

1. Requirement - Wireless Infrastructure design shall be kept separate from the rest of the network infrastructure.

Question – Our assumption is this is in reference to physical infrastructure only, where we will have dedicated switch and uplink for wireless. Wireless segregation based on vlans or layer 3 is not in this scope? **Confirmed. Separation of wireless infrastructure is limited to physical infrastructure only including dedicated patch panels, switches, etc. Any configuration of switches beyond “rack and stack” will be by owner.**

2. Requirement - Wireless access points are to be mounted on ceiling grid at the center of the room or otherwise noted.

Comment – If APs are placed in the center in each room, then between each floor we will end up stacking APs, which is not a good design. Location of APs should be based on the survey, not necessarily in the center of the room. **Wireless access points are to be provided based on wireless site survey at the time of installation for 100% building coverage. In addition, a dedicated wireless point is to be provided within each classroom and collaborative space as shown on the bid documents regardless of site survey.**

3. Requirement - Wireless system shall be completely operational, all wireless access points are to be connected to assigned wireless access point switch located in the TR/TER rooms.

Comment - Our assumption of scope is that we will be performing surveys, based on survey install access point and ensure AP gets the correct POE. Please confirm if this is the correct understanding of the scope. **Confirmed. Contractor to follow requirements set forth in the contract documents, at a minimum.**

4. Requirement - Network, Wireless and IP Equipment has been provided, installed and tested for functionality.

Comment – Define scope of testing? for e.g. for wireless, if above assumptions are correct, what we can test is that AP is not physically damaged, does not have a factory defect, gets right POE and powers up as expected. **Testing includes power up, connection and “ping” as defined in Part 3 of Specification 27 20 01 of the bid documents. In addition, contractor shall provide verification of signal strength as called out in section 3.1-A-6**

5. How many Cisco 7841 Phones needed and locations? **Technology scope notes on drawing TSD-001 of the bid documents call for 84 Classroom VoIP handsets. This shall be revised to 96 Classroom VoIP handsets. Contractor to provide add/deduct unit price for Cisco 7841 in addition to base count.**

6. How many Cisco 7861 Phones needed and locations? **Technology scope notes on drawing TSD-001 of the bid documents call for 15 Admin VoIP handsets. This shall be revised to 3 Admin VoIP handsets. Contractor to provide add/deduct unit price for Cisco 7861 in addition to base count.**

7. Can you please provide the number of switches and models required for each closet? **Switch counts per closet are already shown in the rack elevations and notes section of each Telecom Room as shown on drawings TSD-500 and TSD-501 of bid documents. Switch model numbers are provided in Specification 27 20 01 of bid documents.**

8. Regarding 1.3C, can you please provide the total number of network outlets or the port types and counts required for each closet. **Network drop counts per closet have already been listed in the notes section of each Telecom Room as shown on drawings TSD-500 and TSD-501 of bid documents.**

9. Regarding 1.6B.1, does it mean to show uplink connection from Access Switches to 4500x or you require the drawings to include connections form access switches to end devices as well? **Detailed connections between network equipment is to be shown in line drawings. Generic connections out to end devices should include quantities as opposed to detailed single lines to each device.**
10. Regarding 1.6C, can you clarify the specific data/report to be included in the quality control documents? **Contractor to submit test data and reports to include cable test results for installed cable plant with exact labels used on cables, patch panels, and faceplates.**
11. On 2.2, 4.C, it wasn't clear on the number of SFP modules and types for all the connections. Please provide the number and types of SFP modules required. **Section 2.2-A-2. list quantity and model of SFP modules to be provided per switch**
12. On 3.2, 4.A, it's mentioned to maximize the fiber strands available to the Core switch. Do you require to connect every single access switch interpedently to the core? Doing so will result in consuming more SFPs, Fiber patch cords, and eating up the fiber link to Core (limiting future expansion/use) and at the same time managing every single switch can be more cumbersome. We recommend to use stacks for access switches and rather utilize ether channel for redundancy and high availability. Please clarify if stacking is allowed, and if yes, up to what number of switches. **Edge switch stacking is acceptable for up to 3 switches as shown on data connection diagram and Telecom Rack notes of drawing TSD-500 of the bid documents.**
13. Regarding 3.4, we have a standard switch testing sheet and can utilize the commands to show the functionality. Please specify if you require any specific test methods/results. **As called out in section 3.5-A-2. Switching equipment is required to allow a "ping" from any point on the LAN to equipment outside of LAN.**
14. We didn't find specific information regarding the configuration of switches, will it be done in collaboration with the school's IT team or are there specific requirements mentioned? **Configuration of switches is to be done by the owner.**
15. **Requirement** – Please clarify any Bond requirements. **Contracts more than \$100,000.00 require performance/payment bond.**
16. Wireless outlets shown on the plans may or may not provide complete coverage. This will not be known until a Wireless Survey can be completed which would be after bid award. Can a quantity of AP's be provided for bidding purposes? **The minimum quantity is shown on the bid documents.**
17. Can you provide the number of Vizio 42" Displays required and locations? **In addition to the TV locations indicated on the drawings, please provide the following Vizio 42" displays and associated cable, cover plates, etc. at the following locations:**
 - o **Room 138 - Dining RM - Locate on the East wall with a V outlet, immediately north of the dishwashing counter, 84" above the floor**
 - o **Room 143 - Faculty Lounge - Locate TV on the center of the South wall with a V outlet**
 - o **Room 144 - Security Office - Locate TV on the center of the South wall with a V outlet, 60" above the floor**
 - o **Room 148 - Reception - Located TV on East wall with a V outlet, immediately north of the main entrance double doors.**

Requirements for the 42" display are as follows: 42" Smart wall mounted TV or greater; Wall mount should be tilting type. There should be at least 2 years of warranty included.

18. Can you provide the number of the SMART Board Interactive Panels required and locations?

Two wall mounted locations are shown on the floor plan drawings. Contractor to provide unit price for add/deduct unit price for mobile interactive displays based on the attached basis of design. Mobile Display carts are required at the following locations:

<u>Collaborative Space</u>	<u>Floor</u>	<u>Room #</u>	<u>Quantity</u>
Collab	Lower level	002	1
Collab	Lower Level	013	1
Collab	1 st	110	1
Collab	2 nd	202	1
Collab	2 nd	213	1
<u>Total</u>			<u>5</u>

19. Will the (2) 4" Conduits for the DAS System be installed by others? Conduits for low voltage systems are included in the Package 1 documents.

20. For bidding purposes, can you provide the quantity of 4" sleeves needed between floors and locations? Will the floors need to be X-rayed. Pathways for low voltage systems are part of Package 1 documents.

21. The A/V system requested will require a Page Override Function. Since the Intercom System and A/V System are to be installed and commissioned by (2) separate companies who shall have the responsibility of making the final connection into the Intercom System? Our understanding is that the intercom contractor shall provide the page feed wiring from the public address system to the classroom AV equipment for this contractor to install, terminate and test. Final connection by secondary package contractor.

22. As discussed in the meeting, much of the Technology Package is Back end loaded. With such a tight timeline can you please explain what is required from the Technology Contractor to be substantially complete in Mid-October? AV Secondary package work will not be tied to the Mid-October substantial completion date. All work to be completed no later than 12/1/2017.

23. Will a second shift be an option? Bids should be based on normal working hours/shifts.

24. Should we change the specified cable to 6e and have an add alternate to "upgrade" to 6a? Category 6 UTP cable is acceptable. Associated jacks, patch panels and patch cords shall also meet Category 6 standards. Submittals will be reviewed to insure all equipment meets Category 6 standards. Wireless structured cabling and components shall remain Category 6a compliant.



iRover²™ for Interactive Flat Panels

iRover²™ for Interactive Flat Panels

As education continues to focus on group based learning activities, the need for mobile and flexible interactive teaching solutions increases. The iRover²™ for Interactive Flat Panels has been developed to aid the transition schools are making from interactive whiteboards to flat panel displays.

Highlights

Mobile:

Schools continue to move away from wall-mounted technology. The iRover²™ allows schools to move their flat panels within a classroom or from room-to-room without the need for recalibration; a great time saving feature for teachers.

Cost effective:

The iRover²™'s mobility allows it to be shared in multiple locations, ensuring that budgets can be freed-up and used towards purchasing tech devices and other tools.

Robust:

With adjustable handles that wrap around the flat panel and an electric lift function, the iRover²™ for Interactive Flat Panels has been designed to ensure that your investment is securely protected even when on the move.

What makes ours different from other flat panel carts?

- Specifically designed for rugged school environments
- An electric lift function to adjust the flat panel height with a 17" range so the flat panel can be easily viewed by different grade levels (requires power)
- Large ergonomic handles to aid mobility and protect the screen from bumps in transport
- Four 5" swivel casters to aid maneuverability - 2 with brakes

Other features:

- 2 Small Open Tubs (blue)
- Fits through most standard size doorways
- Laptop tray fits securely onto the frame and can be stored away underneath the flat panel. Tray is suitable for all standard laptop sizes up to 17"
- 6 outlet power strip (UL certified)
- Hook and loop ties for cable management
- **Uses Chief PSBUB or PSBU universal mounting bracket (sold separately)**
- Supports 55"-80" flat panels with a VESA mounting pattern of 862mm x 517mm (max) to 200mm x 200mm (min) and a maximum weight of 200lbs
- Frame design supports ease-of-access for students in wheelchairs



Flat panel shown in the highest position



Flat panel shown in the lowest position



2 Small Open Tubs (blue)



-231-

EXIT



Flat Panel shown in the lowest position



Removable laptop tray



Laptop tray stores away when not in use or when on the move



6 outlet power strip with cable management



Electric lift height adjustment with wired remote control - clips to frame for storage

SKU	Product	Flat Panel Compatibility
IFP300	iRover ² ™ for Interactive Flat Panels	<ul style="list-style-type: none"> • SMART E70 / SMART 6065 / SMART 8065 • Promethean APT-65 / APT2-55 Please check out the Compatibility Chart by visiting the IFP300 product page at www.copernicused.com
	Cart Dimensions	
	56 3/8" - 73 3/8"H x 68 5/8"W x 31 1/2"D	
	Warranty	
	Frame - 5 years Tubs - lifetime Power supply and electric lift - 1 year	Maximum Flat Panel dimensions: Supports flat panels with VESA mounting pattern of 862mm x 517mm (max) to 200mm x 200mm (min). Suitable for all flat panels with a maximum weight of 200lbs

“ _____
Nature does nothing
in vain.
_____ ”

- Aristotle

Available at

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