

PART I

SCHEDULE

SECTION**TITLE**

A	Scope of Services
B	Capabilities and Areas of Expertise
C	Special Terms and Conditions
D	Contract Deliverables
E	Insurance Requirements
F	Invoicing



SECTION A

SCOPE OF SERVICES

A.1 OVERVIEW

- A. The scope of services provided under this Contract will cover a full range of planning, engineering and construction support services on an as needed basis.
- B. The Consultant team shall be capable of providing some or all consulting support services for capital, maintenance and operational enhancement projects as listed below:
 - 1. Expansions and modifications to passenger stations and parking facilities;
 - 2. Assessment and improvements of existing stations, maintenance and parking facilities;
 - 3. Mid-day and overnight equipment storage facilities;
 - 4. Railroad track civil and signal improvements;
 - 5. System and Facilities evaluations and studies;
 - 6. Track capacities and improvements;
 - 7. System communications and improvements;
 - 8. Planning and environmental studies;
 - 9. Cost estimating;
 - 10. Design reviews and value engineering;
 - 11. Survey and Geotechnical investigation;
 - 12. Traffic analysis;
 - 13. Project Management; and
 - 14. Construction Engineering.



- C. The Consultant shall be responsible for, but not limited to, the following tasks:
1. Provide detailed task order scope and cost proposals as required by VRE;
 2. Provide clarifications to proposal as requested;
 3. Comply with Federal and State and jurisdiction regulations and procedures including grant requirements for the assigned projects;
 4. Comply with terms and scope of executed Task Orders; and
 5. Provide reasons in writing for not providing proposals within ten (10) days of the request.
- D. The Consultant must have knowledge of applicable Federal Transit Administration (FTA) environmental, procurement, design, and construction regulations/guidelines, as most of VRE's Capital Improvement Program (CIP) is funded through FTA grants.
- E. The Consultant shall perform work through task orders initiated by VRE (see **SECTION C.8 – TASK ORDER PROCEDURES**).
- F. The general engineering consulting firm is referred to herein as either the "Contractor" or the "Consultant". If the consulting firm chooses to use the services of Subconsultants(s), they will be referred to either as the "Subconsultant(s)" or "Subcontractor(s)". Therefore, the words will be used interchangeably.
- G. In the performance of this Contract, the Consultant shall comply with **ATTACHMENT Q.1 – GENERAL TERMS AND CONDITIONS** included herein this solicitation.

A.2 POTENTIAL PROJECTS

- A. Platform extensions
- B. Second platform with pedestrian bridge or tunnel
- C. Parking garage structural evaluation and recommendation
- D. Parking expansions and modifications including structured parking
- E. Layover yard expansions
- F. Service expansions



- G. Lighting, camera and other security projects
- H. Mainline track infrastructure projects
- I. Yard maintenance facilities
- J. Facility maintenance and renovations
- K. Strategic plan and Capital Improvement Plan update

A.3 ROUTINE EVALUATIONS

- A. The VRE Project Manager may evaluate the work of the Consultant on a regular basis. Areas of evaluation can include, but are not limited to; budgets, schedules, communication, responsiveness, quality of work and overall performance.
- B. If the evaluation requires improvement, the finding will be provided to the Consultant in writing and the Consultant given the opportunity to respond.
- C. VRE will subsequently review the response and determine if an amendment to the evaluation is necessary, or further corrective action is required.
- D. The Consultant's Key Personnel must be available to attend meetings upon request in an effort to correct deficiencies identified.
- E. The Consultant must keep the VRE Project Manager informed of any changes to task order staffing or personnel during the term of the Contract.



SECTION B

CAPABILITIES AND AREAS OF EXPERTISE

B.1 GENERAL REQUIREMENTS

The Consultant shall be capable of performing one (1) or more of the following Areas of Expertise tasks under Articles A, B, C, and/or D listed below:

A. Engineering, Survey and Design Services

1. Provide all necessary services required to prepare complete construction contract documents. Design documents shall be detailed to permit construction contractors to submit responsive bids.
2. Provide deliverables such as; plans, drawings, reports, specifications, cost estimates and schedules on paper and electronically. Plans shall be prepared utilizing drafting software and be to scale. Electronic files of plans and specifications and design calculations shall be provided upon request and shall be considered VRE property. Design work must conform to federal, state and local requirements. Projects shall be developed in compliance with VRE design and project management guidelines.
3. Perform engineering calculations and develop detailed designs for various disciplines to include but not be limited to; architectural, electrical, mechanical, civil, structural, plumbing, fire protection and track design.
4. Provide permitting support.
5. Prepare renderings and schematics as necessary.
6. Prepare Detailed Design Documents:
 - a. Prepare final design submittals in incremental stages allowing for periodic reviews and comments as necessary.
 - b. Stamp and seal plans and specifications by a licensed Professional Engineer as necessary.
 - c. Comply with VRE's procurement procedures, design requirements and specifications.



7. Assist in Procurement:
 - a. Review and evaluation of bids and provide award recommendations.
 - b. Attend pre-bid meetings and prepare meeting minutes.
 - c. Assist in responding to questions and prepare addenda as necessary.
8. Review Shop Drawings:

Perform review of submittals and shop drawings to determine conformance with the contract drawings and specifications.
9. Perform Value Engineering:

Perform Value Engineering Studies as requested.
10. Force Account Work:
 - a. Evaluate railroad designs and proposals.
 - b. Evaluate cost proposals.
 - c. Monitor performance and progress on railroad managed projects.
11. Evaluate track signalization and aspect charts.
12. Review designs prepared by Railroads.
13. Attend meetings and provide meeting documentation as requested.
14. Perform Geotechnical engineering and provide expert opinion and recommendation.
15. Conduct Field Investigations as listed below:
 - a. Visit project sites to determine existing conditions affecting project design;
 - b. Evaluate existing facilities and structures and prepare condition assessments;
 - c. Perform geotechnical engineering and sub-soil evaluation and lab evaluations as necessary;



- d. Verify all applicable as-built drawings and determine any relevant conditions not available on existing as-builts;
- e. Coordinate with railroads and local jurisdictions, as requested, to determine site requirements for inclusion in the specifications, including security, working hours, hauling routes, disposal areas, staging areas, and utility interruptions; and
- f. Obtain insurance and right of entry permits as necessary.

16. Survey

- a. Obtain all necessary dimensions, utilities, property limits, physical, and functional data.
- b. Conduct topographic and planimetric survey as required.
- c. Obtain utility identification and location as required.
- d. Identify property limits and prepare plats and deeds with property descriptions.
- e. Display information in electronic format as base mapping.

17. Assist with project management; including, but not limited to, coordination, document control, quality control, schedule, reports, claim evaluation and project closeout.

B. Planning, Environmental and Conceptual Design

- 1. Perform planning studies incorporating current and future service requirements and forecast necessary improvements to maintain growth.
- 2. Prepare alternative analysis and feasibility reports.
- 3. Prepare conceptual designs consisting of drawings, renderings, cost estimates, and construction phasing.
- 4. Identify primary and alternative site locations, operational and any environmental issues.
- 5. Prepare operational and track capacity modeling, which may include alternative service proposals and recommend track capacity improvements to accommodate additional train service.
- 6. Perform train movement studies.



7. Prepare cost-benefit analysis.
8. Provide reviews and recommendations of Public Private Partnerships.
9. NEPA and Environmental Permitting.
10. Prepare renderings and schematics as necessary.
11. Attend meetings and public hearings as necessary.
12. Prepare Environmental Documents:
 - a. Familiar with environmental regulations and identify environmental requirements and need for permitting.
 - b. Prepare Categorical Exclusions, Environmental Assessments, Environmental Impact Statements as necessary.
 - c. Implement Federal Environmental Assessments, impact statements, reports, etc. as required by NEPA as amended (42 USC 4321 *et. seq.*) and C.F.R. 23 Part 771.
 - d. Perform environmental work in whole or in part, depending on the project.
 - e. Produce environmental remediation plans as necessary.
13. Perform National Transit Database (NTD) sampling.
14. Technical support in grant applications including cost-benefit analysis.

C. Construction Engineering and Inspection Services

1. Coordinate Contractor activities, including performing onsite monitoring, inspections, material testing and quality assurance.
2. Ensure compliance with applicable rules, ordinances, regulations and building codes.
3. Identify and monitor receipt of all required licenses, permits and approvals.
4. Assist in securing permits.
5. Ensure that necessary clearances and safety measures are maintained.



6. Review submittals, shop drawings, requests for information and requests for change.
7. Submit periodic progress and inspection reports.
8. Review invoices.
9. Assist with acceptance of beneficial use and commissioning of projects.
10. Participate in progress meetings and prepare meeting minutes and other documentation as necessary.

D. Property Acquisition

1. Conduct and review property appraisals.
2. Complete site assessment and alternatives analysis.
3. Assist with property negotiations and necessary acquisitions to meet project construction needs and timelines.
4. Provide Legal assistance as necessary.
5. Comply with State and Federal requirements for property acquisitions and tenant displacement for public projects.

