FLORIDA DEPARTMENT OF TRANSPORTATION

| ADDENDUM NO. 3 | DATE: 3/24/17 |
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| RE: RFP-DOT-16/17-9010-GH POSITIVE TRAIN CONTROL SYSTEM FOR THE (CFRC) | |
| Notice is hereby given of the following ch | nanges to the above-referenced RFP: |
| CHANGES: | |
| RFP Section 29 additional language | guage enclosed below |
| Technical Specification addition | ons and revisions enclosed below |
| Questions and Answers are at this Addendum 3 | ttached as an Excel document in VBS and are a part of |
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| | ot of this Addendum by completing and including in your bid nd date of the bid/proposal opening. <u>Failure to do so may</u> alification. |
| | Bidder/Proposer |
| | Address |
| | Submitted by (Signature) |
| | Section 120.57(3), Florida Statutes, or failure to post the bond or other security and shall constitute a waiver of proceedings under Chapter 120, Florida |

Statutes.

FDOT

RFP-DOT-16-17-9010-GH Positive Train Control for the CFRC

FPID: 412994-5-52-01

Addendum #3:

Request for Proposal - <u>Page 24 – Section 29: Potential Additional Services - Add the following after the</u> third bullet:

- SUPPORT SERVICES FOR PHASE 2 NORTH The Department may request PTC services during construction of the Phase 2 North upgrade for Commuter Rail Service. Phase 2 North is described as follows:
 - DeBary Station north to DeLand Amtrak station in Volusia County
 - 12 miles; 1 station; Capital upgrades include adding 2nd mainline track and trestle bridges, grade crossings and wayside signals.

Technical Specification - Page 7 – Section 2.1.3 Definitions, Table 2-3: Add the following definition to the Technical Specification:

| Term | Definition |
|------------|---|
| Department | Florida Department of Transportation, including its |
| | designated authorized representatives. |

Technical Specification - <u>Page 28 – Delete Section 4.1.1.8 Environmental Compliance Manager and add the following sections:</u>

4.1.1.8 Signal Engineer

The Vendor's Signal Engineer provides signal engineering expertise and shall be the technical leader responsible for coordinating and overseeing wayside system installation and testing. The Signal Engineer shall possess a minimum of 5 to 10 years of railroad signal related experience including a key position of responsibility on a major project on an FRA regulated railroad similar in scope and magnitude to this project.

4.1.1.9 Onboard Engineer

The Vendor's Onboard Engineer provides onboard engineering expertise and shall be the technical leader responsible for coordinating and overseeing onboard system installation and testing to including familiarity with Locomotive and Cab car. The Onboard Engineer shall possess a minimum of 5 to 10 years

of railroad communication related experience including a key position of monitoring installation of locomotive equipment.

4.1.1.10 Communication Engineer

The Vendor's Communication Engineer provides communication engineering expertise and shall be the technical leader responsible for coordinating and overseeing Communication system installation and testing to include Wi-Fi, Fiber Optic, Cellular, and 220 MHz radios. The Communication Engineer shall possess a minimum of 5 to 10 years of railroad communication related experience including a key position of responsibility on integrating communication systems.

4.1.1.11 Configuration Management Engineer

The Vendor's Configuration Management Engineer provides configuration management expertise and shall be the leader responsible for developing the procedures, plans and organizing, coordinating and overseeing the configuration management process including organizing the configuration management meetings, ensuring all documentation is in order and ensuring that the activities are in accordance with the approved Configuration Management procedures and plan. The Configuration Management Engineer shall possess a minimum of 5 to 10 years of configuration management experience.

Technical Specification - <u>Page 164 – Section 10.1.3.L System Availability Requirements: Add the following clauses to the Technical Specification:</u>

- 4. The Vendor shall provide 99.95% availability per calendar month. The following downtimes are excluded from this requirement:
 - a. Failure of onboard hardware.
 - b. Failure of third-party hardware, software or network.
 - c. Failure of third-party communication system.
 - d. Failures caused by incorrect configuration data provided by a third-party.

Technical Specification - <u>Page 170 - Section 10.3.1.A.1.c System Security Management: Add the following clause to the Technical Specification:</u>

Access shall also be provided to Department users that interface with the PTC Hosted Back Office system for crew and consist data; reports on enforcement, configuration management; and train location.

Technical Specification - <u>Page 185 – Section 13.4.A CONFIGURATION COMPONENTS: Add the following</u> clause to the Technical Specification:

The Vendor shall develop, install, maintain and update the CM (slot 10) image as required for the length of the Contract.

Technical Specification - Page 202 – Section 15.B.7 HOSTING BACK OFFICE SERVICE: Make the following change to the Technical Specification:

Change: "The most recent data shall be available for reporting or review by authorized users online;" to "The most recent data shall be available for reporting or review by authorized Department users online;"

Technical Specification - Page 202 - Section 15.B HOSTING BACK OFFICE SERVICE: Add the following clause to the Technical Specification:

10. Network security associated with any connection to an external network, including internet service provider or wide-area-network link to another Department location. The Vendor shall maintain the security methods in a current state at all times throughout the term of the Contract, which shall include applying virus and worm software patches at a frequency recommended by the software vendor.

Technical Specification - Page 206 - Section 15.2.8.A Data Exchange with Tenant and Adjacent Railroads: Make the following change to the Technical Specification:

Change: "The Vendor shall establish MPLS circuits between the Department's PTC Hosted Back Office location and the tenant and adjacent railroads PTC Hosted Back Office to bi-directionally communicate PTC and trainsheet data." to "The Vendor shall establish MPLS circuits between the Department's PTC Hosted Back Office location and the tenant and adjacent railroads PTC Back Office to bi-directionally communicate PTC and trainsheet data."

Technical Specification - <u>Page 206 – Section 15.2.8.A</u> <u>Data Exchange with Tenant and Adjacent Railroads: Add the following clause to the Technical Specification:</u>

The Vendor shall be responsible for coordinating with the Department on obtaining any necessary agreements/approvals from the Departments tenant railroads on the PTC office to PTC office exchange protocols.

Technical Specification - Page 207 - Section 15.2.14.A Alarms: Make the following change to the Technical Specification:

Change: "An alarm summary display shall be provided for authorized users." to "An alarm summary display shall be provided for authorized Department users."

Technical Specification - Page 207 – Section 15.2.14.A Alarms: Add the following clause to the Technical Specification:

Alarm report data on enforcements and other PTC events shall be accessible by authorized Department users.

Technical Specification - <u>Page 208 – Section 15.2.18 CFRC Remote Access: Add the following clauses to</u> the Technical Specification:

15.2.18 CFRC Remote Access

- A. As this will be a remotely hosted system, Department users shall be provided with a means of interfacing with the Vendor's system. Therefore, the Vendor shall, at a minimum, provide the following:
 - a. An electronic interface for Department management, preferably as an HTTPS website.
 - b. Capability for Department users to configure crew and consist information.
 - c. Means for Department users to access reports on enforcements, configuration management, active train consists and location.
 - d. Capability to authorize Department users access to the system.
- B. The mechanism for Department to electronically interface with the Hosted Back Office shall be firewalled from the actual PTC-BOS software.

Technical Specification - <u>Page 208 – Section 15.3.B IMPLEMENTATION: Add the following clauses to</u> the Technical Specification:

- B. The Vendor shall provide a turn-key hosted back office solution that meets the following minimum requirements:
 - a. Initializes CFRC trains and provide appropriate data to the Departments tenant railroads via the Interoperable Train Control (ITC) Federated Network for tenant train Initialization.
 - b. Supports communication via dual cell providers, WiFi, and PTC-220, as well as manages communication to select the appropriate network path. The Vendor shall be responsible for coordinating with the Department on obtaining any necessary agreements/approvals from the Departments tenant railroads on the PTC-220 paths for interoperable communications to tenant trains on approach to CFRC territory.

- c. Provides a means of crew and consist configuration to the Department, preferably via a secure website.
- d. Provides a means for the Department to access reports on enforcements, software revisions and active train consists and location, preferably via a secure website.
- e. Addresses all software updates and software configuration for back office and onboard PTC software.
- f. Provides a Help Desk that is available twenty-four (24) hours a day, seven (7) days a week for troubleshooting PTC failures and coordinating with other vendors as required. The Hosting Services Help Desk shall provide troubleshooting of all PTC segment failures, including diagnosis down to the lowest replaceable hardware component of the PTC Hosted Back Office, PTC Onboard Systems, PTC Wayside Systems, and PTC Communications System.
- g. Maximizes office availability to ensure no negative impact to Department or tenant railroad operations.

Technical Specification - <u>Page 208 – Section 15.4.A.g HOSTING SERVICES: change the following clause</u> to the Technical Specification:

Change: "Software updates" to "Software updates for office and onboard"

Technical Specification - Page 209 – Section 15.4.C HOSTING SERVICES: Add the following clause to the Technical Specification:

At a minimum, the PTC BOS and associated systems shall maintain primary and secondary servers with geographic, power grid, and network backbone diversity.

Technical Specification - Page 209 – Section 15.4.D HOSTING SERVICES: Add the following clause to the Technical Specification:

including onboard segment, wayside segment, and all forms of communication infrastructure utilized for PTC.

Technical Specification - <u>Page 209 – Section 15.4.G.c HOSTING SERVICES: Add the following clause to</u> the Technical Specification:

c. Messaging and Onboard software releases coordinated with the Department for the Class I railroads. The Vendor is responsible for all software updates and configuration, including MeteorComm 220 MHz software updates for operation.

Technical Specification - Page 210 – Section 15.4.M HOSTING SERVICES: Change the following clause to the Technical Specification:

Change: "The Vendor shall perform audits that encompass all areas of the Hosted System." To "The Vendor shall perform audits that encompass all areas of the Hosted System, PTC communication system software and PTC onboard system software."

Technical Specification - <u>Page 210 – Section 15.4.R HOSTING SERVICES: Change the following clause to</u> the Technical Specification:

Change: "The Vendor shall be responsible for the necessary support and documentation for any regulatory proceedings to comply with FRA regulations regarding PTC failures and unsafe conditions caused by the BOS System." To "The Vendor shall be responsible for the necessary support and documentation for any regulatory proceedings to comply with FRA regulations regarding PTC failures and unsafe conditions caused by the BOS System, and/or Onboard System software."

Technical Specification - Page 211 – Section 15.4.T HOSTING SERVICES: Add the following clause to the Technical Specification:

- T. The Vendor shall provide maintenance and configuration management services as follows:
 - a. Test office and onboard software releases to ensure continued interoperability with CFRC's tenant railroads.
 - b. Provide Vendor staff to monitor PTC and network logs for potential issues and address issues as required.
 - c. Interface and coordinate with the Department and its contractors, PTC equipment suppliers, CSX, Amtrak, and others as required to resolve PTC operations, initialization or configuration issues.
- U. The Vendor shall install, configure and maintain the software for onboard Slot-10, Meteorcomm radio and any other onboard PTC communication software required for proper operation. This shall include security keys and coordination with Wi-Fi and cellular networks installed at CFRC locations. The Vendor shall develop, install and update the Slot-10 image as required.

Technical Specification - Page 212 - Section 15.6.B.11 PTC HOSTED BACK OFFICE DOCUMENTATION: Add the following clause to the Technical Specification:

including details on anything requiring Department, CSX, Amtrak, FRA and any other third party support. The test documentation shall also include any requirements of the host and tenant railroads or FRA that would prevent revenue service.