**CP 124516 – CAMP – EAST – Electrical Upgrade Project Description**

**Notice 10-29**

A. The Scope of Work included in the single, lump sum price, comprises the provision by the Contractor for the construction of the East Campus 13.2kV Switchgear Replacement for the University of Colorado at Boulder. The project includes the tasks described herein.

B. The East Campus buildings will remain on-line and occupied throughout the entire duration of the project. It is the Contractor's responsibility to coordinate the installation of the various project elements with the Owner to assure maximum availability of the buildings.

C. The services shall be performed in accordance with the attached Agreement and include the following:

1. Procurement and installation of one Power Distribution Center (PDC) building to replace the existing medium voltage, metal-clad, switchgear line-up at the East Campus. The PDC shall include but not be limited to the following:

    a. One Power Distribution Center (PDC) switchgear building.

    b. One 15kV medium voltage, metal-clad, double-ended switchgear line-up.

    c. The building and switchgear shall be shipped whole, fully tested and operational.

    d. Hardware and software associated with the power monitoring and control system (PMCS) as shown on the drawings including but not limited to SEL-2032s, SEL-351s, engineering workstation, and associated wiring. Monitoring and control screens shall be developed and tested similar to those of the existing Main Campus system. The new East Campus switchgear shall be capable of being monitored and controlled from either the existing Main Campus Engineering Center Electrical Vault PMCS engineering workstation or the Main Campus Power House PMCS engineering workstation.

2. Installation of the underground electrical and communication ductbanks to connect the existing Main Campus Switchgear to the new East Campus Switchgear as well as reconnect the new East Campus Switchgear to the existing East Campus buildings. This includes but is not limited to the interception of the existing underground electrical ductbank adjacent the Main Campus Engineering Center Electrical Vault, at the East Campus System Biotechnology Building manhole #TBD, and at the East Campus manhole #301 adjacent the Boulder Creek crossing.

3. Procurement and installation of medium voltage cable to connect the existing Main Campus Switchgear to the new East Campus Switchgear as well as reconnect the new East Campus Switchgear to the existing East Campus buildings.

4. Procurement and installation of the fiber optic cable to connect the existing SEL-3351 located at the Main Campus Engineering Center Electrical Vault to the new switchgear communications in the PDC building.

5. Installation of the structural vault beneath the PDC building to support the building as well as facilitate underground electrical services to enter the switchgear.

4. Installation of the structural wall to conceal the PDC building.

5. Provide all utility locates and necessary utility potholing prior to any excavation of work. This information shall be submitted with the PDC building and switchgear shop drawings before purchasing any material for the structural vault beneath the PDC building.

6. Provide a construction traffic and control plan for all areas of work as indicated on the drawings as well as the means to execute the traffic and control plan to protect pedestrians and minimize the disruption to campus. Emergency vehicle access to all areas shall be maintained at all times.

7. Complete and submit all applicable University forms and inspections including but not limited to Hot Work Permits found in (http://www.colorado.edu/facilitiesmanagement/pdc/safety/index.html).

10. Providing a temporary 2.5MW diesel generator with 24 hour fuel storage to supply power to the East Campus while the 15kV feeders from Main Campus to East Campus are replaced. Fuel for full load operation for a four week duration shall be anticipated.

END