ADDENDUM NO. 3

December 16, 2021

CADILLAC AREA PUBLIC SCHOOLS Cadillac High School Addition & Renovations 400 Linden Street Cadillac, MI 49601

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and the Drawings dated November 3, 2021, by TowerPinkster. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 3-1 through 3-3, dated December 16, 2021, TowerPinkster Addendum No. 3, dated December 14, 2021, consisting of 5 pages, Specification Sections: 09 83 16 and 32 17 23, Drawings: C 101.2, L 003.2, A 601.2D, A 601.2G, A 601.2K, A602.2K, A 610.2, A 621.2, A 622.2, A 623.2, A 624.2, A 625.2, A 631.2, A 632.2, A 633.2, A 634.2, A 635.2, A 636.2, P 000.2H, M 201.2F, E 101.2D, E 431.2, and E 444.2.

A. SPECIFICATION SECTION 00 20 00 – INFORMATION AVAILABLE TO BIDDERS

Add the following:

1. Soil Boring Map (Triterra Environmental Construction Management Plan issued in Addendum No. 1).

B. SPECIFICATION SECTION 00 31 00 – BID FORM (REISSUED)

1. Replace with attached revised Bid Form. **NOTE REVISED DESCRIPTION FOR ONE ALTERNATE AND ADDED ONE NEW ALTERNATE.**

C. SPECIFICATION SECTION 01 12 00 - MULTIPLE CONTRACT SUMMARY

1. Reissued to included additions and deletions of specification sections associated with different bid categories.

D. SPECIFICATION SECTION 01 23 00 – ALTERNATES (REISSUED)

1. Paragraph 1.03 Schedule of Alternates

Revise the following:

Q. ALTERNATE NO. 10 revise to read:R. Alternate No. 11 – Technology-Provide Sapling Talkback Functionality.

Add the following:

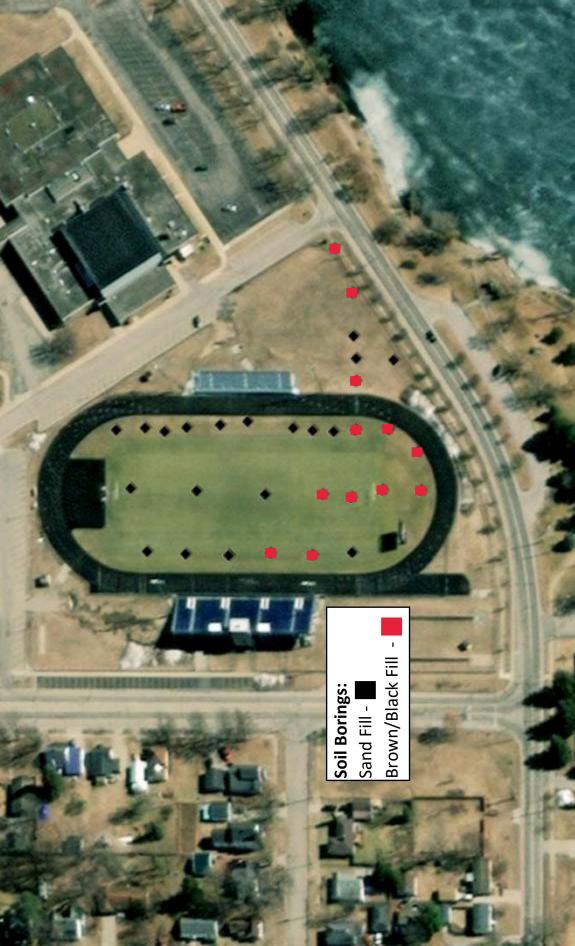
Q. ALTERNATE NO. 10: Lining of Existing Cast Iron Sanitary Piping. Provide price to add pipe lining to the existing 6" cast iron sanitary pipe located below Instrumental Room 212. Length of pipe is approximately 50 feet. Provide system similar to National Liner Cured – In – Place Pipeline Rehabilitation System consisting of a polyester felt liner with a thermosetting resin

E. RFI LOG

1. Refer to the attached Request for Information (RFI) Log, dated December 15, 2021.

F. PRE-AWARD CONFERENCE SCHEDULE

1. Refer to the attached Pre-award Conference Schedule.



CONTRACTOR'S BID FOR PUBLIC WORKS

Cadillac High School Addition & Renovations

Cadillac Area Public Schools Wexford County

PART I

(To be completed for all bids) (Please type or print)

| BIDDER (firm) | | |
|--|--|-------------------|
| Address | P.O. Box | |
| City/State/Zip | | |
| Telephone Number | Email Address: | |
| Person to contact regarding this Bio | d: | |
| Pursuant to notices given, the unde complete the construction work for | rsigned offers to furnish labor and mater : | ials necessary to |
| Insert | Bid Category No.(s) and Name(s) | |
| 1 0 | High School Addition & Renova ared by TowerPinkser, 4 East Fulton S ows: | |
| BASE BID | | |
| For the sum of | | |
| | (sum in words) | |
| | DOLLARS (\$ |) |
| | (sum in fig | gures) |

$\begin{array}{c} **\underline{BREAKDOWN\ OF\ BASE-BID\ (FOR\ ACCOUNTING}\\ \underline{PURPOSES\ ONLY)}** \end{array}$

| EQUIPMENT ONLY required | | | ase-Bid for MECHANICAL |
|--|---------------------|-----------------------|----------------------------|
| Cost | DOI | LLARS (\$ |) |
| Bid Category No. 12 ALUMIN STOREFRONT to provide cos entire project: | | | |
| Cost | DOI | LLARS (\$ |) |
| FOR | R ACCOUNTIN | G PURPOSES ON | LY |
| The undersigned acknowledge | s receipt of the fo | ollowing Addenda: | |
| Receipt of Addenda No.(s) | | | |
| PROPOSAL TIME | | | |
| Bidder agrees that this Bid sha days from the due date, and Bi accepted within said sixty (60) | ds may be accept | ed or rejected during | this period. Bids not |
| Attended pre-bid conference | YES | NO | |
| Has visited the jobsite | YES | NO | |
| The Bidder must attach to the of this Bid Form disclosing a the bidder and any member of | any familial rela | tionship between th | ne Owner or an employee of |
| The Bidder has reviewed the Coof the schedule can be met. | Guideline Schedul | | |
| The undersigned further agrees specified in the Notice to Bidd accordance with the Plans and | ers. If Alternate | | |

ALTERNATE BIDS

A blank entry or an entry of "No Bid", "N/A", or similar entry on any Alternate will cause the bid to be rejected as non-responsive only if that Alternate is selected. If no change in the bid amount is required, indicate "No Change".

<u>MARK "ADD" OR "DEDUCT" FOR EACH ALTERNATE</u>

| Alternate Bid No. 1 – Existing building re-roofing, (Area #1 through Area #6) | <u>.</u> |
|--|----------|
| Change the Base Bid the sum of | |
| (sum in words) | |
| DOLLARS (\$ | ADD |
| DOLLARS (\$) (sum in figures) | DEDUCT |
| (Sum in figures) | |
| Alternate Bid No. 1A – Existing Building Re-Roofing (Area #1). | |
| Change the Base Bid the sum of | |
| (sum in words) | |
| | ADD |
| DOLLARS (\$) (sum in figures) | DEDUCT |
| (sum in figures) | |
| Alternate Bid No. 1B – Existing Building Re-Roofing (Area #2). Change the Base Bid the sum of | |
| (sum in words) | |
| | ADD |
| DOLLARS (\$) (sum in figures) | DEDUCT |
| (sum in figures) | |
| Alternate Bid No. 1C – Existing Building Re-Roofing (Area #3). | |
| Change the Base Bid the sum of | |
| (sum in words) | ADD |
| DOLLARS (\$ | DEDUCT |
| DOLLARS (\$) (sum in figures) | |

Change the Base Bid the sum of (sum in words) ADD _____DOLLARS (\$_____) **DEDUCT** (sum in figures) Alternate Bid No. 1E – Existing Building Re-Roofing (Area #5). Change the Base Bid the sum of (sum in words) ADD DOLLARS (\$ **DEDUCT** (sum in figures) Alternate Bid No. 1F – Existing Building Re-Roofing (Area #6). Change the Base Bid the sum of (sum in words) ADD ____DOLLARS (\$_____) **DEDUCT** (sum in figures) Alternate Bid No. 2 – Provide Snow Melt System at Building Entrances. Change the Base Bid the sum of (sum in words) ADD ____DOLLARS (\$_____) **DEDUCT** (sum in figures) Alternate Bid No. 3 – Provide Watermain Removal and Replacement. Change the Base Bid the sum of (sum in words) ADD ____DOLLARS (\$_____) **DEDUCT** (sum in figures)

Alternate Bid No. 1D – Existing Building Re-Roofing (Area #4).

Change the Base Bid the sum of (sum in words) ADD **DEDUCT** DOLLARS (\$ (sum in figures) Alternate Bid No. 5 – Provide Corridor (COR6) Ceiling Replacement. Change the Base Bid the sum of (sum in words) ADD DOLLARS (\$ **DEDUCT** (sum in figures) Alternate Bid No. 6 – Provide Painting at Competition Gym. Change the Base Bid the sum of (sum in words) ADD ____DOLLARS (\$_____) **DEDUCT** (sum in figures) Alternate Bid No. 7A – Provide Synthetic Field Turf at Football Stadium (44oz. and 2 fiber system). Change the Base Bid the sum of (sum in words) ADD _DOLLARS (\$_____) (sum in figures) **DEDUCT** Alternate Bid No. 7B – Provide Synthetic Field Turf at Football Stadium (52 oz. and 3 fiber system). Change the Base Bid the sum of (sum in words) ADD DOLLARS (\$_____) **DEDUCT** (sum in figures)

Alternate Bid No. 4 – Provide Post Tension Concrete Tennis Courts.

| <u>Alternate Bid No. 8 – Provide Performance Shock Pad for Synthetic Field Turf.</u> | |
|--|--------------------|
| Change the Base Bid the sum of | |
| (sum in words) | |
| | ADD |
| DOLLARS (\$) | DEDUCT |
| (sum in figures) | |
| Alternate Bid No. 9 – Provide a ¾-inch water service extension to the future ten | nis court pavilion |
| and related additional removal and replacement of existing improvements neces | sary for this |
| water service extension. | |
| Change the Base Bid the sum of | |
| (sum in words) | |
| | ADD |
| DOLLARS (\$) | DEDUCT |
| (sum in figures) | |
| | |
| Alternate Bid No. 10 – Lining of existing cast iron sanitary piping. | |
| | |
| Change the Base Bid the sum of | |
| (sum in words) | |
| DOLLARG (A | ADD |
| DOLLARS (\$) (sum in figures) | DEDUCT |
| (sum in figures) | |
| | |
| Alternate Bid No. 11 – Technology-Provide Sapling Talkback Functionality. | |
| | |
| Change the Base Bid the sum of | |
| (sum in words) | ADD |
| DOLLARS (\$ | ADD DEDUCT |
| DOLLARS (\$) (sum in figures) | DEDUCT |

NON-COLLUSION AFFIDAVIT

The undersigned Bidder or agent, being duly sworn on oath, says that he has not, nor has any other member, representative, or agent of the firm, company, corporation or partnership represented by him, entered into any combination, collusion or agreement with any person relative to the price to be bid by anyone at such letting nor to prevent any person from bidding nor to induce anyone to refrain from bidding, and that this Bid is made without reference to any other bid and without any agreement, understanding or combination with any other person in reference to such bidding.

He further says that no person or persons, firms, or corporations has, have, or will receive directly or indirectly, any rebate, fee, gift, commission, or thing of value on account of such sale.

OATH AND AFFIRMATION

| | | | | (Name of Organization) |
|----------------------------|-------------------|---------------------|---------------|--------------------------------|
| | | | | Ву |
| | | | | (Title of Person Signing) |
| | | ACKNOWLED | GEMENT | |
| CATE OF) SS: |) | | | |
| | | | | |
| | | being duly sw | orn, deposes | and says that |
| is(Title) | o | f the above | | |
| (Title) | | | (Name of C | Organization) |
| d that the statements cont | ained in the fore | going Bid, certific | cation and Af | ffidavit are true and correct. |
| bscribed and sworn to be | fore me this | day of | ,,2 | 20 |
| | | | | Notary Public |
| | | | | Trotally Tublic |

PART II

(Complete sections I, II, and III for all state and local public works projects)

These statements to be submitted under oath by each bidder with and as a part of his bid. (Attach additional pages for each section as needed.)

SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed?

| Contract Amount | Class of Work | When Completed | Name and Address of Owner |
|--------------------|----------------------|---------------------|---------------------------------|
| | | | |
| | | | |
| 2. What publ | ic works projects ha | s your organization | now in process of construction: |
| | | | |

Contract Class of When Name and Address of Owner

Work Completed Owner

| List reference | es from private fir | rms for which you | u have performed | d work. |
|----------------|---------------------|-------------------|------------------|---------|
| | | | | |

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

| 1. | Explain your plan or layout for performing proposed Work. |
|----|---|
| 2. | If you intend to sublet any portion of the Work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you expect to require a bond. |
| 3. | What equipment do you intend to use for the proposed Project? |
| 4. | Have you made contracts or received offers for all materials within prices used in preparing your proposal? yes no. |
| | |

SECTION III OATH AND AFFIRMATION

I hereby affirm under the penalties of perjury that the facts and information contained in the foregoing Bid for public works are true and correct to the best of my knowledge and belief.

| IN TESTIMONY | WHEREOF, The | e Bidder has | s hereunto s | et his han | d this | |
|-------------------|--------------|--------------|--------------|------------|---------------|--------|
| | day of | | , 20 | _· | | |
| Bidder: | | | | _ | | |
| IN TESTIMONY | WHEREOF, The | e Bidder (a | firm) have l | nereunto s | et their hand | s this |
| | day of | | , 20 | · | | |
| Firm Name: | | | - | | | |
| By: | | | - | | | |
| Individual names: | | | | | | |

| IN TESTIMONY WHEREOF, The Bidder | (a corporation) has caused this proposal to be signed by |
|--|--|
| its President and Secretary and affixed its co | orporate seal this day of, |
| 20 | |
| Name of Corporation: | |
| Prasident | |
| President: | |
| Secretary: | |
| | |
| ACKN | NOWLEDGEMENT |
| STATE OF | _) |
|) SS: | |
| COUNTY OF | _) |
| | being duly sworn, deposes and says that |
| he is of the abo | ove |
| (Title) | (Name of Organization) |
| and that the answers to the questions in the | foregoing questionnaires and all |
| statements therein contained are true and co | rrect. |
| Subscribed and sworn to before me this | day of, 20 |
| | |
| Notary Public | |
| My Commission Expires: | |
| County of Residence: | |

AFFIDAVIT OF BIDDER - FAMILIAL DISCLOSURE

| The undersigned, the Owner or authorized office | cer of (the 'Bidder'), pursuant to the |
|--|---|
| familial disclosure requirement provided in the | (the 'School District') advertisement for |
| construction bids, hereby represent and warrant, excep | t as provided below, that no familial relationships exist |
| between the Owner(s) or any employee of | and any member of the Board of Education |
| of the School District or the Superintendent of the School | |
| 1 | |
| List any Familial Relationships: | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | |
| | PINDED. |
| | BIDDER: |
| | |
| | By: |
| | |
| | Its: |
| STATE OF MICHIGAN) | |
| COUNTY OF) | |
| , | |
| This instrument was acknowledged before me | on the, day of, 20, by |
| | |
| <u> </u> | |
| | , Notary Public |
| | County, Michigan |
| My | Commission Expires: |
| Act | ing in the County of: |

<u>CERTIFICATION OF COMPLIANCE – IRAN ECONOMIC SANCTIONS ACT</u> Michigan Public Act No. 517 of 2012

The undersigned, the owner, or authorized officer of the below-named company (the "Company"), pursuant to the compliance certification requirement provided in the **Cadillac Area Public School's** Request For Proposal (the "RFP"), hereby certifies, represents, and warrants that the Company (which includes its officers, directors and employees) is not an "Iran Linked Business" within the meaning of the Iran Economic Sanctions Act, Michigan Public Act No. 517 of 2012 (the "Act"), and that in the event the Company is awarded a contract by the **Cadillac Area Public Schools** as a result of the aforementioned RFP, the Company is not and will not become an "Iran Linked Business" at any time during the course of performing any services under the contract.

The Company further acknowledges that any person who is found to have submitted a false certification is responsible for a civil penalty of not more than \$250,000.00 or two (2) times the amount of the contract or proposed contract for which the false certification was made, whichever is greater, the cost of the **Cadillac Area Public School's** investigation, and reasonable attorney fees, in addition to the fine. Moreover, any person who submitted a false certification shall be ineligible to bid on a request for proposal for three (3) years from the date that it is determined that the person has submitted the false certification.

| | | | | | BIDDER: | | | |
|---------------------|------------------|--------|----|-------|--------------|-----------|-----------|-----------------|
| | | | | | • | | | |
| STATE OF MICHIGAN |))ss. _) | | | | | | | |
| This instrument was | | before | me | on | the | day of | | , 20, by |
| | | | | | | | County, M | , Notary Public |
| | | | My | | nmission Exp | | - | - |
| | | | Ac | cting | g in the Cou | nty of: _ | | |

END OF SECTION 00 31 00

SECTION 01 12 00 - MULTIPLE CONTRACT SUMMARY

PART 1 GENERAL

1.01 RELATED DOCUMENTS

A. Drawings and General Provisions of the Prime Contract, including amended General Conditions and other Division 1 Specification Sections, apply to Work of this Section.

1.02 SUMMARY

- A. The intent of this Section is to indicate the Work required by the Contractors and to provide information regarding the duties, responsibilities, and cooperation required by the Contractors, with similar requirements for the subcontractors and suppliers.
- B. Owners right to maintain current operations
- C. Occupancy requirements
- D. Work by Owner
- E. Permits, fees, and notices
- F. Labor and materials
- G. Verifications of existing dimensions
- H. Project security
- I. Coordination of work
- J. Time of commencement and completion
- K. Schedule of contract responsibilities

1.03 WORK UNDER SEPARATE CONTRACTS

- A. Prime Contracts are defined to include the following contracts described in the Schedule of Contract Responsibilities included hereinafter; and each is recognized to be a major part of the project, with Work to be performed concurrently and in close coordination with Work of other Prime Contracts.
- B. The "Contract Documents," as defined in the General Conditions, include "the Drawings." Although Drawings are grouped and identified by classification of the Work, Contractors shall be responsible for their Work as specified herein and as

indicated on the Drawings. Although the majority of the Drawings are "to scale," Contractors are directed to use indicated dimensions for determining material quantities and for other reasons. No additional monies will be allowed due to Contractors using "scaling instruments" to determine material quantities or for other reasons.

- C. Separate prime contracts will be awarded as per the "Schedule of Contract Responsibilities" (see Part 3 Execution). Contractors shall include Work required by the Specifications and Drawings for each contract area defined in the Schedule.
- D. Work for the complete construction of the Project will be under multiple prime contracts with the Owner. The Construction Manager will manage the construction of the Project.
- E. Each Contractor shall be responsible for demolition and disposal of existing items relative to his Contract.

1.04 ADMINISTRATIVE RESPONSIBILITIES OF PRIME CONTRACTORS AND CM

- A. The Construction Manager shall be responsible for the maintenance of the Construction Schedule and management of every phase of the Work.
 - 1. Each Contractor shall read the Specifications and Drawings for other separate Contracts for fixed equipment and the like to be incorporated or attached or built in to the Work; and familiarize himself with the requirements and responsibilities of other Contracts to enable the required coordination and supervision.
 - 2. Each Contractor shall also familiarize himself with other items to be incorporated into the Work including equipment and Work by the Owner.
 - 3. Each Contractor shall cooperate with the Construction Manager in notifying him when the Work is at a stage to require the services of other Contractors and shall notify the Construction Manager in the event that such other Contractors do not carry out their responsibilities in connection with such notification.
- B. Contractors shall cooperate with and assist the Construction Manager in the preparation of construction progress and procedures, schedule of product deliveries, and their effect on the overall project progress and completion. Other Contractors shall cooperate in getting their Work and the Work of their subcontractors completed according to the schedule as prepared and maintained by the Construction Manager. Each Contractor shall immediately notify the Construction Manager of a delay in delivery of products or the scheduled date of completion that may affect the total progress of construction.
- C. The Owner will furnish the topographical survey, either as a part of these Drawings or separately, giving the general topographical lines existing at the site and the property lines.

D. Contractors required to make connections to existing utilities, especially sewerage where gravity flow occurs, shall verify grades and locations at points of such connections and shall notify the Construction Manager of circumstances which would adversely affect the proper flow or connection to such facilities.

1.05 PRIME CONTRACTORS USE OF PREMISES

- A. Use of the Site: Limit use of the premises to work in areas indicated. Confine operations to areas within contract limits indicated. Do not disturb portions of the site beyond the areas in which the Work is indicated.
 - 1. Owner Occupancy: Allow for Owner occupancy and use by the public.
 - 2. Driveways and Entrances: Keep driveways and entrances serving the premises clear and available to the Owner, the Owner's employees, and emergency vehicles at all times. Do not use these areas for parking or storage of materials. Schedule deliveries to minimize space and time requirements for storage of materials and equipment on site.
- B. Use of the Existing Building: Maintain the existing building in a weathertight condition throughout the construction period. Repair damage caused by construction operations. Take all precautions necessary to protect the building and its occupants during the construction period.

1.06 OWNERS RIGHT TO MAINTAIN OPERATIONS

- A. During the course of this Project, normal and customary functions and operations must be maintained. The Contract Documents are intended to define a strict separation between the school activities of students and staff from the activities of the construction project.
- B. The Construction Manager, Architect, and Owner will not tolerate any visible or audible actions initiated or responded to by any employees of Contractors on this Project toward any students, teachers, or staff members at the school system. Violators shall be promptly removed from the site.
- C. The Owner intends to instruct students, teachers, and staff to refrain from communications with Contractor's personnel working on this Project. All communication with Owner and staff shall be through the Construction Manager.
- D. Contractors must expend their best effort toward protection of the health, safety, and welfare of occupants on the Owner's property during the course of Work on this Project.
- E. Contractors and Subcontractors shall be subject to such rules and regulations for the conduct of the Work as the Owner may establish. Employees shall be properly and completely clothed while working. Bare torsos, legs and feet will not be allowed. Possession or consumption of alcoholic beverages or drugs, tobacco or

other noxious behavior on the site is strictly prohibited. Violators shall be promptly removed from the site. Smoking is not permitted on school property or within school buildings.

1.07 OCCUPANCY REQUIREMENTS

- A. Partial Owner Occupancy: The Owner reserves the right to occupy and to place and install equipment in completed areas of the building prior to Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.
 - 1. The Construction Manager will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner occupancy.
 - 2. Party which obtained general building permit shall obtain a Certificate of Occupancy from local building officials prior to Owner occupancy.
 - 3. Prior to partial Owner occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy, the Owner will operate and maintain mechanical and electrical systems serving occupied portions of the building.
 - 4. Upon occupancy, the Owner will assume responsibility for maintenance and custodial service for occupied portions of the building.

1.08 WORK BY OWNER

- A. The Owner intends to complete the following items of Work outside the provisions of these Contract Documents. Contractors shall not restrict or interfere with the Owner's right to the Project to accomplish this Work.
 - 1. Equipment and furniture except as scheduled and specified under Divisions 11 and 12 and shown on the Drawings.
 - 2. Items which may be deleted from Contracts for Work as required by the Contract Documents.
 - 3. Existing school maintenance work.
 - 4. The purchase and supplying of certain materials as noted in the Project Manual.
 - 5. The Owner, under separate contract, shall provide removal of identified hazardous materials from the existing structure. The asbestos report is available through the Construction Manager upon request.
 - 6. Other items TBD.

1.09 PERMITS, FEES, AND NOTICES

A. Construction Manager will secure the general building permit for the Owner. Each Contractor shall secure and pay for other permits, governmental fees, and licenses necessary for the proper execution and completion of the Contractors Work. Fees

to relocate utilities on Owner's property shall be included in the bid of the Contractor doing the relocation.

- 1. The Owner shall pay for the cost of the Building Permit.
- 2. State filing fees for plan approval are the responsibility of the Owner and will be paid by the Owner.
- B. Utility Tie-Ins: Shall be arranged with local utility company and other involved parties for minimum interruption of service.
- C. Shutdowns of existing systems shall be limited to minimum time required and scheduled with other involved parties. Provide 2 days written notice of shutdown to Construction Manager and Owner.
- D. Inspections of installed work shall be performed by the governing authority as arranged for by the Contractor. Work shall not be covered until approved.
- E. Each Contractor shall give notices and comply with laws, ordinances, rules, regulations, and orders of public authorities bearing on the performance of his Work. If a Contractor observes that the Contract Documents are at variance therewith, he shall promptly notify the Construction Manager in writing, and necessary changes shall be adjusted by appropriate notification. If a Contractor performs Work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Construction Manager, he shall assume full responsibility therefore and shall bear the costs attributable thereto.

1.10 LABOR AND MATERIALS

- A. Unless otherwise specifically noted, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of his Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.
- B. Each Contractor shall enforce strict discipline and good order among his employees or other persons carrying out Work of his Contract and shall not permit employment of unfit person or persons or anyone not skilled in the task assigned to them.
- C. Prime Contractors must furnish a letter to the Construction Manager, stating that Contractor shall not assign any of its employees, agents or other individuals to perform any services in the District's facilities or program sites if that individual:
 - 1. Is listed on the Michigan Sex Offender Registry, www.mipsor.state.mi.us.
 - 2. Is listed on the Federal Sex Offender Registry www.nsopw.gov.
 - 3. Has not passed a 5-50 drug screen, testing negative for the following drugs:
 - a. Amphetamines
 - b. Methamphetamines
 - c. Cocaine
 - d. Codeine

- e. Methadone
- f. Morphine
- g. Phencyclidine (PCP)
- h. Marijuana
- D. ID Stickers will be issued by The Skillman Corporation upon receipt of verification from the Contractor that the employee/subcontractor employee or independent contractor has a satisfactory record to work on the Project. Stickers will be numbered and numbers assigned to each worker to be worn on their hardhat. It is the Contractor's responsibility to maintain a record of contractor's name assigned each number and provide to The Construction Manager upon request.
- E. Consistent with Michigan law, possession or consumption of drugs on school property will promptly be reported to the local police. Consumption of alcoholic beverages or tobacco or other noxious behavior on school owned property is strictly prohibited. Violators shall be promptly removed from the site. Smoking is not permitted on school property or within school buildings.

1.11 CUTTING AND PATCHING

A. Refer to Section 01 73 10 – Cutting and Patching, for provisions on this subject.

1.12 VERIFICATIONS OF EXISTING DIMENSIONS

A. When verification of existing dimensions is required, the Contractor requiring said verification for the construction or fabrication of his material shall be the Contractor responsible for the procurement of the field information.

1.13 PROJECT SECURITY

- A. Each Prime Contractor shall take all reasonable precautions to prevent injury, damage or loss to people and property in, on and adjacent to the project. This shall include not only their own work or property but that of other contractors and the Owner.
- B. If deemed necessary by The Construction Manager a project wide security program may be developed for the purpose of preventing damage or loss at the project site or property adjacent thereto. Once accepted by the Owner, contractors shall comply.

1.14 SCHEDULE OF CONTRACT RESPONSIBILITIES - SCOPE

- A. Contractors shall submit their proposals based on the work included under each contract area as listed herein. Include Work necessary for a complete project, as shown on the Drawings and called for in the Specifications.
- B. Questions concerning the phasing or "Schedule of Contract Responsibilities" should be directed to the Construction Manager, who will be the interpreter and be

- responsible for this Schedule of Contract Responsibilities and Contract Breakdown, prior to submitting proposals and during construction.
- C. The requirements of Division 1 are a part of the Work of each and every contract area. The Contractor for any one contract area shall be familiar with the Work and requirements of all other contract areas.
- D. Certain Specification Sections describe Work to be performed under several contract areas. (Example: 06 10 00 Rough Carpentry.) Provide Work of this nature as required for each contract area whether or not enumerated in the Schedule of Contract Responsibilities.
- E. The following contract areas are broken down by Specifications Section conforming basically to the CSI format.
- F. The Drawings and Specifications as furnished for each of the Contracts is for the convenience of the Contractor in preparing a proposal for this Project. However, each Contractor is responsible to review the complete set of Drawings and Specifications to assure that Work required to be installed to complete his phase of the Work is included in his proposal. This "Schedule of Contract Responsibilities" is a definition of the work as it is to be bid in separate contracts. Where a specific item of Work is not defined, but is normally inherent to a trade, or is included in the scope of the applicable technical revision, it will be the responsibility of that Contractor to include the Work in his proposal.
- G. This "Schedule of Contract Responsibilities" is to aid each Contractor in defining the Scope of Work to be included in his proposal. However, omissions from this "Schedule of Responsibilities" do not relieve the Contractor from including in his proposal that Work which will be required to complete his Contract. Each Contractor should read the "Schedule of Contract Responsibilities" completely to familiarize himself with the Work of other Contractors that may have Work in adjacent areas and to coordinate the interfacing problems that may occur as the work is assembled and constructed.
- H. Where specific Work is to be completed under a particular phase of the Project and the Work is wholly or partially completed by other trades because of the type of work involved or jurisdictional trade agreements, the Contractor will be responsible to subcontract the Work as necessary to complete the Work included in his Contract. No delay in the Work will be allowed due to the failure of the Contractor to subcontract related work required by jurisdictional trade agreements.

1.15 COORDINATION OF WORK

A. Each Contractor is responsible to coordinate his Work with the Work of other trades and other Contractors and requirements of the school system. The Contractor must make space allowances for Work of other Contractors, provide necessary openings

where indicated or implied by the Drawings and Specifications. Each Contractor is responsible to protect his own Work.

1.16 TIME OF COMMENCEMENT AND COMPLETION

- A. The Contractor shall commence work within ten (10) days after being notified in writing to proceed and shall complete the Work within the time limitations established in the Form of Agreement.
 - 1. It is anticipated that construction will start within 40 calendar days after receipt of bids.
 - 2. Construction shall be complete within **948** consecutive calendar days, or earlier, after Notice to Proceed.

PART 2 PRODUCTS (Not Used)

PART 3 EXECUTION

3.01 SCHEDULE OF CONTRACT RESPONSIBILITIES

3.02 GENERAL REQUIREMENTS

Section

| A. | PROVIDED | BY OWNER T | THROUGH THE CONSTRUCTION MANAGER |
|----|----------|------------|----------------------------------|
| | Section | 01 22 00 | Sahadulas and Danarta |

| Section | 01 32 00 | schedules and Keports |
|---------|----------|-----------------------------|
| Section | 01 45 10 | Testing Laboratory Services |
| Section | 01 59 10 | Project Office |
| Section | 01 71 50 | Final Cleaning |

B. PROVIDED BY ALL CONTRACTORS AS APPLICABLE

| Section | 01 12 00 | Multiple Contract Summary |
|---------|----------|--|
| Section | 01 23 00 | Alternates |
| Section | 01 25 00 | Contract Modification Procedures |
| Section | 01 28 00 | Schedule of Values |
| Section | 01 29 00 | Applications for Payment |
| Section | 01 31 00 | Project Meetings |
| Section | 01 32 00 | Schedules and Reports |
| Section | 01 33 00 | Submittal Procedures |
| Section | 01 45 10 | Testing Laboratory Services (Paragraph 1.05) |
| Section | 01 50 50 | Temporary Facilities and Controls |
| Section | 01 54 60 | Environment Protection |
| Section | 01 54 80 | Utility Protection |

Water Control

Section 01 60 00 Product Requirements

Section 01 72 50 Work Layout

01 56 30

Section 01 73 10 Cutting and Patching Section 01 77 00 Contract Closeout

All Contractors shall provide their Superintendents with radios capable of handling multiple channels and compatible with radios used by the Construction Manager.

All contractors shall subscribe to PlanGrid for use on this project. Number of users is up to the contractor, however, at a minimum your site personnel will be required to use this product to facilitate communication. PlanGrid will be used for the current construction documentation to include, current set, addenda, ASI, As Built Conditions, QA/QC, and Punch List. Visit the www.PlanGrid.com to determine subscription pricing. It is recommended that you have an office administrator to assist your field personnel. PlanGrid is a tool for the construction phase and will not be used for bidding. Visit www.skillmanplanroom.com for bid documents

C. PROVIDED BY DESIGNATED CONTRACTORS

| Section | 01 21 00 | Allowances |
|---------|----------|---|
| Section | 01 51 10 | Temporary Electricity, Lighting and Warning |
| | | Systems |
| Section | 01 51 30 | Temporary Heating, Ventilation and Cooling |
| Section | 01 51 50 | Temporary Water |
| Section | 01 51 60 | Temporary Sanitary Facilities |
| Section | 01 51 80 | Temporary Fire Protection |
| Section | 01 52 10 | Construction Aids and Temporary Enclosures |
| Section | 01 52 60 | Rubbish Container |
| Section | 01 53 10 | Fences (Temporary Security) |
| Section | 01 53 20 | Tree and Plant Protection |
| Section | 01 53 30 | Barricades |
| Section | 01 55 00 | Access Roads and Parking Areas |
| Section | 01 56 20 | Dust Control |
| Section | 01 56 80 | Erosion Control |
| Section | 01 57 60 | Project Signs |
| Section | 01 72 00 | Field Engineering |

3.03 BID CATEGORIES

A. <u>BID CATEGORY NO. 1 – BUILDING DEMOLITION</u>

General Requirements in Paragraph 3.02.B above.

| Section | 01 21 00 | Allowances |
|---------|----------|-----------------------------------|
| Section | 01 50 50 | Temporary Facilities and Controls |
| Section | 02 41 16 | Structure Demolition |

- 1. Additional mobilizations may be required due to various reasons including, but not limited to, sequence of work, winter construction, or access points into the building. Remobilization costs shall be included as necessary, regardless of intent of Guideline Schedule outlining a work category to occur continuously and/or in a single mobilization.
- 2. Provide recovery of refrigerant according to EPA regulations by a qualified recovery technician.

- 3. Provide temporary shoring as required to perform the work as noted in demolition specifications.
- 4. Existing utility Tie-Ins/Disconnect/Removals shall be arranged with local utility providers and coordinated with Mechanical, Plumbing and Electrical Contractors. All costs associated with disconnecting/tie-in/removal must be included in the Base-bid.
- 5. Bid Category no. 4 Sitework contractor will provide backfilling and compacting for below grade structure removal. Coordinate backfilling operations as required.
- 6. Rubbish Containers specified in section 01 52 60 shall **not** be used by Bid Category No.1.
- 7. Procure permits for your work. Costs of all permits to be included in base-bid.

B. <u>BID CATEGORY NO. 2 – GENERAL TRADES</u>

General Requirements in Paragraph 3.02.B above.

| - | | agraph 5.02.D above. |
|---------|-------------|--|
| Section | 01 21 00 | Allowances |
| Section | 01 51 60 | Temporary Sanitary Facilities |
| Section | 01 51 80 | Temporary Fire Protection |
| Section | 01 52 10 | Construction Aids and Temporary Enclosures |
| Section | 01 52 60 | Rubbish Container |
| Section | 01 53 10 | Fences (Temporary Security) |
| Section | 01 53 30 | Barricades |
| Section | 01 57 60 | Project Signs |
| Section | 01 72 00 | Field Engineering |
| Section | 02 41 19 | Selective Demolition |
| Section | 03 30 00 | Cast-in-Place Concrete (As applicable) |
| Section | 05 58 13 | Column Covers |
| Section | 06 10 00 | Rough Carpentry |
| Section | 06 16 00 | Sheathing (As applicable) |
| Section | 07 21 00 | Thermal Insulation (As applicable) |
| Section | 07 42 13.13 | Formed Metal Wall Panels |
| Section | 07 42 13.23 | Metal Composite Material Wall |
| | | Panels |
| Section | 07 95 13.13 | Interior Expansion Joint Cover Assemblies |
| Section | 07 95 13.16 | Exterior Expansion Joint Cover Assemblies |
| Section | 08 06 71 | Door Hardware Schedule (As applicable) |
| Section | 08 11 13 | Hollow Metal Doors And Frames |
| Section | 08 14 16 | Flush Wood Doors |
| Section | 08 31 13 | Access Doors and Frames |
| Section | 08 33 26 | Overhead Coiling Grilles |
| Section | 08 71 00 | Door Hardware (As Applicable) |
| Section | 09 64 66 | Wood Athletic Flooring |
| Section | 10 11 00 | Visual Display Units |
| Section | 10 14 19 | Dimensional Letter Signage |
| Section | 10 14 26 | Post and Panel - Pylon Signage |
| Section | 10 14 53 | Traffic Signage |
| | | |

| Section | 10 21 13.19 | Plastic Toilet Compartments |
|---------|-------------|---|
| Section | 10 26 00 | Wall and Door Protection |
| Section | 10 28 00 | Toilet, Bath, and Laundry Accessories |
| Section | 10 44 13 | Fire Protection Cabinets |
| Section | 10 44 16 | Fire Extinguishers |
| Section | 10 75 16 | Ground-Set Flagpoles |
| Section | 11 68 23 | Exterior Athletic Equipment |
| Section | 11 68 34 | Football Goal Post |
| Section | 11 68 36 | Soccer Goal (Portable) |
| Section | 11 68 40 | Field Event Construction |
| Section | 12 24 13 | Roller Window Shades |
| Section | 12 36 61.16 | Solid Surfacing Countertop(Deleted in Addendum 3) |
| Section | 12 66 00 | Telescoping Stands |
| Section | 13 34 23.10 | Prefabricated Ticket Booth |
| Section | 14 21 23.16 | Machine-Room-Less Electric Traction Passenger |
| | | Elevators |
| Section | 32 31 13 | Chain Link Fences and Gates (sf0) |
| Section | 32 31 19 | Decorative Metal Fences and Gates |
| Section | 32 39 00 | Miscellaneous Site Specialties |
| Section | 32 71 00 | Athletic Equipment |

- 1. Access panels shown on drawings will be provided by General Trades. Access Panels not shown on the drawings but required, must be provided by contractor performing the work.
- 2. Provide all wood blocking, nailers, wood sheathing, plywood, etc. for roof assembly.
- 3. Provide all blocking or backing required for all trades and Owner provided equipment. All trades are to supply layout drawings and requirements prior to framing of individual areas.
- 4. Each Contractor shall protect finish surfaces of their installed work and finish surfaces encountered during the performance of their work.
- 5. Provide material, labor and equipment allowance of \$20,000 in Base-Bid for temporary enclosures per specification section 01 52 10 Construction Aids and Temporary Enclosures. Installation and removal will be at the discretion of Construction Manager. Any unused allowance will be returned to the Owner through a deduct Change Order.
- 6. Provide concrete work associated with Bid Category No. 2 General Trades scope of work.
- 7. Provide sweeping compound and 380 labor hours at laborer's pay rate (including all fringe benefits and payroll expenses) for general building and site clean-up (or other work) to be performed at the direction of the Construction Manager. At the end of the project, unused hours will be converted into a dollar amount per Wage Scale (including fringe benefits) and returned to the Owner through a deduct Change Order.
- 8. Provide all door hardware components for doors in Bid Category No. 2.
- 9. Provide wood base for all metal lockers.
- 10. Provide glazing in factory glazed wood doors.

- 11. Additional mobilizations may be required due to various reasons including, but not limited to, sequence of work, winter construction, or access points into the building. Remobilization costs shall be included as necessary, regardless of intent of Guideline Schedule outlining a work category to occur continuously and/or in a single mobilization.
- 12. Bid Category 15 Joint Sealants will provide joint sealants exposed to view. Provide sealant joints not exposed to view.
- 13. Refer to specification section 01 72 00 Field Engineering in its entirety. Provide and maintain building and site control points and benchmark elevations for the duration of the project.
- 14. Provide rigid insulation at all top of wall conditions, reference typical top of wall detail 1A on Sheet A334.2.
- 15. Provide all plastic bollard covers.
- 16. Provide new radius point markers in football field, refer to sheet L501.3.
- 17. Prep Auditorium floor to receive new finishes after demolition.
- 18. Provide Electronic Message Sign with letters cut outs per Sheet A356.2. Bid Category No. 6 Masonry will provide all masonry work CMU and Cast Stone with Stainless Steel Anchors required for exterior Monument Sign. Bid Category No. 3 Concrete to provide layout, excavation, backfill, concrete footings, foundations, rebars/dowels, etc.

C. <u>BID CATEGORY NO. 3 - CONCRETE</u>

General Requirements in Paragraph 3.02.B above.

| Section | 01 21 00 | Allowances |
|---------|----------|------------------------------------|
| Section | 03 30 00 | Cast-in-Place Concrete |
| Section | 03 30 53 | Concrete Turf Anchor |
| Section | 03 35 43 | Polished Concrete Finishing |
| Section | 07 17 00 | Bentonite Waterproofing |
| Section | 07 21 00 | Thermal Insulation (As applicable) |
| Section | 07 26 00 | Vapor Retarders |
| Section | 31 31 16 | Termite Control |
| Section | 32 13 13 | Concrete Paving |
| Section | 32 13 73 | Concrete Paving Joint Sealants |
| | | |

- 1. Provide all below grade insulation for footings, foundations, and under concrete slab on grade.
- 2. Provide concrete housekeeping/equipment pads as shown on drawings, refer to civil and mechanical drawings. Any Contractors requiring concrete housekeeping pads which are not shown on the drawings shall include costs to provide in their bid.
- 3. Provide grouting of structural steel base plates to columns.
- 4. Provide installation of concrete filled steel stair pans, posts and bollards. Steel posts and bollards will be furnished by Bid Category No. 7 Structural and Miscellaneous Steel.
- 5. Provide topping at hollow core pre-cast concrete areas.
- 6. Routinely remove concrete spoils from the project site.
- 7. Provide fine grading of sand/subbase material prior to all concrete placement.

- 8. Additional mobilizations may be required due to various reasons including, but not limited to, sequence of work, winter construction, or access points into the building. Remobilization costs shall be included as necessary, regardless of intent of Guideline Schedule outlining a work category to occur continuously and/or in a single mobilization.
- 9. Bid Category No. 4 Sitework to provide granular material/sand and aggregate subbase for asphalt paving for Parking Lots, drives, and Tennis Courts, concrete paving, curbs, walks, slab on grade, etc.
- 10. Bid Category No. 7 Structural and Miscellaneous Steel will provide anchor bolts and embeds to Bid Category No. 3 Concrete contractor for installation.
- 11. Bid Category No. 4 Sitework contractor to provide excavation, backfill and compaction for footings, foundations, and Slab on grade per layout provided by Bid Category No. 3 Concrete for Utility Enclosure.
- 12. Provide installation of utility enclosure steel posts, base plates, and bollards (typical), material furnished by Bid Category No. 7 Structural and Miscellaneous Steel Contractor.
- 13. Provide concrete collar/apron at Tennis courts added in Addendum 3 Item No. D-10. Bid Category No. 2 General Trades will provide all concrete associated with Fence Posts at Tennis Courts.
- 14. Bid Category No. 2 General Trades will provide Electronic Message Sign with letters cut outs per Sheet A356.2. Bid Category No. 6 Masonry will provide all masonry work CMU and Cast Stone with Stainless Steel Anchors required for exterior Monument Sign. Bid Category No. 3 Concrete to provide layout, excavation, backfill, concrete footings, foundations, rebars/dowels, etc.
- 15. Bid Category No. 22 Plumbing to provide snowmelt system in its entirety including required insulation, reference detail B3 on Sheet C501.2. Bid Category No. 3 Concrete to provide all concrete work and installation of Trench drains in Snow Melt areas furnished by Bid Category No. 4 Sitework.
- 16. Bid Category No. 5 Asphalt Paving will provide **NO** work at Tennis Courts if Alternate No. 4 Post-Tensioned Concrete is accepted. Bid Category No. 4 Sitework will provide sand and aggregate similar to Base-Bid work for Asphalt tennis court per detail C6 on Sheet C501.2. Sitework Alternate work for Post-Tensioned concrete includes excavation, compaction and backfill of 12" Class II Sand subbase and 6" MDOT 22A Aggregate Base fine graded to +/- 0.10', and final fine grading of Aggregate and Concrete work by Bid Category No. 3 Concrete.

D. BID CATEGORY NO. 4 - SITEWORK

General Requirements in Paragraph 3.02.B above.

| Section | 01 21 00 | Allowances |
|---------|----------|----------------------|
| Section | 01 56 20 | Dust Control |
| Section | 02 41 13 | Demolition |
| Section | 02 41 19 | Selective Demolition |
| Section | 31 10 00 | Site Clearing |
| Section | 31 20 00 | Earth Moving |
| Section | 31 20 10 | Earthwork - Turf |
| Section | 31 23 19 | Dewatering |

| Section | 31 32 19 | Geotextile Fabric |
|---------|----------|-------------------------------|
| Section | 32 11 23 | Aggregate Drainage Layer |
| Section | 32 11 24 | Aggregate Base Course |
| Section | 32 14 00 | Unit Paving |
| Section | 32 84 20 | Water Distribution -Turf |
| Section | 33 41 00 | Storm Utility Drainage Piping |
| Section | 33 41 25 | Utility Sleeves |
| Section | 33 44 16 | Polymeric Trough Drain |
| Section | 33 46 00 | Subdrainage |
| Section | 33 46 05 | Sub-System Turf Draintile |
| Section | 33 46 15 | Sub-System Peastone |

- 1. Provide utility sleeves and boxes shown to be installed on track.
- 2. Additional mobilizations may be required due to various reasons including, but not limited to, sequence of work, winter construction, or access points into the building. Remobilization costs shall be included as necessary, regardless of intent of Guideline Schedule outlining a work category to occur continuously and/or in a single mobilization.
- 3. Provide fine grading to +/- 0.10' for aggregate subbase for Asphalt paving.
- 4. Provide granular material/sand and aggregate subbase for asphalt paving for Parking Lots, drives, and Tennis Courts, concrete paving, curbs, walks, slab on grade, etc.
- 5. Each Contractor shall protect finish surfaces of their installed work and finish surfaces encountered during the performance of their work.
- 6. Provide excavation, backfilling, and compaction for footings and foundations per layout provided by Bid Category No. 3 Concrete for new building addition, dumpster enclosure.
- 7. Provide backfilling for buildings and structures including building structures demolished by Bid Category No. 1.
- 8. Provide all site demolition and removal as shown on sheet CD101.2 and LD001.2, in a manner to receive new finishes.
- 9. Provide street sweeping on regular basis at areas affected by construction traffic for the duration of the project.
- 10. Bid Category No. 22 Plumbing to provide sanitary and storm piping through foundation walls up to and including exterior cleanouts and frost sleeves. Reference foundation plumbing plan sheets P000 series. Bid Category No. 4 Sitework to provide storm and sanitary piping from cleanouts onto site. Bid Category No. 22 Plumbing to provide storm or sanitary piping without cleanout exiting the building minimum 5' and/or to nearest cleanout.
- 11. Bid Category No. 22 Plumbing to provide snowmelt system in its entirety including required insulation, reference detail B3 on Sheet C501.2. Bid Category No. 3 Concrete to provide all concrete work and installation of Trench drains in Snow Melt areas furnished by Bid Category No. 4 Sitework.
- 12. As part of Alternate #7A and Alternate #7B for Turf replacement, include cost to remove and dispose 500 cubic yards of contaminated soils to landfill **OR** as per cut and fill analysis allows to be used on site. Refer to 'Environmental

- Construction Management Plan' dated November 19, 2021, issued in Addendum 1 and approximate soil boring areas Map issued in Addendum 3.
- 13. Bid Category No. 20 Fire Suppression to provide fire suppression water service piping through foundation walls up to Mechanical room, including sleeves from 5 feet outside the building. Bid Category No. 4 Sitework to provide all fire suppression water service piping from 5 feet outside building.
- 14. As part of Alternate No. 4 Post-Tensioned Concrete, provide all work including excavation, compaction and backfill of 12" Class II Sand subbase and 6" MDOT 22A Aggregate Base fine graded to +/- 0.10' for Post-Tensioned concrete work.
- 15. Bid Category No. 5 Asphalt Paving will provide **NO** work at Tennis Courts if Alternate No. 4 Post-Tensioned Concrete is accepted. Bid Category No. 4 Sitework will provide sand and aggregate similar to Base-Bid work for Asphalt tennis court per detail C6 on Sheet C501.2. Sitework Alternate work for Psot-Tensioned concrete includes excavation, compaction and backfill of 12" Class II Sand subbase and 6" MDOT 22A Aggregate Base fine graded to +/- 0.10', and final fine grading of Aggregate and Concrete work by Bid Category No. 3 Concrete.

E. <u>BID CATEGORY NO. 5 – ASPHALT PAVING</u>

General requirements in Paragraph 3.02.B above.

| Section | 01 21 00 | Allowances |
|---------|----------|-------------------------------------|
| Section | 32 12 16 | Asphalt Paving |
| Section | 32 12 17 | Hot Mix Pavement |
| Section | 32 17 23 | Pavement Markings (Addendum 3) |
| Section | 32 18 00 | Athletic and Recreational Surfacing |

- 1. Additional mobilizations may be required due to various reasons including, but not limited to, sequence of work, winter construction, or access points into the building. Remobilization costs shall be included as necessary, regardless of intent of Guideline Schedule outlining a work category to occur continuously and/or in a single mobilization.
- 2. Provide final grading of aggregate subbase for asphalt paving. Aggregate material is provided and fine graded to +/- 0.10' by Bid Category No. 4 Sitework.
- 3. Bid Category No. 5 Asphalt Paving will provide NO work at Tennis Courts if Alternate No. 4 Post-Tensioned Concrete is accepted. Bid Category No. 4 Sitework will provide sand and aggregate similar to Base-Bid work for Asphalt tennis court per detail C6 on Sheet C501.2. Sitework Alternate work for Post-Tensioned concrete includes excavation, compaction and backfill of 12" Class II Sand subbase and 6" MDOT 22A Aggregate Base fine graded to +/- 0.10', and final fine grading of Aggregate and Concrete work by Bid Category No. 3 Concrete.

F. BID CATEGORY NO. 6 - MASONRY

General Requirements in Paragraph 3.02.B above.

| Section 01 21 00 Allowances | |
|--|-------|
| 2 | |
| Section 04 20 00 Unit Masonry | |
| Section 07 19 00 Water Repellents | |
| Section 07 21 19 Foamed-in Place Insulation | |
| Section 07 25 00 Weather Barriers | |
| Section 07 84 43 Joint Firestopping | |
| Section 31 31 16 Termite Control (Masonry cavities | only) |

Clarifications:

- 1. Provide Masonry Cavity Wall insulation.
- 2. Provide grouting of all hollow metal frames present in masonry walls.
- 3. Provide installation of Structural Steel included but no limited to lintels, anchor bolts and bearing plates furnished by Bid Category No. 7 Structural and Miscellaneous Steel.
- 4. Provide modification of bottom course of masonry walls that are installed on precast plank, prior to concrete topping.
- 5. Provide brick at ticket booth.
- 6. Bid Category No. 2 General Trades will provide Electronic Message Sign with letters cut outs per Sheet A356.2. Bid Category No. 6 Masonry will provide all masonry work CMU and Cast Stone with Stainless Steel Anchors required for exterior Monument Sign. Bid Category No. 3 Concrete to provide layout, excavation, backfill, concrete footings, foundations, rebars/dowels, etc.
- 7. Provide Modular brick with a height of 2-1/4" in lieu of brick height shown as 3-5/8" in specification section 04 2000 Unit Masonry.

G. BID CATEGORY NO. 7 – STRUCTURAL & MISC. STEEL

General Requirements in Paragraph 3.02.B above.

| Section | 01 21 00 | Allowances |
|---------|----------|--------------------------|
| Section | 05 12 00 | Structural Steel Framing |
| Section | 05 21 00 | Steel Joist Framing |
| Section | 05 31 00 | Steel Decking |
| Section | 05 50 00 | Metal Fabrications |
| Section | 05 51 13 | Metal Pan Stairs |
| Section | 05 52 13 | Pipe and Tube Railings |

- 1. Provide anchor bolts and embeds to Bid Category No. 3 Concrete contractor for installation.
- 2. Additional mobilizations may be required due to various reasons including, but not limited to, sequence of work, winter construction, or access points into the building. Remobilization costs shall be included as necessary, regardless of intent of Guideline Schedule outlining a work category to occur continuously and/or in a single mobilization.
- 3. Furnish utility enclosure steel posts, base plates, and bollards (typical) to Bid Category No. 3 Concrete Contractor for installation.

- 4. Bid Category No. 6 Masonry will provide installation of lintels and bearing plates furnished by Bid Category No. 8 Structural and Miscellaneous Steel.
- 5. Provide 'Veteran's Memorial Stadium' steel arch at Stadium Entry piers, reference sheet A358.2.

H. <u>BID CATEGORY NO. 8 – PRECAST CONCRETE</u>

General Requirements in Paragraph 3.02.B above.

Section 01 21 00 Allowances

Section 03 41 00 Precast Structural Concrete

Clarifications:

- 1. Provide integral grouting of hollow core precast slabs at all areas of placement, including but not limited to precast-to-precast grouting and precast to Masonry reinforcements and precast to structural steel.
- 2. Provide and maintain weep holes on precast plank cores, provide weld plates cast into planks, provide mechanical openings, etc. and indicate all details on shop drawings.

I. <u>BID CATEGORY NO. 9 – METAL STUDS, DRYWALL, & ACOUSTICAL</u> CEILINGS

General Requirements in Paragraph 3.02.B above.

| Section | 01 21 00 | Allowances |
|---------|-------------|--|
| Section | 05 40 00 | Cold-Formed Metal Framing |
| Section | 05 44 00 | Cold-Formed Metal Trusses |
| Section | 06 16 00 | Sheathing (As applicable) |
| Section | 07 13 26 | Self-Adhering Sheet Waterproofing |
| Section | 07 21 00 | Thermal Insulation (As applicable) |
| Section | 07 24 13 | Polymer-Based Exterior Insulation and Finish |
| | | System (EIFS) |
| Section | 07 27 15 | Nonbituminous Self-Adhering Sheet Air Barriers |
| Section | 07 81 00 | Applied Fireproofing |
| Section | 07 81 23 | Intumescent Fireproofing |
| Section | 07 84 43 | Joint Firestopping |
| Section | 09 21 16.23 | Gypsum Board Shaft Wall Assemblies |
| Section | 09 22 16 | Non-Structural Metal Framing |
| Section | 09 29 00 | Gypsum Board |
| Section | 09 51 13 | Acoustical Panel Ceilings |
| Section | 09 54 33 | Linear Metal Ceilings (Addendum 1) |
| Section | 09 83 16 | Acoustic Ceiling Coating (Addendum 3) |
| Section | 09 84 33 | Sound Absorbing Wall Units |

- 1. Each Contractor shall protect finish surfaces of their installed work and finish surfaces encountered during the performance of their work.
- 2. Include a \$3,000 material allowance and 40 man-hours at the current rate (including all fringe benefits and payroll expenses) for replacement of stained or damaged ceiling tiles or other work to be performed at the direction of the Construction Manager. At the end of the project, the unused material allowance and labor hours will be converted into a dollar amount per Wage Scale

- (including fringe benefits) and returned to the Owner through a deduct Change Order.
- 3. Provide glass mat gypsum sheathing, refer to specification section 06 16 00.
- 4. Provide material, equipment, and labor required to <u>remove and reinstall</u> <u>10,000 square feet of existing drop ceiling grid system</u> throughout the building to allow for Bid Category No. 20 Fire Suppression work.

J. BID CATEGORY NO. 10 - ROOFING

General Requirements in Paragraph 3.02.B above.

| | 1 | C 1 |
|---------|-------------|------------------------------------|
| Section | 01 21 00 | Allowances |
| Section | 07 01 50.19 | Preparation for Reroofing |
| Section | 07 31 13 | Asphalt Shingles |
| Section | 07 42 93 | Soffit Panels |
| Section | 07 53 23 | Ethylene-Propylene-Diene-Monomer |
| | | (EPDM) Roofing |
| Section | 07 62 00 | Sheet Metal Flashing And Trim |
| Section | 07 71 00 | Roof Specialties |
| Section | 07 71 29 | Manufactured Roof Expansion Joints |
| Section | 07 72 00 | Roof Accessories |

Clarifications:

- 1. Bid Category No. 1 General Trades will provide all wood blocking, nailers, wood sheathing, plywood, etc. for roof assembly.
- 2. Provide all other additional wood blocking, wood nailers or plywood if required by submittals.
- 3. Bid Category No. 2 General Trades will provide rigid insulation at all top of wall conditions, per typical top of wall detail 1A on Sheet A334.2. Provide rigid insulation on inside parapet wall conditions, typical.

K. <u>BID CATEGORY NO. 11 - PAINTING</u>

General Requirements in Paragraph 3.02.B above.

| Section | 01 21 00 | Allowances |
|---------|----------|---------------------------|
| Section | 09 91 14 | Exterior Painting |
| Section | 09 91 23 | Interior Painting |
| Section | 09 96 00 | High-Performance Coatings |
| | | |

L. BID CATEGORY NO. 12 – ALUMINUM WINDOWS, GLAZING,

ENTRANCES, & STOREFRONTS

General Requirements in Paragraph 3.02.B above.

| | 1 | C 1 |
|---------|----------|--|
| Section | 01 21 00 | Allowances |
| Section | 07 21 00 | Thermal Insulation (As applicable) |
| Section | 07 92 00 | Joint Sealants (As applicable) |
| Section | 08 06 71 | Door Hardware Schedule (As applicable) |
| Section | 08 41 13 | Aluminum-Framed Entrances and |
| | | Storefronts |
| Section | 08 51 13 | Aluminum Windows |
| Section | 08 71 00 | Door Hardware (As applicable) |
| Section | 08 80 00 | Glazing |
| | | |

| Section | 08 83 00 | Mirrors |
|---------|----------|--------------------|
| Section | 08 88 13 | Fire-Rated Glazing |
| Section | 08 88 53 | Security Glazing |

Clarifications:

- 1. Each Contractor shall protect finish surfaces of their installed work and finish surfaces encountered during the performance of their work.
- 2. Provide all door hardware components for doors in Bid Category No. 12 Aluminum, Windows Glazing and Framed Entrances and Storefronts.
- 3. Bid Category No. 2 General Trades will provide glazing in factory glazed wood doors.
- 4. Bid Category No. 16 Joint Sealants will provide all joint sealants exposed to view at completion of work, including interior and exterior joints between Bid Category No. 12 Aluminum, Windows, Glazing, Framed Entrances and Storefronts and adjacent walls.
- 5. Provide all sealant joints **not** exposed to view.

M. BID CATEGORY NO. 13 - FLOORING

General Requirements in Paragraph 3.02.B above.

| Section | 01 21 00 | Allowances |
|---------|----------|-----------------------------------|
| Section | 03 54 16 | Hydraulic Cement Underlayment |
| Section | 09 30 00 | Tiling |
| Section | 09 65 00 | Resilient Flooring |
| Section | 09 65 13 | Resilient Base And Accessories |
| Section | 09 65 66 | Resilient Athletic Flooring |
| Section | 09 66 13 | Portland Cement Terrazzo Flooring |
| Section | 09 68 13 | Tile Carpeting |

Clarifications:

1. Provide, maintain and remove floor protection as specified.

N. BID CATEGORY NO. 14 – MANUFACTURED CASEWORK

General Requirements in Paragraph 3.02.B above.

| Section | 01 21 00 | Allowances |
|---------|-------------|---|
| Section | 12 32 16 | Manufactured Plastic-Laminate-Clad Casework |
| | | (Addendum 1) |
| Section | 12 36 23.13 | Plastic Laminate-Clad Countertops |
| Section | 12 36 61.16 | Solid Surfacing Countertops (Addendum 3) |

Clarifications:

1. Provide all brackets, blocking, accessories, etc. required to install all work associated with Bid Category No. 14 Manufactured Casework.

O. <u>BID CATEGORY NO. 15 - LOCKERS</u>

General Requirements in Paragraph 3.02.B above.

| Section | 01 21 00 | Allowances |
|---------|----------|---------------|
| Section | 10 51 13 | Metal Lockers |

P. BID CATEGORY NO. 16 – JOINT SEALANTS

General Requirements in Paragraph 3.02.B above.

Section 01 21 00 Allowances Section 07 92 00 Joint Sealants

Section 07 92 19 Acoustical Joint Sealants

Clarifications:

- 1. Additional mobilizations may be required due to various reasons including, but not limited to, sequence of work, winter construction, or access points into the building. Remobilization costs shall be included as necessary, regardless of intent of Guideline Schedule outlining a work category to occur continuously and/or in a single mobilization.
- 2. Provide caulking the joints between hollow metal frames and masonry walls and drywall/plaster wall surfaces.
- 3. Provide all joint sealants exposed to view at completion of work, including but not limited to interior and exterior joints between Bid Category No. 12 Aluminum, Windows, Glazing, Framed Entrances and Storefronts and adjacent wall, and at all Bid Category No. 2 General Trades provided Site fencing.

Q. <u>BID CATEGORY NO. 17 – AUDITORIUM SEATING</u>

General Requirements in Paragraph 3.02.B above.

Section 01 21 00 Allowances

Section 12 61 00 Fixed Audience Seating

R. BID CATEGORY NO. 18 – FOOD SERVICE EQUIPMENT

General Requirements in Paragraph 3.02.B above.

Section 01 21 00 Allowances

Section 11 40 00 Food Service Equipment

Clarifications:

1. Provide connection and installation of food service equipment. Bid Category 21, 22 and 23 to provide rough ins only.

S. <u>BID CATEGORY NO. 19 – TRACK SURFACING</u>

General Requirements in Paragraph 3.02.B above.

Section 01 21 00 Allowances Section 32 17 24 Track Markings

Section 32 18 26 All Weather Synthetic Track Surface

Clarifications:

1. Protect adjacent finishes during installation.

T. <u>BID CATEGORY NO. 20 – FIRE SUPPRESSION</u>

General Requirements in Paragraph 3.02.B above.

Section 01 21 00 Allowances Section 07 84 13 Penetration

Section 07 84 13 Penetration Firestopping
Section 21 05 00 Common Work Results For Fire

Suppression

Section 21 10 00 Water Based Fire Suppression Systems

- 1. Bid Category No. 9 Metal Studs, Drywall and Acoustical Ceilings will provide material, equipment, and labor required to <u>remove and reinstall 10,000 square</u> <u>feet of existing drop ceiling grid system</u> throughout the building to allow for Bid Category No. 20 Fire Suppression work.
- 2. Bid Category No. 20 Fire Suppression to provide fire suppression water service piping through foundation walls up to Mechanical room, including sleeves from 5 feet outside the building. Bid Category No. 4 Sitework to provide all fire suppression water service piping from 5 feet outside building.
- 3. Provide detection of the Pre-Action Systems. Bid Category No. 23 Electrical contractor to provide all electrical work required to power the detection.

U. BID CATEGORY NO. 21 – MECHANICAL

| General Requirements in Paragrap | oh. | 3. | .02.B | above. |
|----------------------------------|-----|----|-------|--------|
|----------------------------------|-----|----|-------|--------|

| Section | 01 21 00 | Allowances |
|---------|----------|--|
| Section | 02 41 19 | Selective Demolition |
| Section | 07 84 13 | Penetration Firestopping |
| Section | 08 91 19 | Fixed Louvers |
| Section | 23 05 00 | Common Work Results for HVAC |
| Section | 23 05 13 | Common Motor requirements for HVAC Equipment |
| Section | 23 05 16 | Expansion Fittings and Loops for HVAC Piping |
| Section | 23 05 19 | Meters and Gages for HVAC Piping |
| Section | 23 05 23 | General Duty Valves for HVAC Piping |
| Section | 23 05 29 | Hangers and Supports for HVAC Piping and |
| | | Equipment |
| Section | 23 05 53 | Identification for HVAC Piping and Equipment |
| Section | 23 05 93 | Testing, Adjusting, and Balancing for HVAC |
| Section | 23 07 00 | HVAC Insulation |
| Section | 23 08 00 | Commissioning of HVAC |
| Section | 23 09 00 | Instrumentation and Control for HVAC |
| Section | 23 11 23 | Facility Natural Gas Piping |
| Section | 23 21 13 | Hydronic Piping |
| Section | 23 21 23 | Hydronic Pumps |
| Section | 23 23 00 | Refrigerant Piping |
| Section | 23 25 00 | HVAC Water Treatment |
| Section | 23 31 13 | Metal Ducts |
| Section | 23 33 00 | Air Duct Accessories |
| Section | 23 34 23 | HVAC Power Ventilators |
| Section | 23 36 00 | Air Terminal Units |
| Section | 23 37 13 | Diffusers, Registers, and Grilles |
| Section | 23 37 23 | HVAC Gravity Ventilators |
| Section | 23 52 16 | Condensing Boilers |
| Section | 23 62 00 | Packaged Compressor And Condenser Units |
| Section | 23 73 13 | Modular Indoor Central-Station Air-Handling Units |
| Section | 23 73 15 | Modular Outdoor Central Station Air Handling Units |
| Section | 23 73 16 | Blower Coil Air Handling Units |
| Section | 23 74 13 | Packaged, Outdoor, Central-Station Air-Handling |
| | | Units |

| Section | 23 81 26 | Split System Air Conditioners |
|---------|----------|--|
| Section | 23 82 13 | Valance Heating And Cooling Units |
| Section | 23 82 16 | Air Coils |
| Section | 23 82 21 | Self Contained Vertical Unit Ventilators |
| Section | 23 82 23 | Unit Ventilators |
| Section | 23 82 33 | Convectors |
| Section | 23 82 39 | Unit Heaters |
| Section | 23 83 16 | Radiant Heating Hydronic Piping |

Clarifications:

- 1. Regarding Specification Section 07 84 13 Firestopping, and Section 07 92 00 Joint Sealants; provide Firestopping and Joint Sealants in accordance with the Contract Documents. In general, the Contractor whose work creates a joint that requires firestopping or joint sealant (in the normal sequence of work) is to provide the firestopping or joint sealant. MEP trades are to firestop all of their own penetrations.
- 2. Access panels shown on drawings will be provided by Bid Category No. 2 General Trades. Access Panels not shown on the drawings but required, must be provided by contractor performing the work.
- 3. Provide and pay for installation of service natural gas piping by local gas utility. Pay for all fees and charges required by the local gas utility for complete installation, inspection and testing.
- 4. Bid Category No. 1 Building Demolition Contractor will provide demolition of all Mechanical, Plumbing, Electrical, Storm, and Sanitary systems of existing buildings (Unit C and Unit K) scheduled for demolition. Refer to specification section 024119 Structure Demolition.

V. BID CATEGORY NO. 22 – PLUMBING

General Requirements in Paragraph 3.02.B above.

| | 1 | U 1 |
|---------|----------|--|
| Section | 01 21 00 | Allowances |
| Section | 02 41 19 | Selective Demolition |
| Section | 07 84 13 | Penetration Firestopping |
| Section | 22 05 00 | Common Work Results For Plumbing |
| Section | 22 05 13 | Common Motor Requirements For Plumbing |
| | | Equipment |
| Section | 22 05 19 | Meters And Gages For Plumbing Piping |
| Section | 22 05 23 | General Duty Valves For Plumbing Piping |
| | | (2.5 and larger) |
| Section | 22 05 29 | Hangers And Supports For Plumbing Piping And |
| | | Equipment |
| Section | 22 05 53 | Identification For Plumbing Piping and Equipment |
| Section | 22 07 00 | Plumbing Insulation |
| Section | 22 08 00 | Commissioning of Plumbing |
| Section | 22 11 13 | Facility Water Distribution Piping |
| Section | 22 11 16 | Domestic Water Piping |
| Section | 22 11 19 | Domestic Water Piping Specialties |
| Section | 22 11 23 | Domestic Water Pumps |
| Section | 22 13 13 | Facility Sanitary Sewers |

| Section | 22 13 16 | Sanitary Waste And Vent Piping |
|---------|----------|-----------------------------------|
| Section | 22 13 19 | Sanitary Waste Piping Specialties |
| Section | 22 13 33 | Wastewater Sump Pumps |
| Section | 22 14 13 | Facility Storm Drainage Piping |
| Section | 22 14 23 | Storm Drainage Piping Specialties |
| Section | 22 33 00 | Electric Domestic Water Heaters |
| Section | 22 34 00 | Fuel Fired Domestic Water Heaters |
| Section | 22 40 00 | Plumbing Fixtures |

Clarifications:

- 1. Access panels shown on drawings will be provided by Bid Category No. 2 General Trades. Access Panels not shown on the drawings but required, must be provided by contractor performing the work.
- 2. Bid Category No. 1 Building Demolition Contractor will provide demolition of all Mechanical, Plumbing, Electrical, Storm, and Sanitary systems of existing buildings (Unit C and Unit K) scheduled for demolition. Refer to specification section 024119 Structure Demolition.
- 3. Provide sanitary and storm piping through foundation walls up to and including exterior cleanouts and frost sleeves. Reference foundation plumbing plan sheets P000 series. **Bid Category No. 4 Sitework** to provide storm and sanitary piping from cleanouts onto site. Bid Category No. 22 Plumbing to provide storm or sanitary piping without cleanout exiting the building minimum 5' and/or to nearest cleanout.
- 4. Bid Category No. 22 Plumbing to provide snowmelt system in its entirety including required insulation, reference detail B3 on Sheet C501.2. Bid Category No. 3 Concrete to provide all concrete work and installation of Trench drains in Snow Melt areas furnished by Bid Category No. 4 Sitework.

W. <u>BID CATE</u>GORY NO. 23 – ELECTRICAL

General Requirements in Paragraph 3.02.B above.

| Section | 01 21 00 | Allowances |
|---------|----------|--|
| Section | 02 41 19 | Selective Demolition |
| Section | 07 84 13 | Penetration Firestopping |
| Section | 11 68 43 | Playclock |
| Section | 26 05 00 | Common Work Results for Electrical |
| Section | 26 05 13 | Medium-Voltage Cables |
| Section | 26 05 19 | Low-Voltage Electrical Power Conductors and |
| | | Cables |
| Section | 26 05 26 | Grounding and Bonding for Electrical Systems |
| Section | 26 05 29 | Hangers and Supports for Electrical Systems |
| Section | 26 05 33 | Raceways and Boxes for Electrical Systems |
| Section | 26 05 43 | Underground Ducts and Raceways for Electrical |
| | | Systems |
| Section | 26 05 44 | Sleeves and Sleeve Seals for Electrical Raceways and Cabling |
| Section | 26 05 53 | Identification For Electrical Systems |
| Section | 26 05 73 | Coordination Studies |
| Section | 26 05 74 | Overcurrent Protective Device Arc-Flash Study |

| Section | 26 08 00 | Minimum Commissioning of Electrical Systems |
|---------|----------|---|
| Section | 26 09 13 | Electrical Energy Metering |
| Section | 26 09 23 | Lighting Control Devices |
| Section | 26 12 00 | Medium-Voltage Transformers |
| Section | 26 13 00 | Medium-Voltage Switchgear |
| Section | 26 22 00 | Low Voltage Transformers |
| Section | 26 24 13 | Switchboards |
| Section | 26 24 16 | Panelboards |
| Section | 26 27 26 | Wiring Devices |
| Section | 26 28 13 | Fuses |
| Section | 26 28 16 | Enclosed Switches and Circuit Breakers |
| Section | 26 43 13 | Surge Protection For Low-Voltage Electrical Power |
| | | Circuits |
| Section | 26 51 00 | Interior Lighting |
| Section | 26 55 61 | Theatrical Lighting |
| Section | 26 56 00 | Exterior Lighting |
| Section | 27 00 00 | General Technology Requirements |
| Section | 27 10 00 | General Cabling Requirement |
| Section | 27 51 00 | Public Address Systems |
| Section | 27 51 17 | Field Communication System |
| Section | 27 53 00 | Wireless Master Clock System |
| Section | 28 31 00 | Fire Detection and Alarm |

Clarifications:

- 1. Access panels shown on drawings will be provided by Bid Category No. 2 General Trades. Access Panels not shown on the drawings but required, must be provided by contractor performing the work.
- 2. Bid Category No. 1 Building Demolition Contractor will provide demolition of all Mechanical, Plumbing, Electrical, Storm, and Sanitary systems of existing buildings (Unit C and Unit K) scheduled for demolition. Refer to specification section 024119 Structure Demolition.
- 3. Provide detection of the Pre-Action Systems. Bid Category No. 23 Electrical contractor to provide all electrical work required to power the detection.
- 4. Bid Category No. 25 Athletic Lighting will provide all work associated with Athletic Lighting. Bid Category No. 23 Electrical contractor will provide all power from existing Building to the Athletic Lighting poles.

X. <u>BID CATEGORY NO. 24 – ATHLETIC FIELD SYNTHETIC FIELD TURF</u>

General Requirements in Paragraph 3.02.B above.

| Section | 01 21 00 | Allowances |
|---------|----------|---|
| Section | 06 10 50 | Turf Wood Nailer |
| Section | 32 18 18 | Synthetic Turf - Blended with Sand Rubber |
| Section | 32 18 19 | Synthetic Turf - Blended Thatch |
| Section | 32 18 52 | Performance Shock Pad |

Clarifications:

1. Bid Category No. 24 is bid as an Alternate No. 7A and 7B – Turf Field at Football Stadium.

Y. <u>BID CATEGORY NO. 25 – ATHLETIC FIELD LIGHTING</u>

General Requirements in Paragraph 3.02B above.

Section 01 21 00 Allowances

Section 26 56 68 Exterior Athletic Lighting

Clarifications:

1. Bid Category No. 25 Athletic Lighting will provide all work associated with Athletic Lighting. Bid Category No. 23 Electrical contractor will provide all power from existing Building to the Athletic Lighting poles.

X. <u>BID CATEGORY NO. 26 – LANDSCAPING</u>

General Requirements in Paragraph 3.02B above.

Section 01 21 00 Allowances Section 32 92 00 Turf and Grasses Section 32 93 00 Plants

Clarifications:

- 1. Provide new planting soil and excavation as required for all trees, shrubs, plants, etc. Subsoil removed from excavations may not be used as planting soil. Remove any excess spoils for your work as required.
- 2. Seeding protection mats with plastic mesh will not be acceptable.

END OF SECTION 01 12 00



| RFI# | Company Submitting RFI | Date Received | RFI Description | RFI Response |
|------|-----------------------------|---------------|---|--|
| 20 | Team Elmer's | 12/8/2021 | There are different asphalt mix designs throughout the project, will the engineer, architect and owner agree on two HMA mix designs? • Leveling course HMA 4E1 would be sufficient for all application in specs / plans all application in specs / plans | TP:The asphalt mixes shall be bid as specified on the civil drawings, site spec sections, and/or as specified from the Geotech report for the Project. Contractors may submit voluntary alternates to be reviewed including any cost changes, or, if there is not a cost difference, reasoning for the suggested alternate with consideration of the following: The Tennis Court Pavement section, the top course shall be required to be as specified. The entire pavement section shall meet the requirements as stated in the specs, which include: Comply with all guidance listed under "Asphalt for Athletic Uses" within the ASBA document entitled, American Sports Builders Association Asphalt Guidelines found at: www.sportsbuilders.org/publications/Asphalt_Guidelines.pdf. The Geotech engineer will need to review the voluntary alternate to provide a recommendation to CAPS as to whether or not the submitted change will affect the pavement longewity, or if there are any other concerns. |
| 51 | Team Elmer's | 12/8/2021 | What are the application rates for different asphalt mix designs? | TP:Reference the pavement section on the Civil Drawings and the Geotechnical Report for the project. |
| 52 | Hamberg Fence Co. | 12/8/2021 | On A101.2F calls for premanufactured aluminum privacy fence. Who is the manufacturer and where can I find the specifications? | TSC: Refer to Spec Section 32 31 13 - Chanin-Link Fences and Gates for details and accepted manufacturers. Refer to Sheet L001.2. |
| 53 | Hamberg Fence Co. | 12/8/2021 | Post for the fencing going through the track and around the tennis courts. Who will be caulking them? | TSC: Caulking of Fence Post at the track and tennis courts is by BC #16 - Joint Sealants. |
| 54 | ASI Signage Innovations | 12/8/2021 | There is no height dimensions provided on the plans for the directional post and panel signs. Can you please provide that? | TP: Post and Panel signage to be 6'-0" tall. |
| 55 | ASI Signage Innovations | 12/8/2021 | It calls out for Barrier Free Parking Van Accessible where indicated on plan but I don't see any. Please advise. | TP:Shown on Signage Plans sheets L001.2 and L002.2 |
| 95 | Spence Brothers | 12/10/2021 | Spec section 01 52 10 says to provide plastic or plywood covered frames for window openings and hinged plywood or batten doors with locks and temporary enclosures to separate work areas from finished areas and from areas occupied by owner. Is this work covered through the \$20,000 Temporary Enclosure Allowance listed under the General Trades? | TSC: Yes, this work to be included as part of the \$20,000 Temp. Enclosure Allowance and also included in the base bid. |
| 57 | Spence Brothers | 12/10/2021 | Spec section 02 41 19 Selective Demolition is listed under the General Trades bid category. Is General Trades responsible for all interior demolition including removing existing slabs inside the building? Or is some of this work covered through the Building Demolition bid category? Looking for some clarification on what the Building Demolition category is responsible for and what the General Trades contractor is responsible for in regards to demolition. | TSC: Building demolition BC #1 is responsible for all work associated with portions (shaded areas) of the existing building called out for demolition in it's entirety, refer to Sheets AD101.2C, AD101.2J, AD101.2H, and AD101.2K. |
| 58 | Spence Brothers | 12/10/2021 | Enlarged plan 1/A351.2 shows section cut 1A/A351.2 going through Tunnel Access Room 519. I cannot find this section cut on the plans. Please clarify. | TP:Section 1A/A351.2 is cut in Tunnel Access (519) looking north. This detail is called out on sheet A101.2D as well as detail 1/A351.2. The detail 1A/A351.2 is above the enlarged plan on sheet A351.2. |
| 59 | Bouma | 12/10/2021 | Please clarify what wall tile is used at the Drinking Fountains walls in the following areas000 Commons North of Toilet 025M in unit K 1st floor and 100 Commons in unit K North of Toilet 125M in unit K 2nd floor. | TP:Reference detail 70 on sheet A632.2, as part of addendum 3 |
| 09 | Bouma | 12/10/2021 | On Elevation 8 A622.2 (AG6 Girls Shower and AB6 Boys Shower) it is not clear what wall tile and floor tile will be used in the Showers. Please clarify. | TP:Reference details 4 and 8 on sheet A622.2, as part of addendum 3 |
| 61 | Bouma | 12/10/2021 | It appears the walls get PT-P tile in Vestibule COR7 Can you confirm the wall finish is correct? | TP:Corrected to P-1, reference sheet A 601.2G in addendum 3 |
| 62 | ASI Signage Innovations | 12/10/2021 | There are no specs provided for the monument sign. In particular, the LED Display. What is the delegated design stated on the drawing? Please clarify. | TP:Refer to forthcoming Addendum 3 for LED Signage information. Delegated deisgn is for the LED panel product. Product must adhere to requirements in specification (issued in Addendum 3). |
| 63 | Stonecreek Interior Systems | 12/10/2021 | Room 518, Elevation 15/A632.2, what is the casework plastic laminate to be used on the casework? Is the countertop plastic laminate or solid surface and if plastic laminate which color? | TP:Reference updated finish tags on sheet A601.2D and Elevation 15/A632.2, all included in addendum 3. |
| 64 | Schepers Concrete | 12/10/2021 | I had a question regarding Alternate #7 on the Cadillac High School Project. Will the turn nailer cur and trough drain at the field be considered part of alternate #7 or will those be in base bid? | TSC: Turf nailer is part of Alternates #7A and #7B. Trough Drain at field must be included in Base-bid. |

| 65 | Shoreline | 12/13/2021 | Sheet E201.2G shows 4 lines in the stage area and keyed note #2 reads: Reuse existing power distribution/mounting rails and hardware for new stage lighting fixtures. I do not see a fixture type called out on the print or in the fixture schedule for stage lighting. Is this work by a different bid category or is something missing on the drawing? | TP:This information is referenced in elevation AUD/E434.2. See Auditorium Stage Lighting Riser, sheet E434.2 |
|----|-----------------------------|------------|---|---|
| 99 | Tri-City Acoustical Company | 12/14/2021 | The sheet air barrier is on several different types of materials. Plywood sheathing, minor masonry, gypsum sheathing, wood roof blocking etc. Is category 9 responsible for all areas shown? | TSC: The Air Barrier scope applies to all trades assigned. Bid Category #9 to provide air barriers for their own scope of work. |
| 29 | Jacklyn Steel | 12/14/2021 | What are Engineering requirements for the stairs? | TP: Engineering calculations and PE sealed connection details are not required for the building structural steel components except engineered calculations ARE required for the Monumental Stair. |





| | | | Skiiiman |
|-----------------------------|---|------------------|---------------|
| Monday - December 27 | | | |
| BC #1 - Building Demolition | 5 | 9:00 - 10:00 AM | Rohit Tilekar |
| BC #1 - Building Demolition | 1 | 10:00 - 11:00 AM | Rohit Tilekar |
| BC #2 - General Trades | 1 | 11:00 - 12:00 PM | Rohit Tilekar |
| BC #2 - General Trades | 1 | 12:00 - 1:00 PM | Rohit Tilekar |
| BC #3 - Concrete | 2 | 2:00 - 2:45 PM | Rohit Tilekar |
| BC #3 - Concrete | 8 | 3:00 - 3:45 PM | Rohit Tilekar |

| Tuesday - December 28 | | |
|-----------------------|------------------|---------------|
| #4 - Sitework | 9:00 - 10:00 AM | Rohit Tilekar |
| #4 - Sitework | 10:00 - 11:00 AM | Rohit Tilekar |
| #26 - Landscaping | 11:00 - 12:00 PM | Rohit Tilekar |
| #5 - Aphalt Paving | 1:30 - 2:15 PM | Rohit Tilekar |
| #6 - Masonry | 2:30 - 3:30 PM | Rohit Tilekar |
| #6 - Masonry | 3:30 - 4:30 PM | Rohit Tilekar |

| Wednesday - December 29 | | |
|-------------------------------|--------------------|---------------|
| #7 - Structural Steel | MA 00:01 - 00:6 | Rohit Tilekar |
| #7 - Structural Steel | MA 00:11 - 00:01 | Rohit Tilekar |
| #8 - Precast Concrete | 11:00 - 12:00 PM | Rohit Tilekar |
| #23 - Electrical | M30 - 2:30 PM | Rohit Tilekar |
| #23 - Electrical | Md 08:30 - 3:30 PM | Rohit Tilekar |
| #25 - Athletic Field Lighting | 3:30 - 4:30 PM | Rohit Tilekar |
| | | |
| Thursday - December 30 | | |
| #21 - Mechanical | MA 00:9 - 00:8 | Rohit Tilekar |
| #21 - Mechanical | MA 00:01 - 00:6 | Rohit Tilekar |

| #22 - Plumbing | 10:00 - 11:00 AM | Rohit Tilekar |
|--|------------------|---------------|
| #22 - Plumbing | 11:00 - 12:00 PM | Rohit Tilekar |
| | | |
| | | |
| Monday - January 3 | | |
| #9 - Metal Studs, Drywall, and Acoustical Ceilings | 1:00 - 1:45 PM | Rohit Tilekar |
| #9 - Metal Studs, Drywall, and Acoustical Ceilings | 2:00 - 3:00 PM | Rohit Tilekar |
| #13 - Fooring | 3:00 - 3:45 PM | Rohit Tilekar |
| | | |

| Tuesday - January 4 | | |
|------------------------------|----------------|---------------|
| #10 - Roofing | 1:00 - 1:45 PM | Rohit Tilekar |
| #10 - Roofing | 2:00 - 3:00 PM | Rohit Tilekar |
| #18 - Food Service Equipment | 3:00 - 3:45 PM | Rohit Tilekar |

| Wednesday - January 5 | | |
|----------------------------------|------------------|---------------|
| #11 - Painting | 9:00 - 9:45 AM | Rohit Tilekar |
| #11 - Painting | 10:00 - 10:45 AM | Rohit Tilekar |
| #12 - Aluminum Windows, Glazing, | | |
| Entrances, and Storefronts | 11:00 - 12:00 PM | Rohit Tilekar |
| #12 - Aluminum Windows, Glazing, | | |
| Entrances, and Storefronts | 1:00 - 2:00 PM | Rohit Tilekar |
| #15 - Lockers | 2:00 - 2:30 PM | Rohit Tilekar |
| #16 - Joint Sealants | 2:30 - 3:00 PM | Rohit Tilekar |
| #17 - Auditorium Seating | 3:00 - 3:30 PM | Rohit Tilekar |
| | | |

| Thursday - January 6 | | |
|-----------------------------|------------------|---------------|
| #14 - Manufactured Casework | 9:00 - 9:45 AM | Rohit Tilekar |
| #14 - Manufactured Casework | 9:45 - 10:30 AM | Rohit Tilekar |
| #20 - Fire Supression | 10:30 - 11:15 AM | Rohit Tilekar |
| | | |

| Friday - January 7 | | |
|---|------------------|---------------|
| #19 - Track Surfacing | 9:00 - 9:45 AM | Rohit Tilekar |
| #24 - Athletic Field-Synthetic Field Turf | 9:45 - 10:30 AM | Rohit Tilekar |
| #24 - Athletic Field-Synthetic Field Turf | 10:30 - 11:15 AM | Rohit Tilekar |
| | | |



ADDENDUM NO. 3

DATE OF ISSUANCE: December 14, 2021

PROJECT: Cadillac High School

400 Linden Street Cadillac, MI 49601

OWNER: Cadillac Area Public Schools

ARCHITECT'S PROJECT NO.: 17-175.70

ORIGINAL BID ISSUE DATE: November 3, 2021

SCOPE OF WORK

This Addendum includes changes to, or clarifications of, the original Bidding Documents and any previously issued addenda, and shall be included in the Bid. All of these Addendum items form a part of the Contract Documents. The Bidder shall acknowledge receipt of this Addendum in the appropriate space provided on the Bid Form. Failure to do so may result in disqualification of the Bid.

DOCUMENTS INCLUDED IN THIS ADDENDUM

This Addendum includes **five** pages of text and the following documents:

Bidding Documents: none
 Contract Conditions: none

• Specification Sections: **09 8316, 32 1723**

Drawings: C 101.2, L 003.2, A 601.2D, A 601.2G, A 601.2K, A602.2K, A 610.2, A 621.2, A 622.2, A 623.2, A 624.2, A 625.2, A 631.2, A 632.2, A 633.2, A 634.2, A 635.2, A 636.2, P 000.2H, M 201.2F, E 101.2D, E 431.2, E 444.2

CHANGES TO PREVIOULSY ISSUED ADDENDA

None.



Addendum No. 2 // CAPS High School // 17-175.70

CHANGES TO SPECIFICATIONS

12.14.2021

ADD-3 Item No. S-1 - Alternate No. 10

Refer to Specification Section: 01 2300 - Alternates

Add Alternate No. 10: Lining of Existing Cast Iron Sanitary Piping

- 1. Base Bid: No work.
- 2. Alternate: Provide price to add pipe lining to the existing 6" cast iron sanitary pipe located below Instrumental Room 212. Length of pipe is approximately 50 feet. Provide system similar to National Liner Cured In Place Pipeline Rehabilitation System consisting of a polyester felt liner with a thermosetting resin.

ADD-3 Item No. S-2 - Geofoam

Refer to Specification Section 03 3000 - Cast-In-Place Concrete

Add 2.11. D. 1 and 2 as follow:

- D. Foam Fill: Expanded polystyrene conforming to ASTM D 6817 formulated for use as fill below concrete slabs, and as follows:
 - 1. Minimum Compressive Strength: 40 psi (276 kPa).
 - 2. Treated with termiticide in compliance with ICC AC239.

ADD-3 Item No. S-3 - Additional Products

Refer to Specification Section 07 4213.23 – Metal Composite Material Wall Panels

Add 2.2, A, 2, g to specification section as follows; Alfrex FR Metal Composite Material.

ADD-3 Item No. S-4 - Additional Products

Refer to Specification Section 08 4113 - Aluminum Framed Entrance and Storefronts

Add 2.2, A, 7 to specification section as follows; Special-Lite.

ADD-3 Item No. S-5 - Additional Products

Refer to Specification Section 09 5113 – Acoustical Panel Ceilings

Add 2.3, A, 1, b to specification section as follows; United States Gypsum Company: Mars Clima Plus.

ADD-3 Item No. S-6 - LED Signage

Refer to Specification Section 10 1426 – Post and Panel-Pylon Signage

Refer to Section 2.2, B, 5 Add the following:

- 5. Electronic Message Sign: Full color sign as follows:
 - a. Pixel Pitch: 19 mm maximum.



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- b. Light Source: RGB LED bulbs.
 - 1) Display Palette: Minimum 16.7 million colors.
- c. Half-Brightness Viewing Angle: Minimum 140 degrees horizontal and 60 degrees vertical
- d. Video Refresh Rate: Minimum 30 frames per second.
- e. Size: As indicated on Drawings.
- f. Operation: From Owner provide PC via wireless connection.
 - Software: Capable of scheduling sign function and creating and editing text and graphic contents, including importing AVI files created in other software.
- g. Power: 120 V, 60 Hz, 1 phase, 15 A.

ADD-3 Item No. S-7 - Additional Products

Refer to Specification Section 10 5113 – Metal Lockers

Refer to Section 2.2, A, B and C, 1: add Lockers MFG as an acceptable manufacturer.

Refer to Section 2.3, A, B and C, 1: add Lockers MFG as an acceptable manufacturer.

ADD-3 Item No. S-8 - Additional Products

Refer to Specification Section 11 6823 – Exterior Athletic Equipment

Refer to Section 2.1: add Jaypro Sports as an acceptable manufacturer.

ADD-3 Item No. S-9 - Additional Products

Refer to Specification Section 11 6840 – Field Event Construction

Refer to Section 2.1: add Jaypro Sports as an acceptable manufacturer.

ADD-3 Item No. S-10 - Additional Products

Refer to Specification Section 22 3300 - Electric Domestic Water Heaters

Refer to section 2.2 Light Commercial Electric Water Heaters, paragraph [A1] and add Bock as an acceptable manufacturer.

ADD-3 Item No. S-11 - Additional Products

Refer to Specification Section 22 3400 – Fuel Fired Domestic Water Heaters

Refer to section 2.1 High Efficiency Gas Water Heaters, paragraph [A] and add NY Thermal Inc. as an acceptable manufacturer.

ADD-3 Item No. S-12 - Additional Products

Refer to Specification Section 23 5216 - Condensing Boilers



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Refer to section 2.1 Fire Tube Condensing Boilers, paragraph [A] and add Aerco as an acceptable manufacturer.

ADD-3 Item No. S-13 - Additional Products

Refer to Specification Section 23 8239 Unit Heaters

Refer to section 2.1 Cabinet Unit Heaters, paragraph [A] and add Rittling as an acceptable manufacturer.

Refer to section 2.2 Hot Water Propeller Unit Heaters, paragraph [A] and add Rittling as an acceptable manufacturer.

ADD-3 Item No. S-14 - Pavement Markings

Refer to Provided Specification Section 32 1723 Pavement Markings

Provide exterior pavement markings as indicated

CHANGES TO DRAWINGS

ADD-3 Item No. D-1 - Existing 6" Sanitary Piping Below Instrumental Room 212 (Unit H)

Refer to Sheet: P 000.2H

Per Alternate No. 10 provide price to add pipe lining to the existing 6" cast iron sanitary pipe. Refer to above description of Alternate No. 10.

ADD-3 Item No. D-2 - Locations of RTU-1F Space Temperature Sensors

Refer to Sheet: M 201.2F

See drawing for the locations of [3] space temperature sensors used for average temperature for RTU-1F.

ADD-3 Item No. D-3 - Tennis Court Pavement Clarification

Refer to Sheet: L 003.2

See Enlarged Tennis Court Plan and 12 ft. Fence Detail.

ADD-3 Item No. D-4 - M 150 Roof Mechanical Plans: Notes on Gas Piping and Refrigerant Piping Supports

Refer to the gas piping and refrigerant piping support notes located on the M 150 Roof Mechanical Plans (plans not reissued), add to each note, supports shall be equal to the MIRO 8-Base Strut support system. MIRO 3.0 supports may also be used for gas piping. Coordinate pipe size with proper support system.

ADD-3 Item No. D-5 - North Gym Bleacher Power

Refer to Sheet: E 101.2D, E 444.2



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Add electrical circuit to new bleachers on north wall of North Gym AGO as indicated. See also panelboard R1D4 panel load schedule, sheet E 444.2.

ADD-3 Item No. D-6 - Light Fixture Schedule Revisions

Refer to Sheet: E 431.2

12.14.2021

Revise manufacturer part #'s as shown clouded on Light Fixture Schedule.

ADD-3 Item No. D-7 - Finish plan and Material Selection Schedule updates

Refer to reissued A 601.2D, A 601.2G, A 601.2K, A602.2K, and A 610.2. See clouded updated finish plans, along with updated finish key and notes on all sheets. Finish adjustments and additional notes have been added to sheets and clouded.

ADD-3 Item No. D-8 - Elevation and Millwork Updates

Refer to reissued sheets A 621.2, A 622.2, A 623.2, A 624.2, A 625.2, A 631.2, A 632.2, A 633.2, A 634.2, A 635.2, A 636.2, and A 636.2. See clouded notes for adjusted items with include finish and dimension updates, casework details, and additional notes for clarification.

ADD-3 Item No. D-9 - Asphalt Clarification

Refer to Sheet: C 101.2

Revised shading for clarification of new asphalt types.

ADD-3 Item No. D-10 - Concrete Collar at Tennis Courts

Refer to Sheet: C 101.2

Provide a 24" wide, 4" thick concrete collar at tennis courts [as shown clouded].

END OF ADDENDUM.

SECTION 09 8316 - ACOUSTIC CEILING COATINGS

PART 1 - GENERAL

1.1 SUMMARY

- A. Section Includes: Spray-applied acoustic ceiling finishes
- B. Related Sections:
 - 1. Section 07 2100 "Thermal Insulation" for spray-applied thermal insulation.

1.2 ADMINISTRATIVE REQUIREMENTS

- A. Sequencing: Clips, hangers, supports, sleeves and other attachments to spray bases are to be placed prior to the application of sprayed insulation.
 - 1. Do not install ducts, piping, conduit or other suspended equipment until after the application of acoustic coating.
 - 2. Roof penetrations to be installed prior to application of acoustic coating.

1.3 ACTION SUBMITTALS

A. Product data.

1.4 INFORMATIONAL SUBMITTALS

- A. Quality Assurance/Control Submittals:
 - 1. Certificates: Certifying that products comply with the requirements.

1.5 QUALITY ASSURANCE

A. Surface-Burning Characteristics: As determined by testing identical products according to ASTM E 84 by a qualified testing agency. Identify products with appropriate markings of applicable testing agency.

1.6 DELIVERY, STORAGE, AND HANDLING

- A. Shipping, Handling, and Unloading: Deliver in original, unopened containers bearing name of manufacturer, product identification and reference to U.L. testing.
- B. Storage and Protection: Store materials dry, off ground, and under cover. Protect liquid adhesive from freezing.

PART 2 - PRODUCTS

2.1 ACOUSTIC CEILING COATINGS

A. Products: Subject to compliance with requirements, provide products indicated on Drawings.

2.2 ACOUSTIC CEILING COATINGS

- A. Acoustic Ceiling Coating: Integrally colored spray-applied acoustic coating consisting of cellulous or glass fibers in adhesive binder containing no urea-formaldehyde resins, suitable for use as interior finish surface.
 - 1. Products: Subject to compliance with requirements, provide one of the following:
 - a. International Cellulose Corporation; K-13.
 - b. Monoglass, Inc.; Monoglass Spray-Applied Insulation.
 - 2. Regulatory Requirements: Product shall be Class 1 Class A per ASTM E 84/ UL 723.
 - 3. Performance Requirements:
 - a. Acoustic Performance: As follows over solid backing:
 - 1) 1-inch(25-mm) Thickness: 0.75 NRC.
 - 2) 2-inch(51-mm) Thickness: 0.95 NRC.
 - 3) 3-inch(76-mm) Thickness: 1.00 NRC.
 - b. Thermal Performance: Thermal resistivity of 3.8 deg F x h x sq. ft./Btu x in. at 75 deg F (26.4 K x m/W at 24 deg C).
 - 4. Color: As indicated on Drawings.

2.3 ACCESSORIES

A. Primer: As recommended by manufacturer for substrates indicated.

PART 3 - EXECUTION

3.1 EXAMINATION

- A. Examine surfaces and report unsatisfactory conditions in writing. Do not proceed until unsatisfactory conditions are corrected.
- B. Verify surfaces to receive spray insulation to determine if priming/sealing is required to insure bonding and/or to prevent discoloration caused by migratory stains.

3.2 PREPARATION

A. Prime surfaces as required by manufacturer's instructions or as determined by examination.

3.3 INSTALLATION

- A. Install in accordance with manufacturer's written instructions and recommendations in thickness as measured per ASTM E-605 field test procedure.
- B. Where acoustic ceiling coating is applied to deck that is partially concealed by suspended ceiling below, extend acoustic ceiling coating 2 feet (0.6 m) over the lower suspended ceiling.
- C. Cure insulation with continuous natural or mechanical ventilation.
- D. Remove and dispose of over-spray.

END OF SECTION 09 8316

SECTION 32 1723 - PAVEMENT MARKINGS

PART 1 - GENERAL

1.1 SUMMARY

A. Section includes painted markings applied to asphalt pavement.

1.2 ACTION SUBMITTALS

A. Product Data: For each type of product.

1.3 FIELD CONDITIONS

A. Environmental Limitations: Proceed with pavement marking only on clean, dry surfaces and at a minimum ambient or surface temperature of 55 deg F (12.8 deg C) for water-based materials, and not exceeding 95 deg F (35 deg C).

PART 2 - PRODUCTS

2.1 PAVEMENT-MARKING PAINT

- A. Pavement-Marking Paint: MPI #97, latex traffic-marking paint.
 - 1. Color: Blue for barrier-free marking, white and yellow as indicated otherwise.

PART 3 - EXECUTION

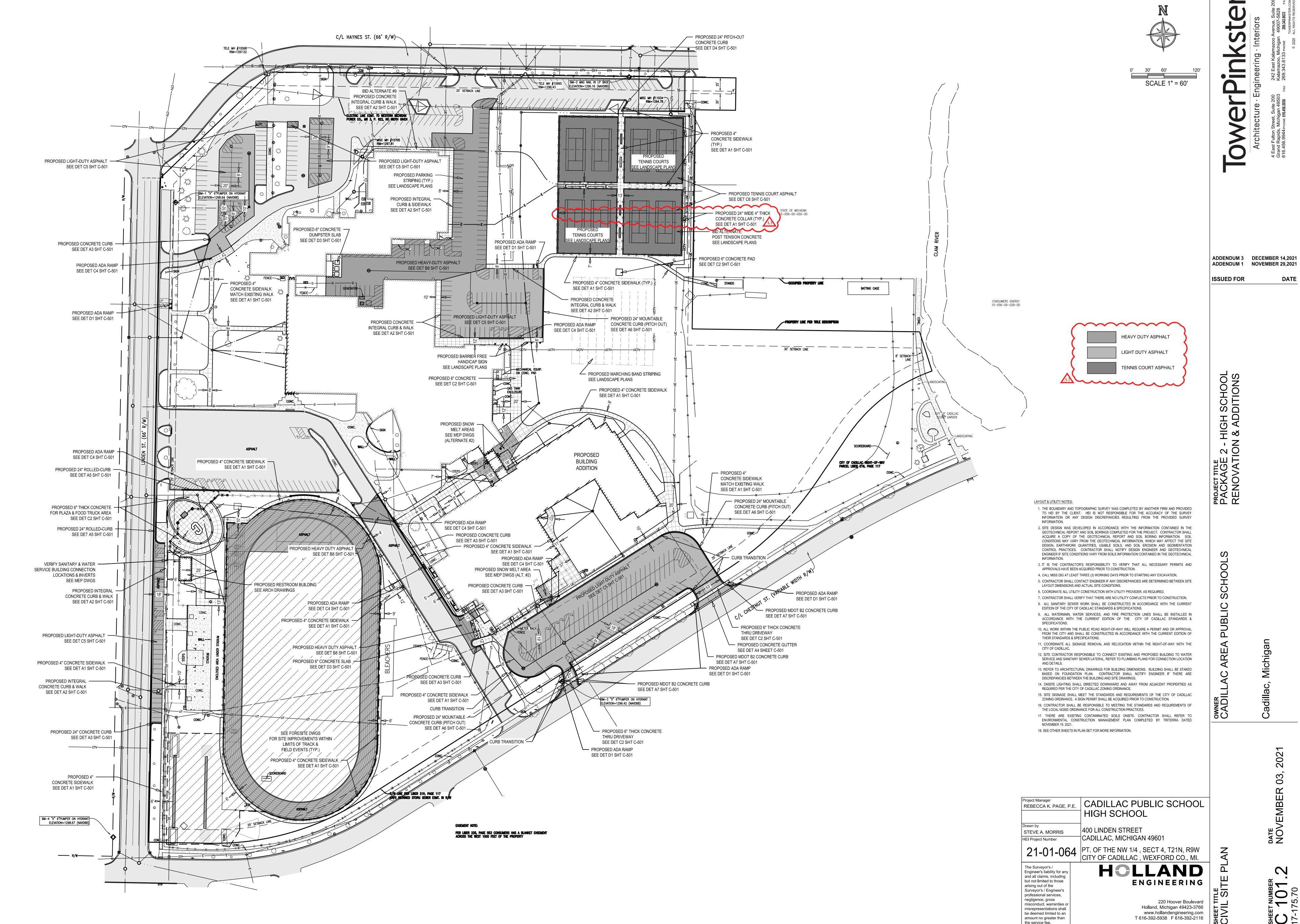
3.1 PAVEMENT MARKING

- A. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Architect.
- B. Allow paving to age for a minimum of 30 days before starting pavement marking.
- C. Sweep and clean surface to eliminate loose material and dust.
- D. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils (0.4 mm).
 - 1. Apply graphic symbols and arrows with paint-resistant, die-cut stencils. Apply paint so that it cannot run beneath the stencil.

PROJECT NO. 17175.70
CADILLAC HIGH SCHOOL ADDITION & RENOVATIONS
Cadillac Area Public Schools

PAVEMENT MARKINGS 32 1723 - 2 11-3-2021

END OF SECTION 32 1723

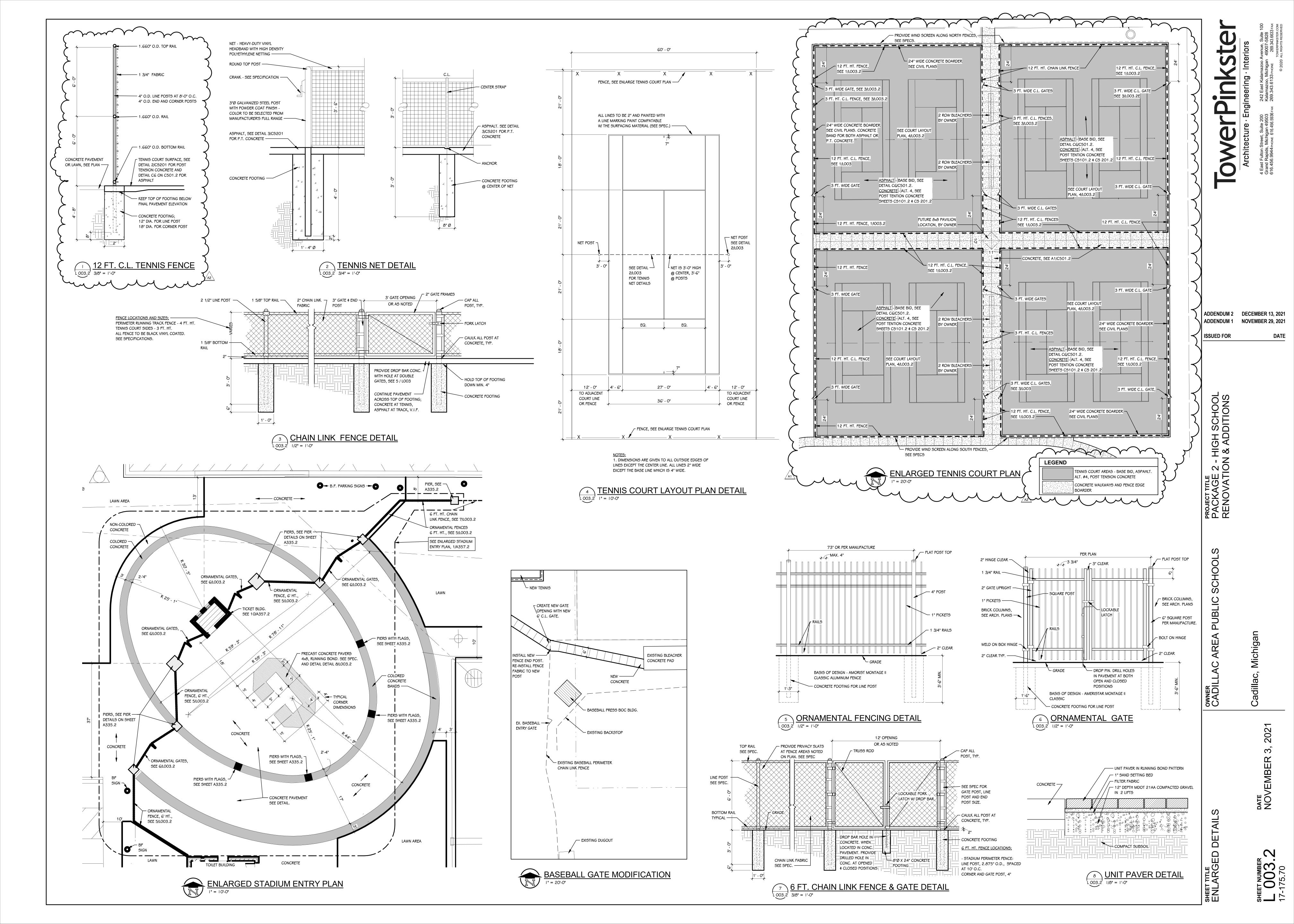


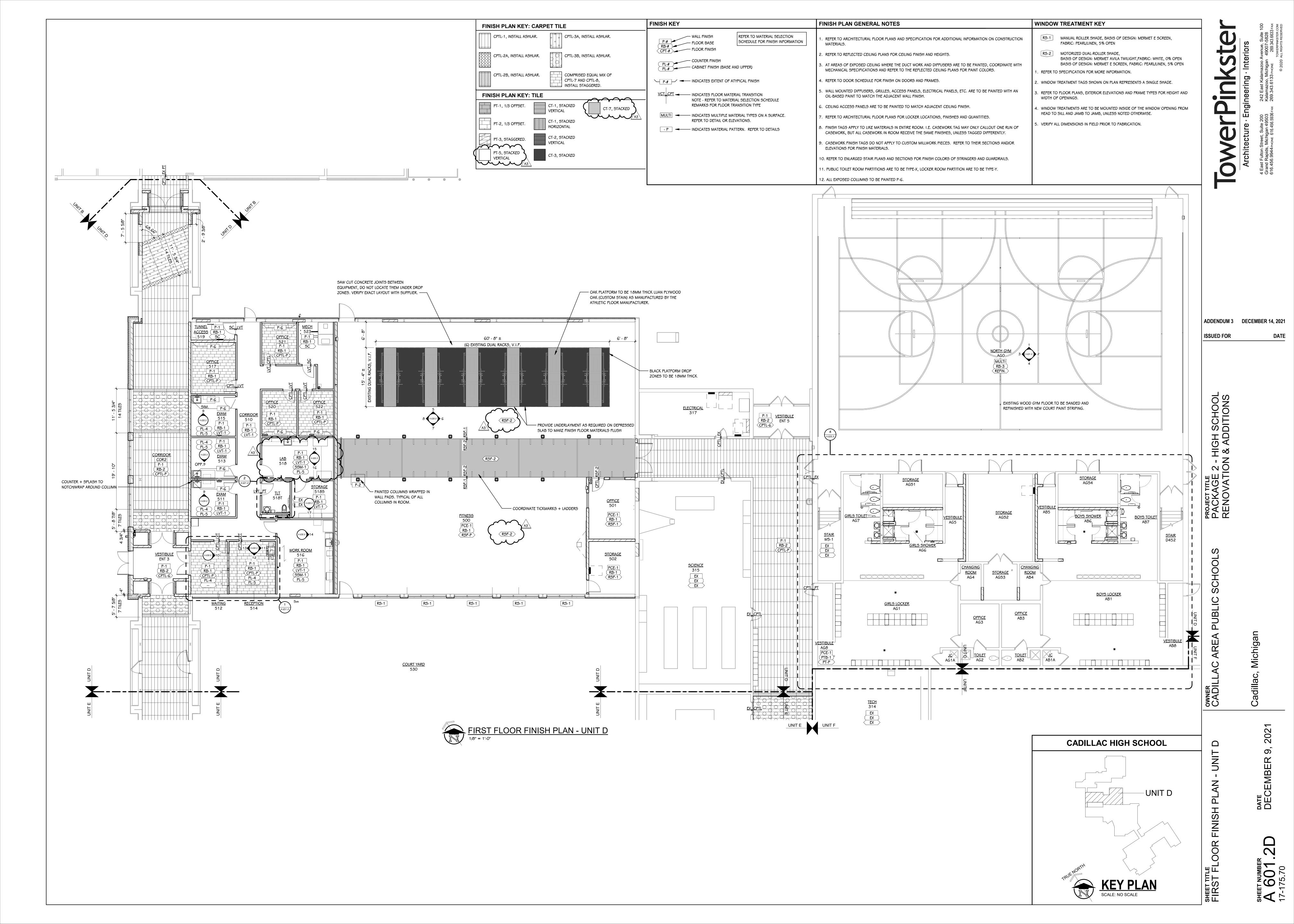
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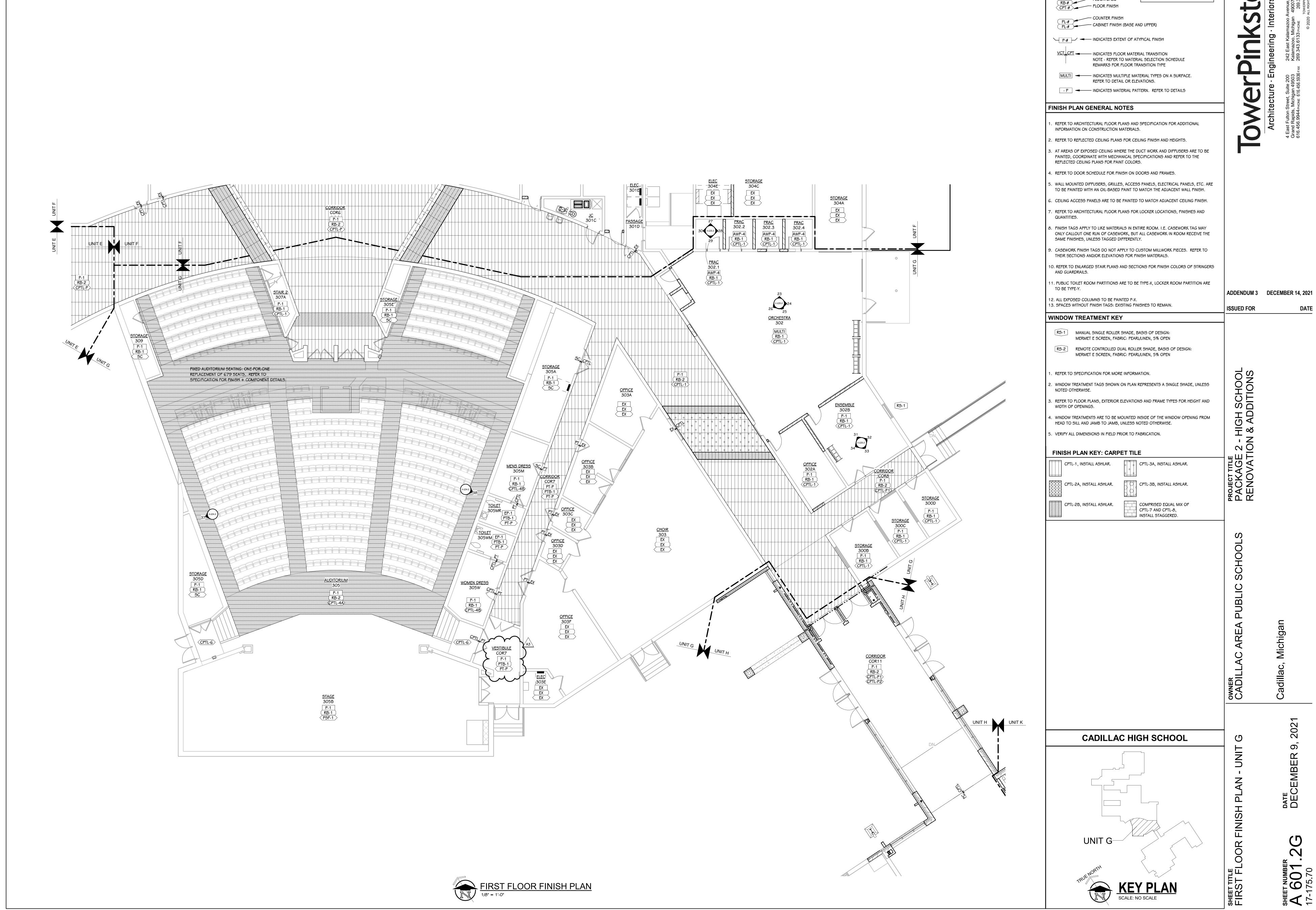
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be deemed limited to an

amount no greater than the service fee.

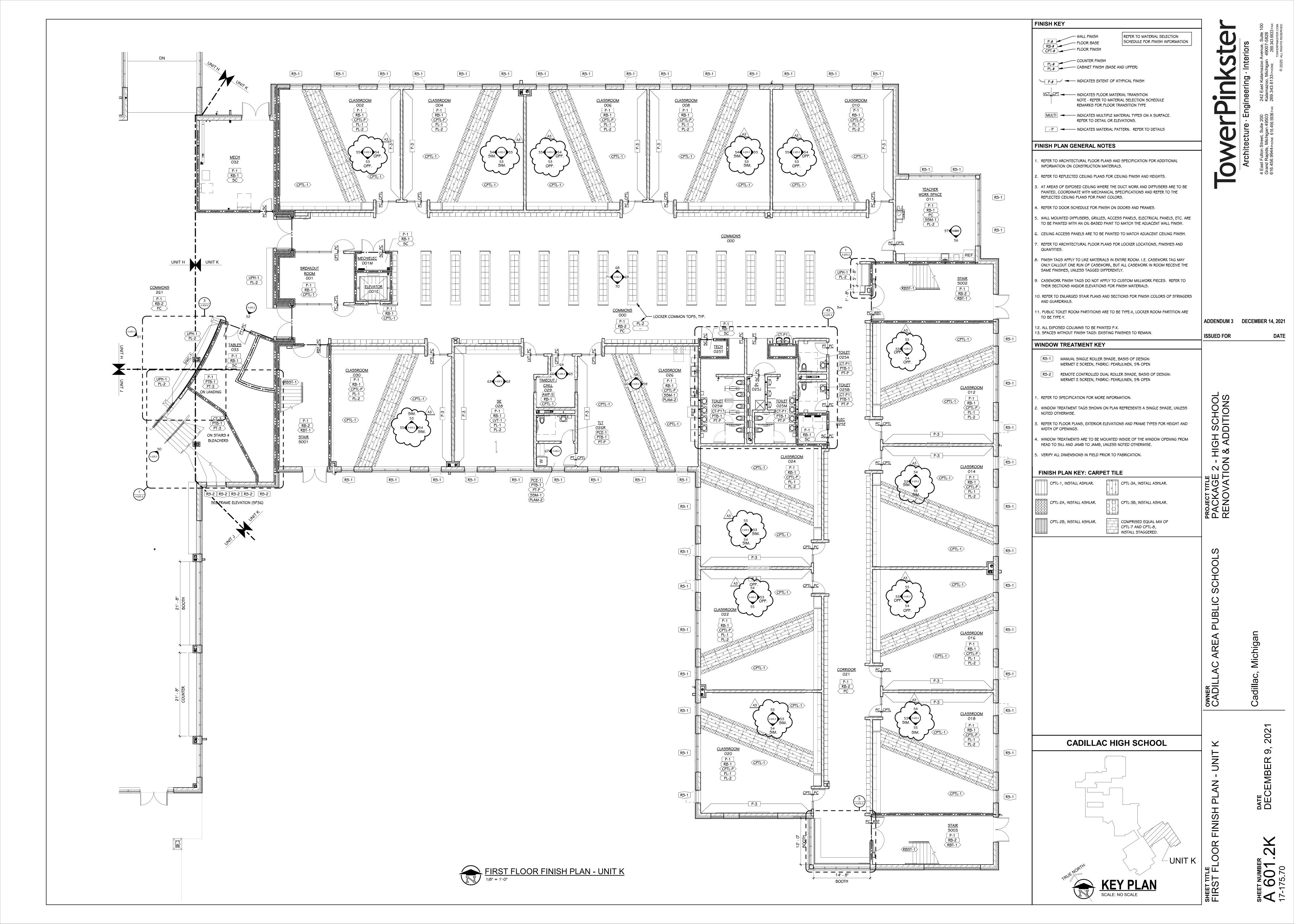


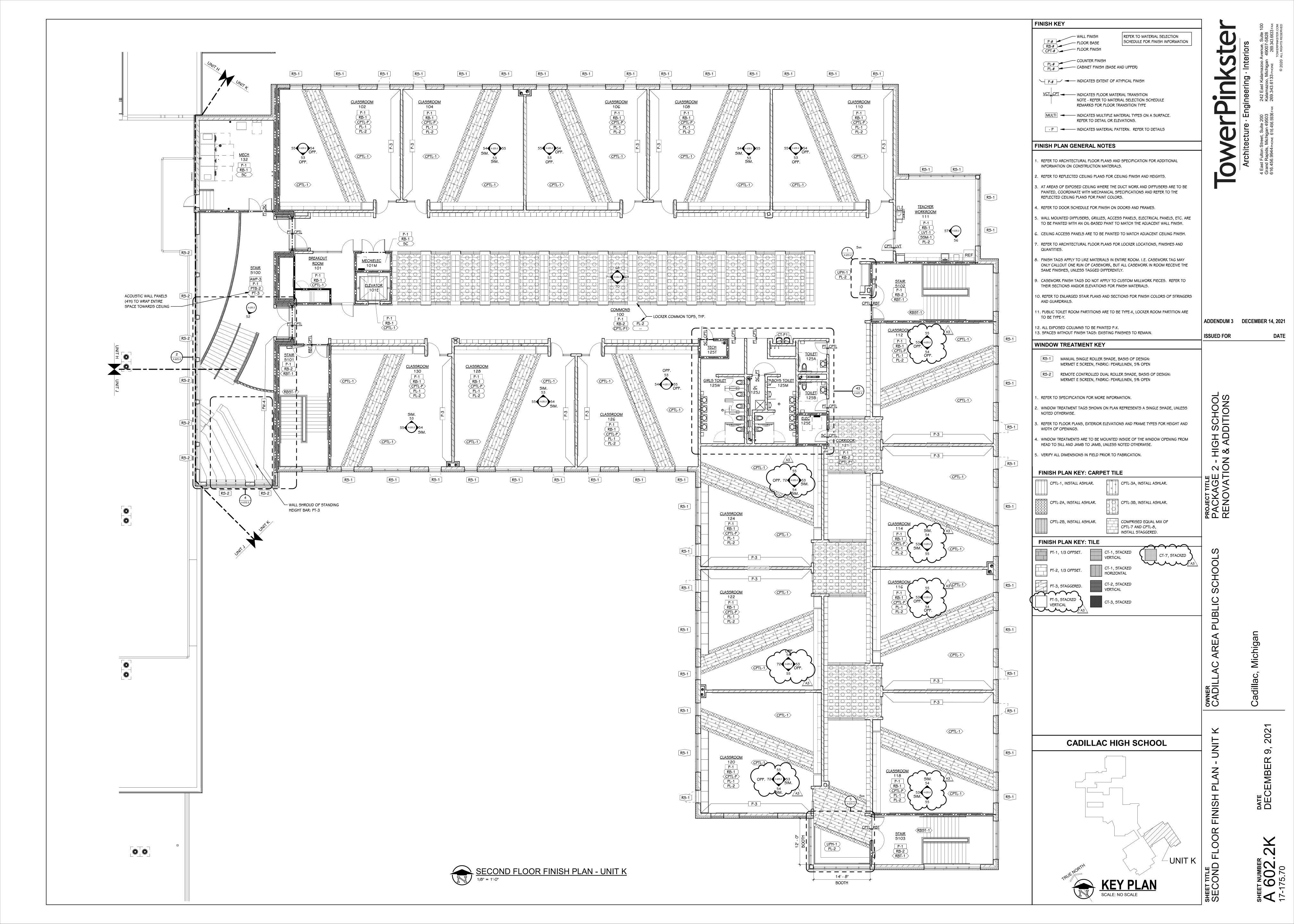


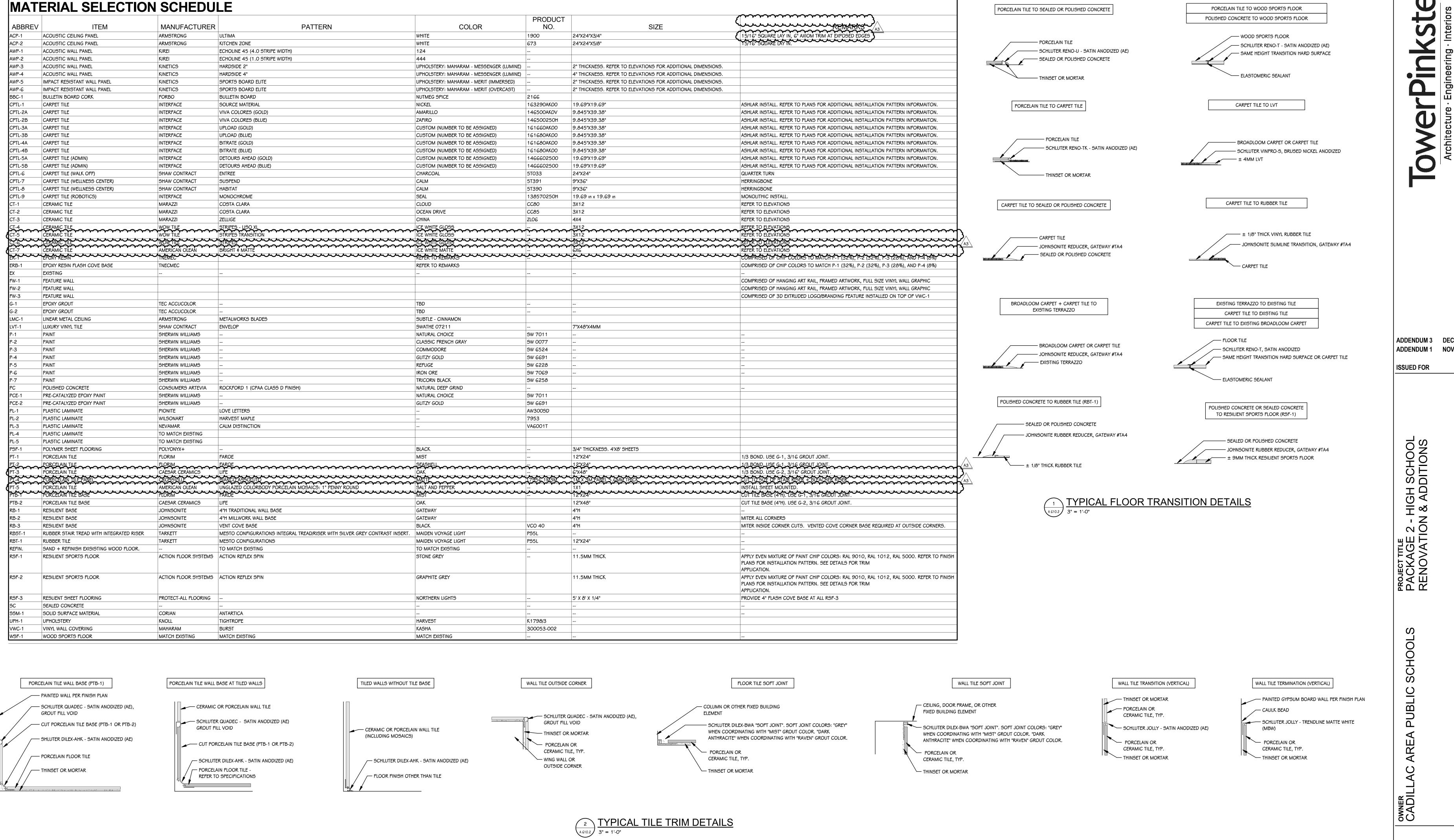


FINISH KEY

REFER TO MATERIAL SELECTION SCHEDULE FOR FINISH INFORMATION

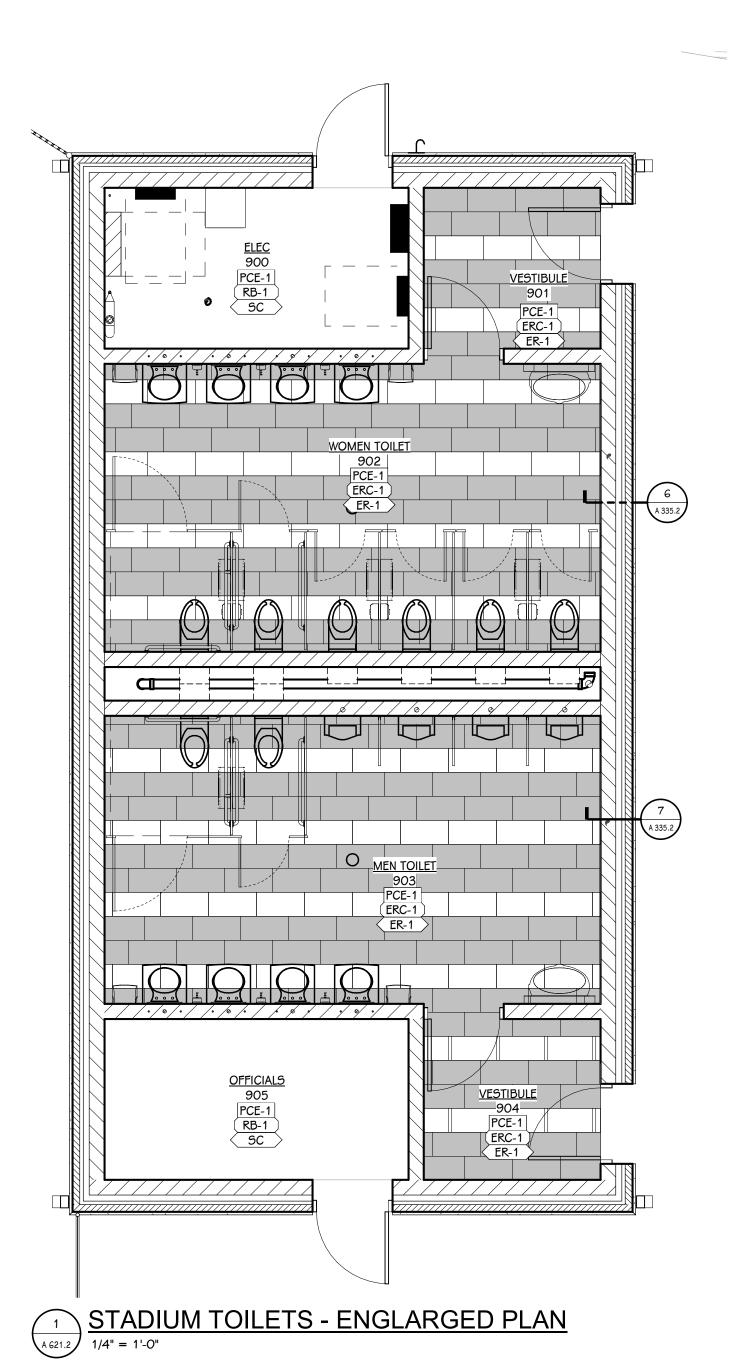


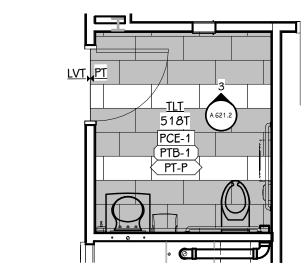




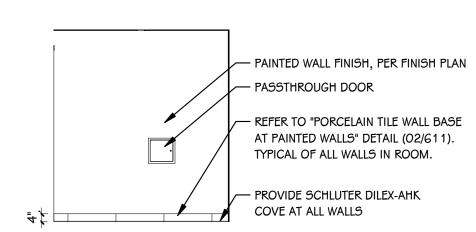
ADDENDUM 3 DECEMBER 14, 2021

ADDENDUM 1 NOVEMBER 29, 2021





 $\frac{2}{1/4" = 1'-0"}$ TOILET 518T - ENLARGED PLAN $\frac{2}{1/4" = 1'-0"}$



3 A 621.2 TOILET 518T - NORTH 1/4" = 1'-0"

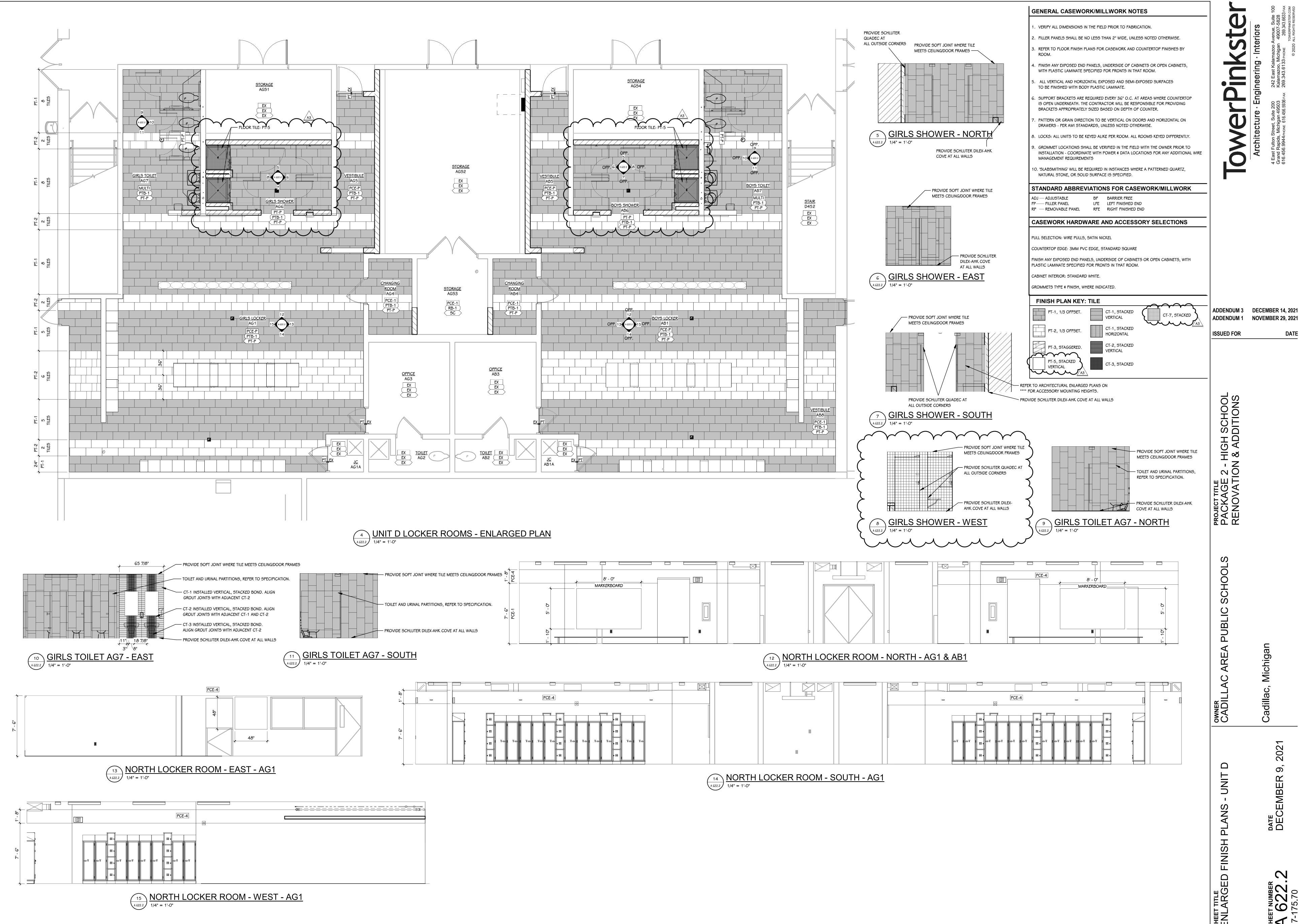


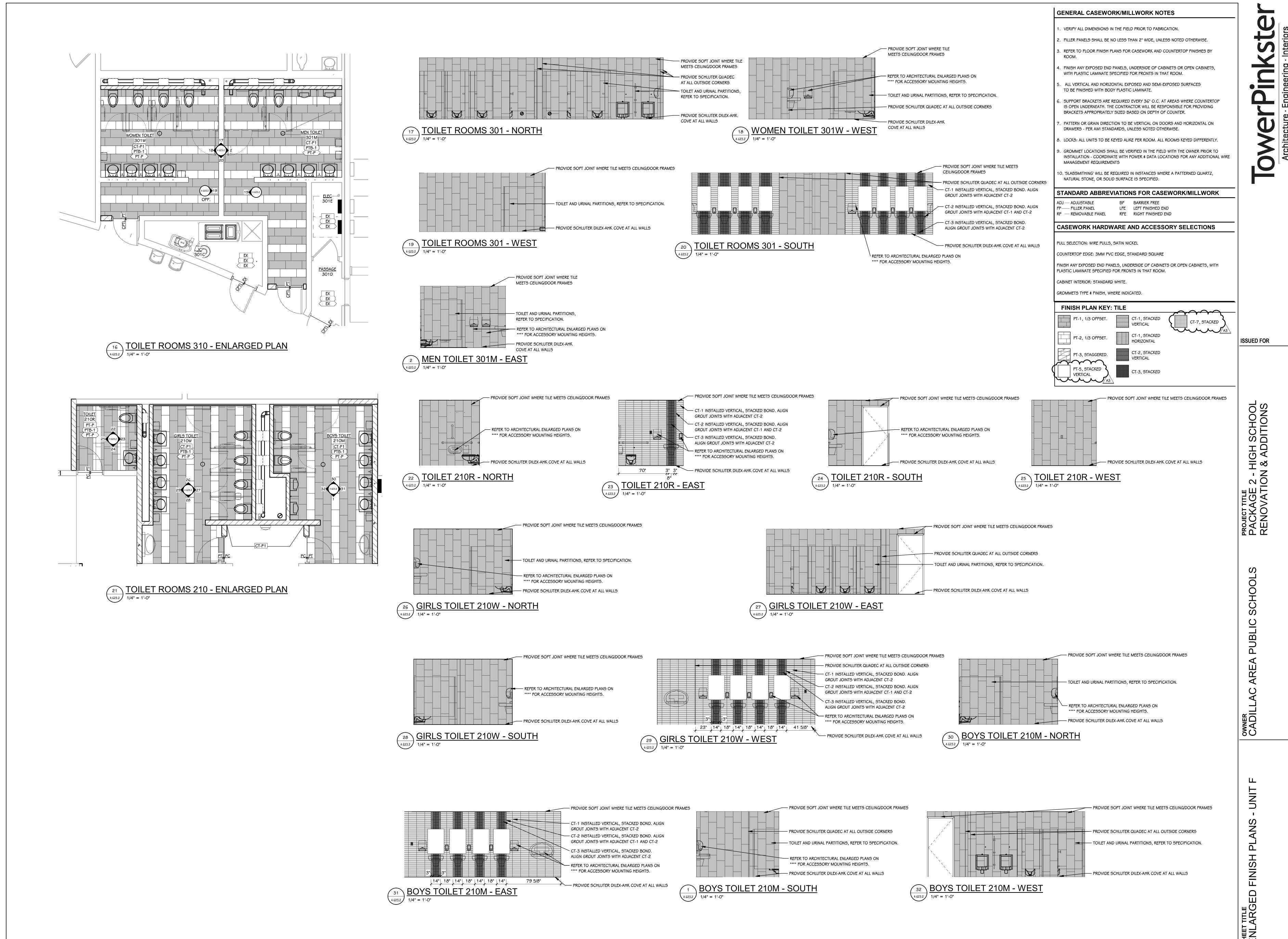
- I. VERIFY ALL DIMENSIONS IN THE FIELD PRIOR TO FABRICATION.
- 2. FILLER PANELS SHALL BE NO LESS THAN 2" WIDE, UNLESS NOTED OTHERWISE.
- . REFER TO FLOOR FINISH PLANS FOR CASEWORK AND COUNTERTOP FINISHES BY
- . FINISH ANY EXPOSED END PANELS, UNDERSIDE OF CABINETS OR OPEN CABINETS, WITH PLASTIC LAMINATE SPECIFIED FOR FRONTS IN THAT ROOM.
 - ALL VERTICAL AND HORIZONTAL EXPOSED AND SEMI-EXPOSED SURFACES TO BE FINISHED WITH BODY PLASTIC LAMINATE.
 - S. SUPPORT BRACKETS ARE REQUIRED EVERY 36" O.C. AT AREAS WHERE COUNTERTOP IS OPEN UNDERNEATH. THE CONTRACTOR WILL BE RESPONSIBLE FOR PROVIDING BRACKETS APPROPRIATELY SIZED BASED ON DEPTH OF COUNTER.
 - . PATTERN OR GRAIN DIRECTION TO BE VERTICAL ON DOORS AND HORIZONTAL ON DRAWERS - PER AWI STANDARDS, UNLESS NOTED OTHERWISE.
 - 8. LOCKS: ALL UNITS TO BE KEYED ALIKE PER ROOM. ALL ROOMS KEYED DIFFERENTLY.
 - . GROMMET LOCATIONS SHALL BE VERIFIED IN THE FIELD WITH THE OWNER PRIOR TO INSTALLATION - COORDINATE WITH POWER \$ DATA LOCATIONS FOR ANY ADDITIONAL WIRE MANAGEMENT REQUIREMENTS
 - O. 'SLABSMITHING' WILL BE REQUIRED IN INSTANCES WHERE A PATTERNED QUARTZ, NATURAL STONE, OR SOLID SURFACE IS SPECIFIED.

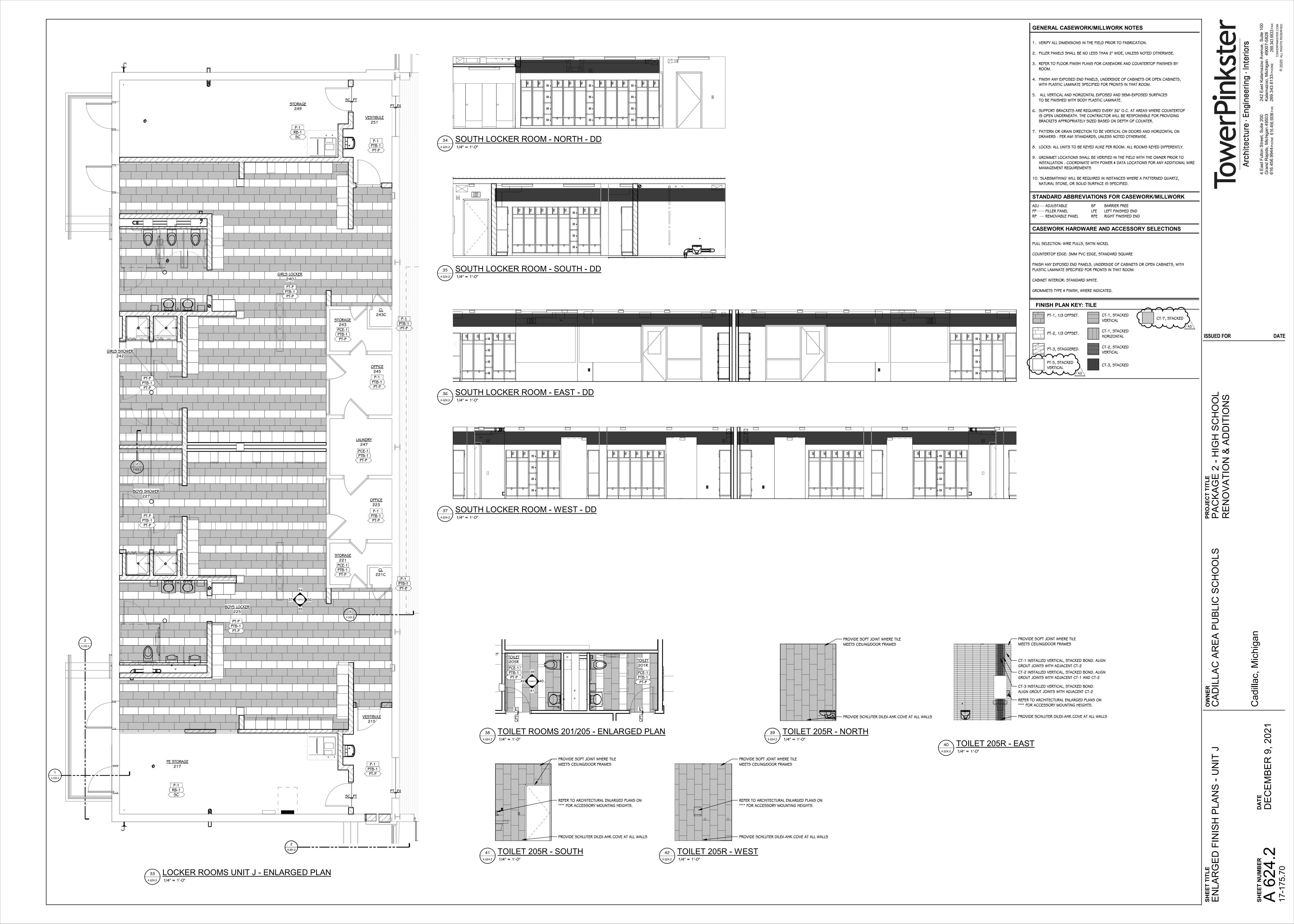
| | BF | BARRIER FREE | |
|------------------------------------|---------------|---------------------------|----------------------------|
| | | LEFT FINISHED E | |
| RP — REMOVABLE PANEL | KFE | KIGHT FINISHED | ' END |
| CASEWORK HARD | WARE A | AND ACCESS | SORY SELECTIONS |
| PULL SELECTION: WIRE PULL | .S, SATIN NIC | CKEL | |
| COUNTERTOP EDGE: 3MM P | VC EDGE, S | TANDARD SQUARI | Ē |
| FINISH ANY EVPOSED FND P | ANFIS LIND | FRSIDE OF CARIN | ETS OR OPEN CABINETS, WITH |
| PLASTIC LAMINATE SPECIFIE | • | | |
| CARINET INTERIOR CTANDA | חם אישודה | | |
| CABINET INTERIOR: STANDA | KD WHILE. | | |
| GROMMETS TYPE & FINISH, | WHERE INDIC | CATED. | |
| , | | | |
| , | | | |
| FINISH PLAN KEY | ': TILE | | |
| , | | CT-1, STACKED | CT-7 STACKED |
| FINISH PLAN KEY | | CT-1, STACKED VERTICAL | CT-7, STACKED |
| FINISH PLAN KEY PT-1, 1/3 OFF9ET. | | • | CT-7, STACKED |
| FINISH PLAN KEY | | VERTICAL | CT-7, STACKED |
| FINISH PLAN KEY PT-1, 1/3 OFF9ET. | | VERTICAL CT-1, STACKED | CT-7, STACKED |

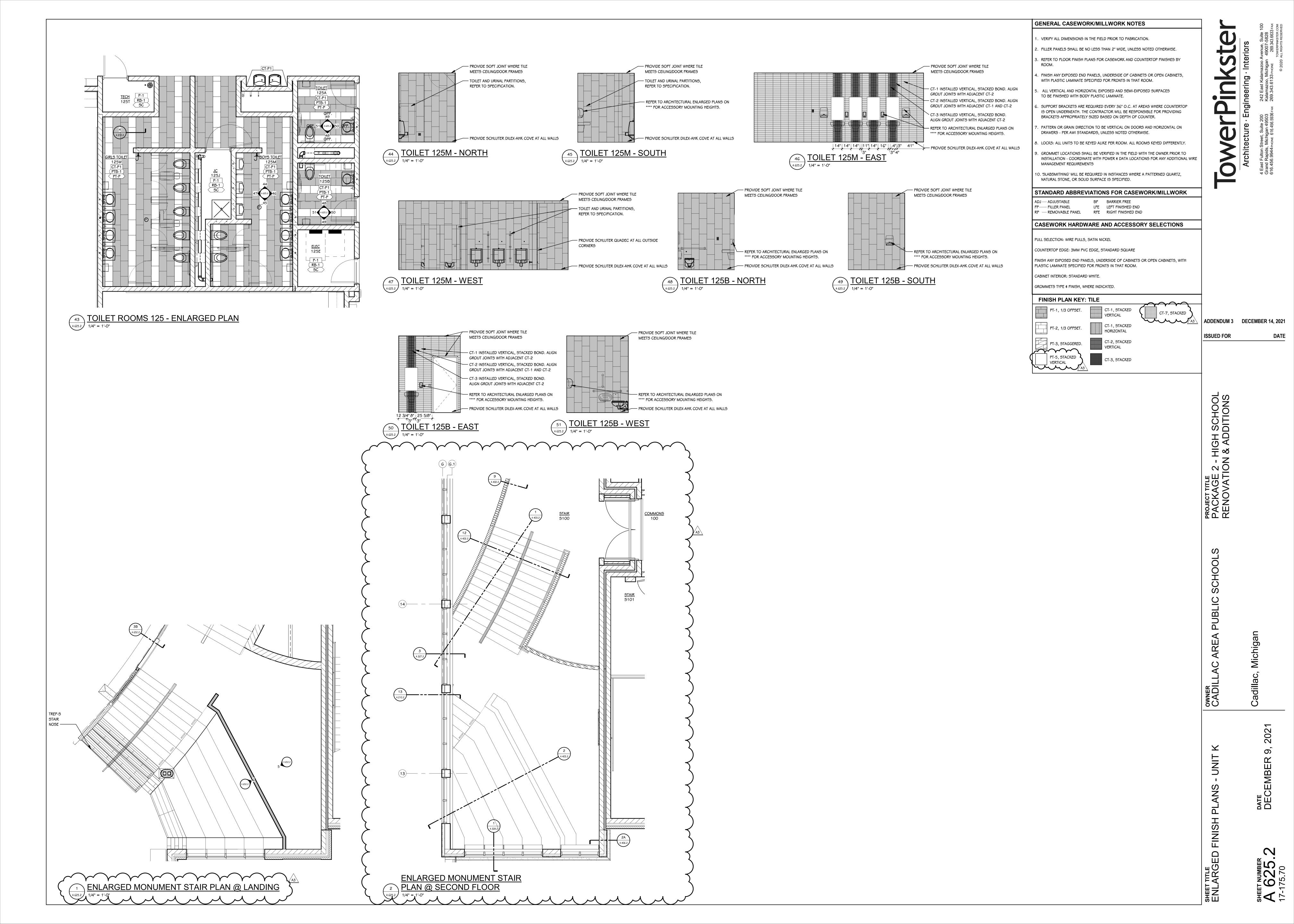
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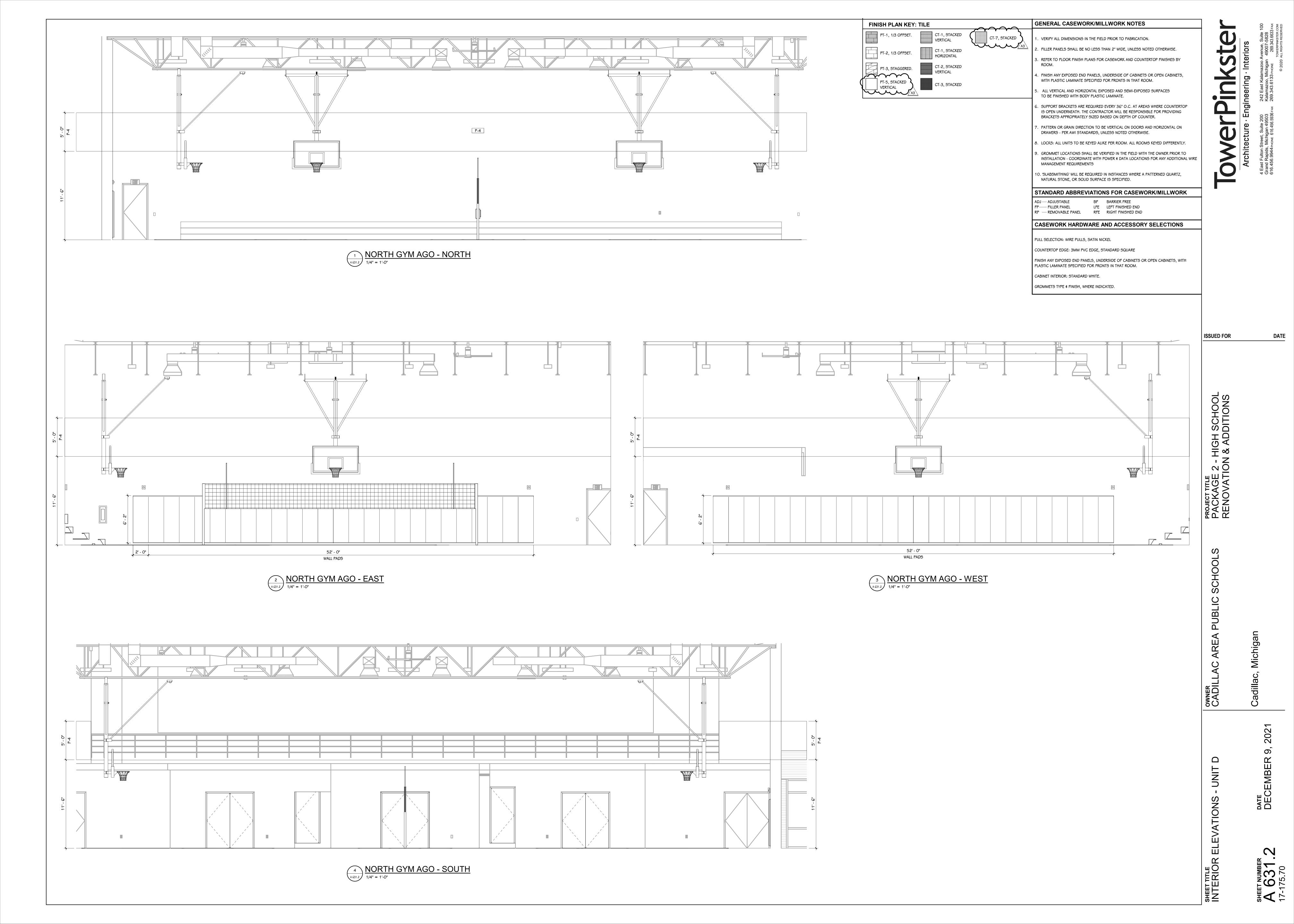
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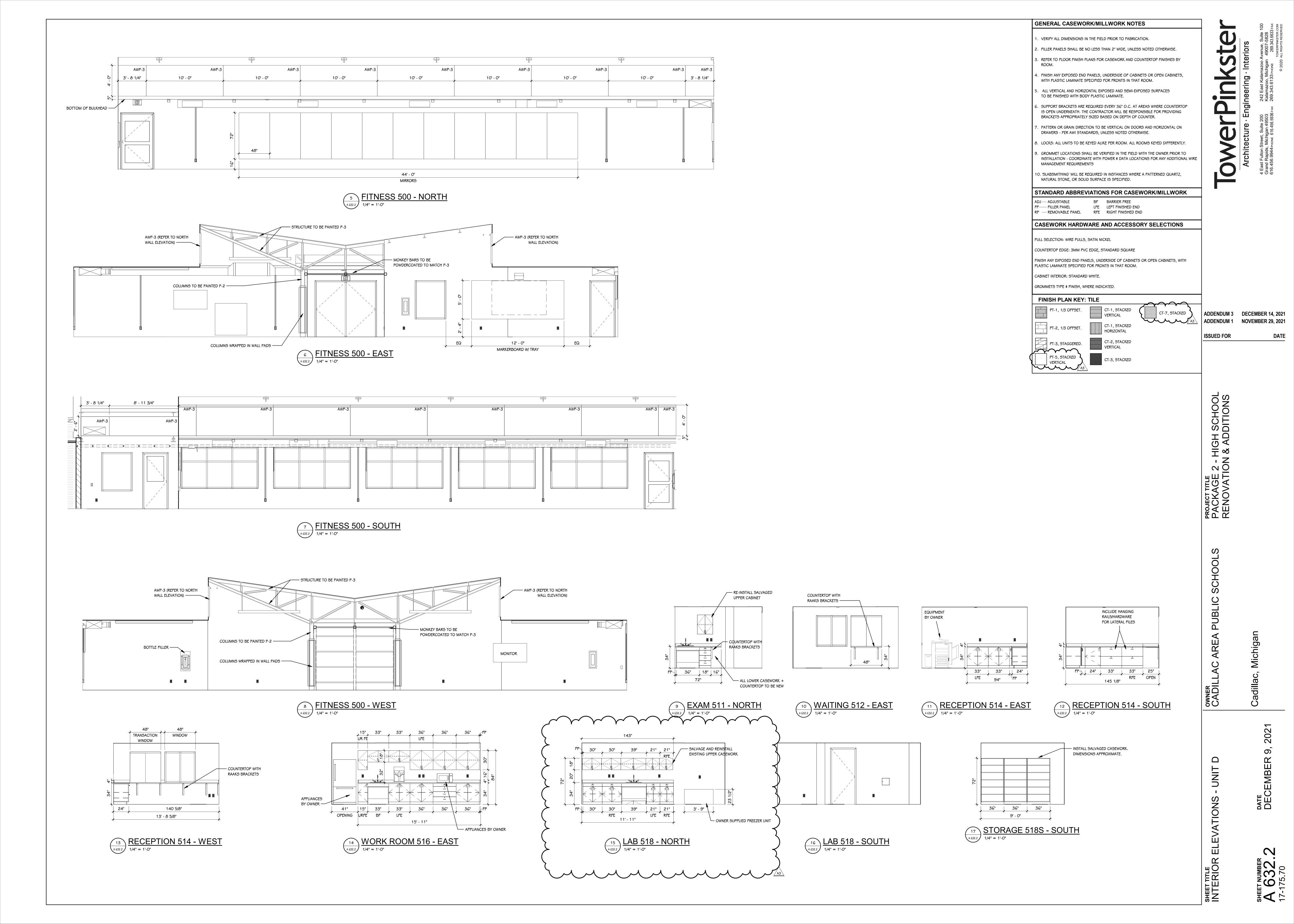


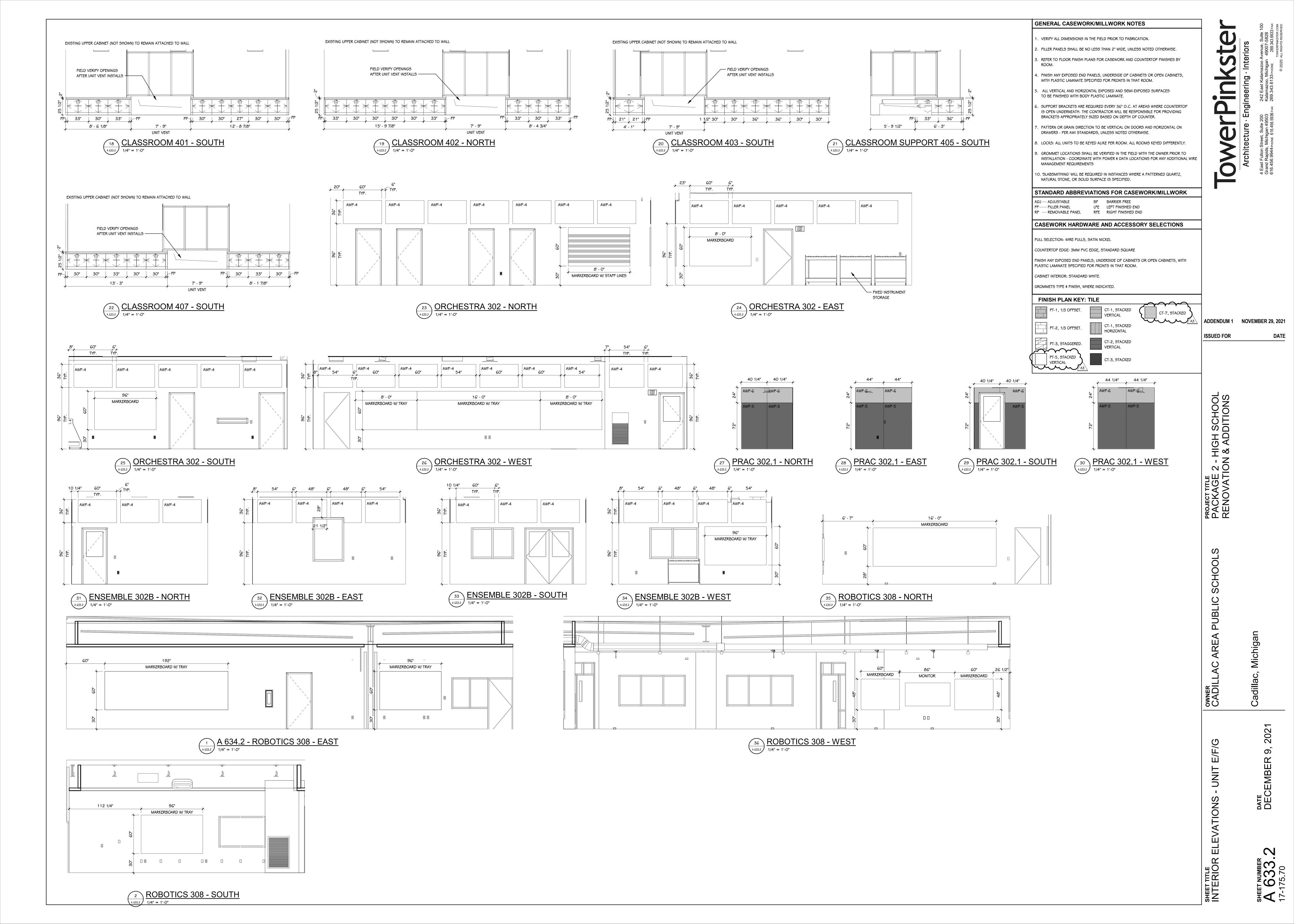


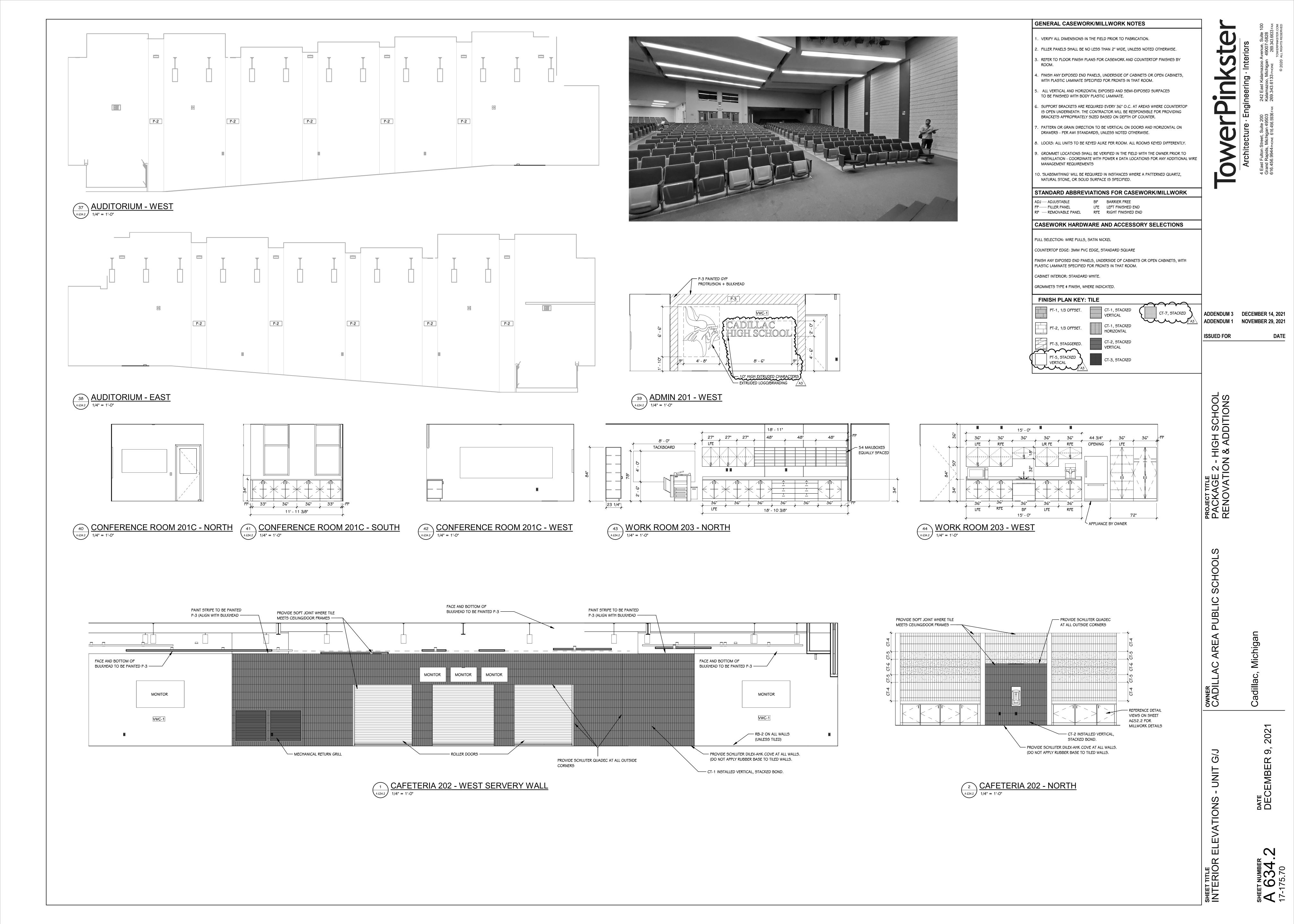


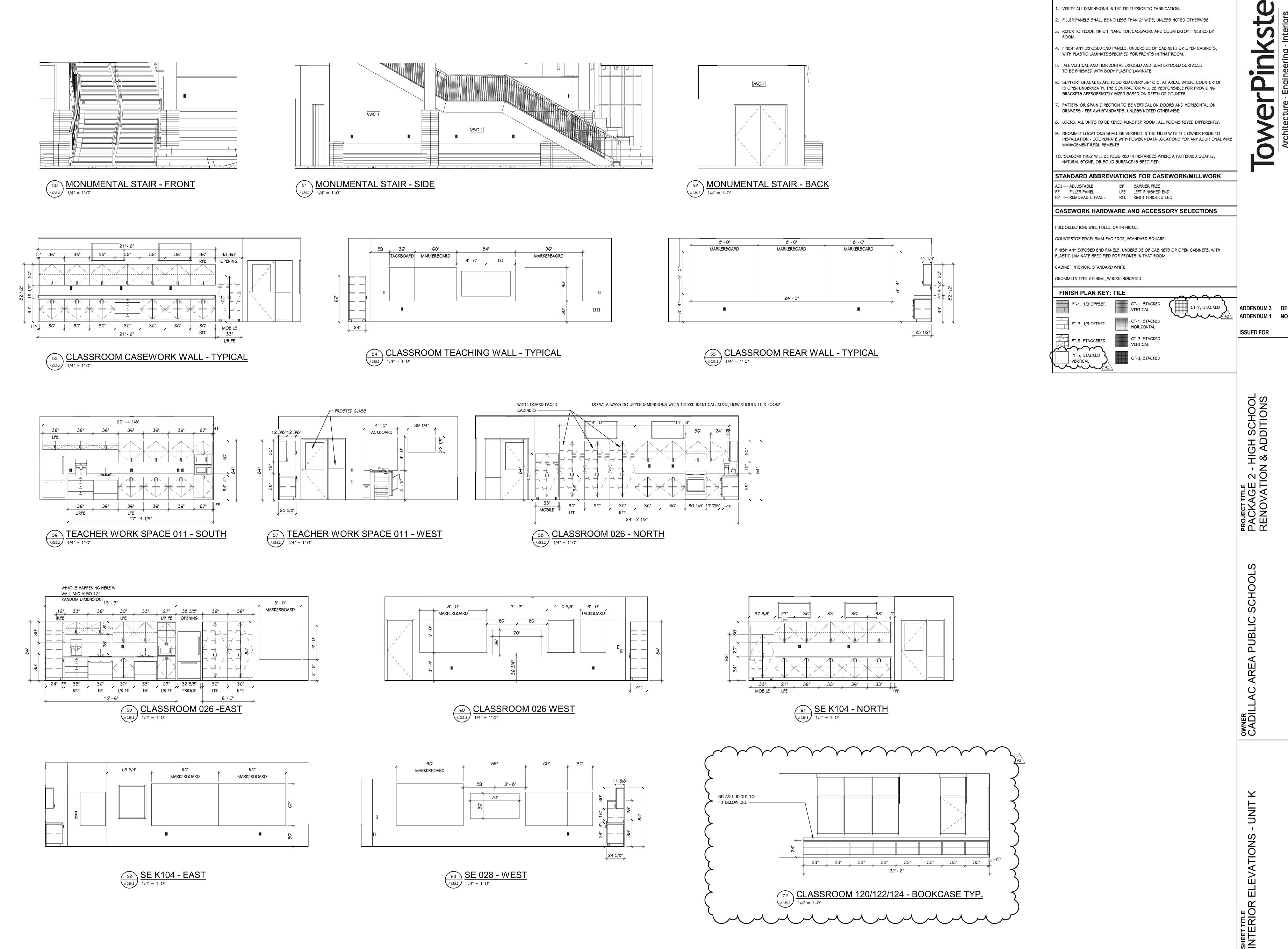












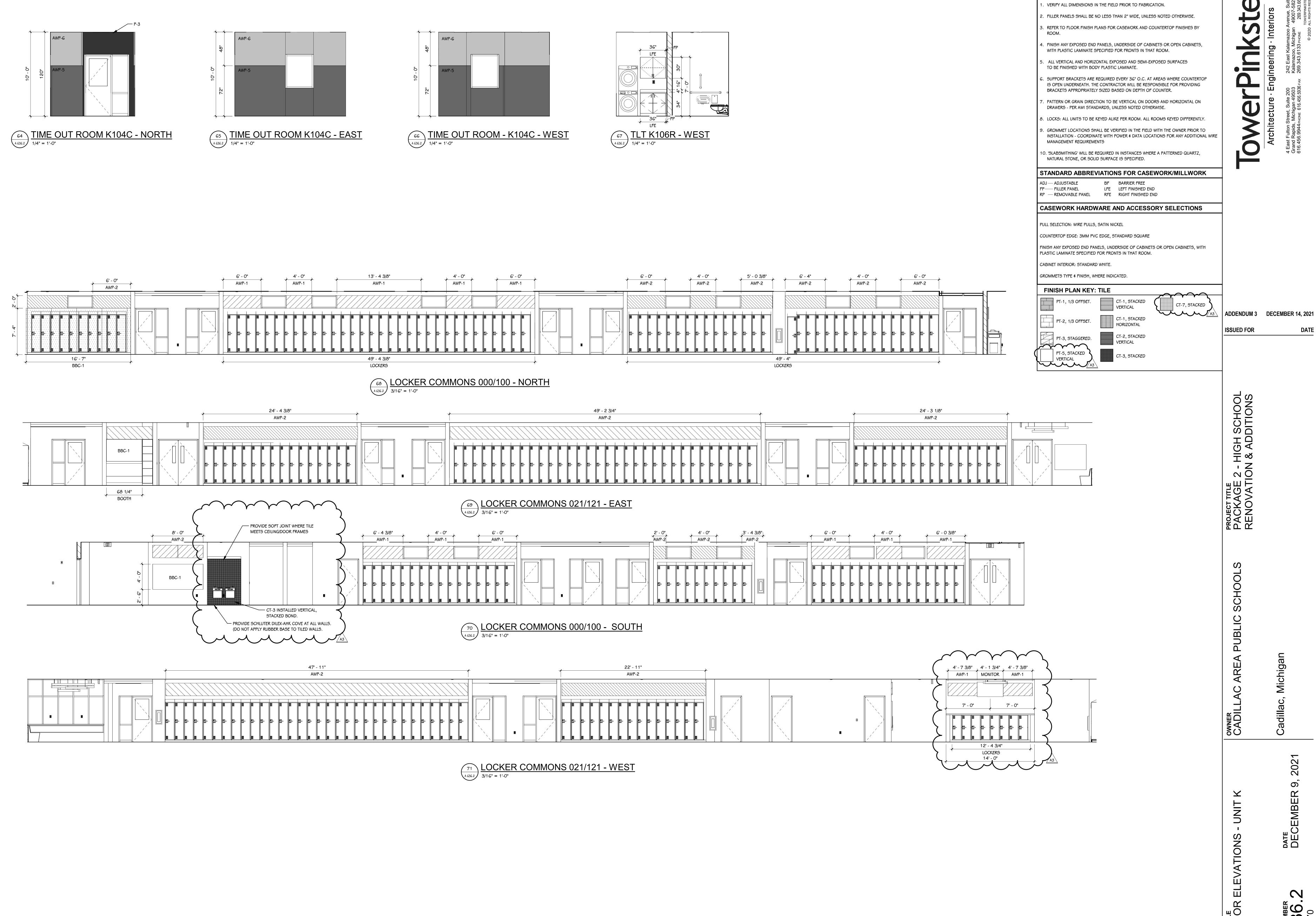
GENERAL CASEWORK/MILLWORK NOTES

ADDENDUM 3 DECEMBER 14, 2021 ADDENDUM 1 NOVEMBER 29, 2021

DATE

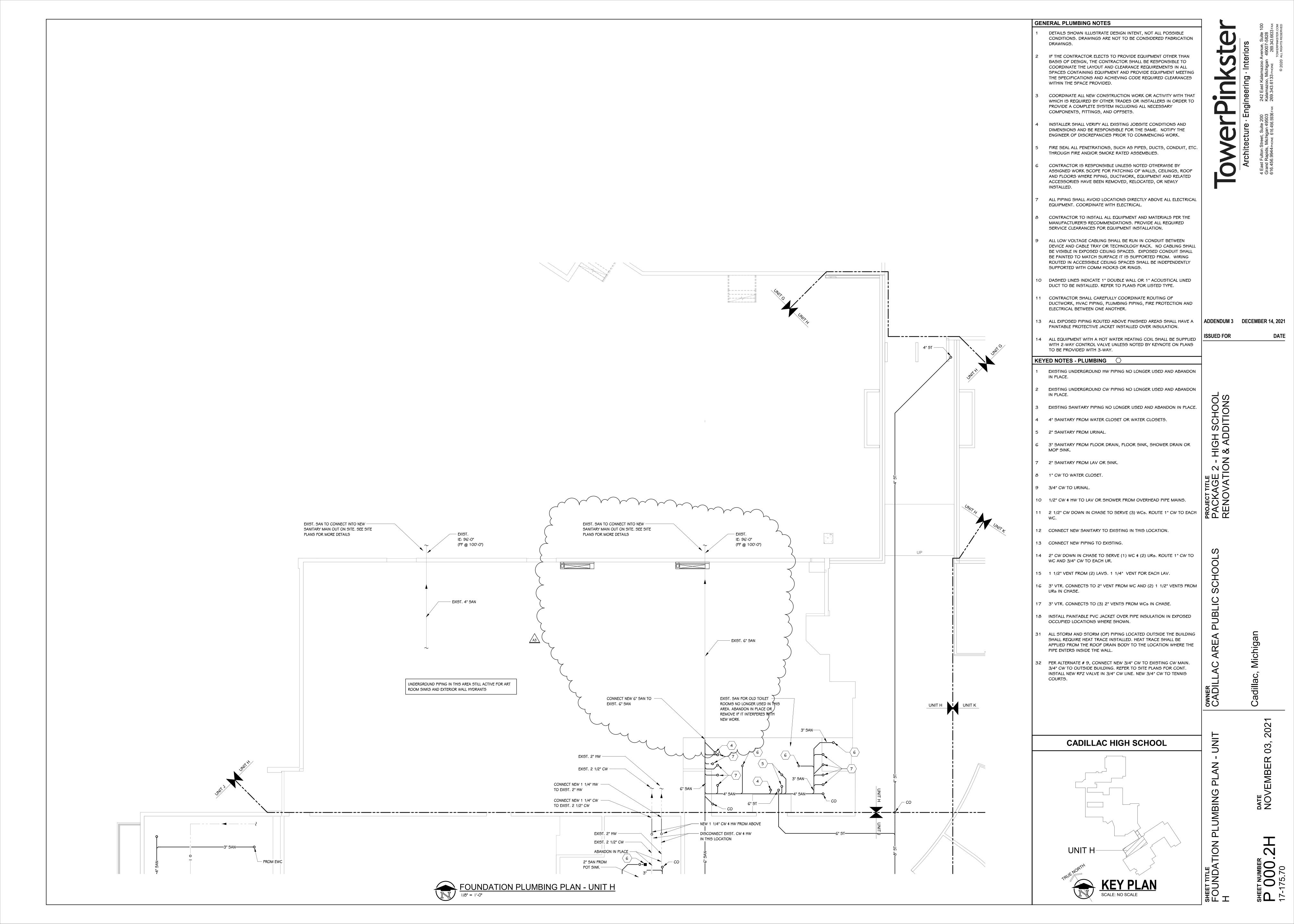
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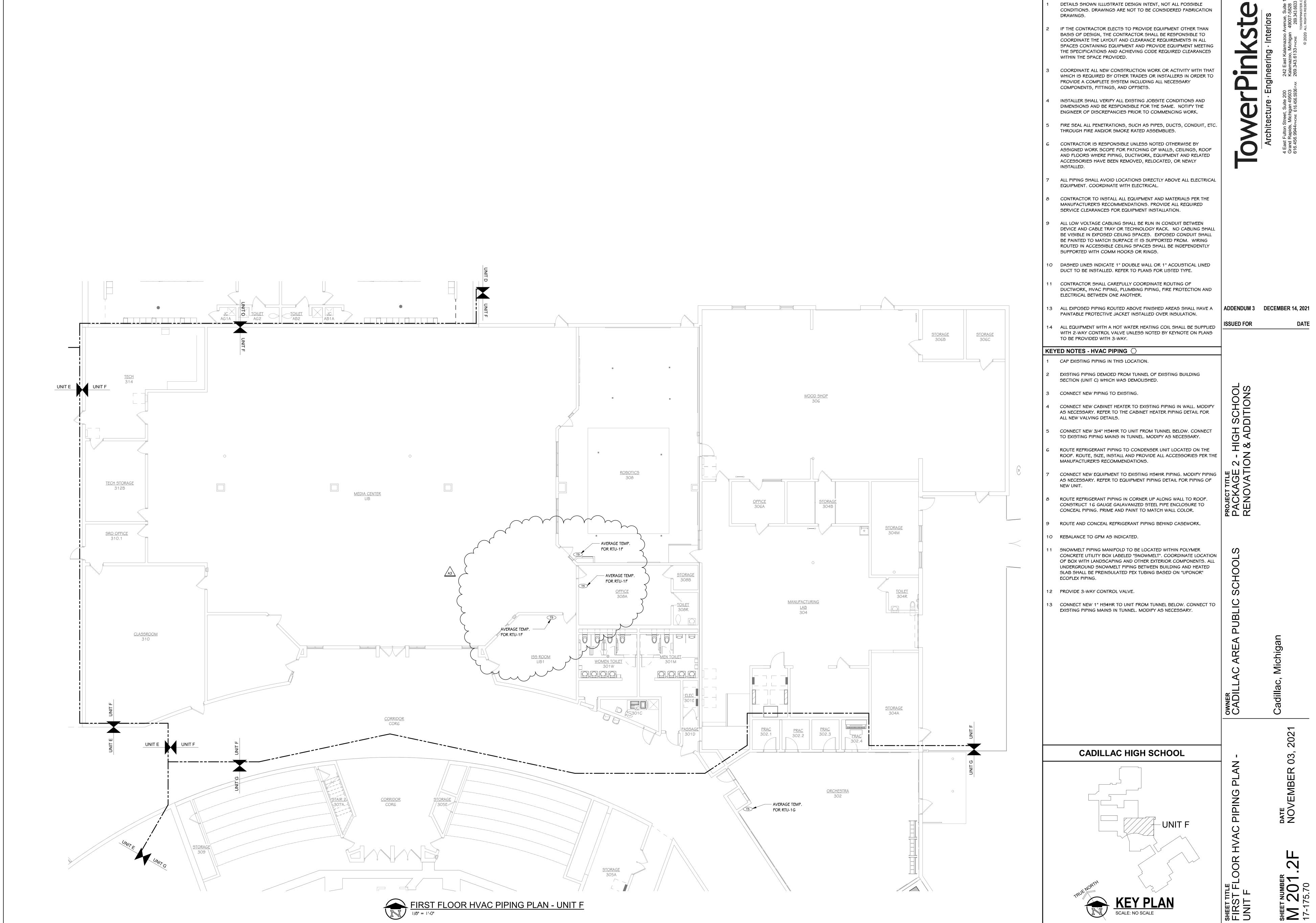
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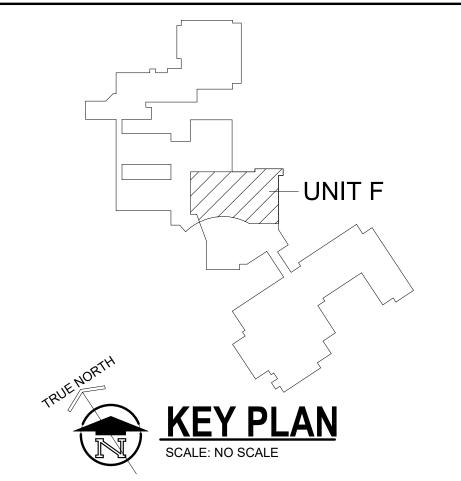
GENERAL CASEWORK/MILLWORK NOTES

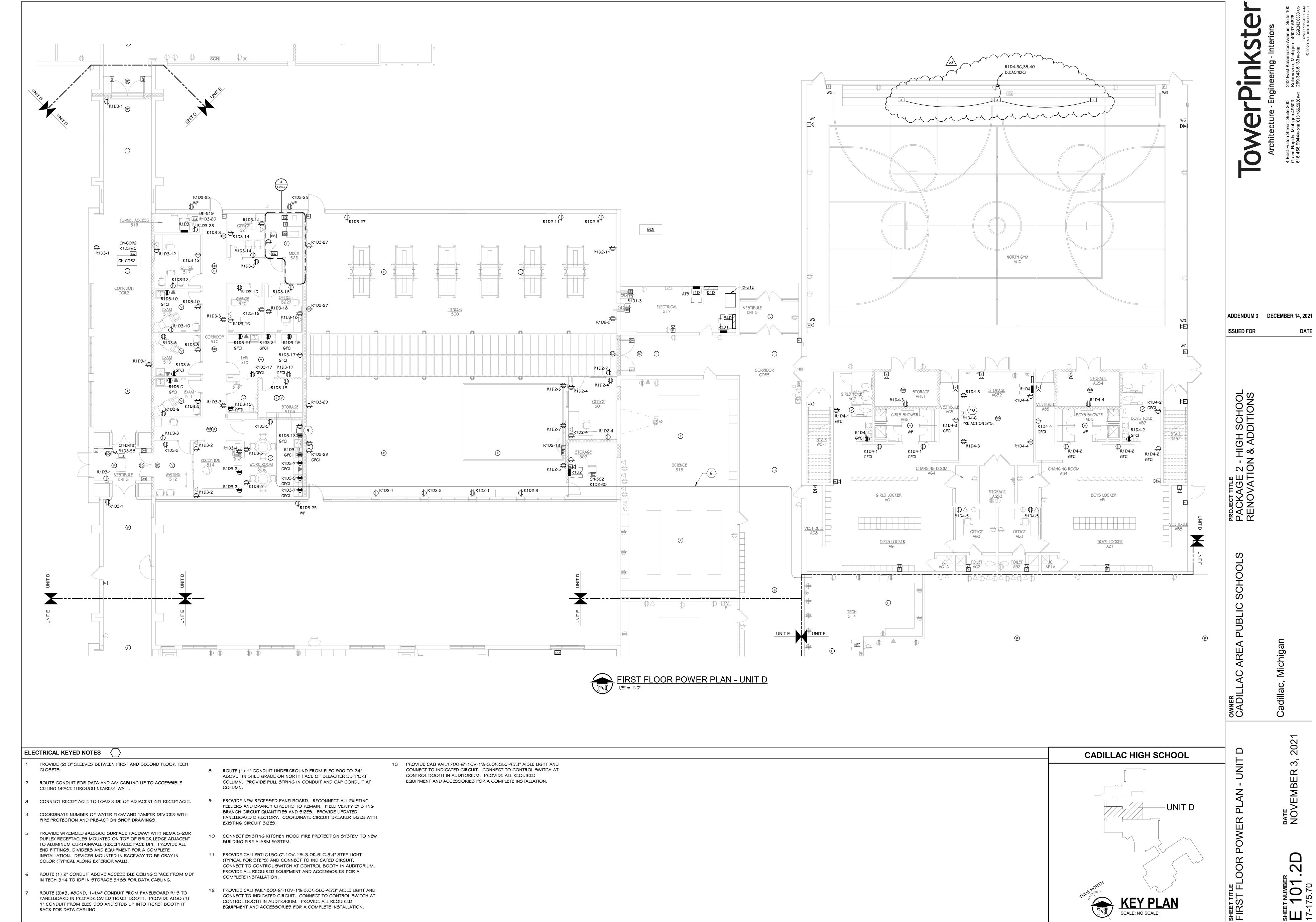
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GENERAL MECHANICAL NOTES





ROUTE (3)#3, #8GND, 1-1/4" CONDUIT FROM PANELBOARD R15 TO

PANELBOARD IN PREFABRICATED TICKET BOOTH. PROVIDE ALSO (1)

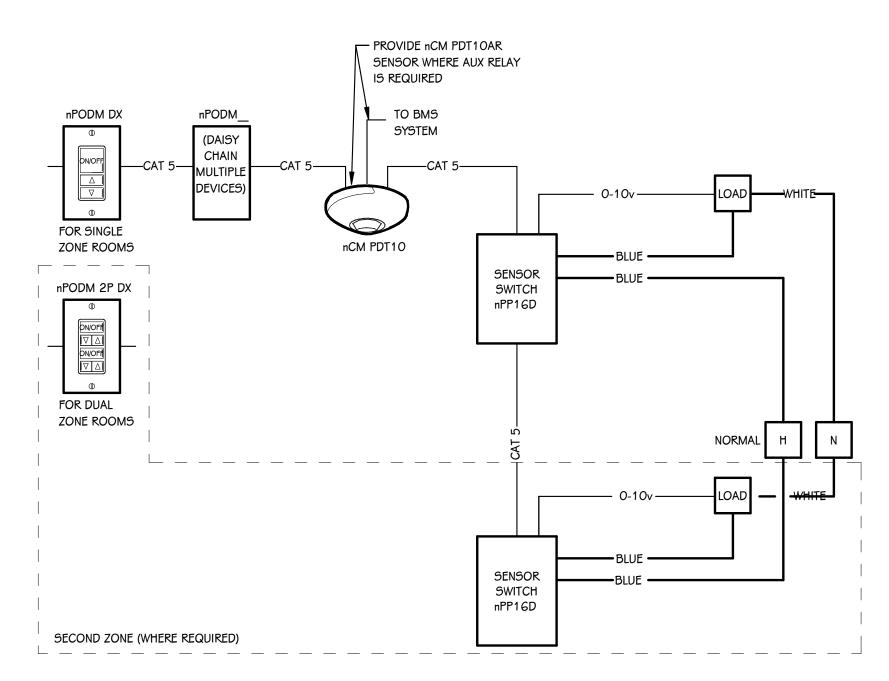
1" CONDUIT FROM ELEC 900 AND STUB UP INTO TICKET BOOTH IT

RACK FOR DATA CABLING.

CONNECT TO INDICATED CIRCUIT. CONNECT TO CONTROL SWITCH AT

CONTROL BOOTH IN AUDITORIUM. PROVIDE ALL REQUIRED

EQUIPMENT AND ACCESSORIES FOR A COMPLETE INSTALLATION.



OCCUPANCY SENSOR WIRING DIAGRAM
SCALE: NONE

| TYPE | DESCRIPTION | MOUNTING | WATTS | MANUFACTURER | NOTE |
|---------------|---|-----------------|-------|---|----------|
| | | | | | |
| D4 | 4" DOWNLIGHT | RECESSED | 13 VA | INTENSE: #554G4DR-L2-408, #IC430-C-5F | 1, 2 |
| D4E | 4" DOWNLIGHT - BATTERY | RECESSED | 13 VA | INTENSE: #954G4DR-L2-408-EM7T, #IC430-C-9F-EM7T | 1, 2, 4 |
| D6 | 6" LED DOWNLIGHT | RECESSED | 17 VA | INTENSE: #556G4DR-L3-408, #IC632-C-5F-CR | 1, 2 |
| D6E | 6" LED DOWNLIGHT - BATTERY | RECESSED | 17 VA | INTENSE: #956G4DR-L3-408-EM7, #IC632-C-9F-CR | 1, 2, 4 |
| ESW | ELEVATOR - SURFACE WRAP, 4' - 3 5/8" FEET | SURFACE | 43 VA | NULITE: #INT-4-CFR-50L40-B12-U-D | 1, 2, 4 |
| LPB6 | LINEAR PENDANT - BI-DIRECTIONAL, 6' - O" FEET | CABLE GRID | 39 VA | NULITE: #RP24-B-03-03-L40-U-D-11-FRF-xx-T1-W-048-6' | 1, 2, 3 |
| LPB8 | LINEAR PENDANT - BI-DIRECTIONAL, 8' - O" FEET | CABLE GRID | 52 VA | NULITE: #RP24-B-03-03-L40-U-D-11-FRF-xx-T1-W-048-8' | 1, 2, 3 |
| LPD4 | LINEAR PENDANT - DIRECT, 4' - O" FEET | CABLE STRUCTURE | 19 VA | NULITE: #RP44-D-05-L50-U-D-11-FRF-BK-5R-B-120-4' | 1, 2, 3 |
| LPD4E | LINEAR PENDANT - DIRECT - BATTERY, 4' - 0" FEET | CABLE STRUCTURE | 19 VA | NULITE: #RP44-D-05-L50-U-D-11/B12-FRF-BK-SR-B-120-4' | 1, 2, 3 |
| LPD8 | LINEAR PENDANT - DIRECT, 8' - O" FEET | CABLE GRID | 51 VA | NULITE: #RP24-D-06-L40-U-D-11-FRF-WH-SR-W-048-8' | 1, 2, 3 |
| LPD8E | LINEAR PENDANT - DIRECT - BATTERY, 8' - 0" FEET | CABLE GRID | 51 VA | NULITE: #RP24-D-06-L40-U-D-11/B12-FRF-WH-SR-W-048-8' | 1, 2, 3, |
| LPD10 | LINEAR PENDANT - DIRECT, 10' - 0" FEET | CABLE GRID | 64 VA | NULITE: #RP24-D-06-L40-U-D-11-FRF-WH-SR-W-048-10' | 1, 2, 3 |
| LPD10E | LINEAR PENDANT - DIRECT - BATTERY, 10' - 0" FEET | CABLE GRID | 64 VA | NULITE: #RP24-D-06-L40-U-D-11/B12-FRF-WH-5R-W-048-10' | 1, 2, 3, |
| LRD4 | LINEAR RECESSED - DRYWALL, 4' - O" FEET | RECESSED | 19 VA | NULITE: #RM2-05L40-UNV-D-11-FRF-WH-4' | 1, 2, 3 |
| LRD4E | LINEAR RECESSED - DRYWALL - BATTERY, 4' - O" FEET | RECESSED | 19 VA | NULITE: #RM2-05L40-UNV-D-11/B12-FRF-WH-4' | 1, 2, 3 |
| LRD6 | LINEAR RECESSED - DRYWALL, 6' - O" FEET | RECESSED | 29 VA | MULITE: 4RM2-05L40-UNV-19-1 TYFRF-WH-6' | 1, 2, 3 |
| LRD6E | LINEAR RECESSED - DRYWALL - BATTERY, 6' - O" FEET | RECESSED | 29 VA | \ \text{NULITE: #RM2-05L40-UNV-D-11B-FRF-WH-6'}\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\\ | 1, 2, 3, |
| LRD8 | LINEAR RECESSED - DRYWALL, 8' - O" FEET | RECESSED | 39 VA | HULITE FRANZ-OSEGO UNIX D-7 TYFRE-WH-8- | 1, 2, 3 |
| LRD8E | LINEAR RECESSED - DRYWALL - BATTERY, 8' - O" FEET | RECESSED | 39 VA | NULITE: #RM2-05L40-UNV-D-11B-FRF-WH-8' _A3_ | 1, 2, 3, |
| LRD10 | LINEAR RECESSED - DRYWALL, 10' - 0" FEET | RECESSED | 49 VA | MULTE #RMR-05140-UNX D-7-14FRF-WW-10-1 | 1, 2, 3 |
| LRD10E | LINEAR RECESSED - DRYWALL - BATTERY, 10' - 0" FEET | RECESSED | 49 VA | NULITE: #RM2-05L40-UNV-D-11B-FRF-WH-10' \ A3 | 1, 2, 3, |
| LRD12 | LINEAR RECESSED - DRYWALL, 12' - O" FEET | RECESSED | 58 VA | MULTE #RM2-05140-UNA/D-11-4RF-WAY-12-Y | 1, 2, 3 |
| LRD12E | LINEAR RECESSED - DRYWALL - BATTERY, 12' - O" FEET | RECESSED | 58 VA | NULITE: #RM2-05L40-UNV-D-11B-FRF-WH-12' \(\begin{array}{c} A3 \\ \end{array} | 1, 2, 3, |
| LRD14 | LINEAR RECESSED - DRYWALL, 14' - O" FEET | RECESSED | 68 VA | NULITE: #RM2-05L4Q-UNVQ-11-FRF-WA-14 | 1, 2, 3 |
| LRD15 | LINEAR RECESSED - DRYWALL, 15' - O" FEET | RECESSED | 73 VA | NULITE: #RM2-05L40-UNV-D-11-FRF-WH-15' | 1, 2, 3 |
| LRD20 | LINEAR RECESSED - DRYWALL, 20' - 0" FEET | RECESSED | 97 VA | MULITE: #RM2-05L40-UNY, D-11-FRF-WH-20' | 1, 2, 3 |
| LRD20E | LINEAR RECESSED - DRYWALL - BATTERY, 20' - 0" FEET | RECESSED | 97 VA | NULITE: #RM2-05L40-UNV-D-11B-FRF-WH-20' | 1, 2, 3, |
| LRG4 | LINEAR RECESSED - GRID, 4' - O" FEET | RECESSED | 19 VA | NULTE: #RG2-05L4Q-UMV-Q-11-ARF-WH-4' | 1, 2, 3 |
| LRG4E | LINEAR RECESSED - GRID - BATTERY, 4' - 0" FEET | RECESSED | 19 VA | NULITE: #RG2-05L40-UNV-D-11/B12-FRF-WH-4' | 1, 2, 3, |
| LRGG LRGG | LINEAR RECESSED - GRID, 6' - O" FEET | RECESSED | 29 VA | NULITE: #RG2-05L40-U-D-11-STR-WH-6' | |
| LRG6E | LINEAR RECESSED - GRID - BATTERY, 6' - 0" FEET | RECESSED | 29 VA | NULITE: #RG2-05L40-UNV-D-11/B12-FRF-WH-6' | 1, 2, 3 |
| LRG6L LRG8 | | | | | 1, 2, 3, |
| | LINEAR RECESSED - GRID, 8' - O" FEET | RECESSED | 39 VA | NULITE: #RG2-05L40-UNV-D-11-FRF-WH-8' | 1, 2, 3 |
| LRG8E | LINEAR RECESSED - GRID - BATTERY, 8' - O" FEET | RECESSED | 39 VA | NULITE: #RG2-05L40-UNV-D-11B-FRF-WH-8' | 1, 2, 3, |
| LRG10 | LINEAR RECESSED - GRID, 10' - 0" FEET | RECESSED | 49 VA | NULITE: #RG2-05L40-U-D-11-STR-WH-10' | 1, 2, 3 |
| LRG10E | LINEAR RECESSED - GRID - BATTERY, 10' - 0" FEET | RECESSED | 49 VA | NULITE: #RG2-05L40-U-D-11/B12-STR-WH-10' | 1, 2, 3, |
| LRG12 | LINEAR RECESSED - GRID, 12' - O" FEET | RECESSED | 58 VA | NULITE: #RG2-05L40-UNV-D-11-FRF-WH-12' | 1, 2, 3 |
| LRG12E | LINEAR RECESSED - GRID - BATTERY, 12' - O" FEET | RECESSED | 58 VA | NULITE: #RG2-05L40-UNV-D-11/B12-FRF-WH-12' | 1, 2, 3, |
| LRG14 | LINEAR RECESSED - GRID, 14' - O" FEET | RECESSED | 68 VA | NULITE: #RG2-05L40-UNV-D-11-FRF-WH-14' | 1, 2 |
| LRG18E | LINEAR RECESSED - GRID - BATTERY, 18' - O" FEET | RECESSED | 87 VA | NULITE: #RG2-05L40-UNV-D-11/B12-FRF-WH-18' | 1, 2, 3, |
| L510 | LINEAR SURFACE, 10' - 0" FEET | SURFACE | 64 VA | NULITE: #RR2-06-L40-UNV-D-11-FRF-WH-10' | 1, 2, 3 |
| L510E | LINEAR SURFACE - BATTERY, 10' - 0" FEET | SURFACE | 64 VA | NULITE: #RR2-06-L40-UNV-D-11B-FRF-WH-10' | 1, 2, 3, |
| PC6 | 6" PENDANT CYLINDER | PENDANT | 17 VA | INTENSE: #596G4C-L3-408-W-C-P36 | 1, 2 |
| PC6E | 6" PENDANT CYLINDER - BATTERY | PENDANT | 17 VA | INTENSE: #55664CREM-L37408-W-C-P36, #REM55G4C-L3-EM7 | 1, 2, 4 |
| 554 | 4' SUSPENDED STRIP LIGHT | CHAIN | 34 VA | COLUMBIA: #MP54-40LW-CW-ED1U-C5CH | 1, 2 |
| 354E | 4' SUSPENDED STRIP LIGHT - BATTERY | CHAIN | 34 VA | COLUMBIA: #MP54-40LW-CW-ED1U-ELL14-C5CH | 1, 2, 4 |
| 5W4 | SURFACE WRAP, 4' - O" FEET | RECESSED | 45 VA | ORACLE: #4-QV2R-LED-4000L-DHM10-MWOLT-40K-85 | 1, 2 |
| SW4E | SURFACE WRAP - BATTERY, 4' - 0" FEET | RECESSED | 45 VA | ORACLE: #4-OV2R-LED-4000L-DIM10-MVOLT-40K-85-0-EMG-LED-20W | 1, 2, 4 |
| T2DE | 2x2 TROFFER - DRYWALL CEILING - BATTERY, 2' - 0" FEET | RECESSED | 39 VA | COLUMBIA: #LCAT22-40VLG-ED1U-ELL14, #FK22-G | 1, 2, 4 |
| T2G | 2x2 TROFFER - GRID CEILING, 2' - O" FEET | RECESSED | 39 VA | COLUMBIA: #LCAT22-40VLG-ED1U | 1, 2 |
| T2GE | 2x2 TROFFER - GRID CEILING - BATTERY, 2' - O" FEET | RECESSED | 39 VA | COLUMBIA: #LCAT22/40VLG/ED1U-ELL14 | 1, 2, 4 |
| <i>W</i> | LED WALL PACK | SURFACE | 51 VA | HUBBELL: #RWL1-48L45L4K7-4W-UNV-DBT-NX5WP14F-E | 1, 2, 4 |
| ··· <1 | SINGLE FACE EXIT SIGN | SURFACE | 3 VA | MAXHUME: #ELX-GOAR-AL-AMIBROR | 1, 2 |
| (2 | DUAL FACE EXIT SIGN | SURFACE | 3 VA | MAXILUME: #ELX-604-R-AL-2-MIRROR | 1, 2 |
| `- | DONE I MOL LATI STON | SURFACE | 3 VA | MAXILUME: #ELX-603-R-W | 1, 2 |

ALL LED FIXTURES TO HAVE WARRANTY TO MEET OR EXCEED WARRANTY INCLUDED IN BASIS OF DESIGN. FIXTURES LISTED AS EQUALS SHALL MEET DELIVERED LUMENS, CRI, EFFICACY AND OPTIONS OF THAT SPECIFIED. REFER TO SPECIFICATIONS 265100 AND 265600 FOR ADDITIONAL REQUIREMENTS.

Architecture · Engineering · Interiors

A East Fulton Street, Suite 200
Grand Rapids, Michigan 49503
Grand Rapids

ADDENDUM 3 DECEMBER 14, 2021

ISSUED FOR DATE

PROJECT TITLE
PACKAGE 2 - HIGH SCHOOL
RENOVATION & ADDITIONS

REA PUBLIC SCHOOLS

Cadillac, Michiga

DATE NOVEMBER 3, 2027

431.2 175.70

THE MOUNTING DESCRIPTION IS GENERAL. REFER TO SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR SPECIFIC MOUNTING DETAILS.

³ FIXTURE LENGTH PER DRAWINGS.

FIXTURES WITH THE CENTER CIRCLE SHADED SHALL HAVE A SELF-CONTAINED EMERGENCY BATTERY PACK OPERATING TWO LAMPS AT A MINIMUM OF 1100 LUMENS FOR 90 MINUTES. FIXTURES WITH THE CENTER CIRCLE COMPLETELY SHADED SHALL BE ON 24 HOURS. ON HID FIXTURES PROVIDE TIME DELAY RELAY AND STAND-BY QUARTZ RESTRIKE LAMP. WIRE BATTERY AND BALLAST SO FIXTURE TURNS "ON" WHEN POWER FAILS.

| CIRCUIT DESCRIPTION POWER - RTU-500 CONV. RECEPT. POWER - UNIT D - 1ST FLR SMOKE DAMPERS (EXIST.) RECEPTACLE 315 (EXIST.) RECEPTACLE 301 (EXIST.) RECEPTACLE 301 (EXIST.) RECEPTACLE 301 | TRIP (A) 20 20 | | | | LUGS | • | | | | | I.C. RATING: 9168 | |
|--|----------------|--------------------|------|------------|---------|------------|-------|-----------|-------|-------------|--|-----|
| POWER - UNIT D - 1ST FLR SMOKE DAMPERS (EXIST.) RECEPTACLE 315 (EXIST.) RECEPTACLE 301 (EXIST.) RECEPTACLE 301 | | POLES | | A | | В | | С | POLES | TRIP (A) | CIRCUIT DESCRIPTION | |
| (EXIST.) RECEPTACLE 315 (EXIST.) RECEPTACLE 301 (EXIST.) RECEPTACLE 301 | 20 | 1 | 180 | 696 | | | | | 1 | 20 | HVAC - EF-502 | |
| (EXIST.) RECEPTACLE 301 (EXIST.) RECEPTACLE 301 | | 1 | | | 80 | 360 | | | 1 | 20 | (EXIST.) RECEPTACLE 502 | |
| (EXIST.) RECEPTACLE 301 | 20 | 1 | | | | | 360 | 360 | 1 | 20 | (EXIST.) RECEPTACLE 504 | |
| , | 20 | 1 | 360 | 360 | | | | | 1 | 20 | (EXIST.) RECEPTACLE 504 | |
| 1 (EXIST.) RECEPTACLE 301 | 20 | 1 | | | 360 | 360 | | | 1 | 20 | (EXIST.) RECEPTACLE 504 | |
| | 20 | 1 | | | | | 360 | 360 | 1 | 20 | (EXIST.) RECEPTACLE 506 | |
| 3 (EXIST.) RECEPTACLE 301 | 20 | 1 | 360 | 360 | | | | | 1 | 20 | (EXIST.) RECEPTACLE 508 | |
| 5 (EXIST.) RECEPTACLE 301 | 20 | 1 | | | 360 | 360 | | | 1 | 20 | (EXIST.) RECEPTACLE 503B | |
| 7 (EXIST.) RECEPTACLE 301 | 20 | 1 | | | | | 360 | 0 | 1 | 20 | SPARE | |
| 9 (EXIST.) RECEPTACLE 301 | 20 | 1 | 360 | 360 | | | | | 1 | 20 | (EXIST.) RECEPTACLE 402 | |
| 1 (EXIST.) RECEPTACLE 301 | 20 | 1 | | | 360 | 360 | 000 | 000 | 1 | 20 | (EXIST.) RECEPTACLE 404 | - 2 |
| 3 (EXIST.) RECEPTACLE 301 | 20 | 1 | 000 | 000 | | | 360 | 360 | 1 | 20 | (EXIST.) RECEPTACLE 305 | |
| 5 (EXIST.) RECEPTACLE 301 | 20 | 1 | 360 | 360 | 000 | 000 | | | 1 | 20 | (EXIST.) RECEPTACLE 306 | - 2 |
| 7 (EXIST.) RECEPTACLE 301 | 20 | 1 | | | 360 | 360 | 200 | 200 | 1 | 20 | (EXIST.) RECEPTACLE 306 | - : |
| 9 (EXIST.) RECEPTACLE 407 | 20 | 1 | 000 | 000 | | | 360 | 360 | 1 | 20 | (EXIST.) RECEPTACLE 306 | ; |
| 1 (EXIST.) RECEPTACLE 403 | 20 | 1 | 360 | 360 | 400 | 200 | | | 1 | 20 | (EXIST.) RECEPTACLE 306 | ; |
| 3 (EXIST.) FIRE PANEL | 20 | 1 | | | 180 | 360 | 240 | 260 | 1 | 20 | (EXIST.) RECEPTACLE 306 | - 3 |
| 5 (EXIST.) EX. FAN RM 305 7 (EXIST.) RECEPTACLE 502 | 20 | 1 | 360 | 360 | | | 240 | 360 | 1 | 20 | (EXIST.) RECEPTACLE 306 (EXIST.) RECEPTACLE 306 | ; |
| 9 (EXIST.) RT7 | 20 | 2 | 300 | 300 | 1040 | 360 | | | 1 | 20 | (EXIST.) RECEPTACLE 306 | |
| 1 | | | | | 1040 | 300 | 1040 | 180 | 1 | 20 | (EXIST.) RECEPTACLE ELEC RM | |
| 3 SPARE | 20 | 1 | 0 | 0 | | | 1040 | 100 | 1 | 20 | SPARE | |
| 5 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | |
| 7 SPARE | 20 | 1 | | | | 0 | 0 | 0 | 1 | 20 | SPARE | |
| 9 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | - ; |
| 1 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | |
| 3 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | |
| 5 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | |
| 7 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | |
| 9 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | |
| 1 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | (|
| 3 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | (|
| 5 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | (|
| 7 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | (|
| 9 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | |
| 1 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | - |
| 3 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | |
| 5 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | |
| 7 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | |
| 9 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | |
| 1 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | 8 |
| 3 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | 3 |
| ADDITIONAL FEED THRU LUGS LOAD | | L LOAD: CABLE): | | 6 VA VA | | 0 VA VA | | 0 VA A | | | | |
| | TOTA | L AMPS: | 4 | 3 A | 44 | 1 A | 42 | 2 A | | | | |
| OAD CLASSIFICATION | CONI | NECTED | LOAD | DEM | AND FA | CTOR | ESTIM | ATED D | EMAND | | PANEL TOTALS | |
| VAC - | | 776 VA | | | 100.00% |) | | 776 VA | | | | |
| OWER - | | 180 VA | | | 100.00% | ò | | 180 VA | ı | TO | TAL CONNECTED LOAD: 15516 VA | |
| pare | | 14560 VA | ١ | | 100.00% | . | | 14560 V | A | | L ESTIMATED DEMAND: 15516 VA | |
| | | | | | | | | | | | CONNECTED LOAD (A): 43 A | |
| | | | | | | | | | | TOTAL | ESTIMATED DEMAND 43 A | |
| OTES: | | | | | | | | | | | | |

| PANEL: R1D2 LOCATION: STORAGE 502 / FIRS ADDED ACCESSORIES: SPD | T FLOOR - CEI | NTER | FEE | | UNTING: AMPS: J LUGS | 225 A I | | | | | VOLTAGE: 208/120 FED FROM: S1D I.C. RATING: 6511 | V, 3PH, 4W | |
|---|---------------|---------|------|------|----------------------------|---------|-----|----------|-------|-------------|--|-------------|---|
| CIRCUIT DESCRIPTION | TRIP (A) | POLES | | A | | В | | , [| POLES | TRIP (A) | CIRCUIT | DESCRIPTION | |
| 1 RECEPTACLE - FITNESS 500 | 20 | 1 | 360 | 180 | • | | | , [| 1 | 20 | RECEPTACLE - STORA | | 2 |
| 3 RECEPTACLE - FITNESS 500 | 20 | 1 | | | 360 | 720 | | | 1 | 20 | RECEPTACLE - OFFICE | | |
| 5 RECEPTACLE - FITNESS 500 | 20 | 1 | | | | - | 360 | 0 | 1 | 20 | SPARE | | (|
| 7 RECEPTACLE - FITNESS 500 | 20 | 1 | 360 | 0 | | | | | 1 | 20 | SPARE | | 8 |
| 9 RECEPTACLE - FITNESS 500 | 20 | 1 | | | 360 | 0 | | | 1 | 20 | SPARE | | 1 |
| 11 RECEPTACLE - FITNESS 500 | 20 | 1 | | | | | 360 | 0 | 1 | 20 | SPARE | | 1 |
| 13 TECHNOLOGY - FITNESS 500 | 20 | 1 | 360 | 0 | | | | | 1 | 20 | SPARE | | 1 |
| 15 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 1 |
| 17 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 1 |
| 19 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 2 |
| 21 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 2 |
| 23 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 2 |
| 25 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 2 |
| 27 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 2 |
| 29 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 3 |
| 31 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 3 |
| 33 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 3 |
| 35 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 3 |
| 37 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 3 |
| 39 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 4 |
| 41 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 4 |
| 43 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 4 |
| 45 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 4 |
| 47 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 4 |
| 49 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 5 |
| 51 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 5 |
| 53 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 5 |
| 55 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 5 |
| 57 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 5 |
| 59 SPARE | 20 | 1 | | | | | 0 | 210 | 1 | 20 | HVAC - CH-502 | | 6 |
| | TOTA | L LOAD: | 126 | 0 VA | 144 | O VA | 930 | VA | | | | | |
| ADDITIONAL FEED THRU LUGS LO | • | - | | VA | | VA | 0 | | | | | | |
| | | L AMPS: | | I A | | 2 A | 8 | | | | | | |
| LOAD CLASSIFICATION | CON | NECTED | LOAD | | AND FAC | | | ATED DEI | WAND | | PANEL | TOTALS | |
| HVAC - | | 210 VA | | | 100.00% | | - | 210 VA | | T ^- | AL CONNECTED : C.C. | 0000) / 4 | |
| RECEPTACLE - | | 3060 VA | | | 100.00% | | | 3060 VA | | | AL CONNECTED LOAD: | | |
| TECHNOLOGY - | | 360 VA | | | 100.00% |) | | 360 VA | | | L ESTIMATED DEMAND: | | |
| | | | | | | | 1 | | | IUIAL | CONNECTED LOAD (A): | 1U A | |

| | PANEL: R1D3 LOCATION: TUNNEL ACCESS 519 / F ADDED ACCESSORIES: SPD | IRST FLO | OR | FEE | | UNTING AMPS J LUGS | : 225 A N | _ | | | | VOLTAGE: 208/120 FED FROM: S1D I.C. RATING: 4841 | V, 3PH, 4W | |
|----|--|-------------|----------------------------------|-----|-------------------|--------------------------|-------------------|-----------------|---------------------------------------|-------|-------------|--|-------------------|--|
| | CIRCUIT DESCRIPTION | TRIP (A) | POLES | | Α | | В | | · · · · · · · · · · · · · · · · · · · | POLES | TRIP (A) | CIRCUIT I | DESCRIPTION | |
| 1 | RECEPTACLE - RMS COR2, ENT 3 | 20 | 1 | 900 | 720 | | | | | 1 | 20 | RECEPTACLE - RECEP | TION 514 | |
| 3 | RECEPTACLE - RMS 510, 512 | 20 | 1 | | | 1080 | 180 | | | 1 | 20 | RECEPTACLE - RECEP | TION 514 - COPIER | |
| 5 | RECEPTACLE - WORK ROOM 516 | 20 | 1 | | | | | 540 | 540 | 1 | 20 | RECEPTACLE - EXAM 5 | 11 | |
| 7 | RECEPTACLE - WORK ROOM 516 | 20 | 1 | 360 | 540 | | | | | 1 | 20 | RECEPTACLE - EXAM 5 | 13 | |
| 9 | RECEPTACLE - WK RM 516 - MICROWAVE | 20 | 1 | | | 180 | 540 | | | 1 | 20 | RECEPTACLE - EXAM 5 | 15 | |
| 11 | RECEPTACLE - WK RM 516 - COFFEE | 20 | 1 | | | | | 180 | 540 | 1 | 20 | RECEPTACLE - OFFICE | 517 | |
| 13 | RECEPTACLE - WK RM 516 - REFRIGERATOR | 20 | 1 | 360 | 540 | | | | | 1 | 20 | RECEPTACLE - OFFICE | 521 | |
| 15 | RECEPTACLE - RMS 518S, 518T | 20 | 1 | | | 360 | 540 | | | 1 | 20 | RECEPTACLE - OFFICE | 520 | |
| 17 | RECEPTACLE - LAB 518 | 20 | 1 | | | | | 540 | 540 | 1 | 20 | RECEPTACLE - OFFICE | 522 | |
| 19 | RECEPTACLE - LAB 518 | 20 | 1 | 180 | 120 | | | | | 1 | 20 | HVAC - UH-519 / 523 | | |
| 21 | RECEPTACLE - LAB 518 | 20 | 1 | | | 360 | 270 | | | 1 | 20 | HVAC - P-AHU-523 | | |
| 23 | RECEPTACLE - RMS 519, 523 | 20 | 1 | | | | | 360 | 0 | 1 | 20 | SPARE | | |
| 25 | RECEPTACLE - UNIT D EXTERIOR | 20 | 1 | 540 | 0 | | | | | 1 | 20 | SPARE | | |
| 27 | RECEPTACLE - FITNESS 500 | 20 | 1 | | | 540 | 0 | | | 1 | 20 | SPARE | | |
| 29 | RECEPTACLE - FITNESS 500 | 20 | 1 | | | | | 540 | 0 | 1 | 20 | SPARE | | |
| 31 | RECEPTACLE - ROOF CONV. RECEPT. | 20 | 1 | 180 | 0 | | | | | 1 | 20 | SPARE | | |
| 33 | POWER - AHU-523 LIGHTS | 20 | 1 | | | 500 | 0 | | | 1 | 20 | SPARE | | |
| 35 | SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | |
| 37 | SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | |
| 39 | SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | |
| 41 | SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | |
| 43 | SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | |
| 45 | SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | |
| 47 | SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | |
| 49 | SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | |
| 51 | SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | |
| 53 | SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | |
| | SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | |
| | HVAC - EF-518S | 20 | 1 | | | 696 | 210 | | | 1 | 20 | HVAC - CH-ENT3 | | |
| 59 | HVAC - EF-523 | 20 | 1 | | | | | 1176 | 210 | 1 | 20 | HVAC - CH-COR2 | | |
| | ADDITIONAL FEED THRU LUGS LOAD | (IF APPL | AL LOAD: ICABLE): AL AMPS: | 0 | 0 VA VA 7 A | 0 | 6 VA VA 6 A | 5166 0 44 | Α | | | | | |
| LO | AD CLASSIFICATION | | INECTED | | | AND FA | | | | EMAND | | PANFL | TOTALS | |
| | 'AC - | | 2682 VA | | | 100.00% | | | 2682 V | | | | - | |
| | WER - | | 500 VA | | | 100.00% | | | 500 VA | | TO | TAL CONNECTED LOAD: | 15062 VA | |
| | CEPTACLE - | | 11880 VA | | | 92.09% | | | 10940 V | | | L ESTIMATED DEMAND: | | |
| | | | | | | | | | | | | CONNECTED LOAD (A): | | |
| | | | | | | | | | | | | ESTIMATED DEMAND | | |

| PANEL: R1D4 LOCATION: STORAGE AGS2 / FIRST FLO ADDED ACCESSORIES: SPD | OOR | | FEE | | UNTING: AMPS: LUGS | 225 A I | | | | | VOLTAGE: 208/120' FED FROM: S1D I.C. RATING: 6209 | V, 3PH, 4W | |
|---|-------------|-------------------------------|------|--------------------|--------------------------|--------------------|-----------------|---------|--|--|---|---|----|
| CIRCUIT DESCRIPTION | TRIP (A) | POLES | | A | | В | | | POLES | TRIP (A) | CIRCUIT I | DESCRIPTION | |
| 1 RECEPTACLE - RMS AG1, AG7 | 20 | 1 | 720 | 900 | | | | | 1 | 20 | RECEPTACLE - RMS AE | B1, AB7 | 2 |
| RECEPTACLE - STORAGE AGS1, AGS2 | 20 | 1 | | | 720 | 720 | | | 1 | 20 | RECEPTACLE - STORAG | GE AGS2, AGS4 | 4 |
| 5 RECEPTACLE - OFFICES AB3, AG3 | 20 | 1 | | | | | 360 | 500 | 1 | 20 | POWER - STORAGE AG | SS2 - PRE-ACTION SYS. | 6 |
| 7 (EXIST.) LIGHTS SPORTS ROW 1 EAST | 20 | 1 | 700 | 700 | | | | | 1 | 20 | (EXIST.) LIGHTS SPORT | TS CONTACT ROW | 8 |
| 9 (EXIST.) LIGHTS SPORTS ROW 2 EAST | 20 | 1 | | | 700 | 700 | | | 1 | 20 | (EXIST.) LIGHTS SPORT | TS ROW 3 WEST | 10 |
| 1 (EXIST.) LIGHTS SPORTS ROW 3 EAST | 20 | 1 | | | | | 700 | 700 | 1 | 20 | (EXIST.) LIGHTS SPORT | TS ROW 2 WEST | 1: |
| 3 (EXIST.) LIGHTS SPORTS ROW 1 WEST | 20 | 1 | 700 | 700 | | | | | 1 | 20 | (EXIST.) LIGHTS GYM C | ENTER ROW | 14 |
| 5 (EXIST.) LIGHTS GYM ROW 1 WEST | 20 | 1 | | | 700 | 700 | | | 1 | 20 | (EXIST.) LIGHTS GYM R | OW 2 EAST | 10 |
| 7 (EXIST.) LIGHTS GYM ROW 2 WEST | 20 | 1 | | | | | 700 | 700 | 1 | 20 | (EXIST.) LIGHTS GYM R | OW 1 EAST | 18 |
| 9 (EXIST.) RECEPTACLE GYM SOUTH WALL/WEST | 20 | 1 | 540 | 720 | | | | | 1 | 20 | (EXIST.) RECEPTACLE \ | WEST WALL | 20 |
| (EXIST.) RECEPTACLE GYM NORTH WALL | 20 | 1 | | | 540 | 360 | | | 1 | 20 | (EXIST.) RECEPTACLE I | NORTH WALL | 2: |
| 23 (EXIST.) RECEPTACLE EAST WALL | 20 | 1 | | | | | 540 | 2080 | 2 | 30 | (EXIST.) RECEPTACLE | CLOTHES DRYER | 24 |
| 25 (EXIST.) EM LIGHTS | 20 | 1 | 900 | 2080 | | | | | | | | | 20 |
| 27 (EXIST.) RECEPTACLE ALARM TX | 20 | 1 | | | 180 | 180 | | | 1 | 20 | (EXIST.) RECEPTACLE | WALL TOILET | 28 |
| 9 (EXIST.) RECEPTACLE SCOREBOARD | 20 | 1 | | | | | 180 | 1441 | 3 | 20 | (EXIST.) FANS XF-5, XF- | -6 | 30 |
| 1 (EXIST.) FAN - LAUNDRY | 20 | 1 | 240 | 1441 | | | | | | | | | 32 |
| 3 (EXIST.) RECEPTACLE NORTH / EAST WALL | 20 | 1 | | | 720 | 1441 | | ار ا | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | ~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~~ | | $\nearrow \nearrow $ | 3 |
| (EXIST.) RECEPTACLE STORAGE WEST | 20 | 1 | | | | | 720 | 720(| 3 | 20 | POWER - NORTH GYM - | - NORTH BLEACHERS | 30 |
| 7 (EXIST.) FAN XF4 | 20 | 1 | 540 | 720 | | | | > | | | | | 38 |
| 9 (EXIST.) FAN XF4 | 20 | 1 | | | 540 | 720 | | 7 | | | | | 4 |
| 1 (EXIST.) FAN TIME CLOCK | 20 | 1 | | | | | 180 | 0 1 | 11 | 201 | SPARE | | 3/ |
| 3 (EXIST.) CV6 WEST STAIRWELL GYM | 20 | 2 | 1040 | 0 | | | | | 1 | 20 | SPARE | | 4 |
| 15 | | | | | 1040 | 0 | | | 1 | 20 | SPARE | | 40 |
| 17 (EXIST.) CV7 WEST HALL | 20 | 2 | | | | | 1040 | 0 | 1 | 20 | SPARE | | 48 |
| 19 | | | 1040 | 0 | | | | | 1 | 20 | SPARE | | 50 |
| 51 (EXIST.) FANS XF-1, XF-2 | 20 | 3 | | | 1441 | 0 | | | 1 | 20 | SPARE | | 5 |
| 53 | | | | | | | 1441 | 0 | 1 | 20 | SPARE | | 54 |
| 55 | | | 1441 | 0 | | | | | 1 | 20 | SPARE | | 50 |
| 7 (EXIST.) RECEPTACLE WASHER | 30 | 3 | | | 2402 | 0 | | | 1 | 20 | SPARE | | 5 |
| 59 | | | | | | | 2402 | 0 | 1 | 20 | SPARE | | 6 |
| 61 | | | 2402 | 0 | | | | | 1 | 20 | SPARE | | 62 |
| SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 64 |
| SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 6 |
| S7 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 6 |
| SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 70 |
| 71 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 7: |
| 3 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 74 |
| 75 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 70 |
| 77 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 78 |
| 79 SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 80 |
| 31 SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 82 |
| 33 SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 84 |
| ADDITIONAL FEED THRU LUGS LOAD (IF | APPLI | L LOAD: CABLE): L AMPS: | 0 ' | 24 VA VA 7 A | 0 ' |)4 VA VA 5 A | 1440 0 12 | | | | | | |
| OAD CLASSIFICATION | CON | NECTED | LOAD | DEM | AND FA | CTOR | ESTIM | ATED DE | EMAND | | PANEL | TOTALS | |
| POWER - | | 2660 VA | | | 100.00% |) | | 2660 VA | | | | | |
| RECEPTACLE - | | 3420 VA | | | 100.00% |) | | 3420 VA | | TO | TAL CONNECTED LOAD: | 45732 VA | |
| Spare | | 39652 VA | ١ | | 100.00% |) | ; | 39652 V | 4 | TOTA | L ESTIMATED DEMAND: | 45732 VA | |
| | | | | | | | | | | TOTAL | CONNECTED LOAD (A): | 127 A | |
| | | | | | | | | | | TOTAL | ESTIMATED DEMAND | 407.4 | |

| ADDED | PANEL: R1E1 LOCATION: STORAGE 407S / FIRS | ST FLOOR | | FEE | | UNTING: AMPS: LUGS | 225 A I | | | | | VOLTAGE: 208/120 FED FROM: S1E I.C. RATING: 4928 | V, 3PH, 4W | |
|--------------|---|-------------|--------------------|------|-------------|--------------------------|-----------------|------------------|-------------------|-----------------------|-------------|--|---------------|----|
| | CIRCUIT DESCRIPTION | TRIP (A) | POLES | A | | В | | С | | POLES | TRIP (A) | CIRCUIT I | DESCRIPTION | |
| 1 RECEP | TACLE - RMS COR3, ENT4 | 20 | 1 | 540 | 180 | | | | | 1 | 20 | RECEPTACLE - STORA | GE 407S | 2 |
| 3 (EXIST |) RECEPTACLE SUMP PUMPS | 20 | 1 | | | 1200 | 500 | | | 1 | 20 | (EXIST.) RECEPTACLE | CLOCKS | 4 |
| 5 (EXIST. |) DWH CIRC PUMP | 20 | 1 | | | | | 240 | 0 | 1 | 20 | SPARE | | 6 |
| 7 SPARE | • | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 8 |
| 9 SPARE | | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 10 |
| 11 SPARE | | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 12 |
| 13 SPARE | | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 14 |
| 15 SPARE | | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 16 |
| 17 SPARE | | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 18 |
| 19 SPARE | | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 20 |
| 21 SPARE | | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 22 |
| 23 SPARE | | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 24 |
| 25 SPARE | | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | | 26 |
| 27 SPARE | | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | | 28 |
| 9 SPARE | | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | | 30 |
| 31 SPARE | | 20 | 1 | 0 | 0 | | | | 0 | 1 | 20 | SPARE | | 32 |
| 3 SPARE | | 20 | 1 | 0 | | 0 | 0 | | | 1 | 20 | SPARE | | 34 |
| S SPARE | | 20 | 1 | | | 0 | | 0 | 0 | 1 | 20 | SPARE | | 36 |
| 37 SPARE | | 20 | 1 | 0 | 0 | | | 0 | U | 1 | 20 | SPARE | | 38 |
| 9 SPARE | | 20 | 1 | 0 | | 0 | 0 | | | 1 | 20 | SPARE | | 40 |
| HVAC - | | 20 | 1 | | | - | | 210 | 0 | 1 | 20 | SPARE | | 42 |
| | ACCU-401 | 25 | 3 | 1992 | 0 | | | 210 | U | 1 | 20 | SPARE | | 44 |
| 5 | ACCU-401 | | | 1992 | | 1992 | 480 | | | 1 | | HVAC - CH-COR3A-B | | 46 |
| 7 | | | | | | 1992 | 400 | 1992 | 1992 | 3 | | HVAC - ACCU-402 | | 48 |
| | ACCU-403 | 25 | | 1002 | 1992 | | | 1992 | 1992 | | 25 | | | |
| | ACCU-403 | | 3 | 1992 | 1992 | 1000 | 4000 | | | | | | | 50 |
| 51 | | | | | | 1992 | 1992 | 4000 | 4500 | | | A COLL 405 | | 52 |
| 53 | A COLL 407 | | | 1000 | 4500 | | | 1992 | 1560 | 2 | 25 | HVAC - ACCU-405 | | 54 |
| | ACCU-407 | 25 | 3 | 1992 | 1560 | 1000 | 540 | | | | | PEOEDTAGLE DOOF | DON'T DECEDE | 56 |
| 57 | | | | | | 1992 | 540 | 1000 | 000 | 1 | 20 | RECEPTACLE - ROOF C | | 58 |
| 9 | ADDITIONAL FEED THRU LUGS LO | | L LOAD: CABLE): | | 17 VA VA | | 37 VA VA | | 360 37 VA A | 1 | 20 | RECEPTACLE - ROOF C | ONV. NECEF 1. | 60 |
| | | | _ AMPS: | | 5 A | | 9 A | | 6 A | | | | | |
| | SSIFICATION | | | | | DEMAND FACTOR | | ESTIMATED DEMAND | | | PANEL | TOTALS | | |
| IVAC - | | | 27710 VA | | 100.00% | | | 27710 VA | | | | | | |
| RECEPTACLE - | | | 1620 VA | | | 100.00% | | 1620 VA | | TOTAL CONNECTED LOAD: | | | | |
| pare | | | 1940 VA | | | 100.00% | | | 1940 VA | | | L ESTIMATED DEMAND: | | |
| | | | | | | | | | | | | CONNECTED LOAD (A): | | |
| | | | | | | | | | | | TOTAL | ESTIMATED DEMAND | 87 A | |

| CIRCUIT DESCRIPTION | , | PANEL: R1E2 LOCATION: STORAGE 407S / FIRST ADDED ACCESSORIES: SPD | FLOOR | | FEEI | | UNTING: AMPS: LUGS | 225 A N | | | | | VOLTAGE: 208/120V, 3PH, 4W FED FROM: S1E I.C. RATING: 4891 | | | |
|---|----|---|--------------|---------|------|----------|--------------------------|---------|------|------|-------|---|--|----|--|--|
| CANTE 1.1 1.2 1. | | | | POLES | A | \ | В | | С | | POLES | | CIRCUIT DESCRIPTION | | | |
| | | | 20 | 2 | 624 | 40 | | | | | 1 | 20 | LIGHTING - STADIUM FLAGPOLE LIGHTS | 2 | | |
| 7 (EXIST) NIGHT LIGHTS 20 | | | | | | | 624 | 720 | | | 1 | 20 | , | 4 | | |
| (EXIST) JUSHTS DISPLAY CASE | | ` ' | 20 | 1 | | | | | 500 | 600 | 1 | | , | 6 | | |
| 1 | | ` ' | 20 | 1 | 600 | 360 | | | | | 1 | | , | | | |
| 3 SPARE | | · · · · · · · · · · · · · · · · · · · | 20 | 1 | | | 1500 | 720 | | | | | , | _ | | |
| 5 SPARE | | , | | 1 | | | | | 596 | 596 | | | , | | | |
| 7 SPARE | | | | 1 | 0 | 600 | | | | | · · | | | | | |
| 9 SPARE | | | | 1 | | | 0 | 0 | | | 1 | | | _ | | |
| 18 SPARE | | | | | | | | | 0 | 0 | | | | | | |
| 3 SPARE | | | 20 | 1 | 0 | 0 | | | | | 1 | 20 | | _ | | |
| S SARE | | | 20 | 1 | | | 0 | 0 | | | 1 | | | | | |
| SPARE | | | 20 | 1 | | | | | 0 | 0 | 1 | 20 | | | | |
| 9 SPARE | 25 | SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | | 26 | | |
| SPARE | | | 20 | 1 | | | 0 | 0 | | | 1 | 20 | | 28 | | |
| 3 SPARE | 9 | SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | 30 | | |
| S SPARE | 31 | SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | 32 | | |
| SPARE | 33 | SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | 34 | | |
| 9 SPARE 20 1 0 0 0 1 20 SPARE 40 15 SPARE 20 1 0 0 0 1 20 SPARE 40 16 SPARE 20 1 0 0 0 1 20 SPARE 40 17 SPARE 20 1 0 0 0 1 20 SPARE 46 18 SPARE 20 1 0 0 0 1 20 SPARE 46 19 SPARE 20 1 0 0 0 1 20 SPARE 46 19 SPARE 20 1 0 0 0 1 20 SPARE 50 19 SPARE 20 1 0 0 0 1 20 SPARE 50 19 SPARE 20 1 0 0 0 1 20 SPARE 50 19 SPARE 20 1 0 0 0 1 20 SPARE 50 19 SPARE 20 1 0 0 0 1 20 SPARE 50 19 SPARE 20 1 0 0 0 1 20 SPARE 50 19 SPARE 20 1 0 0 0 SPARE 50 19 SPARE 20 1 1 0 0 0 SPARE 52 19 SPARE 20 1 1 0 0 0 SPARE 52 19 SPARE 20 1 1 0 0 0 SPARE 52 19 SPARE 20 1 1 0 SPARE 54 10 SPARE 54 10 SPARE 55 10 SPARE 56 1 | 35 | SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | 36 | | |
| SPARE | 37 | SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | 38 | | |
| 3 | 39 | SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | 40 | | |
| 1 | ŀ1 | SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | 42 | | |
| 1 | ŀ3 | SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | 44 | | |
| 9 SPARE | ŀ5 | SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | 46 | | |
| SPARE 20 1 | ŀ7 | SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | 48 | | |
| SAPARE 20 1 1080 0 0 1 20 SPARE 54 55 56 56 57 57 57 57 58 58 58 58 | 19 | SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | 50 | | |
| 1 | 51 | SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | 52 | | |
| ST HVAC - VUV-402 20 | 53 | SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | 54 | | |
| NAC - VUV-405 20 1 | 55 | HVAC - VUV-401 | 20 | 1 | 1080 | 0 | | | | | 1 | 20 | SPARE | 56 | | |
| TOTAL LOAD: 3264 VA 5724 VA 3912 VA 3912 VA 0 A | 57 | HVAC - VUV-402 | 20 | 1 | | | 1080 | 1080 | | | 1 | 20 | HVAC - VUV-403 | 58 | | |
| ADDITIONAL FEED THRU LUGS LOAD (IF APPLICABLE): 0 VA 0 VA 0 VA 0 A TOTAL AMPS: 27 A 49 A 33 A OAD CLASSIFICATION CONNECTED LOAD DEMAND FACTOR ESTIMATED DEMAND PANEL TOTALS IVAC - 100.00% 4860 VA 4860 VA 4860 VA TOTAL CONNECTED LOAD: 12900 VA IGHTING - 1249 VA 100.00% 1249 VA TOTAL ESTIMATED DEMAND: 12900 VA Spare 6792 VA 100.00% 6792 VA TOTAL ESTIMATED DEMAND: 12900 VA | 9 | HVAC - VUV-405 | 20 | 1 | | | | | 540 | 1080 | 1 | 20 | HVAC - VUV-407 | 60 | | |
| OAD CLASSIFICATION CONNECTED LOAD DEMAND FACTOR ESTIMATED DEMAND PANEL TOTALS VAC - 4860 VA 100.00% 4860 VA TOTAL CONNECTED LOAD: 12900 VA IGHTING - 6792 VA 100.00% 6792 VA TOTAL ESTIMATED DEMAND: 12900 VA | | ADDITIONAL FEED THRU LUGS LOA | D (IF APPLIC | CABLE): | ٥ ٧ | /A | 0 \ | VΑ | 0 . | Ą | | | | | | |
| IVAC - 4860 VA 100.00% 4860 VA IGHTING - 1249 VA 100.00% 1249 VA TOTAL CONNECTED LOAD: 12900 VA Spare 6792 VA 100.00% 6792 VA TOTAL ESTIMATED DEMAND: 12900 VA | O/ | AD CLASSIFICATION | | | | | | | | | | | PANEL TOTALS | | | |
| IGHTING - 1249 VA 100.00% 1249 VA TOTAL CONNECTED LOAD: 12900 VA Spare 6792 VA 100.00% 6792 VA TOTAL ESTIMATED DEMAND: 12900 VA | | | | | | | | | | | | TARLETOTALS | | | | |
| pare 6792 VA 100.00% 6792 VA TOTAL ESTIMATED DEMAND: 12900 VA | | | | | | | | | | | | TOTAL CONNECTED LOAD: 12900 \/A | | | | |
| | | | | | | | | | | | | | | | | |
| | | | | 0192 VA | | 100.0070 | | | 2.32 | | | TOTAL CONNECTED LOAD (A): 36 A TOTAL ESTIMATED DEMAND 36 A | | | | |

DATE

PROJECT TITLE
PACKAGE 2 - HIGH SCHOOL
RENOVATION & ADDITIONS

OWNER CADILLAC AREA PUBLIC SCHOOLS

ILES