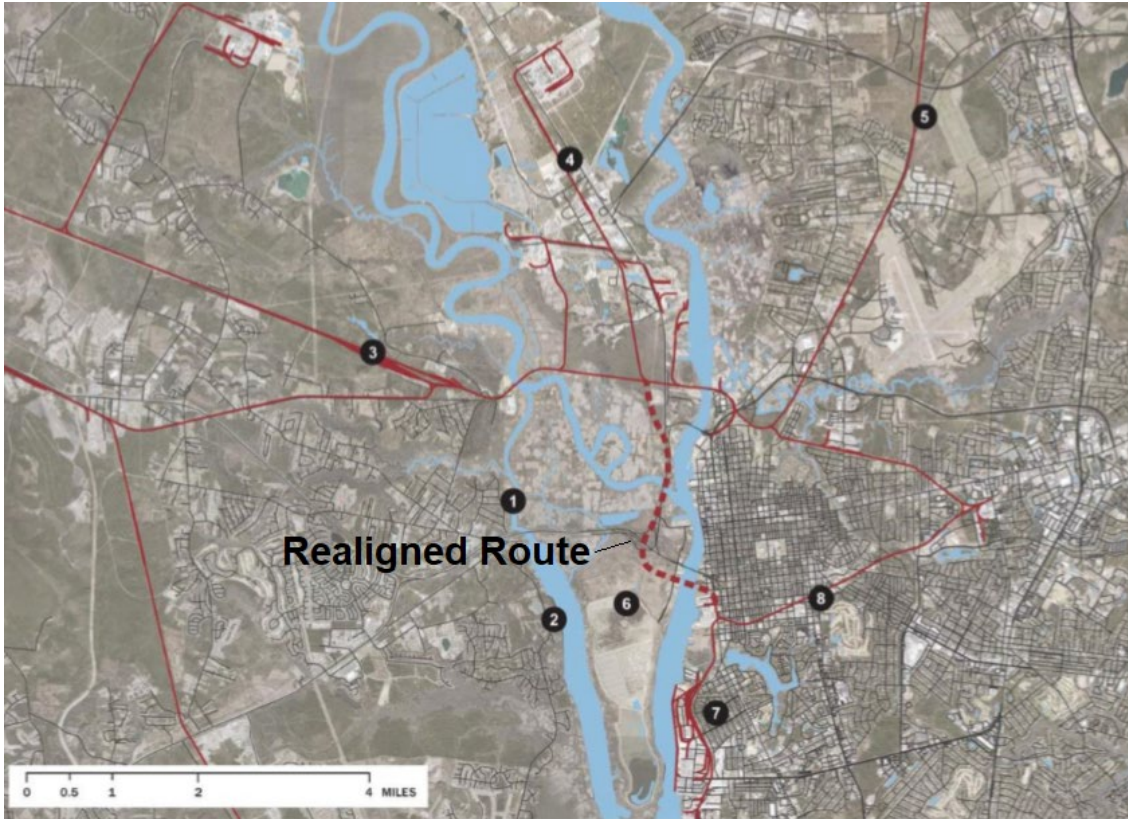
Notes:

1. See Appendix A for a full list of activities for each task.
2. Activities marked with (*) are expected to occur prior to the commencement of the formal NEPA process. See additional explanation under Tasks 2 and 3 in Section III of this PWP.

Figure 1 – Existing Route



Figure 2 – Realigned Route (for Illustrative Purposes Only)



III. PROJECT SCOPE

The Scope of the Project for the purposes of this Detailed Project Work Plan include preliminary engineering up to 30% design and an environmental review pursuant to NEPA to evaluate the feasibility of the relocation of CSX freight traffic from an existing 8.5-mile route that passes through the City to a new alignment that bypasses west of the City providing a direct route between the CSX Davis Yard and the WTRY at the Port of Wilmington.

The environmental review for the proposed Wilmington Rail Realignment Project will be conducted as an Environmental Assessment (EA), which is likely to be the class of action, or an Environmental Impact Statement (EIS) in compliance with the NEPA requirements. For the purposes of this Detailed PWP, the processes associated with an EA will be assumed. Should the class of action produce an EIS, this Detailed PWP and all other pertinent documentation associated with the grant award will be updated accordingly.

Note: On September 9, 2020, FRA defined an EA as the Class of Action for this Project.

This Detailed PWP defines the Project in five tasks as shown in Table 1, and as described in greater detail herein.

Task 1: Detailed PWP, Budget, and Schedule

Prepare a Detailed PWP to further describe the activities and steps necessary to complete the Project. The Detailed PWP will describe, in detail, the activities and steps necessary to complete the five tasks outlined in Table 1. The Detailed PWP will also include information about the project management approach (including team organization, team decision-making, roles and responsibilities and interaction with FRA), as well as address quality assurance and quality control procedures. In addition, the Detailed PWP will include the Project Schedule (see Appendix A) and a detailed Project Budget (see Appendix B). Similarly, any agreements defining interagency or stakeholder participation should also be included. Primary Project Stakeholders are defined in Section II of this Detailed PWP. The Detailed PWP, Budget, and Schedule will be reviewed and approved by the FRA.

Work on subsequent tasks will not commence until the Detailed PWP, Budget, and Schedule has been completed, submitted to FRA, and has received approval in writing from FRA. At the completion of Task 1, Scope elements defined herein may be modified upon mutual agreement of the parties.

Task 1 Deliverables:

- Detailed PWP
- Detailed Project Schedule
(Approved Project Schedule, Appendix A, revised as applicable)
- Detailed Project Budget
(Approved Project Budget, Appendix B, revised as applicable)

Task 2: Environmental Review

Complete an environmental review for the proposed Wilmington Rail Realignment Project through an Environmental Assessment (EA), which is likely to be the class of action, or an Environmental Impact Statement (EIS) in compliance with the NEPA requirements. Should FRA determine that the appropriate class of action is an EIS, the parties agree to renegotiate the scope, the allocation of the \$2,500,000 total project cost across the tasks identified in the budget, and schedule to fit within the requirements of an EIS.

Note: On September 9, 2020, FRA defined an EA as the Class of Action for this Project.

The environmental review will include a Section 106 evaluation for the Area of Potential Effect (APE) of the Project in accordance with the National Historic Preservation Act implementing regulations, 36 CFR Part 800 *et seq.*, and, if necessary, a Section 4(f) evaluation in accordance with the US DOT Act and US DOT guidance. Following the completion of the EA, a draft of a Finding of No Significant Impact (FONSI) will be prepared for the FRA (the lead federal agency) and any cooperating agencies. The City, and its contractors, will work with the FRA to conduct informal and formal scoping on the onset of the project. The information obtained during scoping will be used to identify potential concerns and to inform alternatives development.

The Study Area and scope of the environmental review will be limited to only the location and information required to define and equitably evaluate the alternatives considered in the EA and support FRA's identification of a "Selected Alternative" in a FONSI. The environmental review will include an iterative development and analysis of the impacts and benefits associated with the identified "Build Alternative(s)" considered for the future construction of a new route for the Project between CSX Davis Yard and the Port. The environmental review will also include an analysis of the impacts and benefits associated with continuing to operate current and future freight rail traffic on the existing CSX Wilmington Subdivision Beltline relative to all environmental resource areas (including, but not limited to railroad and roadway traffic, at-grade railroad crossing traffic delays, train horn noise, train noise and vibration, and air quality) for comparison against a "No Build Alternative" as required under NEPA.

The NEPA document will comply with the requirements of the related environmental laws and regulations, including Section 106 of the National Historic Preservation Act (54 USC 300101), the Section 4(f) of the US DOT Act (49 USC 303), the Council on Environmental Quality (CEQ) regulations (40 CFR Part 1500 *et seq.*) and FRA's NEPA regulations (23 CFR Parts 117-174) and associated guidance and requirements.

The City will prepare a "Screening Report" for up to four (4) Build Alternatives and the No Build Alternative. This report will define alternatives being considered and will identify environmental constraints and opportunities for each of the alternatives considered. This report will serve as an initial screening of preliminary alternatives to identify alternatives to be carried forward for more detailed analysis in the NEPA document. A separate Preliminary Alternatives Analysis Report will be prepared to further evaluate and screen alternatives to identify a recommended Preferred Alternative. As part of the EA, the recommended Preferred Alternative will be fully evaluated in comparison to the No Build Alternative.

An Administrative Draft EA will be provided to the FRA for the Administrative review and approval prior to public release and review. Following public review/comment, an Administrative draft of the Final EA will be provided to the FRA for Administrative review and approval prior to public release and review. Similarly, a draft decision document (FONSI) will be provided to the FRA prior to FRA issuing the FONSI. The FRA may require multiple preview drafts of the Screening Report, Alternatives Analysis Report, EA and FONSI for FRA for quality and compliance reviews prior to approval of a final document.

The deliverables for Task 2 are listed below; however, FRA may require additional administrative and technical documents as necessary to support the environmental review as defined in the Detailed PWP prepared in Task 1.

Pre-NEPA:

The Pre-NEPA analysis aligns with US DOT's One Federal Decision MOU that seeks to make the environmental review process for infrastructure projects more efficient and expeditious.

The Pre-NEPA analysis will result in the identification of a preliminary range of reasonable alternatives that will undergo detailed environmental evaluation during the NEPA process. The Project Team will develop a Pre-NEPA Methodology Report to outline the specific analyses required to establish the preliminary range of reasonable alternatives, which includes 1) developing a preliminary Purpose and Need statement 2) assessing future traffic levels consistent with the Project's planning horizon 3) identifying and analyzing a range of route options to serve and connect the Davis Yard and Port of Wilmington 4) analyzing infrastructure/design options that meet the capacity and operational needs of the Project. Items 2) and 4) will be addressed in the Pre-NEPA Methodology Report as Capacity Planning.

The Pre-NEPA activities will commence upon award of the FY18 CRISI funding and the publication of the start of study notice.

Task 2 Deliverables:

- Pre-NEPA Methodology Report (*Pre-NEPA Activity)
- Screening Report (*Pre-NEPA Activity)
- Preliminary Alternatives Analysis Report (*Pre-NEPA Activity)
- Draft EA
- Final EA
- NEPA Decision Document (FONSI)

Note: The City has provided draft submittals of the Pre-NEPA Methodology Report (9/10/20) and Screening Report (9/25/20), which remained under FRA review as of the preparation and approval of this PWP (Ver. 1).

Task 3: Conceptual Engineering

Conceptual engineering will be prepared to define up to four (4) alternatives for evaluation in the environmental review performed in the EA (Task 2). The purpose of conceptual engineering is to develop preliminary alternatives to evaluate in the Screening Report prepared in Task 2, which will identify options to advance for up to four (4) alternatives and the No Build. Conceptual engineering may also be utilized in the preparation of a "Preliminary Alternatives Analysis Report". Conceptual engineering will include the following: location of the route within the study area and the APE, estimated limits of disturbance (LOD) of physical impacts, type size and location of the infrastructure proposed for the preliminary alternative, and location of any existing physical and environmental

features along the route (i.e. roadways and bridges, natural or man-made drainage channels or conduits, utilities, etc.). Conceptual engineering plans may continue to be developed beyond the screening phase of the NEPA document, as required to perform an equitable evaluation of all alternatives considered through alternatives analysis in the EA and to support FRA's issuance of a FONSI in Task 2.

The conceptual engineering for the preliminary alternatives will be presented as an overlay on aerial maps, based on existing records and surveys, but may also include the preparation of new aerial base mapping resources. The conceptual engineering may include review of existing data (to include existing physical surveys, geotechnical investigation, or hydraulic study data, as required) to investigate the practicability of the alternatives considered in the EA, particularly for the subsurface supports for the proposed new railroad bridge over the Cape Fear River spanning the larger navigational channel downstream near the Port. The conceptual engineering will not advance beyond 15% design nor include detailed structural design unless required to complete the NEPA process. The conceptual engineering will only be prepared for the alternatives required for the new route of the Wilmington Rail Realignment Project between CSX Davis Yard and the Port unless the Grantee identifies any new or modified infrastructure elements along the existing CSX Wilmington Subdivision Beltline or WTRY that are required to support the development or diversion of rail traffic to the new route.

FRA may require up to two preview drafts of the Conceptual Engineering for FRA quality and compliance review and approval prior to submittal of a final document.

Pre-NEPA Conceptual Engineering:

The preparation of conceptual engineering in Task 3 supports both Pre-NEPA and formal NEPA activities in Task 2. As described above, Pre-NEPA conceptual engineering includes the development the preliminary alternatives in the Screening Report or the preparation of the Preliminary Alternatives Analysis Report. Conceptual engineering activities that support the formal NEPA process will occur after finalization of the Screening Report and Preliminary Alternatives Analysis Report (or as otherwise established following applicable environmental regulations), including: conceptual engineering to refine the alternatives considered in the Environmental Assessment.

Task 3 Deliverables:

- Conceptual Engineering Roll Plots for Screening Report (*Pre-NEPA Activity)
- Conceptual Engineering for Alternatives Analysis (*Pre-NEPA Activity, as required)
- Summary Cost Estimates

Task 4: Preliminary Engineering

Preliminary engineering (PE) will be prepared for the Preferred Alternative of the Project as prepared in Task 2. The PE will include all elements presented in conceptual engineering for the Preferred Alternative and advance to a 30% level of design. The PE design process will also include the preparation of up to two (2) “progress print(s)” as interim submittals, as needed, with an additional print provided as needed prior to submittal of a final PE (30% design) deliverable document for review and approval by FRA.

The PE design will include scaled drawings overlaid on the most up to date available base mapping through NC One Map along with GIS property information. Design will be represented on appropriate scale mapping and show existing right-of-way (ROW) limits along with railroad and adjacent property ownership, topography, and significant environmental features based on currently available GIS data. Design criteria, typical sections and cross sections reflecting proposed roadway and railroad work along the alignment, such as retaining walls, ROW acquisitions, or easements will be developed. The track design will include plan and profile detail for all new or modified trackwork, turnouts or special features (i.e. guard rails) with typical sections, as applicable. The track design detail will include spiral and curves with calculations for freight speed along the route. Signal design is not required to support the PE prepared under this Project, and will be deferred to future design beyond this scope.

Specifically, the 30% PE design submittal will include the following components:

- Design horizontal and vertical alignments for proposed tracks
- Structure offset evaluation and recommendation from existing
- Typical sections, cross-section exhibits as needed
- Alignment and Track Geometry data tables
- Preliminary structure recommendations to include:
 - A typical section for all proposed rail bridges.
 - Include out to out bridge width, proposed number of tracks, center to center of track spacing, rail ties, minimum ballast thickness, minimum offset from proposed centerline track to concrete parapet, metal railing height and other elements that contribute to load calculation.
 - A typical section for the roadway over or under the structure, where applicable. Including number of travel lanes, dimensions for lane widths, shoulder width, cross slopes, minimum required vertical and horizontal clearances. A typical section under the structure will not be prepared for stream crossings.

For structures that fall within the purview of the USCG (i.e., bridge spanning the navigational channel of the Cape Fear River), recommendations should include design considerations which fall within the purview of 30% PE as described herein and are applicable in the application of a bridge permit pursuant to the USCG Bridge Permit Application Guide (COMDTPUB P 16591.3D)

The PE design will not advance beyond 30% design or include detailed structural design, unless such was included in the conceptual engineering prepared for the selected alternative in Task 3. The PE design will only be prepared for the Preferred Alternative for the new route of the Project between CSX Davis Yard and the Port unless the City identifies any new or modified infrastructure elements along the existing CSX Wilmington Subdivision Beltline or WTRY that are required to support the development or diversion of rail traffic to the new route.

All design will be carried out in accordance with established NCDOT CADD standards and CSX guidelines and procedures as applicable. Design will be in accordance with the CSX Public Project Information Manual, AREMA and NCDOT design criteria where applicable. The City will prepare the design in coordination with the Project Stakeholders (see Section II) to ensure the design reflects the intended utility and applicable guidelines or procedures of the respective stakeholder. At least one progress print will be provided for stakeholder review and comment using the NCDOT Comment Form. Comments that can be addressed will be included in the final PE (30% design) deliverable. Other comments that require additional review beyond 30% design may be included in a design comment log and deferred for further review in a subsequent design phase not included under this Project.

Engineer's Opinion of Probable Cost:

The PE will include an Engineer's Opinion of Probable Cost for the construction of the Project, presented in a Standard Cost Category (SCC) format, such as published for:

- NCDOT Standard Specifications for Highway Construction, 2018 Edition;
- FHWA Federal Lands Highways, <https://flh.fhwa.dot.gov/resources/estimate/>; or
- FRA's Capital Cost Estimating Guidance, August 30, 2016 (<https://www.fra.dot.gov/eLib/Details/L17452>); and Monitoring Procedure 33, SCC Worksheets reference (<https://www.fra.dot.gov/eLib/details/L16055>).

Financial Planning Documentation

Financial planning documentation will be prepared to support future financial planning of the Project. Based on the Engineer's Opinion Probable Cost, the minimum requirements for the financial planning documentation are listed below.

- A projected schedule of construction expenditures for the Project by calendar quarter, in both base year and "year of expenditure" (i.e., inflation-adjusted "nominal") dollars.
- A description of the inflation assumptions used to escalate the base year dollars to year of expenditure values.
- A description of cost risks associated with Project, including cost risks represented in the cost estimate and schedule risks represented in the schedule.
- A description of the percentage of contingency included in the cost estimate associated with the identified risks, as well as other financing risks associated with the Project,

including cost risks represented in the cost estimate and schedule risks represented in the schedule.

- A projection of annual operating and maintenance (O&M) costs needed to keep the Project in a state of good repair over the first twenty (20) years of operation.
- A projection of annual O&M savings associated with the removal of existing rail assets over the same 20-year period as the O&M cost projections for the new project to facilitate a net change in O&M.

FRA may require up to two draft cycles of the PE design for FRA review for quality and compliance prior to submittal of a final PE (30% design) deliverable document for review and approval by FRA.

Task 4 Deliverables:

- PE Roll Plot Progress Print (as required)
- Associated CADD files in .dgn format
- PE (30% Design)
- Engineer’s Opinion of Probable Cost
- Financial Planning Documentation

Task 5: Project Management

Funds may be expended for Project Management (PM) activities related to the administration and delivery of the Project. Eligible activities under this Task include: document preparation (scope, schedule, budget updates), contract procurement, support for FRA inquiries on grant compliance oversight or monitoring, and applicable FRA reporting requirements as required by the City’s Grant Agreement with the FRA. Specifically, per Section 16 of the Grant Agreement, Final Performance Report must be submitted within 90 days of completion of the Project.

Task 5 Deliverables:

- Final Performance Report

IV. PROGRAM MANAGEMENT

Organizational Structure

The City of Wilmington will bear the overall managerial responsibilities for the Project. The City’s Director of Rail Realignment, Aubrey Parsley, PE, will lead managerial efforts on behalf of the City. The City has procured the necessary professional consulting services through AECOM Technical Services of North Carolina, Inc. (“AECOM” or “Consultant”) to produce, or assist in producing, the deliverables described in Section III. The City will manage the efforts undertaken by AECOM.

When major decisions or policy issues arise, communication among senior managers/personnel from the relevant parties will be organized and conducted by the City, with support from AECOM. The FRA has final fiduciary authority over the project and will oversee the City's efforts related to the Project.

The managerial structure of the project is depicted in the organizational chart shown below in Figure 3.

Figure 3: Organizational Structure of Project Management

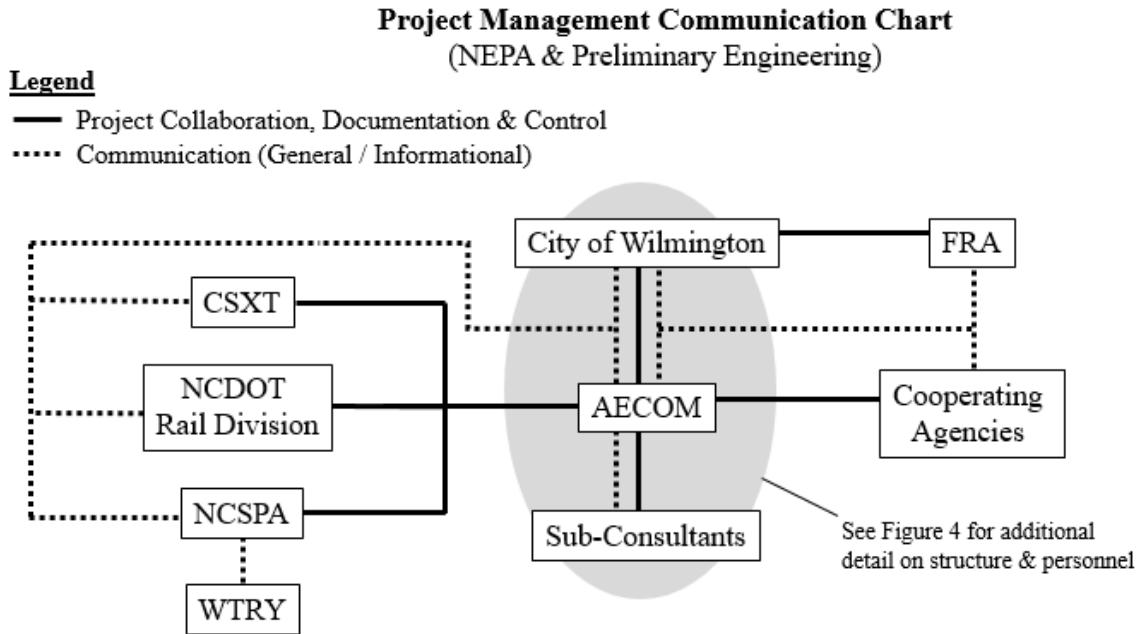
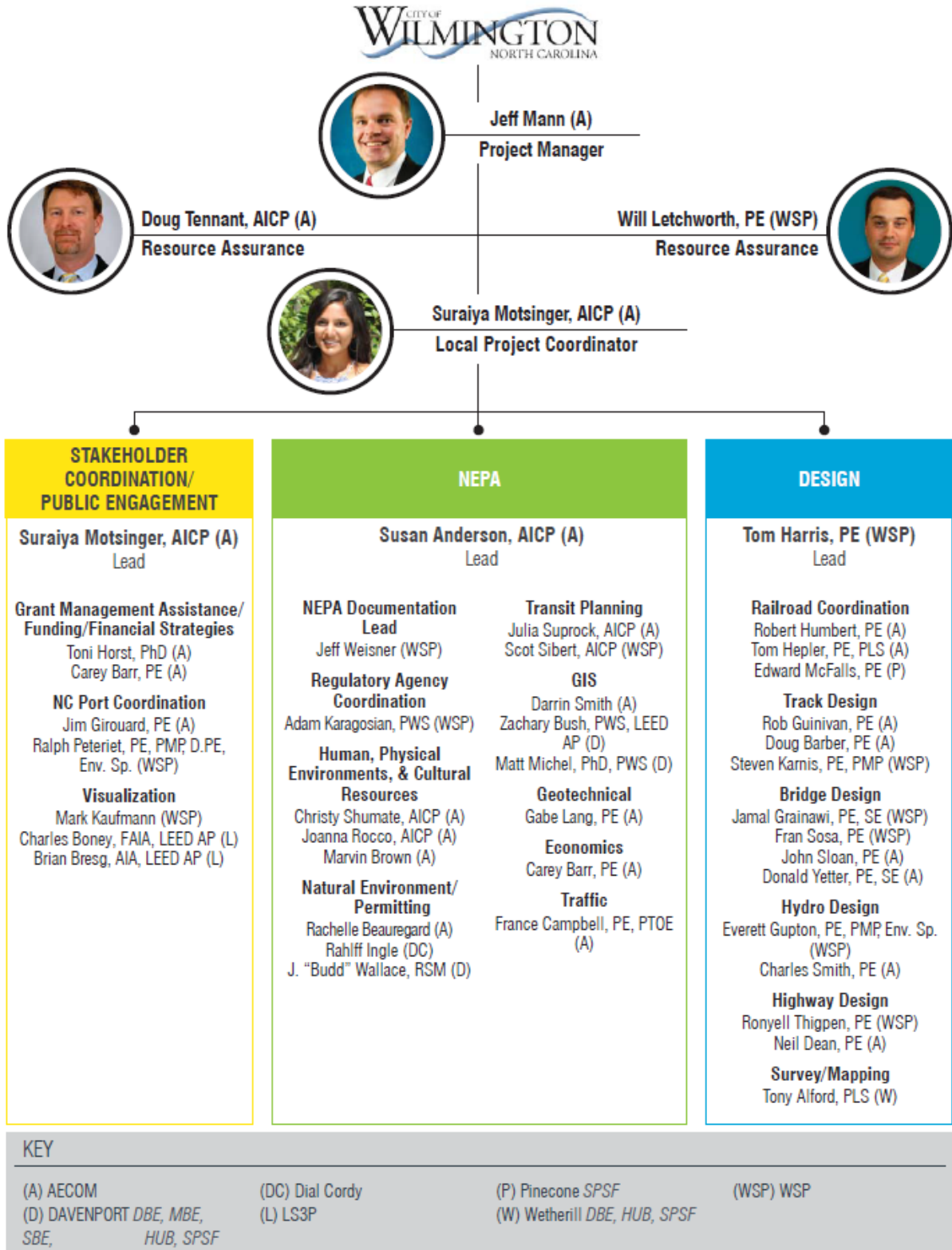


Figure 4: Detailed Organizational Structure between City & Consultants



A. City of Wilmington

The City will have overall managerial responsibility for the Project, to include managing the scope, schedule and budget of the project. The Director of Rail Realignment (“Director”), Aubrey Parsley, PE, will lead managerial efforts for the City. The Director position falls within the City Manager’s Office, and reports to the Deputy City Manager, who reports to the City Manager, who reports to City Council. The Director oversaw the City’s procurement process, which was to be conducted by the Purchasing Division of the City’s Finance Department, for the professional consulting services required to perform the tasks and complete the deliverables detailed in Section III. AECOM was enlisted as lead consultant to perform the aforementioned professional consulting services. The Director will manage and administer the professional services contract between the City and AECOM. The City will collaborate with and be assisted by AECOM, in the day to day management of the operations, scope, budget and schedule of the project.

At the direction of the Director of Rail Realignment, other departments within the City will be involved in the Project. The Finance Department will work with the Director to ensure compliance with federal and state standards regarding the grant award and reimbursement, and will also assist in the development of quarterly financial updates. The City Attorney’s Office, the Communication division, City Clerk’s Office, Planning, Development and Transportation Department, Wilmington Metropolitan Planning Organization and others may all be involved with the Project, but these efforts will be overseen and managed by the Director.

Contact information for the key City personnel is as follows:

Aubrey Parsley, PE

Director of Rail Realignment
City of Wilmington
305 Chestnut Street, 4th Floor
Post Office Box 1810
Wilmington, NC 28402-1810
(o) 910-341-0188 (c) 910-200-8382

Katherine P. Dimopoulos MBA, CGMS

Senior Accountant – Grants
City of Wilmington Finance Department
305 Chestnut Street, 4th Floor
Post Office Box 1810
Wilmington, NC 28402-1810
(o) 910-341-4654 (fax) 910-254-0906

B. AECOM (Lead Consultant)

AECOM will have contracted managerial responsibility for the Project, to include managing the scope, schedule and budget of the project through a WBS as maintained in Appendix A of this document. The Project Manager, Jeff Mann, will lead managerial efforts for AECOM with direct assistance from the Local Project Coordinator, Suraiya Motsinger, AICP. The Project Manager will report directly to the Project Director. The Project Manager will manage and administer the professional services contract between the City and AECOM. The Project Manager and Local Project Coordinator will collaborate with and assist the Project Director, in the day-to-day management of the operations, scope, budget and schedule of the project.

At the direction of the Project Manager, key AECOM teams will be deployed towards the completion of the WBS elements they are specifically assigned. These project teams include the Project Management Team (led by Jeff Mann), the Stakeholder Coordination/Public Engagement Team (led by Suraiya Motsinger, AICP), the NEPA Team (led by Susan Anderson, AICP), and the Design Team (led by Tom Harris, PE). The Project Management Team will manage the project contract and project plan on behalf of AECOM. The Project Management team will provide ultimate Quality Assurance and will implement project deliverable quality control reviews through a specified Technical Quality Review process. Activities of the Project Management Team include resource assurance, documentation control, and regular coordination with the City. The Stakeholder Coordination/Public Engagement Team will involve the development and implementation of a Public Involvement Plan which will outline the manner in which the public and stakeholders are engaged in the development of the project. The NEPA Team will be responsible for the development of all deliverables associated with Task 2 as outlined in the Project Scope. The Design Team will be responsible for the development of all deliverables associated with Task 3 and Task 4 as outlined in the Project Scope.

Contact information for the key AECOM personnel is as follows:

Jeff Mann

AECOM Project Manager
701 Corporate Center Drive, Suite 475
Raleigh, NC 27560
(o) 919-239-7217

Doug Tennant, AICP

AECOM Resource Assurance
1000 Corporate Centre Drive, Suite 250
Franklin, TN 37067
(o) 615-771-2480

Will Letchworth, PE
WSP Resource Assurance (Subconsultant)
434 Fayetteville Street, Suite 1500
Raleigh, NC 27601
(o) 984-269-4652

Suraiya Motsinger, AICP
AECOM Local Project Coordinator
201 N Front Street, Suite 509
Wilmington, NC 28401
(o) 910-667-2389

Susan Anderson
AECOM NEPA Lead
4840 Cox Road
Glen Allen, VA 23060
(o) 804-515-8559

Tom Harris
WSP Design Lead (Subconsultant)
434 Fayetteville Street, Suite 1500
Raleigh, NC 27601
(o) 919-836-4062

C. Other Non-Regulatory Stakeholders

The project will involve coordination with a large number of non-regulatory stakeholders to include New Hanover County, Brunswick County, other neighboring municipalities, and businesses located along the existing rail corridor. At the direction of the City and as outlined in a Public Involvement Plan (PIP), non-regulatory stakeholders will participate in the project's development through a two-pronged engagement strategy. On a continuous basis, project information will be disseminated and input will be solicited through the City's Rail Realignment website (<https://www.wilmingtonnc.gov/departments/city-manager/rail-realignment>), email, and other stakeholder outreach techniques as documented through the PIP. These continuous engagement strategies will also facilitate key partnerships which will allow for early coordination with CSX, NCDOT, and NCSPA towards obtaining operational and engineering design criteria guidance in a collaborative environment. Additionally, at project milestones as documented in the Detailed Project Schedule, formal comments will specifically be solicited, received, and addressed regarding specified milestone deliverables. The PIP will describe in more detail the two-pronged (both the continuous and the formal) public engagement approach.

Note: The City has provided a draft submittal of the Public Involvement Plan (10/1/20), which remained under FRA review as of the preparation and approval of this PWP (Ver. 1).

V. PROJECT CONTROL PROCEDURES

A. General

Controlling project management oversight will be provided by the City's Project Director. The City's Project Director will ensure control processes are carried out as required for the successful delivery of the tasks described in Section III. AECOM will also put in place procedures and controls around the Project's various tasks to ensure the accurate and timely completion of deliverables as well as the integration of team efforts and stakeholder feedback throughout.

B. Purchasing

Material purchases are likely to be limited for the Project. Should purchasing needs arise during the course of the Project, the City's Purchasing Division of the Finance Department will conduct procurement, which will be overseen by the Director. The Purchasing Division's guidelines for doing business with the City can be found on the City's website, more specifically <https://www.wilmingtonnc.gov/home/showdocument?id=10319>.

C. Documentation & Design Change Control (in lieu of Change Orders and Claims)

Many changes that occur during the course of the environmental documentation and engineering design processes can be accomplished routinely via the scheduled communication and documentation processes described herein and need not be subject to a formalized change control process.

Only changes that materially affect elements of the scope, budget allocation, or schedule of the Project work, as detailed herein, will be subject to the change control procedures described in Grant Award Agreement and mirrored in the Professional Services Agreement.

D. Cost Estimating

A baseline, itemized project cost is attached hereto in Appendix B. Cost estimates will be updated as milestone completion points are reached, or if material circumstances arise that require cost elements of the Project be reconsidered.

E. Schedule Control

A baseline, detailed project schedule is attached hereto in Appendix A. The City will manage adherence to the schedule and will communicate any material schedule deviations to all relevant stakeholders as needed. At a minimum, the City and AECOM will review tasks and sub-tasks associated with the Project's schedule on a weekly basis. Furthermore, the City will provide the FRA with updates relevant to the schedule on a monthly basis (at a minimum).

F. Documentation Control

1. General Requirements

Initial/draft documents will be developed by AECOM Technical Teams as identified in the WBS associated with the Detailed Project Schedule. All final documents produced/revised by AECOM will be subject to an adopted Technical Quality Review process and be approved by the Project Manager or Local Project Coordinator before submittal for the City's review and comment. At the Project Director's direction, AECOM will forward deliverables for further review by other parties. A Technical Quality Approach document will be maintained to outline the specific quality control/assurance processes which will govern documentation control to include specific techniques to implement strict version control while allowing for seamless communication with multiple parties.

In order to maintain strict version control, all comments on deliverables will be addressed by the project team (accepted, rejected, or carried forward with response comments) on a particular document version before another document version is produced for further review and comment. Document control numbers will also be used on deliverables and draft deliverables to maintain version control. Official document comments will be addressed at the conclusion of the review period, after all comments are collected and synthesized. Document comments, including compiled AECOM responses to address comments from other parties, will be filed in an appropriate 400 Unified File Index (UFI) folder. Each document version released for the City's review will be filed in an appropriate 400 UFI folder. All final deliverables for each task will be filed in an appropriate 500 UFI folder.

2. Correspondence

Project coordination opportunities will be facilitated through a two-track communication approach to enable the project team to implement thoughtful project revisions while allowing for regular feedback from the City, FRA, and other regulatory and non-regulatory stakeholders. AECOM will provide for comment periods for milestone deliverables as is indicated in the Detailed Project Schedule in Appendix A. Outside the specified deliverable comment periods, emails and letters sent to the project team indicating comments relevant to the development of project deliverables will be reviewed by the Project Management Team and the City on at least a biweekly basis. At the direction of the City, AECOM will identify relevant action items from any correspondence and direct action of the appropriate AECOM Technical Team. Correspondence documentation will be filed in an appropriate 300 UFI folder.

3. Meetings

AECOM will document the participants, topics of discussion and any action items from all project meetings with the City, FRA, and/or any project stakeholders. Documentation of meetings will be filed in a 300 Unified File Index (UFI) folder.

4. Contract Documents, Plans and Specifications

All project contract documents will be filed in a 100 Unified File Index (UFI) folder. Any project plan roll plots and technical specifications will be filed in an appropriate 400 UFI folder. Final project deliverables will be filed in an appropriate 500 UFI folder.

5. File Structure

The City and AECOM will maintain project documents in a Unified File Index (UFI) file structure that is compliant with International Organization for Standardization procedures (ISO-9001). This file structure will utilize the following ISO-compliant subfolder structure:

- 100 – Contract Documentation
- 200 – Project Control
 - 210 – Project Plan
 - 220 – Risk Register
 - 230 – WBS/Schedules
 - 240 - Budget
 - 250 - Invoices
- 300 – Communication
- 400 – Technical
 - 410 – Technical Approach Review
 - 420 – Technical Quality Review
- 500 – Final Deliverables
- 800 – Safety
- 900 – CAD/GIS

By utilizing the same file structure, the City and AECOM will allow for seamless coordination and document control procedures throughout the development of the project.

G. PWP – Plan Control and Revisions

The PWP will be reviewed and updated upon the completion of each Task or as necessary to reflect the completion of a scope item, revision or submittal of an updated project budget or schedule, or revision or execution of a contract for professional or construction services.

VI. PROJECT DESIGN PROCEDURES

A. Design Criteria

The design of the project will be in accordance with the requirements of the City, NCDOT and CSX. Design criteria, requirements and recommendations used for the design of the project will include, but not be limited to, the following:

- AASHTO, A Policy on Geometric Design of Highways and Streets
- AREMA Manual of Recommended Practices for Railway Engineering
- AREMA Portfolio of Track Work Plans
- FRA Standard Rules, Regulations and Specifications
- CSX Public Project Information Manual, as well as CSX concurrence from CSX's Design & Construction Department and Division/Region Superintendent as needed
- NCDOT CADD Standards and NCDOT Rail & Highway Division guidelines and procedures as applicable (e.g. design criteria and policies for grade separated crossings)

B. Design Submittal Review Procedures

Designs will be evaluated for function, safety, constructability, economics and meeting established design criteria. Personal preference comments should not be made. Plans must be in accordance with practices, policies, form and presentation accepted by the City, regulatory stakeholders as well as operating stakeholders (CSX & NCSPA).

The project design consultant will submit plans, specifications and supporting documents to the City's Project Director. AECOM will prepare transmittal letters and distribute the plans and documents to Project regulatory stakeholders, operating stakeholders as well as other reviewers as applicable. Design reviews will be in accordance with the steps outlined below, and generally allotted fifteen (15) business days.

The reviewers will provide comments to AECOM either in electronic format or on the forms provided. AECOM will collate all comments and provide them to the design consultant for resolution and response. AECOM will provide responses to all comments within ten (10) working days.

The overview of this review and comment process is as follows:

- Step 1. AECOM submits plan set in PDF format to the City's Project Director for review by noon on the scheduled due date.
- Step 2. AECOM or its designee will prepare the plan set and email / FTS plans to the discipline reviewers.

- Step 3. Each individual discipline reviewer will have 14 calendar days to provide comments in the PDF file and return comments to AECOM.
- Step 4. AECOM will compile all comments and forward a single PDF containing plans and all comments to the City.
- Step 5. After consulting with the City, AECOM will revise the plans as necessary and provide written responses to all comments within the PDF. Once completed, the AECOM will submit a revised plan set in PDF format, along with original plan set PDF with comments and all responses, to the City's Project Director. Unresolved comments will be noted and resolved by the Project Director in collaborating with AECOM or its designee.
- Step 6. AECOM will submit the revised PDF and original PDF with comments and responses to all discipline reviewers. Reviewers are to verify that their respective comments have been satisfactory addressed. Reviewers will email AECOM to confirm satisfactory completion of their comments. AECOM will compile said confirmations and submit to the City as a single PDF file.

VII. PROCUREMENT PLAN

The City has procured the professional consulting services of AECOM. The City followed its standard protocols and procedures in procuring the services necessary to carry out the tasks described in Section III. The solicitation requesting letters of interest and qualification describes the procurement process used and also contains submittal requirements (see <https://www.wilmingtonnc.gov/Home/Components/RFP/RFP/301/382?npage=2>).

On April 21, 2020 Wilmington City Council granted authority to the City Manager to enter into a \$2,500,000 professional services agreement with AECOM (see Appendix D). The Scope (Statement of Work), Budget, Schedule and Performance Measures of the professional services agreement between AECOM and the City mirror those which appear in the Grant Award.

The City will act as its own representative throughout the Project. AECOM will be conducting and coordinating all the efforts related to completion of the tasks described in Section III. The City will manage and oversee these efforts. AECOM will sublet engineering services to WSP, and will further sublet other tasks to firms as described in Appendix D.

VIII. RISK MANAGEMENT

In coordination with the Director, AECOM will implement strict Risk Management procedures to include the development and maintenance of a project Risk Register (see Appendix C). The Project Management Team is responsible for the development and maintenance of the Risk Register. The magnitude, stage and schedule of this project presents associated risks. Risks can be attributed primarily to the unknown. The Risk Register will be maintained and updated throughout the duration of project development as the primary tool to identify potential risks, likelihood of occurrence, magnitude of impact, and management approach.

A. Risk Identification

At a minimum, AECOM will identify and document risks associated with the following topics:

- 1.0 Project Management
- 2.0 Stakeholder Management
- 3.0 Health & Safety
- 4.0 Project Team
- 5.0 Governmental Policy
- 6.0 Scope Definition
- 7.0 Schedule
- 8.0 Staff Resources
- 9.0 Technical
- 10.0 Environmental
- 11.0 Cultural
- 12.0 Safety in Design
- 13.0 Approvals
- 14.0 Financial
- 15.0 Messaging
- 16.0 Communications
- 17.0 Subcontractors
- 18.0 Related Projects
- 19.0 Quality
- 20.0 Security/Medical

B. Project Risks

The Project Management Team will lead the Risk Identification process. As each discipline proceeds with their tasks they will further identify risks which are associated with the unknown and will submit additional risks for identification in the Risk Register. Over the course of the project's development, the list of identified risks is expected to change and evolve.

C. Risk Quantification and Evaluation

Identified risks will be assessed and categorized as Low, Medium, or High. After risks are categorized with a risk level, the Project Management Team will identify appropriate risk management strategies and assign actions (as appropriate) in the risk register. Management strategies may include avoidance, transference, mitigation, and, in some instances, acceptance.

D. Risk Assessment Process

As the risks are identified they will be quantified as to their magnitude and qualified as to their degree of impact to the tasks and project as a whole. This will occur through a three-part assessment to include an assessment of risk likelihood (Rare, Unlikely, Possible, Likely, Probable) and risk consequence (Insignificant, Minor, Moderate, Major, Catastrophic) to produce a risk assessment (Low Risk, Medium Risk, High Risk).

The Risk Register will be a living document with initial assessment by the discipline identifying the risk and vetted via project management according to the relativity of the risk to the overall project. As the project advances new information may be obtained which would impact the status of the relevant risk. The assessment may be modified accordingly. Modifications would be made and vetted through Project Management and documented according to justification for the change.

E. Project Risk Register

The Risk Register will serve as the primary document to guide the project's Risk Management procedures and will be maintained and updated throughout the duration of the project. The Risk Register will document:

- Risk Identification Number
- Date Created
- Risk Title
- Risk Description
- Likelihood
- Consequence
- Risk Level
- Risk Management Controls
- Actionee/Owner
- Action Update
- Date of Update
- Date Closed

The Risk Register will be filed in an appropriate 200 Unified File Index (UFI) folder.

F. Contingency

1. Cost

If realized, the project budget may incur significant impacts from many of the identified project risks. As such, AECOM will closely monitor the realization of any project risk and will review the project budget immediately upon incurring a project risk. If necessary, AECOM will discuss proposed revisions to the project budget with the City for consideration. In order to mitigate potential risks, AECOM included \$150,000 contingency in the project budget. If, in discussion with the City, AECOM requires release of these contingency funds, AECOM will submit a request in writing to the City for their release. The City will then submit a written request to the FRA for approval in order to release the contingency needed to support the completion of any project task or combination of project tasks. AECOM will draft sufficient time in the Detailed Project Budget to manage potential risk impacts.

2. Schedule

If realized, the project schedule may incur significant impacts from many of the identified project risks. As such, AECOM will closely monitor the realization of any project risk and will review the project schedule immediately upon incurring a project risk. If necessary, AECOM will discuss proposed revisions to the Project Schedule with the City for consideration. AECOM will draft sufficient time in the Detailed Project Schedule to manage potential risk impacts.

G. Risk Register

Please see Appendix C for an updated copy of the project's Risk Register.

IX. QUALITY CONTROL / QUALITY ASSURANCE PROCEDURES

A. General

AECOM implements strict Technical Quality Review Procedures which begin with the development of a specified Technical Quality Approach. AECOM's Project Management Plan and WBS will be produced by the Project Management Team and then reviewed by a designated Lead Verifier. The Lead Verifier will review the project's proposed technical approach, schedule, and budget to propose milestones for additional deliverable Technical Quality Review which will be further incorporated in the project schedule. The Technical Quality Review process will require that all identified deliverables be checked by the Document Originator, the Technical Team Lead, and a separate Lead Verifier (who cannot have been involved in the original creation of the document) before release for delivery to the City. The Technical Quality Review process requires documentation of the review including signatures from the Document Originators, the Technical Team Lead, and the Lead Verifier. Lead Verifiers will be assigned to review documents based on their technical expertise for the assigned review.

B. Design

AECOM's Technical Quality Review process will be required for all deliverables, to include those associated with Tasks 3 & 4 related to design. At a minimum, the following Technical Quality Reviews will be required for design tasks:

- Organization, clarity and completeness
- Compliance with scope
- Validation of assumptions
- Review of subconsultant information
- Conformance with standards and regulatory requirements
- Check of calculations
- Check of drawings and graphics
- Edit for elements such as grammar, punctuation, formatting and graphics

Document comments, including compiled AECOM responses to address comments from other parties, will be filed in an appropriate 400 Unified File Index (UFI) folder. Each document version released for the City's review will be filed in an appropriate 400 UFI folder. All final deliverables for each task will be filed in an appropriate 500 UFI folder.

X. SAFETY APPROACH

A. General

The staff at the City of Wilmington works every day to provide quality services that enhance the safety, livability and prosperity of the community. Safety is integral to all City operations, and this tradition of safety will appropriately applied to the Project. The City will strive to ensure that safety remains at the forefront of all planning and operational considerations related to the Project.

B. Railroad Safety

Should the Project require on-site duties on active freight railroad, the operating railroad entity will always be contacted prior to any activities taking place. The City and AECOM will ensure that the appropriate operating personnel at the relevant railroad(s) are contacted, and that said railroad personnel provide those performing duties for the Project with a daily safety briefing to be made aware of any potential safety hazards. Furthermore, the City and AECOM will ensure that personnel performing duties on behalf of the Project be appropriately trained – to include Roadway Worker Training and E-Rail Safe Requirements as may be required.

C. City Safety

The City will conduct Project business in accordance with the following Administrative Policies approved by both the City Manager and City Council:

Administrative Policy 301 – Safety Program

Administrative Policy 302 – Accident Review Standards

Administrative Policy 304 – Driving Standards

Administrative Policy 305 – Safety Shoe Policy

Administrative Policy 306 – Vehicular and Mobile Equipment Safety

Administrative Policy 308 – Personal Protective Equipment

Administrative Policy 309 – Workplace Violence and Bullying Prevention

Administrative Policy 310 – Fire Protection

Administrative Policy 311 – Respiratory Protection

Administrative Policy 314 – Substance Abuse Policy

D. Contractor Safety

AECOM and all subcontractors will be required to follow all City Safety procedures and safety procedures as required by operating railroads. In addition, AECOM will adhere to recent safety measures that have been put in place regarding the COVID-19 virus. All safety procedures will be documented in a project specific Safety Plan. All on-site field visits will commence with a tailgate meeting regarding task specific requirements. A Safety Officer will be assigned to ensure constant compliance with the Safety Plan.

XI. SECURITY APPROACH

A. General

This project includes only NEPA environmental and design related tasks and, as such, project security concerns typically involved with an active construction site will not apply. For a project of this nature, project security involves two primary facets. Accessing the project site for data collection is one area of security emphasis. Security of project documents represents the other area of emphasis.

B. Document Security

Project documents will be maintained on the AECOM server. Access to documents to individuals outside of the specified project team will be at the discretion of the City of Wilmington. Project documents and correspondence are subject to the Freedom of Information Act and will be treated respectfully so in both preparation and storage. All milestone deliverables will be supplied to the City after AECOM's internal Technical Quality Review as per the Project Schedule in Appendix A. Other documents and correspondence will be released to the City at their request.

C. Railroad Security

Portions of the existing railroad route that are likely to be in scope of the project include actively operated lines owned and operated by CSXT, or lines that are owned by the NCSPA and operated by WTRY (a G&W subsidiary). Work within the right-of-way will be conducted only upon permission from both the owner and operator of the rail line in question. Once the Wilmington Rail Realignment is designated as a Public Project with CSXT, then right of entry (ROE) for project purposes requires a 10-day advance notification to CSXT's Construction Manager covering the region. The identified CSXT Construction Manager for the project is Clyde Gray, Jr. (804-226-7753 or Clyde_Gray@csx.com). Any requests for ROE will be addressed to Clyde Gray. CSXT's Public Projects Manager for NC, Troy Creasy (804-226-7718 or Troy_Creasy@csx.com), will also be included on correspondence with CSXT for ROE.

Right of entry to the NC Port rail facilities must be obtained from the NC Port Authority from Tolga Cankurtaran (910-343-6429 or Tolga.Cankurtaran@ncports.com). Wilmington Terminal Railroad (WTRY) Trainmaster, Darren Hartsfield (910-228-8512 or dhartsfield@gwrr.com) will also be included on correspondence to the NC Port Authority for ROE purposes as WTRY operates the short line on NCSPA property.

D. Contractor Security

AECOM and all subcontractors will be required to follow all project security procedures as outlined in the preceding subsections A, B, and C.

XII. SCHEDULE

The Project Performance Period and Federal Funding Period, as defined in 2 C.F.R § 200.77 and described in 2 C.F.R. § 200.309, for all work in the Project will be approximately 36 months beginning approximately April 27, 2020 to April 26, 2023. Unless otherwise approved, requests for extensions of the Project Performance Period or Federal Funding Period must be submitted to the FRA not later than 90 days before the end of the Project Performance Period or Federal Funding Period.

The City and Consultant have defined the delivery of the Project in five tasks, including: Task 1, Detailed Project Work Plan (PWP); Task 2, Environmental Review; Task 3, Conceptual Engineering; Task 4, Preliminary Engineering; and Task 5, Project Management. The Project Scope of Services (Scope) in Exhibit A to this professional services agreement describes the range of the tasks to be performed under the Project and lists the deliverables required under each respective task. Deliverables are documents that will be prepared by the Consultant and submitted to the City, and further submitted by the City to the FRA, for review and acceptance or approval as a requirement of the cooperative agreement.

The approved Project Schedule and deliverables associated with this Agreement are listed below. The Consultant must complete these deliverables to City’s and FRA’s satisfaction to be authorized for funding reimbursement and for the Project to be considered complete.

Task #	Deliverable Name	Due/Completion Date
1	Detailed Project Work Plan (PWP)	Oct. 6, 2020
	Detailed Project Work Plan (PWP), Ver. 1 (Oct. 6, 2020)	Due Jun. 30, 2020
	Detailed Project Schedule (approved Project Schedule, Exhibit B, revised as applicable)	Ver. 1 Accepted Oct. 6, 2020
	Detailed Project Budget (approved Project Budget, Exhibit C, revised as applicable)	
2	Environmental Review	Apr. 1, 2022
	Pre-NEPA Methodology Report	Draft Submitted Sep. 10, 2020
	Screening Report	Due Nov. 1, 2020 Draft Submitted Sep. 25, 2020
	Alternatives Analysis Report (as required)	May 1, 2021
	Draft EA or EIS (see note)	Sep. 1, 2021
	Final EA or EIS (see note)	Jan 31, 2022
	Draft FONSI or ROD (see note)	Feb. 28, 2022
	Final FONSI or ROD (see note)	Apr. 1, 2022
3	Conceptual Engineering	Jul. 1, 2021
	Conceptual Engineering for Screening Report	Nov. 1, 2020
	Conceptual Engineering for Alternatives Analysis (as required)	May 1, 2021
	Summary of Cost Estimates	Jul. 1, 2021
4	Preliminary Engineering	Apr. 1, 2023
	PE Progress Prints (as required)	Sep. 1, 2022
	PE (30% Design)	Feb. 1, 2023
	Engineer’s Opinion of Probable Cost	Feb. 1, 2023
	Financial Planning Documentation	Apr. 1, 2023
5	Final Performance Report (due 90 days after end of Project Performance Period)	

Note: On September 9, 2020, FRA defined an EA as the Class of Action for this Project.

Additional detail to include a current MS Project-based Work Breakdown Structure (WBS) with information detailing the desired progress and interdependencies of each task, component, and subtask on the Project Schedule will be maintained in Appendix A. AECOM will update the WBS with current progress to share with the City on a biweekly basis. The City will use the WBS to monitor the progress of the project and provide feedback to AECOM on a biweekly basis and to discuss progress with FRA.

XIII. BUDGET AND ESTIMATE

The total estimated cost of the Project is \$2,500,000, for which the FRA grant will reimburse up to \$2,000,000 or 80.0000% of the total Project cost. The City’s Non-Federal Contribution is comprised of cash in the amount of up to \$500,000 or 20.0000% of the total Project cost, to be reimbursed by the NCDOT.

Project Budget by Source

Funding Source	Project Contribution Amount	Percentage of Total Project Cost
Federal Contribution (Amount of FRA Grant)	\$2,000,000	80.0000%
Non-Federal Contribution (Administered by Grantee) <i>Source: City of Wilmington to be reimbursed by North Carolina Department of Transportation (NCDOT) via separate agreement</i>	\$500,000	20.0000%
Total Project Cost	\$2,500,000	100%

Note: The City’s application for funding proposed a total Project cost of \$2,760,000, which included the sources listed above as well as an estimate of \$260,000 for City staff to manage the Project. The revised Project budget excludes the City Project Management component, which the City will administer separately from the Federal funding and required Non-Federal Contribution in this Agreement.

Project Budget by Task

The budget by task allocation represented below represents the Approved Project Budget as requested by the City and approved by FRA (letter dated July 20, 2020). Should a subsequent budget allocation update differ from this approved Project Budget, AECOM (through the City) may request approval to revise the budget allocation to ensure that the Project can be completed within the terms and conditions of the City’s FRA Grant Agreement. The City, with assistance from AECOM, will document expenditures by task, and by Federal and Non-Federal contributions, when seeking reimbursement from FRA and NCDOT.

Task #	Task Name	FRA-Federal Contribution (80.00%)	Grantee Contribution (20.00%)	Total Project Cost (100%)
1	Detailed PWP, Budget and Schedule	\$ 32,000	\$ 8,000	\$ 40,000
2	Environmental Review	\$ 640,000	\$ 160,000	\$ 800,000
3	Conceptual Engineering	\$ 496,000	\$ 124,000	\$ 620,000
4	Preliminary Engineering	\$ 472,000	\$ 118,000	\$ 590,000
5	Project Management	\$ 240,000	\$ 60,000	\$ 300,000
Cont.	Contingency	\$ 120,000	\$ 30,000	\$ 150,000
	Total	\$2,000,000	\$ 500,000	\$2,500,000

A Detailed Project Budget will be maintained in Appendix B. The Detailed Project Budget will reflect the WBS for cost to complete each task used to define detail on project progress for the Detailed Project Schedule in Appendix A.

XIV. PROJECT SUPPORTING DOCUMENTS

<u>Supporting Document</u>	<u>Date</u>	<u>Document No.</u>
Professional Services Agreement (City of Wilmington and AECOM - Contract No. S1-0520.2)	Jun. 8, 2020	111
Public Involvement Plan (PIP)	Draft Submit Oct. 1, 2020	331

XV. PROJECT DELIVERABLE RECORD

<u>Task</u>	<u>Deliverable</u>	<u>Date</u>	<u>Document No.</u>
Project Administration			
Contract Documents and Notice to Proceed:			
	Notice to Proceed – Consultant Support	Jun.9, 2020	112
Task 1: Detailed PWP			
	Detailed PWP, Ver. 1 (Oct. 6, 2020)	Oct. 6, 2020	511
	Detailed Project Schedule	Oct. 6, 2020	512
	Detailed Project Budget	Oct. 6, 2020	513
Task 2: Environmental Review			
	Pre-NEPA Methodology Report	Draft Submit Sep. 10, 2020	
	Screening Report	Draft Submit Sep. 25, 2020	521
	Alternatives Analysis Report		522
	Draft EA (see note)		523
	Final EA (see note)		524
	NEPA Decision Document (FONSI)		525
Task 3 Deliverables:			
	Conceptual Engineering Roll Plots for Screening Report		531
	Conceptual Engineering for Alternatives Analysis		532
	Summary Cost Estimates		533
Task 4 Deliverables:			
	PE Roll Plot Progress Print		541
	Associated CADD files in .dgn format		542
	PE (30% Design)		543
	Engineer’s Opinion of Probable Cost		544
	Financial Planning Documentation		545
Task 5 Deliverables:			
	Final Performance Report		551

Note: On September 9, 2020, FRA defined an EA as the Class of Action for this Project.

XVI. REPORTING REQUIREMENTS AND PROCEDURES

Reporting to the FRA will be as described in the FRA Agreement and will include quarterly progress reports, a quarterly federal financial report, and Interim and/or Final reports as required by the FRA.

XVII. APPENDICES

- A. Detailed Project Schedule**
- B. Detailed Project Budget**
- C. Risk Register**
- D. Professional Services Agreement or Sub-Consultants List**