SECTION 13731 COMPUTER EQUIPMENT

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. General provisions of the Contract, including General and Special Conditions and Division 01 Specification Sections, 01200 Measurement and Payment Procedures, 01350 Submittals, 01500 Temporary Facilities and Controls and 01505 Mobilization apply to this Section.

1.2 SUMMARY

A. Section Includes:

- 1. Portable "laptop" computer work-station.
- 2. One or more internet access workstations.
- 3. Computer operating system and application software.

1.3 DEFINITIONS

- A. CPU: Central processing unit.
- B. ProTrak software: a web-based project management and collaborative communications system providing multiple project users access to all project documentation.
- C. Credential: Password for the protected access to the ProTrak software providing data security for project documentation.
- D. DSL: Digital Subscriber Line. Commercial subscription for access to the internet
- E. Wireless Hub: Wireless access to the DSL internet connection for use with wireless computer modems in lap top computers.
- F. PC: Personal computer. Applies to the central station, workstations, file servers and portable lap tops.
- G. PDF: Portable Document Format. The file format used by the Acrobat document-exchange-system software from Adobe.
- H. RAS: Remote access services.
- I. RF: Radio frequency.
- J. ROM: Read-only memory. ROM data are maintained through losses of power.
- K. TCP/IP: Transport control protocol/Internet protocol incorporated into Microsoft Windows.

- L. UPS: Uninterruptible power supply.
- M. USB: Universal serial bus.
- N. WAN: Wide area network.
- O. WAV: The digital audio format used in Microsoft Windows.
- P. WMP: Windows media player.
- Q. Windows: Operating system by Microsoft Corporation.
- R. Workstation: A PC with software that is configured for specific functions.

1.4 ACTION SUBMITTALS

A. Product Data: Provide manufacturer's product description as a submittal for each type of product indicated. Include rated capacities, operating characteristics, and furnished specialties or accessories. Reference each product to the original specification. Warranty data and any required warranty use authorization should be provided and transferable to the City as end user.

1.5 CLOSEOUT SUBMITTALS

- A. Operation and Maintenance Data: Provide all users' manuals, warranty information and any proof of purchase type information required for warranty and information regarding imbedded software licensing. In addition to items specified in Section 01782 "Operation and Maintenance Data," include the following:
 - 1. Microsoft Windows software documentation.
 - 2. PC installation and operating documentation, manuals, and software for the PC and all installed peripherals. Software shall include system restore, emergency boot diskettes/cd's, and drivers for all installed hardware. Provide separately for each PC.
 - 3. Hard copies of manufacturer's specification sheets, operating specifications, design guides, user's guides for software and hardware, and PDF files on CD-ROM of the hard-copy submittal.
 - 4. System installation and setup guides with data forms to plan and record options and setup decisions.

1.6 QUALITY ASSURANCE

- A. Comply with NFPA 70, "National Electrical Code."
- B. Provide "new" in the box materials and equipment complete with manufacturer's warranty as required. Provide all documentation as supplied by OEM.

1.7 DELIVERY, STORAGE, AND HANDLING

A. Workstations, and Portable "laptop" computers:

- 1. Store in temperature- and humidity-controlled environment in original manufacturer's sealed containers. Maintain ambient temperature between 50 and 85 deg F, and not more than 80 percent relative humidity, non-condensing.
- 2. Open each container; verify contents against packing list; and file copy of packing list, complete with container identification.
- 3. Save original manufacturer's containers and packing materials and deliver as directed under provisions covering extra materials.

1.8 PROJECT CONDITIONS

- A. Environmental Conditions: System shall be capable of withstanding the following environmental conditions without mechanical or electrical damage or degradation of operating capability:
 - 1. Indoor, Controlled Environment: System components, except installed in air-conditioned indoor environments shall be rated for continuous operation in ambient conditions of 36 to 78 deg F dry bulb and 20 to 90 percent relative humidity, non-condensing.
 - 2. Outdoor Environment: System components installed in locations exposed to weather shall be rated for continuous operation in ambient conditions of 36 to plus 100 deg F dry bulb and 20 to 90 percent relative humidity, condensing.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

- A. Manufacturers: Subject to compliance with requirements, provide products by the following Manufacturer to comply with existing City IT requirements and Software access:
 - 1. Dell Computer: Latitude E6420 ATG (225-0702)
- B. <u>Basis-of-Design Product</u>: Subject to compliance with requirements, provide Dell Latitude E6420 (225-0702) or comparable product.

2.2 DESCRIPTION

A. System Hardware and Software:

Base Unit: Dell Latitude E6420 ATG (225-0702)

Processor: Intel Core i5-2540M, 2.60GHz, 3MB Cache, Dell Latitude E6X20 (317-5995)

Memory: 4.0GB, DDR3-1333MHz SDRAM, 2 DIMM, Dell Latitude (317-6239)

Keyboard: Internal Backlit Dual Pointing English Keyboard, Dell Latitude E (331-1201)

Keyboard: Tech Setup Guide, English, Dell Latitude E6420 ATG (331-1715)

Keyboard: Documentation (English/French), Dell Latitude E-Family/Mobile Precision (331-2169)

Video Card: Intel HD Graphics 3000, Dell Latitude E6420 ATG (318-0512)

Hard Drive: 320GB Hard Drive 7200RPM, Dell Latitude E (342-0482)

Hard Drive Controller: NO Internal Fingerprint Reader and NO contactless smartcard reader, Dell Latitude

E6420 ATG (331-2714)

Floppy Disk Drive: 14.0 in HD(1366x768) Anti-Glare LED, Dell Latitude E6420 ATG (320-2141)

Floppy Disk Drive: LCD Cover, No Touchscreen, Dell Latitude E6420 ATG (318-0510)

Operating System: Genuine Windows 7 Professional, 64-bit, No Media, Latitude, English (421-8067)

Modem: No Modem, Dell Latitude E (331-1221)

TBU: 90W 3-Pin, AC Adapter, Dell Latitude E (331-1719)

TBU: US - 3 foot Flat Power Cord, Dell Latitude (330-4016)

CD-ROM or DVD-ROM

Drive:

8X DVD+/-RW Bezel, Dell Latitude E6320/E6420/E6520/ATG (318-0466)

Software: Cyberlink Power DVD 9.5,No Media, Dell OptiPlex, Latitude and Precision Work-

station (421-4370)

Software: Roxio Creator Starter, No Media, Dell OptiPlex, Latitude and Precision Workstation

(421-4539)

Sound Card: No Camera, with single digital microphone, Dell Latitude E6420/ATG (318-0441)

Processor Cable: Intel WiFi Link 6205 (802.11a/g/n 2X2) 1/2 MiniCard for VPRO Latitude E/Mobile

Precision (430-3961)

Documentation Disk-

ette:

Intel vPro Technology Advanced Management Features, Dell Latitude E6X20 (331-

1227)

Bundled Software: Adobe Acrobat X, includes Serial Key Card, FI, ENG/FRN (410-0560)

Bundled Software: Microsoft Office Professional 2010, English, OptiPlex, Precision and Latitude (421-

3957)

Feature 6-Cell (60WH) Primary Lithium Ion Battery for Latitude (312-1151)

Feature Carrying Handle, Latitude E6420 ATG (331-1713)

Service: Dell Limited Hardware Warranty Plus Service Extended Year(s) (934-9528)

Service: Dell Limited Hardware Warranty Plus Service Initial Year (929-3587)

Service: ProSupport: Next Business Day Limited Onsite Service After Remote Diagnosis 4

Year Extended (927-0034)

Service: ProSupport: Next Business Day Limited Onsite Service After Remote Diagnosis Ini-

tial Year (951-4140)

Service: ProSupport: 7x24 Technical Support, 4 Year Extended (928-8134)

Service: ProSupport: 7x24 Technical Support, Initial (956-5210)

Support: Accidental Damage Service, 5 Year (927-0184)

Support: Info, Complete Care (988-7689)

Misc: Energy Star Enabled/E-PEAT/Gold, Latitude E6420/ATG (331-1931)

Misc: Intel Core i5 vPro Processor (331-1641)

Resource DVD with Drivers, Dell Latitude E6420/ATG (331-1222)

Cyberlink Power 9.5.1 AND Roxio Creator Starter Media for DVD+/-RW,Dell Opti-

Plex, Workstation and Latitude (421-5109)

Media Kit, Win 7 Professional 64bit, MUI, Dell OptiPlex, Precision and Latitude (421-

5682)

Dell Back-up and Recovery Manager for Win7, MUI, Optiplex, Precision, Latitude

(331-3300)

CFI,Integration Fee,Order Ready,Pronc (365-0530)

B. Field Office Internet Access

- 1. CONTRACTOR shall provide and pay for DSL internet access in the temporary Field Office for use by OWNER'S REPRESENTATIVE, CONSTRUCTION MANAGER and INSPECTORS as well as for CONTRACTOR'S use.
 - a. Service must support a minimum of two users simultaneously and be available at all times during working ours
 - b. No separate pay item will be made for Internet Access. Include monthly cost in Temporary Facilities, if a separate pay item is established, or as an incidental cost

PART 3 - EXECUTION

Provide computer equipment and software submittal in initial "Critical" submittals as material submittal #1. Upon approval by OWNER and ENGINEER;

- a) deliver computer equipment to OWNER in original manufacturer's packaging.
- b) Establish wireless internet connections in CONTRACTOR'S field office and coordinate operation of computer with internet access at this location and request
- c) Invoice Computer Equipment line item in first 50% of Mobilization.

END SECTION