

**HARPER CREEK COMMUNITY SCHOOLS
BATTLE CREEK, MI 49014**

**NETWORKING EQUIPMENT
REQUEST FOR PROPOSAL**

April 30, 2010

1 Schedule of Dates

Specifications Released 4/30/2010

Project Specifications are available from:
Harper Creek Technology Department
Merry Ellen Eason
Phone: 269-441-8421
Email: easonm@harpercreek.net

Bid Due Date 5/14/2009 @ 3:00 pm

*Late bids will be not be accepted.
Bids sent via fax or electronic mail will not be accepted.*

Prior to 5/14/2010 bids may be delivered to:

Harper Creek Administration
ATTN: Merry Ellen Eason
7454 B Drive North
Battle Creek, MI 49014

Provide three (3) sealed copies of your response.

Bids must be clearly marked “HCCS NETWORK EQUIPMENT - BID RESPONSE”

Bid Bond: 5% bid bond is required – Cashiers Check or Bond

Performance Bond is required

No bids may be withdrawn for at least sixty (60) consecutive calendar days following the bid opening.

The Owner reserves the right to accept or reject any and all bids, alternatives, or proposals that, in his judgment, serve his best interests.

The Base Bid shall be a lump sum amount, for the work as set forth in the Bidding Documents.

2 Terms and Conditions

2.1 SALES TAX

The Contractor shall be responsible for the payment of any tax obligation it may incur in connection with the work of this project, including but not limited to State sales and use taxes. The cost of these shall be included in the bid price.

2.2 BID SECURITY

- A. Each Proposal shall be accompanied by Bid Security pledging that the bidder will enter into a contract with the Owner on the terms stated in the Proposal, and will furnish Bonds as described herein. Should the bidder refuse to enter into such contract or fail to furnish satisfactory Bonds and insurances as required after Notice to Proceed, the amount of the Bid Security shall be forfeited to the Owner as liquidated damages, not as a penalty.
- B. Bid Security shall be in the amount of five percent (5%) of the Base Bid(s).
- C. Bid Security may take the form of a Bid Bond, Certified Check, Cashier's Check, or a Money Order. When submitting a Certified Check, Cashier's Check or Money Order for multiple Bids, it is recommended that a separate check or money order accompany each bid. **AN UNCERTIFIED PERSONAL OR COMPANY CHECK DOES NOT CONSTITUTE A BID SECURITY.**
- D. The Owner will have the right to retain the Bid Security of bidders to whom an award is being considered until either (a) the Contract has been executed and bonds, if required, have been furnished, or (b) the specified time has elapsed so that Bids may be withdrawn or (c) all bids have been rejected.

2.3 INSURANCE

- A. Limitation of Liability – By signing the bid, the bidder acknowledges that he/she is skilled and experienced in the use and interpretation of the Specifications. He/she has reviewed the Specifications for this project and has found them to be free of ambiguities and sufficient for Bid purposes. He/she has based his/her Bid solely on these documents and observations and has not relied in any way on any explanation or interpretation, oral or written, from any other source.
- B. Insurance Required – Prior to commencement of the work, the Contractor shall provide to the Owner satisfactory proof of insurance and maintain during the term of the project such insurance as will protect him and the Owner from claims arising out of the Work described in this contract and performed by the Contractor or Subcontractors consisting of:
 1. Worker's Compensation Insurance including Employer's liability to cover employee injuries or disease compensable under the Worker's Compensation Statutes of the State of Michigan, disability benefit laws, if any or Federal compensation acts such as U.S. Longshoremen or Harbor Workers', Maritime employment, or Railroad Compensation Acts, if applicable. Self-insurance plans approved by the regulatory authorities in the State of Michigan are acceptable.
 2. A Comprehensive General Liability policy to cover bodily injury to persons other than employees and for damage to tangible property, including loss of use thereof, including the following exposures:
 - a. All premises and operations.
 - b. Explosion, collapse, and building damage.
 - c. Contractor's Protective coverage for independent contractors or subcontractors employed by him.

- d. Contractual Liability for the obligation assumed in the Indemnification or Hold Harmless agreement found in the Supplemental Conditions section of this Contract.
 - e. The usual Personal Injury Liability endorsement with no exclusions pertaining to employment.
 - f. Products and Completed Operations coverage. This coverage shall extend through the Contract guarantee period.
3. A Comprehensive Automobile Liability policy to cover bodily injury and property damage arising out of the ownership, maintenance or use of any motor vehicle, including owned, non-owned and hired vehicles. In light of standard policy provisions concerning (1) loading and unloading and (2) definitions pertaining to motor vehicles licensed for road use vs. unlicensed or self-propelled equipment, it is strongly recommended that the Comprehensive General Liability and the Comprehensive Auto Liability be written by the same insurance carrier, though not necessarily in one policy.
4. Umbrella or Excess Liability: The Owner, for this project may waive the umbrella or excess liability coverage under the “Limits of Liability” below. This coverage may be considered when awarding this contract, however, it is not a requirement of this contract. The Contractor is granted the option of arranging coverage under a single policy for the full limit required or by a combination of underlying policies with the balance provided by an Excess or Umbrella Liability policy equal to the total limit(s) requested. Umbrella or Excess policy wording shall be at least as broad as the primary or underlying policy(ies) and shall apply both to the Contractor’s general liability and to his automobile liability insurance. The Owner shall be listed as Additional insured.
5. Property Insurance: The Contractor shall be solely and exclusively responsible for all of its equipment and materials used or located at the Project. The Owner is hereby released and shall not have any liability of any kind whatsoever for any damage, destruction, vandalism, theft or any other loss of any kind to Contractor’s equipment and materials used or located at the Project.
- a. The Contractor shall effect and maintain similar property insurance on portions of the work stored off site or in transit when such portions of the work are included in an application for payment.
- C. Limits of Liability – The required limits of liability for insurance coverage required under “Insurance Required” above shall be not less than the following:
- 1. Workers Compensation

Coverage A – Compensation	Statutory
Coverage B – Employer’s Liability	\$1,000,000.00
 - 2. Comprehensive General Liability

Bodily Injury – Each Occurrence	\$1,000,000.00
Bodily Injury – Aggregate (Completed Operation)	\$1,000,000.00
Property Damage – Each Occurrence	\$1,000,000.00
Property Damage – Aggregate or combined single limit	\$1,000,000.00
 - 3. Comprehensive Automobile Liability

Bodily Injury – Each Person	\$1,000,000.00
Bodily Injury – Each Occurrence	\$1,000,000.00

	Property Damage – Each Occurrence	\$1,000,000.00
	or combined single limit	\$1,000,000.00
4.	Umbrella or Excess Liability	\$2,000,000.00

D. Insurance – Other Requirements

1. Notice of Cancellation or Intent Not to Renew – Policies will be endorsed to provide that at least thirty (30) days written notice shall be given to the Owner of cancellation or of intent not to renew.
2. Evidence of Coverage – Prior to commencement of the Work, the Contractor shall furnish to the Owner, Certificates of Insurance in force. The Owner reserves the right to request complete copies of policies if deemed necessary to ascertain detail of coverage not provided by the certificates. Such policy copies shall be “Originally Signed Copies,” and so designated.
3. Qualification on Insurers – In order to determine financial strength and reputation of insurance carriers, all companies providing the coverage required shall have a financial rating not lower than XII and a policyholder’s service rating no lower than A+ as listed in A.M. Best’s Key Rating Guide, current edition. Companies with ratings lower than A+: XII will be acceptable only upon written consent of the Owner.
4. Subrogation Clause – The following subrogation clause shall appear in all policies of insurance, “Subrogation Clause – It is hereby stipulated that this insurance shall not be invalidated should the insured waive in writing prior to a loss any or all right of recovery against any part for loss occurring to the property described herein.”
5. Additional Insured Provision on Policy(ies) is to read as follows:
“The Kalamazoo RESA, its elected or appointed officers, officials, employees and volunteers are included as insured with regard to damages and defense of claims arising from:
 - a. activities performed by or on behalf of the Named Insured,
 - b. products and completed operations of the Named Insured,
 - c. premises owned, leased or used by the Named Insured, or
 - d. the ownership, operation, maintenance, use, loading or unloading of any auto owned, leased, hired or borrowed by the Named Insured.”

2.4 ENVIRONMENTAL STATEMENT AND RESPONSIBILITY OF CONTRACTORS AND SUBCONTRACTORS

- A. It shall be the responsibility of the Contractor to pay any and all costs incurred from the clean up related to any environmental hazard created by means of release, spill, leak or any other means of contamination caused by accident or negligence.
- B. It shall be the responsibility of the Contractor to dispose of any product(s) and/or material following EPA, DNR, and local applicable laws and regulations.
- C. It shall be the responsibility of the contractor, if required, to purchase the proper permits and notify the proper authorities prior to commencing said project or, should a “release” take place, to notify proper authorities of any such release.
- D. It shall be the responsibility of the Contractor to maintain on site a blood borne pathogen plan and all necessary safety supplies associated with any spill or clean up that may occur. Contractor shall, prior to commencement of any site activities, supply to the Construction Manager, a written description of its site specific safety plan and accident prevention program. This shall serve as proof of compliance with the foregoing provisions and for coordination with the safety programs of other trade contractors.
- E. The Contractor shall not use the Owner’s dumpsters for any materials of any kind.

- F. Please be aware that owner's buildings contain various types of asbestos containing material (ACBM). Each building has been previously inspected with locations of ACBM being identified within the Asbestos Management Plan book located in each building's administration office. This binder will identify known locations of asbestos materials within that particular building.

Asbestos containing materials include, but are not limited to: floor tile, linoleum, plaster, pipe insulation, spray on material to walls and ceilings/support structures, wallboard, and gaskets. If any building materials that are known or suspected of containing asbestos are encountered, stop work in that area immediately. It is Owner's policy that no outside contractor may touch ACBM without explicit permission from Facilities Management. Owner's representative will take samples and analyze and provide further instruction. Contractor is responsible for any fiber release that results in fiber concentration above the Permissible Exposure Limit (P.E.L.).

- G. The Contractor shall submit verification and confirmation of the above.

2.5 Quality Assurance

2.5.1 Materials

Furnish only new, first-class quality materials and equipment to be delivered, erected, connected and finished in every detail, selected and arranged to fit properly into spaces. Where no specific kind or quality of material is specified, furnish first-class quality standard article, approved by Owner.

2.5.2 Current Versions

Supply most current version of all products being provided. Prior and/or old versions of products, unless specifically identified as an exception to this requirement, in this document or its subsequent addenda and/or bulletins, shall not be acceptable. In cases where a newer version of a product is available at the time of installation, request a clarification from the Owner, in writing, via fax, electronic mail, or letter, on which product is to be used.

2.5.3 Standards Compliance

Comply with latest edition or revision of each standard of code mentioned in these specifications for use in the intended environment as follows:

- American Insurance Association (AIA)
- American Insurance Service Group (AISG)
- American National Standard Institute (ANSI)
- American Society for Testing and Materials (ASTM)
- Alliance for Telecommunications Industry Solutions (ATIS) Bellcore
- Building Officials and Code Administrators International, Inc. (BOCA)
- Ceilings and Interior Systems Construction Association (CISCA)
- Electronics Industries Association (EIA)
- Federal Communications Commission (FCC)
- Federal Information Processing Standards (FIPS)
- General Services Administration (GSA)
- International Conference of Building Officials (ICBO)
- Institute of Electrical and Electronics Engineers, Inc. (IEEE)
- International Organization for Standardization (ISO)
- International Telecommunication Union (ITU) (Formerly CCITT)
- National Electrical Manufacturers Association (NEMA)
- National Fire Protection Association (NFPA)
- National Electrical Code (NEC) – NFPA 70-1993
- Telecommunications Industries Association (TIA)
- Underwriters' Laboratories (UL)
- National Institute of Standards and Technology (NIST)

National Technical Information Service (NTIS)
Occupational Safety and Health Administration (OSHA)
Rural Utilities Services USDA/RUS (RUS Formerly REA)
State and Local Municipality Codes and Ordinances
Building Industry Consulting Service International (BICSI)

Where conflicts occur between codes and standards, or between codes and standards and Specifications and Plans, the one establishing the more stringent requirements shall be followed.

2.6 Contract Documents

This document along with the completed Bid Form and Proposal Documents shall constitute the Contract Documents by which performance of work shall be judged. The Owner's consultant shall be the judge of performance regarding all work. Standard AIA contracts between Owner and Contractor will be executed.

2.7 Conformance

The Contractor warrants that all workmanship, materials, and equipment incorporated in this work will be of good quality and in conformance with the Contract Documents.

2.8 Quality Standard

The Contract Documents establish a standard of quality that the Owner has determined to be necessary for the project. It is mandatory that items of material and equipment conform to the Contract Documents and meet the quality standards in every respect.

2.9 Conformity of Work

Execute all work in conformity with best practice to accommodate work to environment and surroundings. Perform all work in accordance with drawings, manufacturer's instructions, shop drawings, this specification, and other Contractors and Vendors.

2.10 Coordinate Locations

Coordinate locations and arrangements of equipment with requirements of all other Contractors, Vendors, and Owner. In cases of technical configuration or implementation difficulties, or if simplified installation is made possible by slight variance, bring such conditions to attention of Owner, in writing, via fax, electronic mail, or letter. Changes in arrangements may be made only if authorized by Owner.

Drawings are diagrammatic and indicate the general arrangement of systems and work included in these documents. Final placement and arrangement are the responsibility of the Installing Contractor.

2.11 Work Definition

Below is an outline of specific work the Contractor shall be responsible for performing:

- Project Management
- Systems Engineering
- Construction Scheduling
- Installation
- Configuration
- Testing
- Documentation
- Owner Orientation or Training

2.12 General Duties

2.12.1 Supervision

The Contractor shall plan, direct, supervise, coordinate, and perform the work.

2.12.2 Owner Policies and Procedures

1. A no smoking policy is in effect at all times for all areas on school property.
2. The consumption of drugs or alcoholic beverages by the Contractor's employees, or any subcontractor's employees, shall be prohibited on the Owner's property. The Contractor shall remove from the site, any employee or employee of a

- subcontractor, who is vulgar, offensive, or who is under the influence of drugs or alcohol.
3. Firearms, knives, and any other weapons are not allowed on school property. This includes weapons stored in vehicles parked on Owner's property.

2.12.3 Qualified Personnel

Only certified, skilled, dependable persons who meet with the Owner's approval at all times in every capacity shall be utilized.

2.12.4 Product Delivery and Liability

The Contractor shall take responsibility for the delivery and installation of all equipment specified in the Bid Proposal. This shall include loss or damage during shipment or installation. The Contractor warrants that all materials and equipment incorporated in the work shall be new, unless otherwise specified in the Bidding Documents. The Contractor warrants that all materials and equipment incorporated in the work shall be free from faults and defects. The Contractor shall inspect all product shipments for damages and promptly replace damaged product. No damaged product shall be stored on site.

2.12.5 Structural Damage

The Contractor shall replace or repair any damage to structure, finishes, or resulting from work performed by the Contractor. The Contractor shall REPLACE any damaged ceiling tiles.

2.12.6 Incidentals

The Contractor shall provide any incidental material, labor, or detail omitted from the Bid Proposal, yet required by governing codes and standards, local regulations, trade practices, operational functions, or good workmanship, as part of the contract work without extra charge.

2.12.7 Deviations

Deviations from Plans or Specifications shall not be permitted except upon written permission from Owner.

2.13 Project Management

The Contractor shall provide complete project management for all aspects and phases of the project, including the following:

2.13.1 Project Manager

The Project Manager shall be experienced. He/She shall have managed at least three similar projects of similar scope. The project manager shall be authorized to make decisions on behalf of the company. The project manager shall inspect work and direct the crew on an on-going basis.

2.13.2 Planning and Management

Building work shall be coordinated with the construction manager, Owner's technology consultant and/or the Owner's representative.

2.14 Time and Scheduling

2.14.1 Owner Possession

It is the intention of the Owner to take possession of the Work by the established completion date or earlier, within the shortest time possible consistent with good construction practices.

2.14.2 Schedule of Work

Upon award of the contract, the Contractor shall meet with the Owner to prepare an agreed upon schedule of work. This schedule shall provide the Owner with dates upon which stages of the work may be reviewed or inspected. The Contractor shall keep the Owner informed at all times of any modifications to the agreed upon schedule.

2.14.3 Delay of Work

If the work is delayed through the fault of the Owner (or of any separate contractor employed by the Owner or of any condition by the Owner beyond the Contractor's control) the schedule may be extended within a

period agreed upon by the Owner and the Contractor. The Contractor shall notify the Owner, in writing, of any condition or situation that in the Contractor's opinion warrants an extension of Contract Time.

2.14.4 Time Extension

The Contractor shall not be entitled to additional compensation or damages due to delays, interference's or interruptions to the Work or the Project, but shall be entitled only to an appropriate extension of time in accord with the General Conditions of the Contract for Construction.

2.15 Contractor Inspection of Work

The Contractor shall promptly facilitate inspection and testing of the Work regardless of expense as necessary or as requested by the Owner, regardless of whether or not the Work in question is his own or that of a subcontractor. The costs for such tests or inspections shall be born as follows:

2.15.1 Contractor Deficiencies

If such tests or inspections reveal deficiencies as measured by Construction documents or an independent consultant/testing agency, the Contractor shall bear all costs incurred to correct such deficiencies, including the cost of testing and inspection, and the cost to reconstruct any work by testing or inspection or by the correction of any deficiency.

2.15.2 Other Deficiencies

If such test and inspections do not reveal deficiencies attributable to the Contractor, the Owner shall bear all costs incurred including the cost of testing and inspection, and the cost of reconstruction. Contracts shall be modified by Change Order to reimburse the Contractor for costs.

2.16 Inspection of Work

The Owner's Consultant will inspect and "punch" the project. The Contractor is responsible to correct any issues brought forth at no additional expense to the Owner.

Retainage, as presented in this document, will be dependent on complying with the final "punch out" list.

2.16.1 Deficiencies

The Contractor shall replace, repair or otherwise correct all deficiencies in the Work during the construction of the Project, within two years after the date of substantial completion, within the time period prescribed in any special warranties and guarantees, and any longer period prescribed by law.

2.16.2 Owner Option

The Contractor shall expediently correct all deficiencies brought to his attention in writing by the Owner or Owner's Consultant. If, in the opinion of the Owner, the Contractor fails to correct deficiencies, or fails to act expeditiously to correct deficiencies, the Owner may:

2.16.2.1 Accept Deficiencies

Accept the deficiencies in the Work, and reduce the Contract Sum of the Contractor at fault by a unilateral Change Order issued and signed by the Owner in an amount to be determined by the Owner.

2.16.2.2 Deficiencies Removed

Have the deficiencies removed in any reasonable manner available to the Owner, and charge the Contractor at fault for the costs incurred, or reduce that Contractor's Contract Sum by a unilateral Change Order issued by the Owner for the costs incurred.

2.17 Cost of the Work

The Contractor shall pay all costs of the Work including, but not limited to, labor, materials, equipment, tools, transportation, freight, taxes, royalties, patent fees, support facilities, construction equipment, water, heat, utilities, supervision, overhead, and all other items necessary for the proper execution and completion of the Work.

2.18 Legal Compliance

The Contractor shall comply fully with all laws, statutes, ordinances, rules, regulations, codes, and lawful orders applicable to their work, including employment regulations, unless specifically exempted from compliance by the Contract Documents. Where local codes differ from codes of broader jurisdictions, the

more stringent code shall apply. The Contractor shall promptly notify the Owner in writing, of items in the plans or specifications for this project that violate any applicable codes.

2.19 Permits

Unless otherwise specifically stated in the Contract Documents, the Contractor shall apply for, secure, and pay for all permits, licenses, and fees. The Contractor shall schedule, conduct or perform all tests, and give all notices required by governmental units for the Work of his Contract.

2.20 Site Housekeeping

The Contractor shall be responsible for his own site housekeeping and clean up of any waste generated in the execution of his Work. Unless otherwise specified, the Contractor is responsible for suitable off-site disposal of their waste and debris.

2.21 Cleanup

Clean all equipment at time of substantial completion including the interiors and exteriors of all cabinets, furniture, and equipment enclosures. Clean out all debris and rubbish related to the installation of all components for all work locations within the building. All equipment shall appear in first class new condition.

2.22 Cutting and Patching

Do all cutting and patching necessary for installation of work with approval of the Owner. Do not impair strength or function of work being cut or patched, e.g., do not weaken structural members; maintain watertight integrity where necessary. Use rotary type drilling tools and concrete cutting saws to cut concrete and masonry walls. Use rotary type drilling tools to cut cabinets where knockouts are not available and cable access is required. Do not use torches for cutting metal.

2.23 Firestopping

Provide firestop as required at all penetrations through fire rated or smoke rated walls, floors, or other surfaces. Replace or reinstall firestop material on all existing penetrations where others have installed firestop.

2.24 Coordinate Schedule

The Contractor shall conduct all work in coordination with the schedule of construction published by the Construction Manager.

The Contractor shall adhere to any and all conduct requirements of the Owner, Owner’s Representative, or Construction Manager. It is the contractor’s responsibility to familiarize staff with any conduct requirements and adhere to the requirements.

2.25 Attendance at Meetings

The Contractor shall be responsible for attending all meetings as required by the Owner.

2.26 Installation

The Contractor shall adhere to manufacturer’s specifications during installation of all hardware.

2.27 Review of Documentation

Upon completion of work, the Contractor shall meet with the Owner to deliver and review system documentation, including test results. The work shall not be considered complete until the Review of Documentation has been completed.

2.28 Acceptance

All construction and installation work shall be done in a thorough and workman-like manner in accordance with the Plans, Specifications, and Construction Drawings and shall be subject to acceptance by the Owner.

2.29 Payment

2.29.1 Submission of Invoice

Requests for payment must be received by KRESA before the 8th day of the month. AIA form G702/G703 must be used. Provide three notarized copies of each pay application for approval. The contractor’s request for payment will be processed the following month after it is received.

Contractor will not be paid if Certificate of Insurance has not been provided prior to submission of G702/G703 forms. Additionally, if Contractor wishes to request payment for Stored Materials, Certificate of Insurance stating that the Stored Materials are insured.

2.29.2 Payment of Invoice

Invoices in question shall be communicated to the Contractor within eight (8) business days of reception.

2.29.3 Retainer

Ten percent (10%) of all invoices will be retained. Retained amount will be paid within 60 days of final acceptance.

2.30 Michigan Prevailing Wage

Harper Creek Community Schools is funding this project with bond funds and State of Michigan Prevailing Wage rules apply.

2.30.1 Permits

The selected contractor will be responsible for obtaining/securing all permits necessary for installing all components of this project.

2.31 Drawings

Drawings provided are considered part of this specification.

3 Project Requirements

3.1 Introduction

Harper Creek Community Schools is soliciting bids from qualified bidders for:

- Network Hardware
- Digital Signage Hardware and Training
- Category 6 Cabling

The district intends to award all projects to a single contractor. Primary contractors may use subcontractors to provide a total solution. All subcontractors must complete separate Company Information forms and Reference forms.

3.2 Project Schedule

All products must be delivered to customer facility no later than August 25, 2010.

3.3 Warranty

All hardware, connectors, jumpers, patch cords, as well as all workmanship and labor, will be warranted for a period of not less than two (2) years.

All warranties will begin immediately following acceptance of the completed project, as determined by the Owner.

3.4 General Installation

The Vendor will be responsible to furnish, set in place, and install all equipment, unless otherwise noted. The installation process includes, but is not limited to the following:

- Receive all equipment on behalf of the Owner.
- Provide inventory receipt of all equipment to Owner.

3.4.1 Workmanship

All work shall have a finished appearance. The contractor shall supply and repair / install all trim, covers, fixtures, carpet, ceiling tile, paint, hardware, brackets, etc., as needed.

3.5 Proposal Format

3.5.1 Bid Forms

All bidders submitting a response to this RFP must complete all bid forms provided. At least three references must be provided on the Technology Reference form. Bid forms are available in Microsoft Word format upon request.

3.5.2 Executive Summary

Bidders should include an executive summary that gives an overview of their response. Please include any pertinent information not specifically asked for on the bid forms.

3.5.3 Material Lists

Include a detailed Materials List for each section of your response. It is important that all items are listed. It will not be assumed that items are included, unless they are specifically listed.

3.5.4 Diagrams

Some sections may require diagrams. Please review each specific section for stated diagram requirements. If noted, failure to provide diagram may disqualify your bid.

3.5.5 Cut Sheets

Include manufacturer cut sheets for key components used in your design. Cut sheets are not required for items that exactly match the specified models in this RFP.

3.6 Bid Evaluation

It is the intent of the Owner to select the bid response that provides the greatest long-term value to the Owner. This may not be the response with the lowest initial purchase price. The following factors will be used to evaluate and award this project:

- Completeness of response

- Provides lower long-term cost of ownership
- Vendor's experience with similar projects
- Flexibility of solution to expand and change over time
- Initial purchase price

3.6.1 Bid Award

Owner will, at its sole discretion, award the project(s) to a vendor or vendors of its choice. Owner may elect to not award any or all sections of the RFP. Owner reserves the right to increase or decrease all quantities by 25 percent in the final award.

Bidder, by submitting bid, agrees to honor line item individual component pricing submitted on bid forms for the final quantity determined by Owner. Owner may elect to eliminate any individual line item or combination of line items contained on bid forms prior to contract award. Bid prices must be honored for 90 days from the bid due date.

4 Networking Hardware

4.1 Work Summary

Work covered by this section includes:

Network Equipment

Installation of this equipment is not required

4.2 Product

4.2.1 Approved Products

HCCS has standardized on network equipment from Cisco Systems. All provided equipment must be from Cisco Systems.

4.2.2 New Equipment

All equipment provided shall be new and of the latest model and version available.

4.2.3 Authorized Dealer

All vendors must be Cisco Certified, gray market products, offered by non-certified vendors, are not acceptable.

4.2.4 Genuine Product

All equipment provided must be genuine Cisco products and sourced only from approved Cisco distributors. Third-party and clone products will not be accepted. Vendor will be required to show proof of purchase, for all products, from a Cisco authorized distributor or Cisco direct.

4.2.5 Support Contracts

All contracts provided shall be manufacturer direct contracts and shall not require service of the vendor organization.

4.3 Materials List

A detailed materials list is provided as part of the bid response forms to assist in preparation of your response.

4.4 Freight

The base bid must include all freight charges for delivery of equipment to HCCS.

5 Digital Signage

5.1 Work Summary

Work covered by this section includes:

- Digital signage hardware and software
- Raceway and electrical outlets
- Installation of equipment
- Owner training

5.2 Product

5.2.1 Approved Products

HCCS has standardized on signage systems from Tightrope Media Systems. All provided signage software should be the latest available version of Tightrope Media Systems server and player environment.

5.2.2 New Equipment

All equipment provided shall be new and of the latest model and version available.

5.3 Materials List

A detailed materials list is provided as part of the bid response forms to assist in preparation of your response.

5.4 Fright

The base bid must include all fricht charges for delivery of equipment to HCCS.

5.5 Flat Panel Displays

Provide and install and signage displays as indicated on the provided floor plans.

5.6 Flat Panel Mounts

Provide and install appropriate Peerless Industries wall or ceiling mounts for flat panel display. Select mount type based on field conditions at installation location. Mount shall allow screen position to be oriented for optimal viewing.

5.7 Electrical Work

Vendor will provide the services of a licensed electrician to install divided Wiremold 4000 metal raceway and a 120-volt electrical outlet for each signage locations that requires new power. Refer to provided drawings for electrical outlet locations.

5.8 Installation

5.8.1 Server Installation

Install Tightrope server on owner provided virtual server and configure to provide a separate signage channel for each building. Coordinate all IP addressing and management credentials with Owner.

5.8.2 Display and Player Installation

For each display perform the following tasks:

- Securely install mounts and display per manufacturers guidelines.
- Configure display to lock out front panel controls.
- Secure digital signage player behind display so it is out of sight.
- Configure RS-232 control from player to display.
- Create an automatic power on/off schedule for each display
- Connect display and signage player to power.
- Connect signage player to data network.
- Configure signage player with IP address coordinated with Owner.
- Neatly coil and secure all signal and power cables so they are out of sight.

5.8.3 Signage Templates

Provide 16 hours of labor to create six separate signage channel templates, one for each building. This shall include importing appropriate logos into the systems for the district and for each building..

5.9 Training

Provide the following training sessions for Owner designated staff:

- One 2-hour technical session for system administrators
- Two 2-hour sessions on content creation for elementary building staff
- Two 2-hour sessions on content creation for administrative, HS and MS building staff

Coordinate the dates, times and locations of all training sessions with Owner.

5.10 Project Close-out Requirements

5.10.1 Documentation Binder

Provide a documentation binder for each system containing:

- Copies of all equipment manuals
- Copies of all equipment warranty agreements
- Inventory records in Microsoft Excel format for all equipment stating:
 - Manufacturer, part number, serial number and installation location for all active components of the system.

6 Category 6 Cabling

6.1 Work Summary

Work covered by this section includes:

- Cable pathways and support
- Category 6 structured cabling

6.2 General Specifications

The proposed Structured Wiring System is intended to support voice and Ethernet data communication at rates up to 1000 Mbps. It will consist of a star topology with category 6 UTP cable from distribution frames to workstation outlets.

6.2.1 Vendor Certifications

Vendor shall meet or exceed the following requirements:

- Panduit Certified Installer
- BICSI Level II Installers
- Minimum of one BICSI RCDD on staff

6.2.2 Category Ratings

All cables and termination hardware shall be Category 6 rated and meet the specifications of TIA/ EIA-568-B.2-1, Transmission Performance Specifications for 4-Pair 100-Ohm Category 6 Cabling.

6.2.3 Project Smoke Rating

All cable and related parts installed shall be plenum rated.

6.2.4 Warranty

A certified installation, with a 20-year joint warranty from the termination hardware manufacturer and the cable manufacturer, is required. Include in your bid response a letter showing Panduit authorization.

All hardware that is not covered by the above manufacturer warranty: connectors, jumpers, patch cords, equipment racks, and cabinets, as well as all workmanship and labor, will be warranted for a period of not less than two (2) years.

All warranties will begin immediately following the network acceptance, as determined by the Owner.

6.2.5 Workmanship

All work shall have a finished appearance. The contractor shall supply and repair/ install all trim, covers, fixtures, carpet, paint, hardware, brackets, landscape, etc., as needed.

6.2.6 Permits

The selected contractor will be responsible for obtaining/securing all permits necessary for installing all components of this project.

6.2.7 Applicable Standards

This installation will be in accordance with but not limited to the latest fully ratified and accepted version of the following industry standards:

- National Electric Code
- TIA/EIA-568-B.1 Commercial Building Telecommunications Cabling Standard - Part 1: General Requirements
- TIA/EIA-568-B.1-1 Commercial Building Telecommunications Cabling Standard - Part 1: General Requirements - Addendum 1 - Minimum 4-Pair UTP and 4-Pair ScTP Patch Cable Bend Radius
- TIA/EIA-568-B.1-2 Commercial Building Telecommunications Cabling Standard - Part 1: General Requirements - Addendum 2 - Grounding and Bonding Requirements for Screened Balanced Twisted-Pair Horizontal Cabling
- TIA/EIA-568-B.1-3 Commercial Building Telecommunications Cabling Standard - Part 1: General Requirements - Addendum 3 - Supportable Distances and Channel Attenuation for Optical Fiber Applications by Fiber Type

TIA/EIA-568-B.1-4 Commercial Building Telecommunications Cabling Standard - Part 1: General Requirements - Addendum 4 - Recognition of Category 6 and 850 nm Laser-Optimized 50/125 μm Multimode Optical Fiber Cabling

TIA/EIA-568-B.1-5 Commercial Building Telecommunications Cabling Standard - Part 1: General Requirements - Addendum 5 - Telecommunications Cabling for Telecommunications Enclosures

TIA/EIA-568-B.2 Commercial Building Telecommunications Cabling Standard - Part 2: Balanced Twisted Pair Cabling Components

TIA/EIA-568-B.2-1 Commercial Building Telecommunications Cabling Standard - Part 2: Balanced Twisted Pair Components - Addendum 1 - Transmission Performance Specifications for 4-Pair 100 Ohm Category 6 Cabling

TIA/EIA-568-B.2-2 Commercial Building Telecommunications Cabling Standard - Part 2: Balanced Twisted-Pair Cabling Components - Addendum

TIA/EIA-568-B.2-3 Commercial Building Telecommunications Cabling Standard - Part 2: Balanced Twisted-Pair Cabling - Addendum 3 - Additional Considerations for Insertion Loss and Return Loss Pass/Fail Determination

TIA/EIA-568-B.2-4 Commercial Building Telecommunications Cabling Standard - Part 2: Balanced Twisted Pair Components - Addendum 4 - Solderless Connection Reliability Requirements for Copper Connecting Hardware

TIA/EIA-568-B.2-5 Commercial Building Telecommunications Cabling Standard - Part 2: Balanced Twisted-Pair Cabling Components - Addendum 5 - Corrections to TIA/EIA-568-B.2

TIA/EIA-568-B.2-6 Commercial Building Telecommunications Cabling Standard - Part 2: Balanced Twisted Pair Cabling Components - Addendum 6 - Category 6 Related Component Test Procedures

TIA/EIA-568-B.3 Optical Fiber Cabling Components Standard

TIA/EIA-568-B.3-1 Optical Fiber Cabling Components Standard - Addendum 1 - Additional Transmission Performance Specifications for 50/125 μm Optical Fiber Cables

BICSI Structured Cabling Standards and Practices

If any discrepancies exist between these standards and the technical specifications of this document, the technical specifications of this document will apply.

6.3 Cable Pathways and Support

The site has existing main cable tray, conduit sleeves, outlet boxes and conduit pathways to accessible ceilings. However, the structured cabling contractor is expected to provide and install pathway that may be required to complete the installation of their cables in a workmanship like manner.

6.3.1 Cable Routing

All cable is to be concealed, either installed above drop ceilings, in access tunnels, in surface raceway or fished through walls. No exposed cable is allowed.

However, the cabling contractor will supply all J-hooks, cable tray, conduit, raceway, surface boxes, communications poles and mud rings required for cable pathways.

Installation methods must follow TIA/EIA-568A standards including cable support, pulling force, minimum bend radius and minimum distance from sources of electrical interference.

6.3.2 Surface Raceway

Use of surface raceway is to be avoided. Consult with Owner for approval prior to installing any surface raceway.

Panduit LD5, LD10 raceway is preferred in areas where no existing raceway must be matched. Coordinate color choice with owner. Raceway should be sized to maintain a fill ratio of 50% or less.

All raceway fittings for inside and outside corners and drop ceiling fittings must be designed to maintain a minimum 1-inch cable bend radius.

All raceway and surface boxes shall be installed using anchors or screws. Adhesive mounting is not acceptable.

6.3.3 Cable Tray

Provide and install GS Metals Flextray or equivalent continuous, rigid, welded steel wire mesh cable management tray as indicated on prints.

Install and support cable management system in accordance with span load criteria of L/240.

Install cable management system using hardware; splice connectors, support components, and accessories furnished by manufacturer.

6.3.4 Penetrations

Wall and floor penetrations or corings must be provided with EMT sleeves and protective bushings to prevent damage to cable as it is pulled through sleeves.

Any Penetrations through fire rated walls and floors shall utilize Specified Technologies Inc, EZ-Path fire rated pathways installed in accordance with manufacturer's guidelines and instructions.

The maximum fill for all sleeves shall not exceed 60% of capacity.

6.3.5 Fire-stopping

Any penetrations of fire rated walls that do not utilize the STI EZ-Path system shall be fire-stopped using a UL approved putty to restore the wall to its original fire rating. *Proper fire stopping is not possible if penetrations exceed a 60% fill ratio.* Fire-stopping material must be removable to allow future cable system upgrades.

6.3.6 Cable Support

Cables must be supported at least every five (5) feet. Tie-wraps are not acceptable for cable support. Cable trays and Caddy "J" hooks are the preferred method of cable support. For bundles of six or less cables, building metal truss structure may be used to provide support.

Velcro wraps with a minimum width of 3/8" are acceptable for cable support. Tie-wraps may be used to organize cable as long as they do not deform the cable jacket and are not supporting the weight of the cable.

6.4 Premise Cable Termination

6.4.1 Acceptable Manufacturers

The following manufacturers of jacks and patch panels are acceptable for this project:

Panduit

Refer to drawings for specified model numbers of parts.

6.4.2 Faceplates, Jacks and Patch Panels

All termination equipment must be from a single manufacturer. Faceplates must be modular and capable of holding a variety of modular jacks including blanks, 8-pin data, 6-pin voice, RCA audio, S-video, VGA, etc. A single gang faceplate must be available to hold from two to six jacks. Faceplates must provide a labeling area covered by a clear protective cover.

Where required a 106-style mounting frame must be available to hold two or four jacks.

Where required a Decora-style mounting frame must be available to hold two or four jacks.

Any unused faceplate positions must be filled with blank inserts that match the color of the faceplate.

Rack-mounted patch panels must be modular, utilizing the same jacks installed in workstation outlet locations. This should allow for the replacement of a single defective jack in a patch panel.

6.4.3 Wiring Pattern

All jacks and patch panels shall be wired using the T568B wiring pattern.

6.4.4 Faceplate color

Data faceplate color shall match electrical faceplates. Coordinate final color selection with owner.

6.4.5 Jack color

Data and other jack shall match faceplate color unless noted otherwise on technology prints.

6.5 Category 6 Cable

6.5.1 Acceptable Cable Manufacturers

All cable manufacturers that participate in a joint warranty with Panduit at the time of the bid are considered acceptable.

6.5.2 UTP Maintenance Loops

At the rack location provide a minimum maintenance loop of 10 feet of cable neatly dressed into the rack, cable tray or attached to a backboard. At the outlet location provide 1 foot of cable in accessible ceiling above the outlet box.

For drops supporting wireless access points or security cameras, provide 20 feet of cable neatly coiled in a large loop and secured above lay-in ceiling.

For drops installed in modular furniture, provide 30 feet of cable neatly coiled in a large loop and secured above lay-in ceiling above conduit feeding furniture.

6.5.3 Labeling

Each patch panel jack and workstation jack must be clearly marked with a computer printed label showing the Cable ID. Hand printed labels are not acceptable.

For faceplate jack labels, the preferred method of labeling is using a protective label holder built into the faceplate. Adhesive labels on faceplates or raceway are undesirable. If they are used they must conform to defacement and adhesion specifications of UL969.

Each UTP cable shall be marked with its Cable ID using a Brady, Panduit or Brother self-laminating label. Each end of the cable must be labeled within one foot of the termination point.

6.6 Cable Identification Plan

Refer to provided drawings for cable ID plan for site.

6.7 UTP Testing

All category 6 cables are to be certified for Category 6 operation using a cable tester that provides TIA/EIA TSB-67 level II accuracy. The tester must maintain an electronic log of test results. Each cable must be identified on the test equipment using its correct Cable ID.

Prior notification for all phases of testing will be given to the owner, or its designated representative, allowing them to be present during testing procedures. The owner may elect to have some or all cables tested by a third party prior to final acceptance of the completed job.

Any cable that does not pass the testing requirements must be repaired or replaced at the contractor's expense. Any cables that are damaged during installation must be replaced. Splicing of cables is not acceptable.

Test results shall be presented to the client in both printed format and on CD-ROM in PC Excel format and in the raw format exported from the test equipment. The model and software version of the test equipment must be shown in a README file on the CD-ROM. This is a condition for final acceptance of the completed job.

6.8 Category 6 Patch Cords

Provide category 6 patch cords of the length and color indicated in the table below. Patch cords must be factory built using category 6 stranded cable and must be non-booted. Provide patch cords based on the following percentages of total drops installed in the building. Deliver patch cords directly to owner's representative and obtain signed proof of delivery. Do not leave patch cords in wiring closet.

Wireless Drop Patch Cords

For Patch Panel connections

1-foot yellow – 100%

3-foot yellow – 100%

Digital Sign Drop Patch Cords
For Patch Panel connections
3-foot blue – 200%

6.9 Close Out

6.9.1 As-Built Floor Plan

The contractor will prepare a final as-built floor plan that shows the location of each wiring closet and all workstation outlets in the building. Each workstation outlet will be labeled with the cable IDs of all cables at that location. The routing of all fiber and other backbone cables will be shown along with their cable ID numbers.

This floor plan will be provided to the customer in printed form (a minimum of 3 copies) and on CD-ROM in Acrobat PDF format and DXF format.

A laminated copy of the as-built floor plan shall be mounted in each wiring closet to assist in equipment patching.

Provide a copy of the completed Panduit 20-year installation warranty.

6.9.2 Documentation

Provide an as-built floor plan of all buildings, which show the location of where each cable drop is installed. Indicate the Cable ID of the cable drop on the as-built floor plan.

Test results shall be presented to the client in both printed format and on CD-ROM in PC Excel format and in the raw format exported from the test equipment. The model and software version of the test equipment must be shown in a README file on the CD-ROM. This is a condition for final acceptance of the completed job.

7 Bid Forms

7.1 Vendor Profile

All subcontractors must also complete a Vendor Profile form.

Company Name: _____

Address: _____

Contact Name: _____

E-Mail Address: _____

Phone: _____

Fax: _____

Date Founded: _____ Number of employees: _____

Total revenue last fiscal year: _____

Cisco Partner Level: _____

TightRope Partner Level: _____

Panduit Certification Level: _____

Name of RCDD Certified Staff: _____

7.2 Familial Disclosure Form

7.2.1 Statement of Disclosure

All proposals shall be accompanied by a notarized statement disclosing any familial relationship (or lack of a relationship) that exists between the Owner or any employee of the bidder and any member of the Board of Education of the Harper Creek Community Schools or the Superintendent of the School District.

The District shall not accept a bid that does not include a sworn and notarized disclosure statement.

7.2.2 Disclosure Form

Harper Creek Community Schools
7454 B Drive North
Battle Creek, MI 49014

Dear Ladies and Gentlemen:

I/We the undersigned acknowledge the details stated in Section 7.2.1 – “Statement of Disclosure”, regarding familial relationship (or lack of) that exists between the Owner or any employee of the bidder and any member of the Harper Creek Community Schools Board of Education or the Superintendent of the School District.

We have prior familial knowledge of parties involved. (Attach clarification.)

We have no prior familial knowledge of parties involved.

Signature

Company Name

Notary Public

_____ County, State _____

My Commission Expires: _____

7.3 Vendor References

Include at least three references for similar projects. Any subcontractors must also provide references.

Customer Name: _____
Address: _____
Contact Name: _____
Contact Title: _____
Phone: _____
E-Mail Address: _____
Date Started & Completed: _____
Dollar Amount of Project: _____

Customer Name: _____
Address: _____
Contact Name: _____
Contact Title: _____
Phone: _____
E-Mail Address: _____
Date Started & Completed: _____
Dollar Amount of Project: _____

Customer Name: _____
Address: _____
Contact Name: _____
Contact Title: _____
Phone: _____
E-Mail Address: _____
Date Started & Completed: _____
Dollar Amount of Project: _____

7.4 Proposal Forms

FOR: Harper Creek Community Schools
Network Equipment

TO:
Harper Creek Community Schools
ATT: Merry Ellen Eason
7454 B Drive North
Battle Creek, MI 49014

PROPOSAL BY: _____
(Name & address of firm)

BASE BID: We, the undersigned, having familiarized ourselves with local conditions affecting the cost of work and with the bidding documents on file at the office of the Owner, hereby propose to perform the work required by said bidding documents in a workman-like manner for the Bid Categories as shown on this bid form for the above-named project in accordance with contract documents as prepared by the Owner for the amounts hereinafter stated, such amounts constituting the base bid, including Addendum No.(s):

7.4.1 Exceptions

State any exceptions taken to project specifications:

7.4.2 Pricing

Network Hardware \$ _____
Digital Signage \$ _____
Category 6 Cabling \$ _____
TOTAL OF ALL ABOVE \$ _____

7.4.3 Cisco Equipment Price Details

QTY	Manu.	Part Number	Description	Unit	Extended
4	Cisco Systems	WS-C3560G-24PS-S	Catalyst 3560 24 10/100/1000T PoE + 4 SFP Standard Image		
4	Cisco Systems	CON-SNTE-3750G24P	3Yr Smartnet 13x5 onsite C3560G		
45	Cisco Systems	AIR-LAP1142N-A-K9	802.11AGN LWAPP AP INTEGRATED ANTENNAS FCC CNFG		
1	Cisco Systems	AIR-CT5508-50-K9	5508 SERIES CONTROLLER FOR UP TO 50 APS		
3	Cisco Systems	CON-SNT-CT0850	1 Year SMARTnet 8x5xNBD (SNT)		
1	ValuePoint Networks	NC3500	Wireless Hotspot Gateway		
				TOTAL	

7.4.4 Digital Signage Price Details

QTY	Manu.	Part Number	Description	Unit	Extended
1	TightRope	CAR-CAROUSEL-ENT	Carousel Enterprise Server		
1	TightRope	SVC-PH-INST	6 hours Tightrope factory phone support		
8	TightRope	CAR-PLAYER230	Carousel Player 230		
11	TightRope	CAR-CRTV-CH	Carousel Creative Channel Template		
4	TightRope	SVC-PH-TRAIN	Carousel Phone Training		
8	LG	42LH200C	LG 42" Commercial LCD TV w/Front Panel Input Lockout		
8	Chief	MTRU	Flat Panel Tilt Wall Mount		
8	Chief	MAC252	Flat Panel Locking CPU Adapter		
8	Generic		6 foot HDMI v1.3 cable		
8	Generic		6 foot RS232 Null Modem Cable		
1	Vendor	LABOR	16 hours for setup of 6 signage channel templates with logos		
1	Vendor	LABOR	10 hours for five 2-hour Owner training sessions		
4	Vendor		Install Wiremold 4000 and new electrical outlet		
				TOTAL	

7.4.5 Category 6 Cabling Price Details

QTY	Location	Description	Unit	Extended
1	Beadle Lake	Category 6 cable drop – plenum		
1	Sonoma	Category 6 cable drop – plenum		
1	Wattles Park	Category 6 cable drop – plenum		
2	Middle School	Category 6 cable drop – plenum		
42	High School	Category 6 cable drop – plenum		
10	Administration	Category 6 cable drop – plenum		
			TOTAL	

7.4.6 Voluntary Alternates

VOLUNTARY ALTERNATES: Attach a separate sheet if proposing Voluntary Alternates. Prices shall include all applicable costs for taxes, insurance, bonds and fees

7.4.7 Cut Sheets

Include manufacturer cut sheets for key components used in your design. Cut sheets are not required for items that exactly match the specified models in this RFP.

7.4.8 Signature

In submitting this bid, we understand the right is reserved by the Owner to reject any or all bids. It is further agreed that this bid is binding for the period of forty-five (45) days.

DATE _____ 2009

FIRM NAME _____

BY _____

(Authorized Signature)

(Typed or Printed Signature)

TITLE _____

OFFICIAL ADDRESS _____

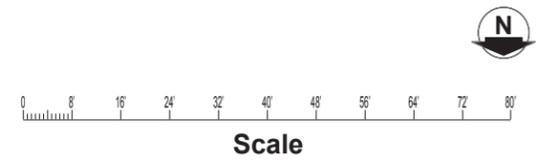
PHONE NO. _____ FAX NO. _____

● New Access Point Location
 Provide one category 6 cable drop above lay-in ceiling and routed to wiring closet for area. Label drop using provided cable ID. Provide a maintenance loop of 20 feet of additional cable at drop location. Neatly coil extra cable and secure to building structure. Terminate drops with yellow data jacks at each end.

● Existing Access Point - No work required

DS 42 Digital Sign - 42 Inch
 Provide one category 6 cable drop routed to wiring closet for area. Label drop using provided cable ID. Terminate drops with blue data jacks at each end.

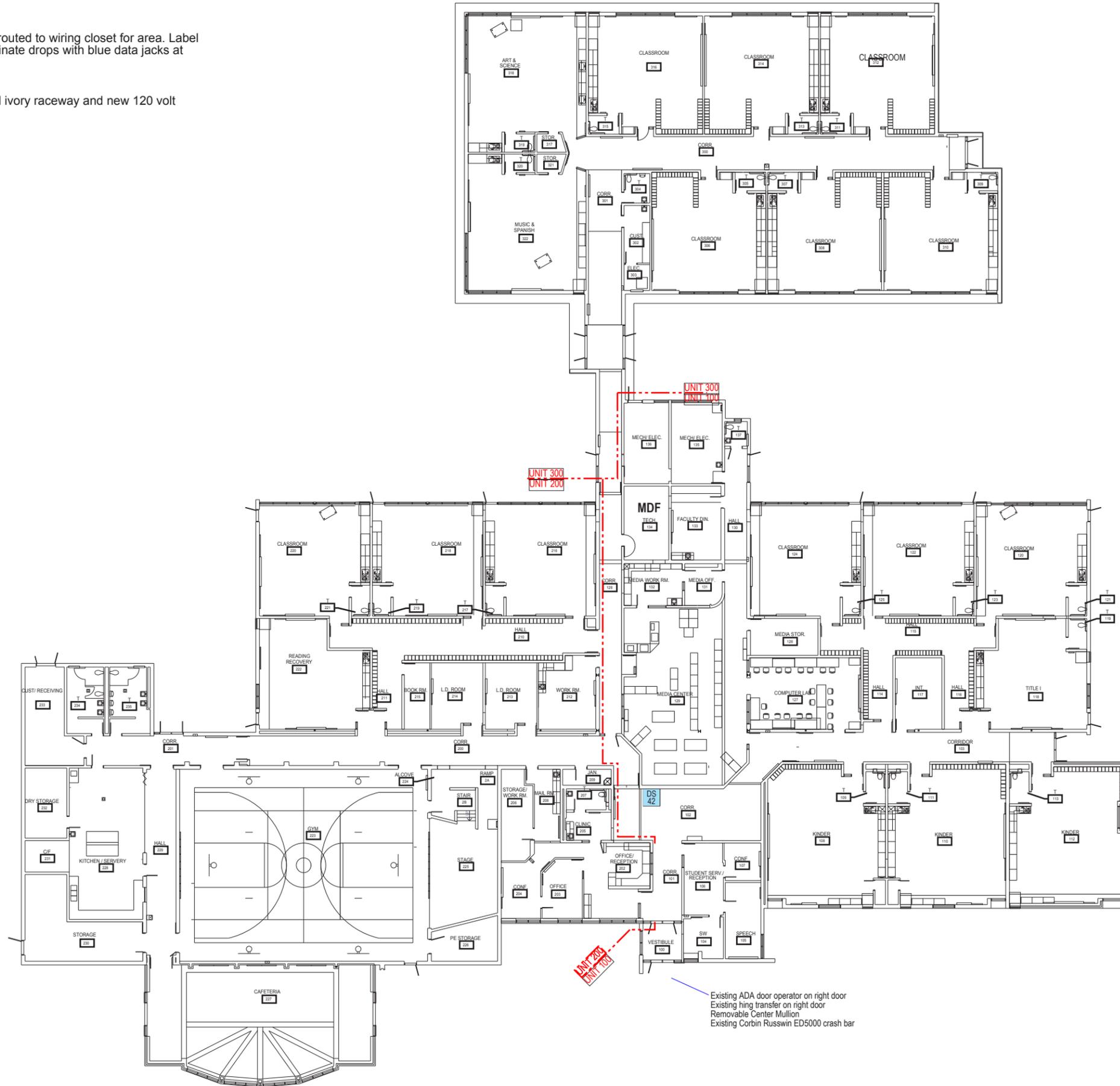
⊕ Raceway and Electrical Outlet
 Provide wall Wiremold 4000 divided ivory raceway and new 120 volt electrical outlet for digital sign.



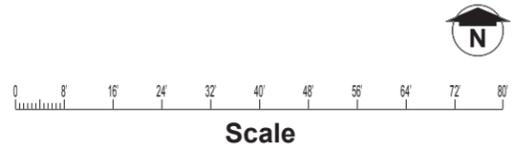
Network Equipment
 Harper Creek Community Schools
 Battle Creek, MI Version: 4-27-2010
 Administration

DS 42 Digital Sign - 42 Inch
 Provide one category 6 cable drop routed to wiring closet for area. Label drop using provided cable ID. Terminate drops with blue data jacks at each end.

⊕ Raceway and Electrical Outlet
 Provide wall Wiremold 4000 divided ivory raceway and new 120 volt electrical outlet for digital sign.



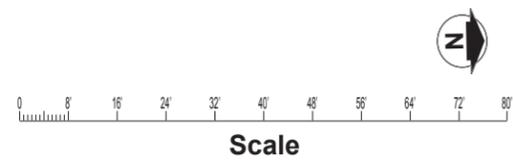
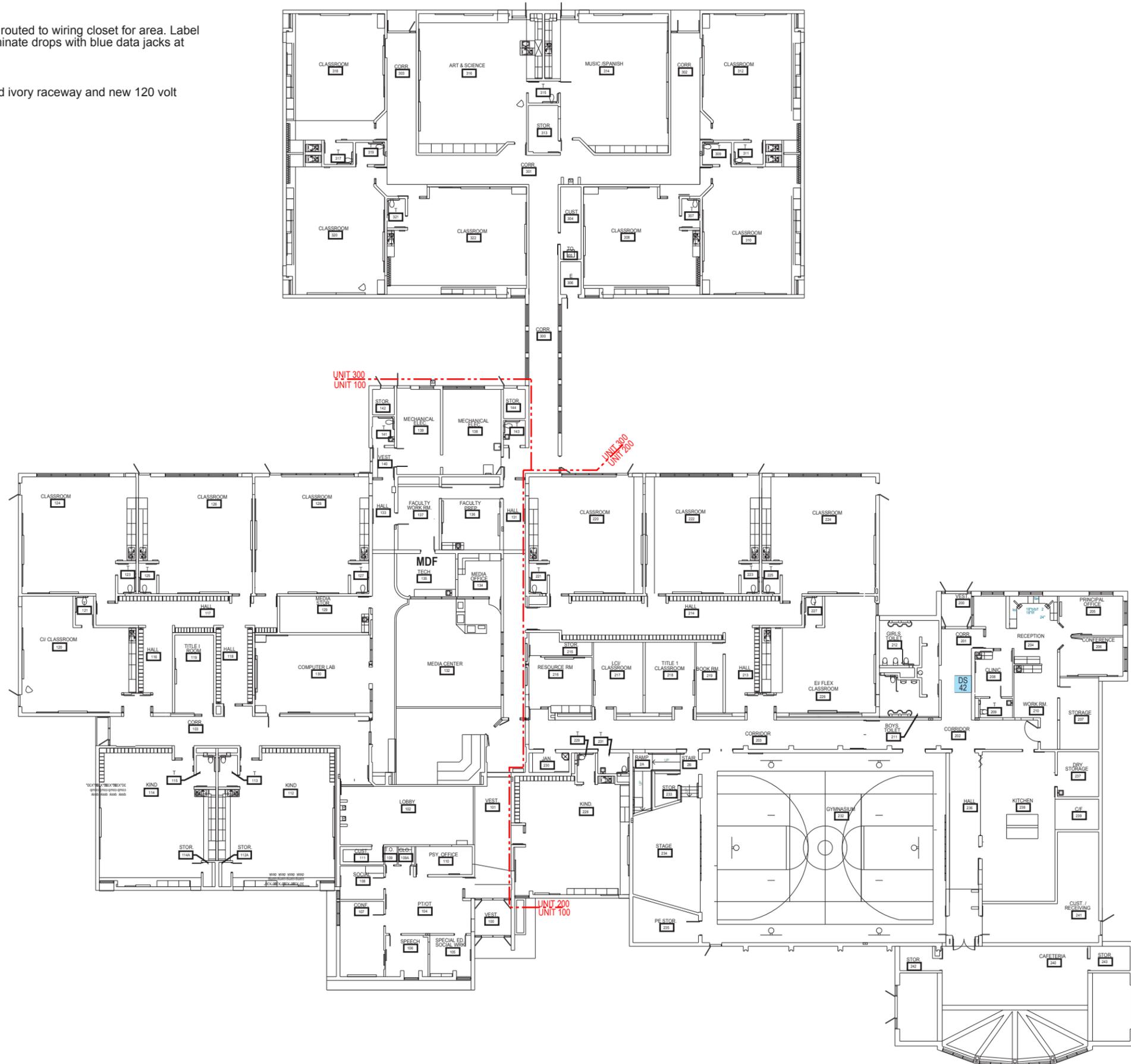
Existing ADA door operator on right door
 Existing hing transfer on right door
 Removable Center Mullion
 Existing Corbin Russwin ED5000 crash bar



Network Equipment
Harper Creek Community Schools
Battle Creek, MI **Version: 4-27-2010**
 Beadle Lake Elementary

DS 42 Digital Sign - 42 Inch
 Provide one category 6 cable drop routed to wiring closet for area. Label drop using provided cable ID. Terminate drops with blue data jacks at each end.

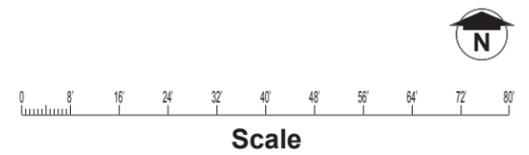
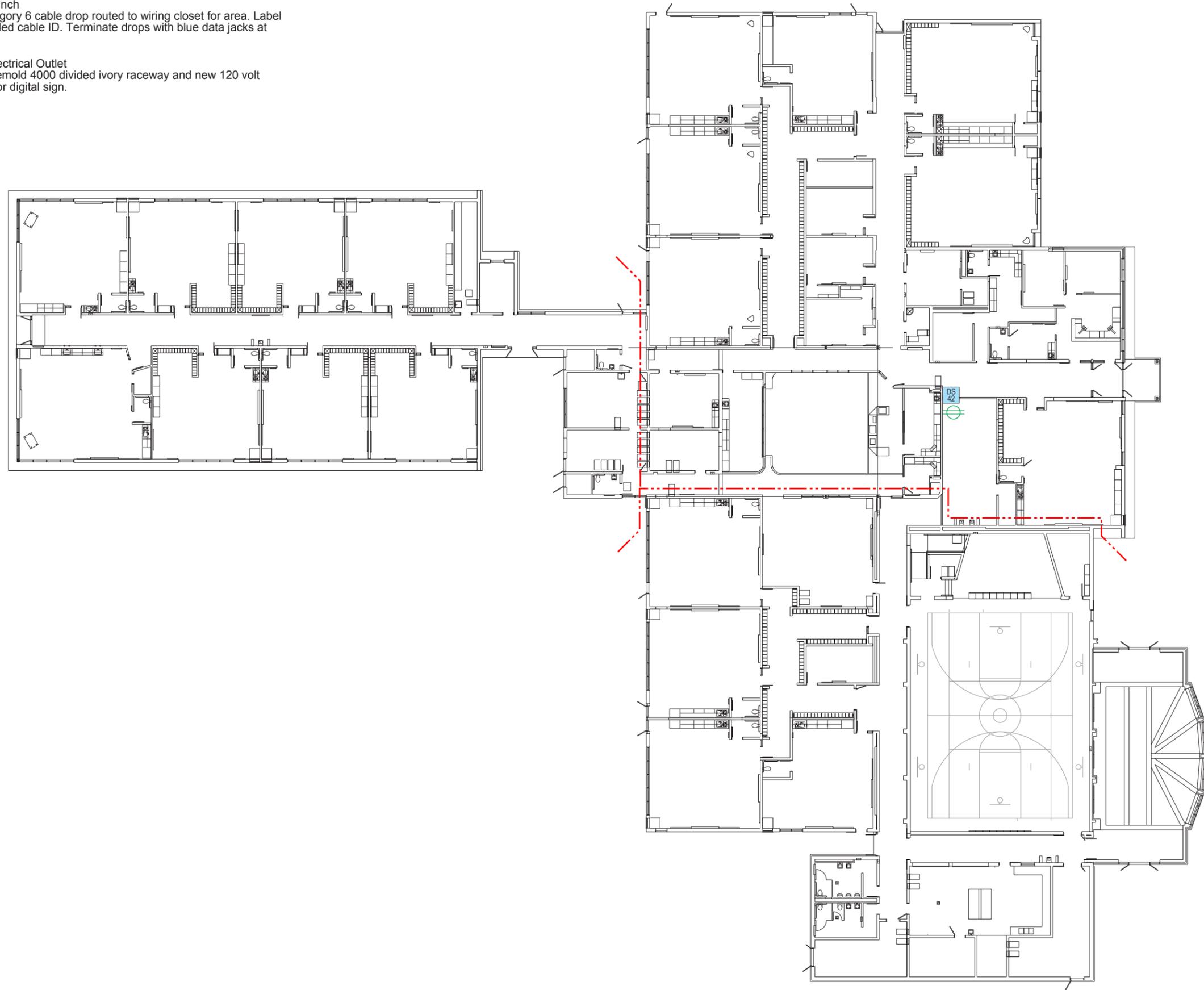
Ⓞ Raceway and Electrical Outlet
 Provide wall Wiremold 4000 divided ivory raceway and new 120 volt electrical outlet for digital sign.



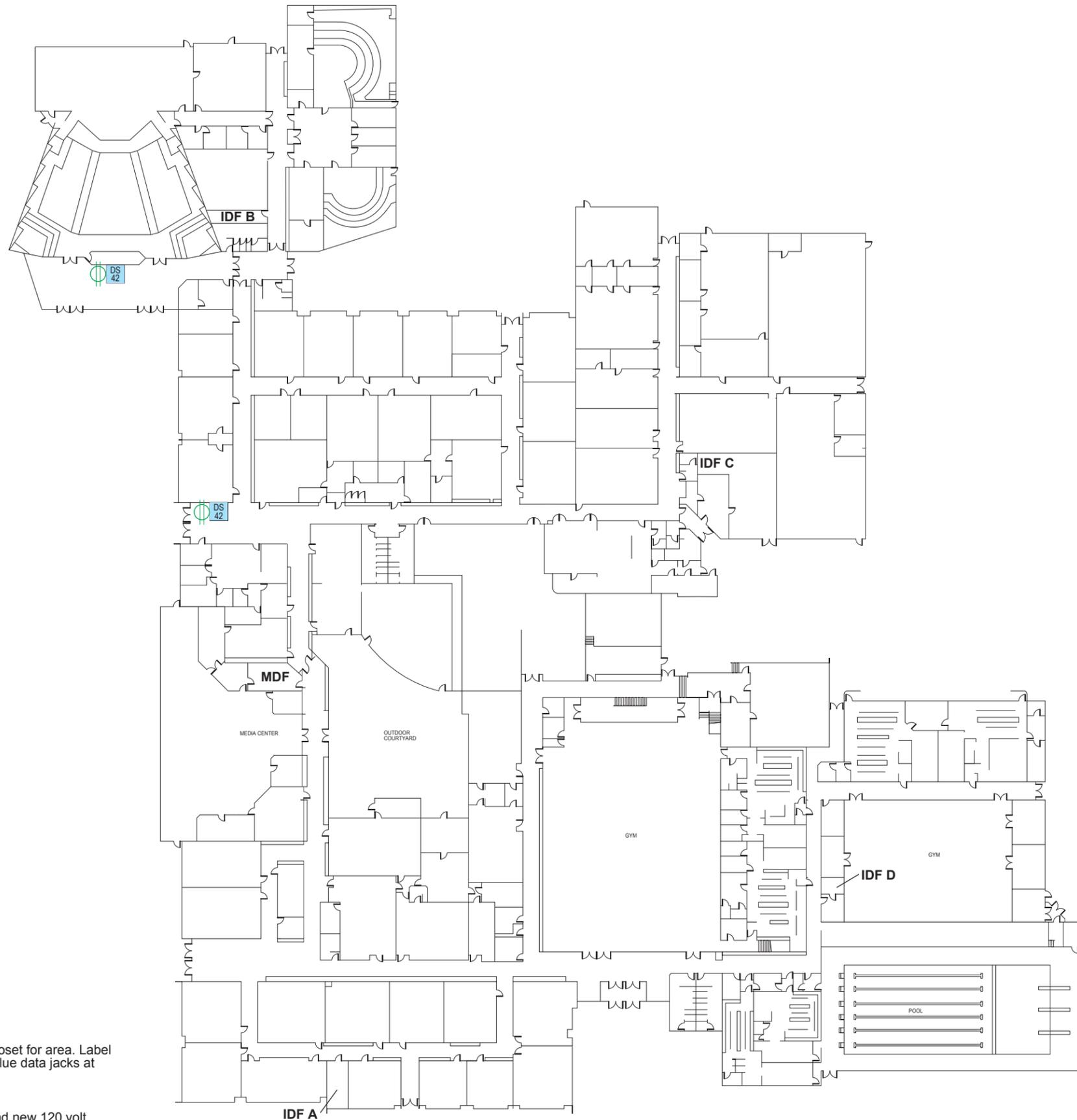
Network Equipment
 Harper Creek Community Schools
 Battle Creek, MI Version: 4-27-2010
 Sonoma Elementary

DS 42 Digital Sign - 42 Inch
Provide one category 6 cable drop routed to wiring closet for area. Label drop using provided cable ID. Terminate drops with blue data jacks at each end.

Ⓞ Raceway and Electrical Outlet
Provide wall Wiremold 4000 divided ivory raceway and new 120 volt electrical outlet for digital sign.

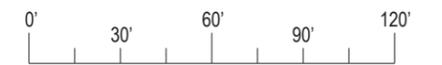


Network Equipment
Harper Creek Community Schools
Battle Creek, MI **Version: 4-27-2010**
Wattles Park Elementary



DS 42 Digital Sign - 42 Inch
 Provide one category 6 cable drop routed to wiring closet for area. Label drop using provided cable ID. Terminate drops with blue data jacks at each end.

 Raceway and Electrical Outlet
 Provide wall Wiremold 4000 divided ivory raceway and new 120 volt electrical outlet for digital sign.



Network Equipment
 Harper Creek Community Schools
 Battle Creek, MI Version: 4-27-2010
 Middle School

All data drops in this section routed to Tech Closet D on main level

TC-D

All data drops in this section routed to Tech Closet B on second level

All data drops in this section routed to Tech Closet M on main level

MDF TC-M

All data drops in this section routed to Tech Closet A on second level

All data drops in this section routed to Tech Closet E on second level

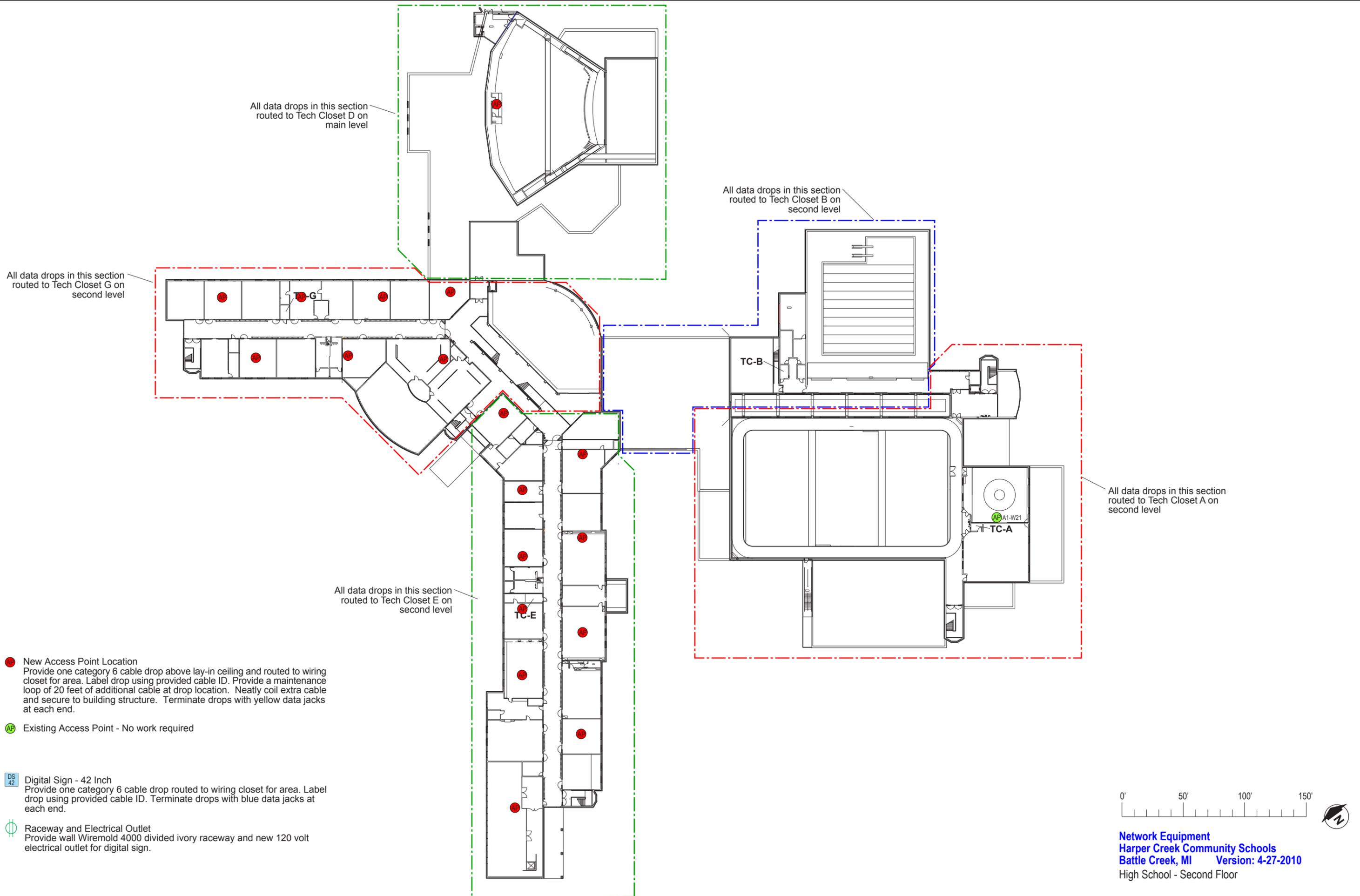
● New Access Point Location
Provide one category 6 cable drop above lay-in ceiling and routed to wiring closet for area. Label drop using provided cable ID. Provide a maintenance loop of 20 feet of additional cable at drop location. Neatly coil extra cable and secure to building structure. Terminate drops with yellow data jacks at each end.

● Existing Access Point - No work required

DS 42 Digital Sign - 42 Inch
Provide one category 6 cable drop routed to wiring closet for area. Label drop using provided cable ID. Terminate drops with blue data jacks at each end.

⊕ Raceway and Electrical Outlet
Provide wall Wiremold 4000 divided ivory raceway and new 120 volt electrical outlet for digital sign.





All data drops in this section routed to Tech Closet D on main level

All data drops in this section routed to Tech Closet B on second level

All data drops in this section routed to Tech Closet G on second level

All data drops in this section routed to Tech Closet A on second level

All data drops in this section routed to Tech Closet E on second level

AP New Access Point Location
 Provide one category 6 cable drop above lay-in ceiling and routed to wiring closet for area. Label drop using provided cable ID. Provide a maintenance loop of 20 feet of additional cable at drop location. Neatly coil extra cable and secure to building structure. Terminate drops with yellow data jacks at each end.

AP Existing Access Point - No work required

DS 42 Digital Sign - 42 Inch
 Provide one category 6 cable drop routed to wiring closet for area. Label drop using provided cable ID. Terminate drops with blue data jacks at each end.

⊕ Raceway and Electrical Outlet
 Provide wall Wiremold 4000 divided ivory raceway and new 120 volt electrical outlet for digital sign.

