

Portsmouth Middle School
Portsmouth, New Hampshire

Technology Equipment and Services

Rebid of item D 401

June 30, 2012

:

Table of Contents

Invitation to Bid	3
Definitions and Schedules.....	4
General	
Guidelines.....	5
General	
Requirements.....	6-10
Non-collusion Affidavit	11
Bid Form	12-15
Technology Equipment & Services Specification Section 16744	16-19

City of Portsmouth
Portsmouth, New Hampshire
School Department

INVITATION TO BID

Please note, this is a partial rebid of items originally bid for the Portsmouth Middle School Project. The School Department has determined that it is in the best interest of the School Department to not award item D 401, Network Switching, under the original bid 38 – 12 Portsmouth Middle School Technology Equipment. The School Department has elected to issue this rebid for the identified item; the technical specifications have changed.

Sealed bid proposals, **plainly marked** "Portsmouth Middle School Technology Equipment – RE-BID NUMBER 38-12 **on the outside of the envelope**, addressed to Steve Bartlett, Portsmouth School Department, 1 Junkins Avenue, Suite 402, Portsmouth, NH 03801 will be accepted until 2:00 p.m., July 11, 2012 at which time all bids will be publicly opened and read aloud.

This bid is available at <http://www.cityofportsmouth.com/finance/purchasing.htm> or by contacting Steve Bartlett at the following number: (603) 431-5080. Questions should be directed to the consultants: Conrado Alvarez calvarez@vanderweil.com and/or Mike Kerwin mkerwin@vanderweil.com. Deadline for questions is July 5, 2012.

Addenda to this proposal, if any, including written answers to questions, will be posted on the City of Portsmouth website at <http://www.cityofportsmouth.com/finance/purchasing.htm> under the project heading. Addenda and updates will NOT be sent directly to firms. Contractors submitting a proposal should check the web site daily for addenda and updates after the release date. Firms should print out, sign and return addenda with the proposal. Failure to do so may result in disqualification.

The City of Portsmouth reserves the right to reject any or all bids, to waive technical or legal deficiencies, and to accept any bid that it may deem to be in the best interest of the City.

Definitions

The “Owner” as used in this document identifies: Portsmouth School Department, 1 Junkins Avenue, Suite 402, Portsmouth, NH 03801

The “Project: as used in this document is: Portsmouth Middle School

The Project location is: 155 Parrott Avenue, Portsmouth, NH 03801

The “Consultant” as used in this document is: R.G. Vanderweil Engineers LLC, Conrado Alvarez calvarez@vanderweil.com and Mike Kerwin mkerwin@vanderweil.com

Project Schedule

- | | |
|--|--------------------------|
| 1. Deadline for Questions: | July 5, 2012 |
| 2. Bids Due: | July 11, 2012 @ 2:00pm |
| 3. Vendor Selection and notification, on or about: | TBD |
| 4. Delivery/Install to begin: | July 25, 2012 |
| 5. Project Completion: | August 22, 2012 |
| 6. Close-out Submittals | 30 days after completion |

Bid Delivery Location

Portsmouth School Department
Attn: Steve Bartlett
1 Junkins Avenue – Suite 402
Portsmouth, NH 03801

At the close of the bidding period, the bids will publicly opened and read aloud. Bids that are mailed must be clearly marked “Bid for the Purchase of Technology Equipment for the Portsmouth Middle School.

General Guidelines

Permits and Compliance with Codes: The Vendor/Systems Contractor shall obtain and pay for all necessary insurance certificates for equipment, appliances and work, and shall conform with all applicable safety and fire codes. The System Contractor must have a copy of their insurance certificates on file with the Owner prior to beginning work.

In order to meet the needs of persons with disabilities, when applicable all items shall comply with the current New Hampshire Basic Building Code including the Rehabilitation act 1973, the Uniform Federal Accessibility Standards (UFAS) and 504 Regulations and the American with Disabilities Act Title II, including the Americans with Disabilities Act Accessibility Guidelines (ADAAG) and ADA Regulations. Compliance with the current New Hampshire Fire Safety Code and current O.S.H.A.-Title 29/Labor is also required when applicable.

The “items” shall include, but not limited to technology equipment and systems. All items are to be completely imaged, configured, installed, connected and tested.

By submitting a bid, the bidder agrees to hold the unit and category pricing through the entire contract period and acknowledges that the Owner may elect to order additional quantities of any or all items in any quantity at the quoted unit and/or category price.

Submit all questions about this Project in writing to the Consultant. Replies requiring changes to the contract documents will be issued and posted on the City of Portsmouth webpage <http://www.cityofportsmouth.com/finance/purchasing.htm> as Addenda and will become part of the Contract. Questions received after the deadline for questions will not be responded to.

Addenda and updates will NOT be sent directly to firms. Vendor/Systems Contractors submitting a proposal should check the web site daily for addenda and updates after the release date. Vendor/Systems Contractors should print out, sign and return addenda with the proposal. Failure to do so may result in disqualification.

The Owner is accepting bids for school technology equipment to be used at the Project. Specific configurations are needed and are detailed within the project documents. All bids should specify parts, quantities, and prices for each of the product categories as well as comply with the items listed under the heading: General Requirements.

1.01 GENERAL REQUIREMENTS

A. Instructions to Bidders:

1. Bid Forms: The Vendor/Systems Contractor must utilize all bid forms, or exact facsimiles, as supplied in this document. All bids shall be submitted in triplicate on forms provided and shall be properly signed and executed.
 - a) Bid Submission: The bid must be complete.
 - b) Bid Attachment/Unit Prices: Wherever requested, each bidder must insert the prices of the items listed on this attachment and agree that those prices will be the basis of his/her compensation for additions or deletions, as the case may be, for such increase or decrease in work. The unit price shall include freight and delivery. Installation costs associated with equipment shall be quoted separately on a per unit basis.
 - c) Bids must be submitted on forms provided. The contract shall be binding on heirs, successors, or assigns in the event of change in management, through sale or by other means. The contract shall not be sublet, assigned, or transferred without the written permission of the Owner. Bid prices for "Options" and proposed substitutions are to be provided on a separate page, clearly identifying the item being bid, pricing and cut sheets that define the specific option or proposed substitution.
 - d) The Owner reserves the right to reject any or all bids in whole or in part, and to waive informalities, irregularities, omissions or technical defects if it is deemed in the best interest of the Owner.
 - e) The Owner desires to place an award to a single Vendor/Systems Contractor for each category in this bid; however, the right is reserved to place awards to multiple Vendor/Systems Contractors. The Owner reserves the right to make a partial award. Should the need arise to make a partial award; the quoted unit item price will be used in order to calculate the total cost for the quantity of items selected. Categories may be awarded in whole or in part as determined by and in the best interest of the owner.
 - f) All documents must be delivered in a sealed envelope, plainly marked with the reference "Re-Bid for the Purchase of Technology Equipment for the "Portsmouth Middle School." These sealed envelopes shall have the name and address of the bidder prominently indicated on the bid envelope. Bid date July 11, 2012, bid time 2:00 p.m. and bid number 38-12 shall also be prominently indicated on the bid envelope.
 - g) Identify company name, address, and telephone numbers of suppliers and subcontractors; indicate the work they are to perform. Submit corporate or individual information for each such listed subcontractor. This information shall include at a minimum the firm name, address, telephone number, number of years in business, a one paragraph description of the nature of the firm's business, federal tax identification number, and a statement of compliance to state tax and labor law.

- B. Bid Bond: Each bid shall be accompanied by a Bid Bond or Certified Check in the amount of ten percent (10%) of the Base Bid Sum made payable to The Owner. No bid will be considered which is not accompanied by such Bid Security. A Bid Bond, if used, shall be executed by a surety company licensed to

do business in the State where the project is located, which can comply with requirements for writing the Payment and Performance Bonds in that State.

- C. **Insurance Requirements:** The successful vendor shall, at its own expense and cost, obtain and keep in force during the entire duration of the Project or Work the following insurance coverage covering the bidder and all of its agents, employees and subcontractors and other providers of services and shall name The Owner, its employees and agents as an Additional Insured on a primary and non-contributory basis to the bidders Comprehensive General Liability and Automobile Liability policies. Insurance shall be written with Carriers approved in the State where the project is located, and with a minimum Best's Rating of A-. In addition, all Carriers are subject to approval by the Owner.
- a) Worker's Compensation Insurance:
- Statutory Coverage, Employers Liability
- b) Comprehensive General Liability:
- Including Premises & Operations, Products and Completed Operations, Personal and Advertising Injury, Contractual Liability and Independent Contractors.
- Limits of Liability for Bodily Injury and Property Damage:
 Each Occurrence: \$1,000,000
 Aggregate \$2,000,000 (The Aggregate Limit shall apply separately to each job.)
- c) Automobile Insurance:
- Including all owned, hired, borrowed and non-owned vehicles.
- Limit of Liability for Bodily Injury and Property Damage:
 Per Accident: \$1,000,000
- I. The bidder shall direct its Insurer to provide a Certificate of Insurance to the Owner before any work is performed. The Certificate shall specify that the Owner shall receive 30 days advance written notice of cancellation or non-renewal. The Certificate shall evidence all required coverage including the Additional Insured.
- D. **Indemnification:** To the fullest extent permitted by law, the Vendor/Systems Contractor shall indemnify and hold harmless the Owner, and its consultants, agents, and employees from and against all claims, damages, losses and expenses, direct, indirect or consequential (including but not limited to fees and charges of engineers, attorneys and other professionals and court and arbitration costs) arising out of or resulting from the performance of the Vendor/Systems Contractor's work, provided that such claim, damage, loss or expense is caused in whole or in part by any negligent act or omission by the Vendor/Systems Contractor, any person or organization directly or indirectly employed or engaged by the Vendor/Systems Contractor to perform or furnish either of the services, or anyone for whose acts the Vendor/Systems Contractor may be liable, regardless of whether or not it is cause in part by a party indemnified hereunder.
- E. The Vendor/Systems Contractor shall be an authorized representative and/or re-seller for all of the products that he/she is bidding. The Vendor/Systems Contractor must supply written information from the manufacturer that he/she is authorized to sell and warranty all products bid in the State where the Project is located. The Vendor/Systems Contractor shall pay all royalties and license fees on products furnished. It shall defend all suits (with Counsel) satisfactory to Owner and claims for infringement of any patent rights and shall indemnify and hold the Owner harmless from any and all costs, legal fees, expenses and liabilities resulting there from.

- F. The Vendor/Systems Contractor shall warrant that the software will not infringe or violate the patent, copyright, trademark, trade secret, or other intellectual property rights of any third party and the Vendor/Systems Contractor shall defend and indemnify the Owner against all such claims.
- G. Permits and Compliance with Codes: The Vendor/Systems Contractor shall obtain and pay for all necessary insurance certificates for equipment, appliances and work, and shall conform to all applicable safety and fire codes. The System Contractor must have a copy of their insurance certificates on file with the Owner prior to beginning work.
- H. The Vendor/Systems Contractor shall take all required precautions to protect his/her equipment against damage, theft, and deterioration on the site(s). He/she shall respect the work of others, and any accidental damage incurred to the work of others shall be promptly repaired or replaced at the expense of the Vendor/Systems Contractor. All equipment shall be left in a designated location within the building and installed in strict accordance with all manufacturer's directions and maintenance manuals.
- I. All technology hardware shall be delivered based on required build specifications.
- J. All software, with the exception of the operating system, shall be purchased on an academic licensing basis, or on a most favorable pricing basis, whichever provided the lowest price to the owner.
- K. All technology hardware shall be covered by a minimum of a one-year on-site, three-year parts and labor warranty, with a one-day response time. Additional warranty requirements are identified within this document and the most stringent requirements are to be met and included in the bid. The responding Vendor/Systems Contractors will outline all warranties in their bid.
- L. The Vendor/Systems Contractor shall deliver all components or coordinate delivery should equipment be shipped directly to the site.
- M. Acceptance of delivery will be contingent upon demonstration by the Vendor/Systems Contractor of proper working order of all hardware and software components purchased. The Vendor/Systems Contractor may be asked to provide product demonstration prior to the execution of a contractual agreement. Following installation and implementation of the software and completion of any training to be provided, the Owner shall be given 90 days to conduct an acceptance test to be sure the software functions properly. The Vendor/Systems Contractor must commit to correcting all errors discovered during the testing process. The Owner shall be entitled to a refund if the vendor is unable to correct all errors, within a reasonable period of time, during the acceptance testing process.
- N. Prices in each bid must reflect total cost to the Owner including freight to the Project, internal delivery, unpacking, trash removal, and complete installation. Final delivery schedules will be coordinated with the Vendor/Systems Contractor(s) at the time of the award.
- O. The successful Vendor/Systems Contractor is obligated to provide equipment and computer systems that meet the specific usage for which they are intended and designed. Notwithstanding the details presented in this Specification, it is understood that a complete and operating computer system is required. It is the responsibility of the successful Vendor/Systems Contractor to verify the completeness of the materials list to meet the intent of the specifications and include in their bid items and associated pricing they know to be necessary which may not be specifically listed herein. Be advised that any additional hardware or software required during and/or after installation in order to make the systems operational, even if not specifically mentioned herein (e.g., device cables, power cords, patch cables), shall be provided by the successful Vendor/Systems Contractor at no cost to the Owner.
- P. All items must be current manufacturer products and be available in the general marketplace. All items must be new from the manufacturer and contain no remanufactured parts.
- Q. All bidders are required to sign and submit a Non-Collusion Affidavit as well as any other forms as

required by the Owner along with the Bid Forms.

- R. The Vendor/Systems Contractor will provide at least one original copy of all software purchased through this order, as well as all documentation for software licenses.
- S. The contract period shall extend until one year after Project completion (for all equipment and installations unless specifically noted elsewhere) and Owner sign-off, during which time additional quantities or the items provided by the Vendor/Systems Contractor may be purchased by the Owner at the same or lower cost than the amount specified in the bid.
- T. The bidder agrees and warrants that in the submission of this sealed bid, they will not discriminate or permit discrimination against any person or group of persons on the grounds of race, color, religion, national origin, sex, or physical disability including, but not limited to blindness, unless it is shown by such bidder that such disability prevents performance of that which must be done to successfully fulfill the terms of this sealed bid or in any manner which is prohibited by the laws of the United States or the State of New Hampshire; and further agrees to provide the Human Relations Commission with such information requested by the Commission concerning the employment practices and procedures of the bidder.

1.02 BIDS

- A. The following items must be included in each bid. Exclusion of any item will be grounds for disqualification of the bid.
- B. Carefully examine the contract documents and the site to obtain firsthand knowledge of existing conditions. Vendor/Systems Contractors will not be given extra payments for conditions, which can be determined by examining documents or site and will not be relieved of any obligations with respect to bid.
- C. Include a completed Bid Response Form of the systems being bid, indicating the manufacturer, model number, quantity, unit cost, and total costs for each item and category and the total for both categories. Itemization of software license costs must be included for each piece of installed software. The Vendor/Systems Contractor must warranty that the software will function in accordance with the specifications. Itemization of miscellaneous equipment such as cables, connectors, patch cords, etc. is not required. Prices shall include all necessary systems configuration, installation, overhead, etc. required for a complete and functioning system. At the end of this list indicate the cost of all other items such as miscellaneous equipment required. Bidders are reminded that Public Schools are exempt from Federal Excise Taxes as well as State Sales Taxes, Use and Service Taxes, to the extent provided by the law, which should not be included in the Vendor/Systems Contractor's bid.
- D. Submit complete manufacturer data sheets and specifications for all items specified and bid. Cut sheets must be compiled and presented in the order or the specific items identified within each category being bid.
- E. The Vendor/Systems Contractor must furnish all software license agreements that the Vendor/Systems Contractor proposes executing upon execution of contract.
- F. Include a listing of any voluntary alternates bid by the bidder as substitutions or additions to the specified systems; with complete manufacturer data sheets and specifications.
- G. Include any notes or comments if necessary to clarify bid.
- H. Provide references for provisions/installations of similar size. Furnish the names, addresses, and telephone numbers of System Designer and/or Systems Consultant, and Owner on five projects similar in scope, which the Vendor/Systems Contractor has installed in the last five years. References that provide poor and/or unsatisfactory work related information pertaining to the work by the System's Contractor on similar projects shall be immediate cause for the rejection of the System Contractors bid.
- I. Provide resumes of personnel to be assigned to the Project. At a minimum include project management, engineers and technical support.

- J. Prior to the final selection of a Vendor/Systems Contractor and the award of a contract, the Owner and/or representatives of the project, reserves the right to meet with any of the bidders of their choosing, for the purpose of clarifying a bid response, and for answering any questions pertaining to a bidder's bid.
- K. Vendor/Systems Contractors will be required to provide demonstrations of any and all equipment bid and answer specific questions relating to specific hardware or software bid. Any hardware or software including internal components of computer systems that the Owner (and its' consultants) determines is not equal or superior in quality to the hardware or software specified will be cause for rejection of that bidders' bid.

END OF SECTION

NON-COLLUSION AFFIDAVIT

**Portsmouth Middle School
155 Parrott Avenue, Portsmouth, NH 03801**

NON-COLLUSION BIDDING AFFIDAVIT

No bid will be considered nor will any award be made to any Bidder who has not certified under penalties of perjury to the statement of non-collusion.

- A. The undersigned and each person signing on behalf of the undersigned certified, under penalty of perjury, that:
- B. The prices in this bid have been arrived at independently, without collusion, consultation, communication or agreement, for the purpose of restricting competition, as to any matter relating to such prices with any other bidder or with any competitor;
- C. Unless otherwise required by law, the prices which have been quoted in this bid have not been knowingly disclosed by the undersigned and will not knowingly be disclosed by the undersigned prior to opening, directly or indirectly to any other bidder or to any competitor;
- D. No attempt has been or will be made by the undersigned to induce any other person, partnership or corporation to submit or not to submit a bid for the purpose of restricting competition.

Any bid containing a corporate Bidder's certification to the statement of non-collusion shall be deemed to have been authorized by the Board of Directors of the Bidder and such authorization shall be deemed to include the signing and submission of the bid and the inclusion therein of the certification as to non-collusion as the act and deed of the corporation.

By: _____ Title: _____

Corporation: _____

NOTE: By bidding on this Contract the Contractor agrees that any or all past clients may be contacted by the Owner or Construction Manager. The Contractor bidding on this Contract also agrees to release and discharge by bidding on this Contract for the Contractor itself, its heirs, executors, administrators and assigns, does release, acquit and forever discharge the Town, its Board of Education, the Architect, Consultant, Construction Manager and all employees and any or all other persons, firms and corporations of and from any and all actions, causes of actions, claims or demands, costs, loss of services, expenses, compensation, consequential damage or any other thing whatsoever, on account of, or in any way growing out of any former client contacted by the Town or the Construction Manager to obtain an opinion regarding any work performed by your Company. The above release shall also include and apply to any former client contacted.

BID FORM ITEMIZED BID

PROJECT: Portsmouth Middle School
155 Parrott Ave.
Portsmouth NH 03801
Project Phase 1

To: Hereinafter called "Owner"

From: Company:

Contact:

Telephone:

E-Mail:

The undersigned, in compliance with the Invitation to Bid Technology Equipment and Services for the Project, having examined the Plans and Specifications contained herein and the related Documents, and being familiar with the conditions surrounding the proposed Work, including availability of products, materials and labor, proposes to furnish, deliver and set in place all materials, including furnishings, hardware, software and cabling required for Section 16744 entitled Technology Equipment and Services for the Project in accordance with the Contract Documents within the time limit specified and for the contract price specified below.

The Owner desires to place an award to a single Vendor/Systems Contractor for this re-bid.

The unit pricing is strictly for the addition and/or deletion of items throughout the contract period.

ADDENDUM ACKNOWLEDGEMENT (Date and Initial as Necessary)

	Title/Date	Initial
Addendum #1:	_____	_____
Addendum #2:	_____	_____

Prices shall remain FIRM during the entire contract period.

The following lump sums are the total lump sum bid to accomplish the full scope of work for the Bid Categories.

Lump Sum Bid to furnish and install products and services per specification.

Bid Item D 401.1 Cisco Solution, \$ _____

Price in words _____

Bid Item D 401.2 HP 1G configuration \$ _____

Price in words _____

Bid Item D 401.3 HP 10G configuration \$ _____

Price in words _____

Unit prices furnished below are to be held firm for the course of the entire contract period and will be used to adjust the quantities of specific items throughout the project. Include delivery, installation, configuration, training, service, warranty and installation costs for each item, included in the unit costs. Additional charges will not be approved.

BID FORM VENDOR CHECKLIST

Item	Description	Yes/no & initial
1	SUBCONTRACTORS LISTED	
2	5% BID BOND INCLUDED	
3	INSURANCE REQUIREMENTS MET	
4	AUTHORIZED RE-SELLER, WARRANTY/SERVICE COMPANY	
5	PRODUCT DATA PROVIDED	
6	REFERENCES PROVIDED	
7	CORPORATE INFORMATION PROVIDED	
8	BID FORM COMPLETED & PROVIDED IN TRIPLICATE	
9	ADDENDUM ACKNOWLEDGEMENT (if any)	
10	SIGNED NON-COLLUSION	

The undersigned agrees that if the undersigned is selected, he will accept and execute a Purchase Order issued by the Owner and that all specifications, requirements and terms in this bid document will apply.

SOCIAL SECURITY NUMBER OR FEDERAL I.D. NUMBER OF BIDDER:

By (Company and Title): _____
(print) (signature)

Business Address: _____

City/State/Zip Code: _____

End of Bid Form

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 1 Specification Sections, apply to this Section.

1.2 SUMMARY

- A. Furnish, unpack, remove trash, install, test, configure, integrate and inventory. The equipment and systems specified in this section including but limited to the following:

- 1. Network hardware, switching, WAN and related items

- B. The installation will include but not be limited to the following:

- 1. Ordering and storage of material prior to shipment and/or delivery;
 - 2. Delivery directly to the location within the Project;
 - 3. Configuring, imaging, connecting and placing in the location designated on the plan, or as noted in the distribution list;
 - 4. Documenting and implementing the IP scheme and configurations required for effective connections to and with the Owner facilities and systems;
 - 5. Complete unpacking, placement in final location and assembly;
 - 6. Leveling, anchoring, mounting and securing equipment, racks and other items;
 - 7. Installation, integration and configuration of operating systems, applications and software;
 - 8. Check all items in with the Project Contact or Designated Representative of the owner;
 - 9. Removal of all packing material and other trash associated with this work. The vendor is responsible for trash removal. The owner will not furnish dumpsters. Trash must be removed from the site and properly disposed of. Provide certification of recycling major packing material, paper products and other recyclable items.
 - 10. Adhere inventory tags on each item. Tags will be provided by the Owner. Include asset tag/number information in the final equipment inventory documentation. Provide an electronic copy of the complete inventory in Excel or compatible format.
 - 11. Training: Provide professionally credentialed trainers, technician level 1 or higher, for each of the systems provided. Provide a total of 20 hours of training. The training is to be scheduled with the designated representative of the owner in blocks of no fewer than 4 hours, at the convenience of the Owner. Maintain sign-in sheets for all training and provide summary of training sessions, attendees and total training time with close-out submittals.

- C. Project status and schedule

- 1. The School is currently under construction. The technology equipment will be provided and installed at the end of each construction phase and will be coordinated with the installation of the furniture and systems. The successful vendor will coordinate with other parties working on the project.
 - 2. The installation of equipment and systems shall occur as indicated.
 - 3. Training is to be started during the week of August 22, 2012 and is to continue as required and directed by the designated representative of the Owner.

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ADDITION AND RENOVATION
PORTSMOUTH, NEW HAMPSHIRE**

D. ENERGY STAR Requirement

Equipment and systems are to be ENERGY STAR rated and are to carry the ENERGY STAR symbol in a clear and visible location. Equipment that is not eligible for the ENERGY STAR rating does not need to carry the rating, but all eligible equipment and categories are to be rated and labeled. Provide systems that earn the ENERGY STAR and are configured properly for automatic energy-saving features as per the current ENERGY STAR specifications. Provide a list of the items that are ENERGY STAR compliant in your bid response.

- E. Bid Forms: Provide completed bid forms for the categories and items that you are bidding on. Note: the amount of your bid is to be written in numbers and words. The two values are to be identical. Services, warranty, training and other costs are to be included in each unit cost and in totals. No additional funds will be provided for these services.

1.3 QUALITY ASSURANCE

- A. Source Limitations: Obtain technology equipment through one source from a single manufacturer to the greatest possible extent. Coordinate and ensure compatibility of equipment provided under this section with other related equipment. The Contractor must provide evidence that the manufacturer authorizes them to sell, install and service the equipment included in the Bid.
- B. Vendor/Systems Contractor must be experienced, having successfully completed five (5) projects of similar size and scope within the past five, (5) years, submit references with the Bid response. The technicians must have five (5) years experience in designing, installing and testing technology equipment and networks. The technicians must be manufacturer certified to install the technology equipment and systems. The contractor must maintain the same systems engineer throughout the entire installation, if an emergency occurs, the owner must approve the replacement systems engineer.
- C. Software and Equipment Trainer Requirements: A firm or person experienced in the training of users of the provided equipment and software, and who has been trained on and qualified by the manufacturer to train others in the use of the equipment and/or software. The vendor shall include in the bid response a minimum of twenty (20) hours of training.
- D. References and Standards: The Contractor shall furnish and install equipment that is in conformance with UL and NEC, as well as industry standards.

1.4 SUBMITTALS

- A. Submit complete manufacturer's technical specifications and instructions for each component or assembly. Clearly highlight information showing compliance with this and/or all applicable specifications.
- B. Submit complete shop drawings showing inventory of equipment (by system - by type) to be installed, parts and quantity for each room, including communications equipment and wiring rooms. Include configuration of complete installed systems. Provide drawings and schematics to show interconnections and configuration of completed systems.
- C. Certifications: For each system, submit each manufacturer's certification(s) of distributorship, training and equipment warranties. Submit proof of factory training and certification for the installation and maintenance of each system. Include certifications for the foreman and each technician (worker), who will work on this project. Certifications shall be updated when any changes in personnel are made throughout the project. Provide evidence of manufacturer certification to perform warranty work on the systems.

**PORTSMOUTH MIDDLE SCHOOL
ADDITION AND RENOVATION
PORTSMOUTH, NEW HAMPSHIRE**

1.5 PROJECT CONDITIONS

- A. The Contractor shall verify and confirm all building dimensions relative to equipment to be furnished and installed by taking actual field measurements at the job site prior to equipment fabrication.
- B. The Contractor shall become familiar with job conditions and building measurements to coordinate the planning, design, delivery and installation of equipment furnished under these Specifications with other related trades and associated work during the term of this contract.
- C. The Contractor shall review and become familiar with field conditions, installed infrastructure, wiring rooms and other related work, provided by others that they will interface with or otherwise use, prior to installation.

1.6 DELIVERY AND STORAGE

- A. The Contractor shall schedule, arrange, and coordinate with involved parties/trades for shipment, arrivals, loading dock, elevators (as applicable), acceptance, storage, and security of equipment and materials. Assure that these activities do not interfere with other trades or the progress of this project. The Contractor shall deliver and install the equipment to its final location and not store the equipment in other locations, on site, prior to the installation.
- B. The Contractor shall assure that deliveries are affected in the quantities, within the times, and in accordance with each manufacturer's shipping instructions.
- C. The Contractor shall protect materials according to manufacturer's specifications.
- D. Provide seventy-two (72) hours notice to the design team, consultant, and to the Owner, prior to the delivery of any items or services. Failure to provide such notice and delivery information shall not incur any increase in price to Owner. The vendor shall bear any costs associated with repeat delivery attempts and/or coordination. Installation, shipping, delivery, and other costs shall be included in the prices quoted on the bid form. No additional charges will be allowed. Coordinate all delivery, schedule, access and related issues with project contacts to be provided to the successful vendor(s).

1.7 COORDINATION

- A. The Contractor shall coordinate the installation with the other trades and system installation personnel.
- B. The Contractor will have reasonable access to the resources and facilities necessary to complete the above objectives.
- C. The Owner will supply the contractor with a directory services list of all personnel whom will have access to the network and what rights will be granted.
- D. The Owner will provide asset tags and inventory form.

1.8 WARRANTIES

- A. Provide a warranty for the installation including all equipment subsystems and components. The warrant shall state that the equipment and services are free of faulty workmanship and defects, for a

**PORTSMOUTH MIDDLE SCHOOL
ADDITION AND RENOVATION
PORTSMOUTH, NEW HAMPSHIRE**

period of three (3) years from the date of complete installation and proven functional operation. Within the warranty period, any part or system found to be defective will be repaired or replaced at no cost to the Owner.

- B. Equipment supplied by the Vendor/Systems Contractor under this bid must contain only new factory approved devices that will not void the equipment warranty.
- C. Vendor/Systems Contactor shall provide a single call point of service for all warranty issues related to the work governed by this document.
- D. Provide three year 5 day-per-week, on-site, 10 hours per day, next business day replacement warranty coverage for each item and/or system provided, unless specifications specifically require more comprehensive coverage or service.

PART 2 – PRODUCTS

2.1 MANUFACTURER

- A. For purposes of identification of style and level of quality of equipment desired, these Specifications refer to Technology Equipment as currently manufactured by companies as listed herein. These references are not intended to be restrictive or limiting to competitive makes and models of comparable quality and design, unless otherwise noted on the Item Detail Sheets. Proposals using competitive makes and models shall submit sufficient illustrative material with their proposal to permit comparisons. Provide a complete feature-by-feature comparison of each substitution, verifying the equality of the substituting item. Colors shall be as selected by the Architect or as specified.

In cases where there are district standards and/or requirements for specific vendors, manufacturers and/or equipment, these items are indicated as proprietary and/or required.

2.2 TECHNICAL SUPPORT

- A. The owner reserves the right to record the training sessions for use by Owner’s personnel.
- B. Refer to item detail descriptions for specific information on individual items.

2.3 ITEM D 401 DESCRIPTION

401.1 Cisco Solution

Name	Description	Qty
Core Switch - 4507 Chassis with 2x45 port PoE/PoE+ Linecard and Supervisor 7L-E (2x10G ports)		
WS-C4507RE+96V+	WS-C4507R+E Chassis, two WS-X4648-RJ45V+E, Sup7L-E, LAN Base	1
C4500E-LB-IPB	Lan Base to IP Base license Upgrade	1
C4500E-S7L-DEFAULT	Default WS-X45-SUP7L-E with WS-X4648-RJ45V+E Bundle	1

**PORTSMOUTH MIDDLE SCHOOL
ADDITION AND RENOVATION
PORTSMOUTH, NEW HAMPSHIRE**

Line Cards - 2x12 Port Fiber + 2x45 Port Copper(bundled)		
WS-X4612-SFP-E	Catalyst 4500 E-Series 12-Port GE (SFP)	1
WS-X4612-SFP-E	Catalyst 4500 E-Series 12-Port GE (SFP)	1
Power Supplies		
PWR-C45-1300ACV	Catalyst 4500 1300W AC Power Supply (Data and PoE)	1
PWR-C45-1300ACV/2	Catalyst 4500 1300W AC Power Supply (Data and PoE)	1
Services - 24x7x4 Hardware Replacement + TAC + IOS upgrades		
CAB-AC-2800W-TWLK	U.S. Power Cord, Twist Lock, NEMA 6-20 Plug	2
CON-SNTP-C4507REV	SMARTNET 24X7X4 WS-C4507R+E Chassis,2 WS-X4648-RJ45V+E	1
Optics for Linecards (Multimode)		
GLC-SX-MMD	1000BASE-SX SFP transceiver module, MMF, 850nm, DOM	12
GLC-SX-MMD	1000BASE-SX SFP transceiver module, MMF, 850nm, DOM	7
Storage Switches x 10G Uplinks and Optics		
WS-C2960S-24TD-L	Catalyst 2960S 24 GigE, 2 x 10G SFP+ LAN Base	2
GLC-SX-MM=	GE SFP, LC connector SX transceiver	2
CLOSET B		
2960S-48 Port PoE/PoE+ 10G Uplink Switch (370W)		
WS-C2960S-48LPD-L	Catalyst 2960S 48 GigE PoE 370W, 2 x 10G SFP+ LAN Base	1
2960S-48 Port PoE/PoE+ 1G Uplink Switch (370W)		
WS-C2960S-48LPS-L	Catalyst 2960S 48 GigE PoE 370W, 4 x SFP LAN Base	1
2960S-48 Port 1G Uplink Switch		
WS-C2960S-48TS-L	Catalyst 2960S 48 GigE, 4 x SFP LAN Base	1
Optics for Switches (Multimode)		
GLC-SX-MM=	GE SFP, LC connector SX transceiver	3

**PORTSMOUTH MIDDLE SCHOOL
ADDITION AND RENOVATION
PORTSMOUTH, NEW HAMPSHIRE**

CLOSET C		
2960S-48 Port PoE/PoE+ 10G Uplink Switch (370W)		
WS-C2960S-48LPD-L	Catalyst 2960S 48 GigE PoE 370W, 2 x 10G SFP+ LAN Base	1
2960S-48 Port PoE/PoE+ 1G Uplink Switch (370W)		
WS-C2960S-48LPS-L	Catalyst 2960S 48 GigE PoE 370W, 4 x SFP LAN Base	1
2960S-48 Port 1G Uplink Switch		
WS-C2960S-48TS-L	Catalyst 2960S 48 GigE, 4 x SFP LAN Base	1
Optics for Switches (Multimode)		
GLC-SX-MM=	GE SFP, LC connector SX transceiver	3
CLOSET D		
2960S-48 Port PoE/PoE+ 10G Uplink Switch (370W)		
WS-C2960S-48LPD-L	Catalyst 2960S 48 GigE PoE 370W, 2 x 10G SFP+ LAN Base	1
2960S-48 Port PoE/PoE+ 1G Uplink Switch (370W)		
WS-C2960S-48LPS-L	Catalyst 2960S 48 GigE PoE 370W, 4 x SFP LAN Base	1
2960S-48 Port 1G Uplink Switch		
WS-C2960S-48TS-L	Catalyst 2960S 48 GigE, 4 x SFP LAN Base	1
Optics for Switches (Multimode)		
GLC-SX-MM=	GE SFP, LC connector SX transceiver	3
CLOSET E		
2960S-48 Port PoE/PoE+ 10G Uplink Switch (370W)		
WS-C2960S-48LPD-L	Catalyst 2960S 48 GigE PoE 370W, 2 x 10G SFP+ LAN Base	1

**PORTSMOUTH MIDDLE SCHOOL
ADDITION AND RENOVATION
PORTSMOUTH, NEW HAMPSHIRE**

2960S-48 Port PoE/PoE+ 1G Uplink Switch (370W)		
WS-C2960S-48LPS-L	Catalyst 2960S 48 GigE PoE 370W, 4 x SFP LAN Base	1
2960S-48 Port 1G Uplink Switch		
WS-C2960S-48TS-L	Catalyst 2960S 48 GigE, 4 x SFP LAN Base	1
Optics for Switches (Multimode)		
GLC-SX-MM=	GE SFP, LC connector SX transceiver	3
CLOSET F		
2960S-48 Port PoE/PoE+ 10G Uplink Switch (370W)		
WS-C2960S-48LPD-L	Catalyst 2960S 48 GigE PoE 370W, 2 x 10G SFP+ LAN Base	1
2960S-48 Port PoE/PoE+ 1G Uplink Switch (370W)		
WS-C2960S-48LPS-L	Catalyst 2960S 48 GigE PoE 370W, 4 x SFP LAN Base	1
2960S-48 Port 1G Uplink Switch		
WS-C2960S-48TS-L	Catalyst 2960S 48 GigE, 4 x SFP LAN Base	1
Optics for Switches (Multimode)		
GLC-SX-MM=	GE SFP, LC connector SX transceiver	3
CLOSET G		
2960S-48 Port PoE/PoE+ 10G Uplink Switch (370W)		
WS-C2960S-48LPD-L	Catalyst 2960S 48 GigE PoE 370W, 2 x 10G SFP+ LAN Base	1
2960S-48 Port PoE/PoE+ 1G Uplink Switch (370W)		
WS-C2960S-48LPS-L	Catalyst 2960S 48 GigE PoE 370W, 4 x SFP LAN Base	1
Optics for Switches (Multimode)		
GLC-SX-MM=	GE SFP, LC connector SX transceiver	2

**PORTSMOUTH MIDDLE SCHOOL
ADDITION AND RENOVATION
PORTSMOUTH, NEW HAMPSHIRE**

401.2 HP 1 Gbps solution

Procurve 1 Gig

HP E5412 zl Switch

Switch - L4 - managed - rack-mountable - PoE - with HP E5400 zl Switch Premium License

J9643A 1

HP

Power supply - hot-plug / redundant (plug-in module) - AC 110/220 V - 1.5 kW - United States - for HP E5406,

E5412, E8206, E8212; HP ProCurve Switch 5406zl-48, Switch 8206, Switch 8212

J9306A#ABA 2

HP

Expansion module - Ethernet, Fast Ethernet, Gigabit Ethernet - 10Base-T, 100Base-TX, 1000Base-T - 24 ports - for

HP E5406, E5412, E8206, E8212

J9534A 3

HP ProCurve Gigabit-SX-LC Mini-GBIC

SFP (mini-GBIC) transceiver module - 1000Base-SX - LC multi-mode - plug-in module - up to 1800 ft - for HP

E2610, E2810, E2910, E3500, E6200, E6600; HP ProCurve 20p 10/100/1000, 6120

J4858C 17

HP ProCurve Gigabit-LH-LC Mini-GBIC

SFP (mini-GBIC) transceiver module - 1000Base-LH - LC - plug-in module - for HP E2520, E2610, E2810, E2910,

E3500, E6200; HP ProCurve 20p 10/100/1000, Switch 1810G-24

J4860C 1

HP

Expansion module - 24 ports - for HP E5406, E5412, E8206, E8212

J9537A 1

HP E2910-48G-PoE+ al Switch

Switch - managed - 48 x 10/100/1000 + 4 x shared SFP - rack-mountable - PoE

J9148A#ABA 17

HP ProCurve Gigabit-SX-LC Mini-GBIC

SFP (mini-GBIC) transceiver module - 1000Base-SX - LC multi-mode - plug-in module - up to 1800 ft - for HP

E2610, E2810, E2910, E3500, E6200, E6600; HP ProCurve 20p 10/100/1000, 6120

J4858C 17

APC Smart-UPS 1000 LCD

UPS (rack-mountable) - AC 120 V - 700 Watt - 1000 VA - RS-232, USB - 6 output connector(s) - 2U

**PORTSMOUTH MIDDLE SCHOOL
ADDITION AND RENOVATION
PORTSMOUTH, NEW HAMPSHIRE**

SMT1000RM2U 7

24 port Non POE For ISCSI

HP E2910-24G al Switch
Switch - managed - 24 x 10/100/1000 + 4 x shared SFP - desktop
J9145A#ABA 2

Turnkey Installation / Configuration/ Mounting / Onsite Warranty Support/ Testing

401.3 HP 10 Gbps solution

10 Gig Procurve

HP E5412 zl Switch
Switch - L4 - managed - rack-mountable - PoE - with HP E5400 zl Switch Premium License
J9643A 1

HP
Power supply - hot-plug / redundant (plug-in module) - AC 110/220 V - 1.5 kW - United States - for HP
E5406,
E5412, E8206, E8212; HP ProCurve Switch 5406zl-48, Switch 8206, Switch 8212
J9306A#ABA 2

HP
Expansion module - Ethernet, Fast Ethernet, Gigabit Ethernet - 10Base-T, 100Base-TX, 1000Base-T - 24
ports - for
HP E5406, E5412, E8206, E8212
J9534A 2

HP ProCurve Gigabit-LH-LC Mini-GBIC
SFP (mini-GBIC) transceiver module - 1000Base-LH - LC - plug-in module - for HP E2520, E2610,
E2810, E2910,
E3500, E6200; HP ProCurve 20p 10/100/1000, Switch 1810G-24
J4860C 1

HP
Expansion module - Ethernet, Fast Ethernet, Gigabit Ethernet - 10Base-T, 100Base-TX, 1000Base-T - 20
ports + 4 x
SFP - for HP E5406, E5412, E8206, E8212
J9535A 1

HP ProCurve 10-GbE SFP+ LRM
SFP+ transceiver module - 10GBase-LRM - LC multi-mode - plug-in module - up to 720 ft - 1310 nm -
for HP
E6600-24G-4XG, E6600-24XG, E6600-48G-4XG; HP ProCurve 2-Port, 4-Port 10GbE, 6120XG
J9152A 6

**PORTSMOUTH MIDDLE SCHOOL
ADDITION AND RENOVATION
PORTSMOUTH, NEW HAMPSHIRE**

HP

Expansion module - 10 Gigabit Ethernet - 8 ports - for HP E5406, E5412, E8206, E8212

J9538A 1

HP E2910-48G-PoE+ al Switch

Switch - managed - 48 x 10/100/1000 + 4 x shared SFP - rack-mountable - PoE

J9148A#ABA 17

HP ProCurve 10-GbE SFP+ LRM

SFP+ transceiver module - 10GBase-LRM - LC multi-mode - plug-in module - up to 720 ft - 1310 nm - for HP

E6600-24G-4XG, E6600-24XG, E6600-48G-4XG; HP ProCurve 2-Port, 4-Port 10GbE, 6120XG

J9152A 6

HP

Expansion module - 10 Gigabit Ethernet - 2 ports - for HP E2910-24, E2910-48; HP ProCurve Switch 2910al-24,

Switch 2910al-48

J9008A 6

HP ProCurve 10-GbE Interconnect Kit

Expansion module - 10 Gigabit Ethernet - 10GBase-CX4 (pack of 2) - for HP E2910-24G, E2910-24G-PoE+,

E2910-48G, E2910-48G-PoE+

J9165A 11

APC Smart-UPS 1000 LCD

UPS (rack-mountable) - AC 120 V - 700 Watt - 1000 VA - RS-232, USB - 6 output connector(s) - 2U

SMT1000RM2U 7

24 port Non POE For ISCSI

HP E2910-24G al Switch

Switch - managed - 24 x 10/100/1000 + 4 x shared SFP - desktop

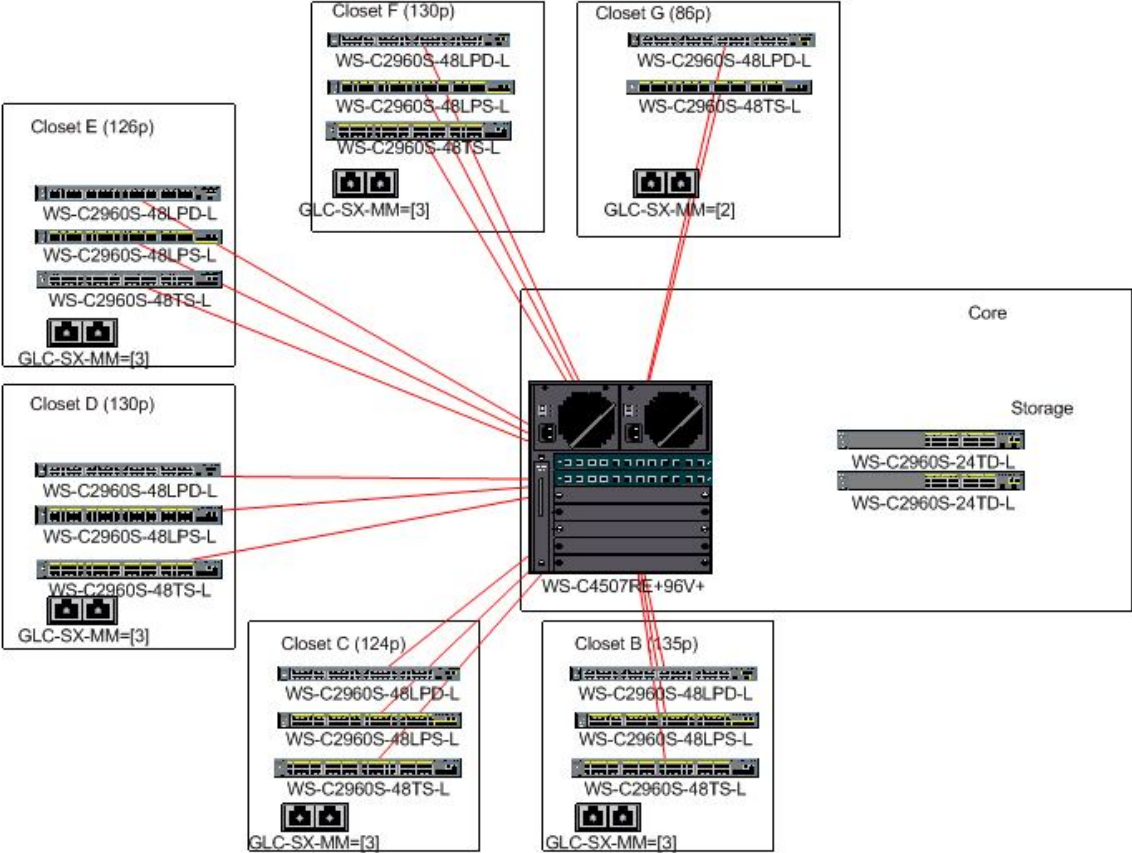
J9145A#ABA 2

Turnkey Installation / Configuration/ Mounting / Onsite Warranty Support/ Testing

Network Option Diagrams

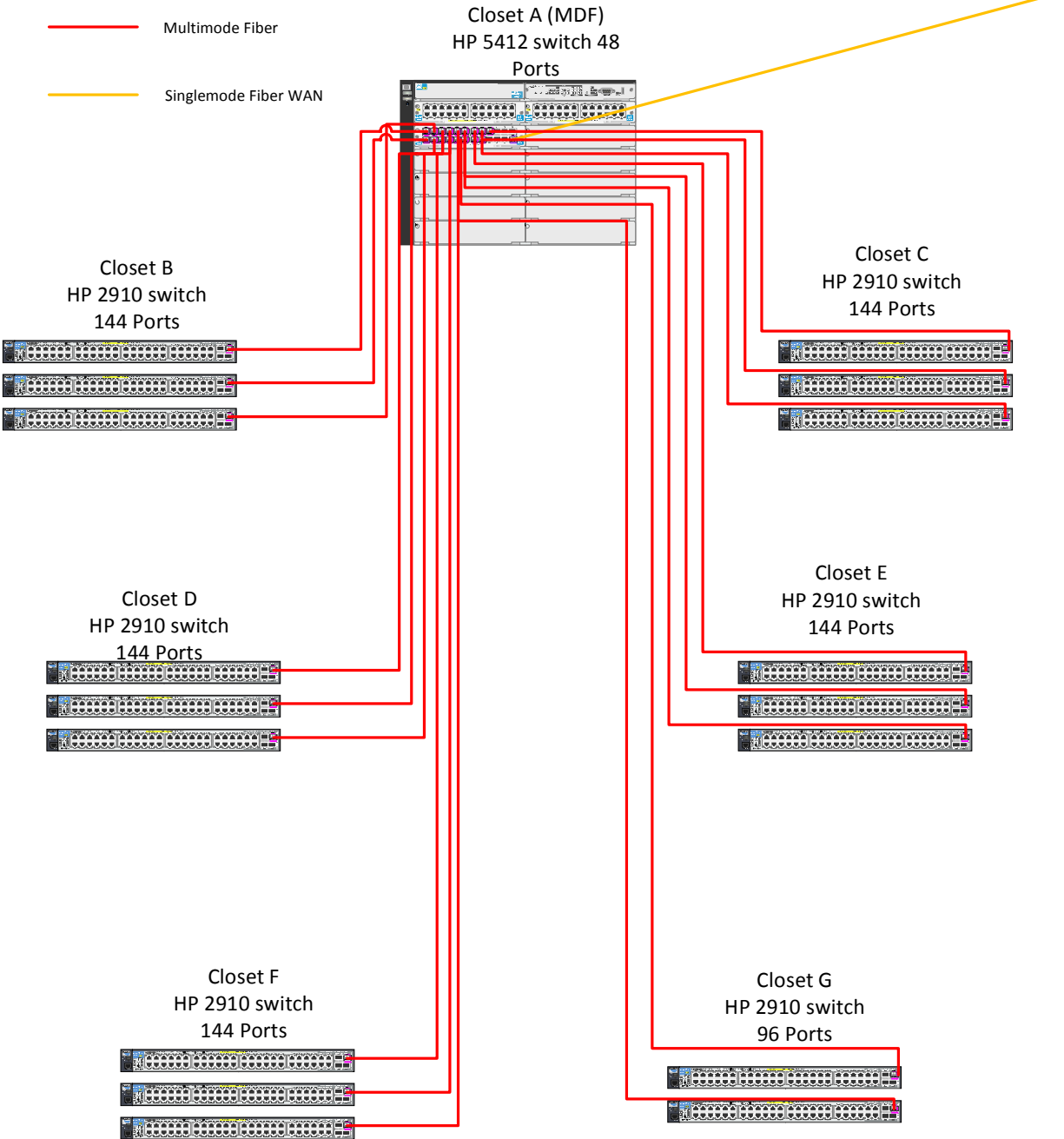
**PORTSMOUTH MIDDLE SCHOOL
ADDITION AND RENOVATION
PORTSMOUTH, NEW HAMPSHIRE**

Portsmouth Cisco Solution Diagram



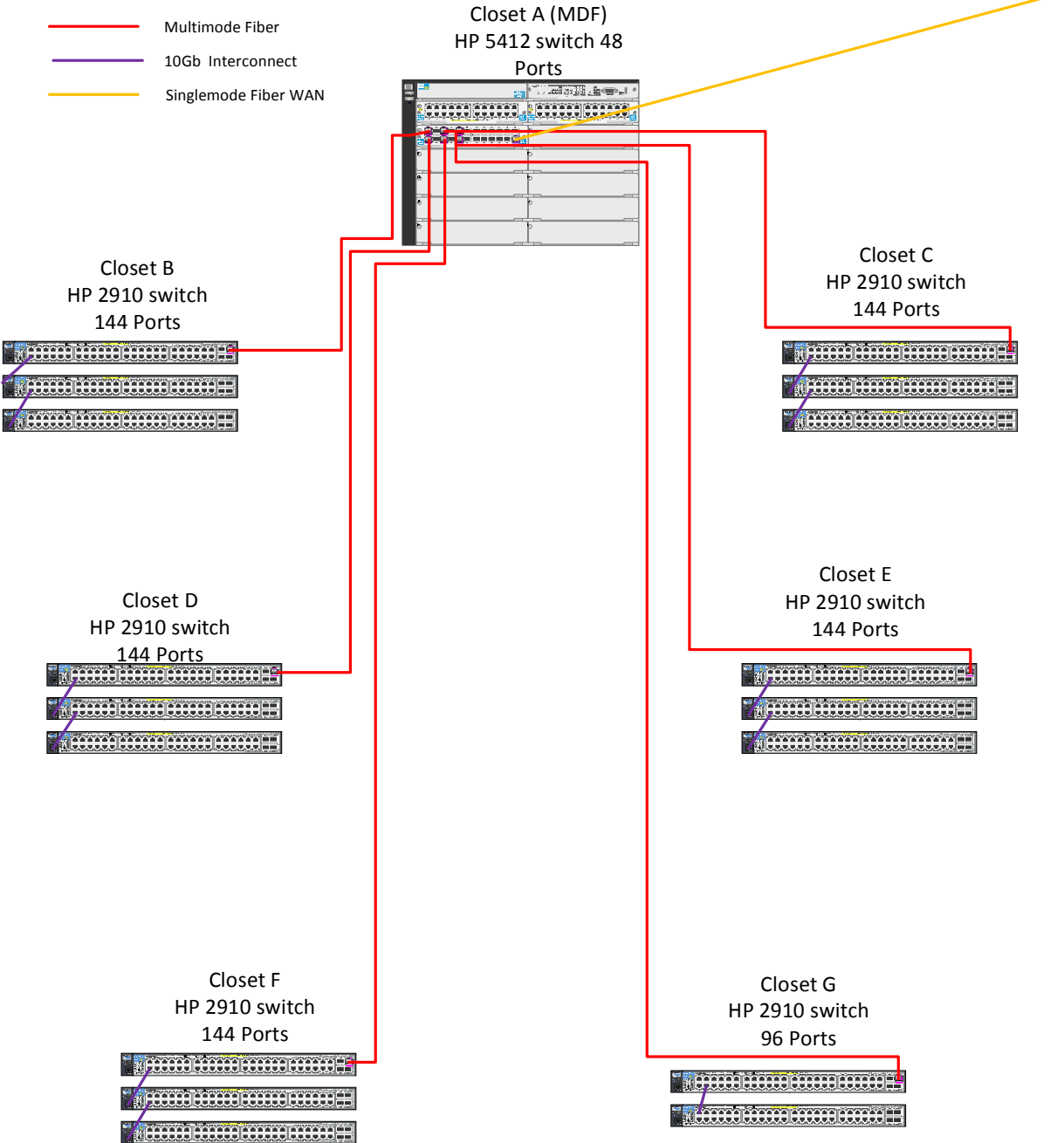
**PORTSMOUTH MIDDLE SCHOOL
ADDITION AND RENOVATION
PORTSMOUTH, NEW HAMPSHIRE**

**Portsmouth HP 1 Gbps
solution**



**PORTSMOUTH MIDDLE SCHOOL
ADDITION AND RENOVATION
PORTSMOUTH, NEW HAMPSHIRE**

Portsmouth HP 10 Gbps Solution



**PORTSMOUTH MIDDLE SCHOOL
ADDITION AND RENOVATION
PORTSMOUTH, NEW HAMPSHIRE**

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