ADDENDUM NO.2

February 29, 2024

Richland-Bean Blossom C.S.C.
Including:
Edgewood High School - Additions and Renovations
Early Childhood Center
Intermediate School Renovations
Primary School Renovations

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 January 31, 2024, by Lancer Associates Architecture. 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 1-1 through ADD 1-5, Specification Section 00 10 00 Instructions to Bidders, Specification Section 00 31 00 Revised Bid Form, Specification Section 00 50 00 Schedule of Insurance Requirements, Specification Section 01 23 00 Bid Alternates, and attached Lancer Associates Architecture Addendum 2 and Specifications: Spec Sections: 02 41 19, 11 66 43, 23 37 13.13, 23 37 16, 26 05 33.23, 26 22 13, 27 05 53, 27 15 00.23, 27 4116, 27 51 16, 27 51 23, 32 1816.13 and Addendum 2 Drawings:

Early Childhood Center: C601, C602, C801, C802, S100A, A101A, A101B, A503, A601, A761, ES102, P904, P905, PF1A, PF1B, PP1A, PP1B,T301,T500

Edgewood Primary School: AD101A, AD101B, AD101C, AD101D, A101B, A721B, A760,A767

Edgewood High School: C101, C301, C601, C602, C603, C801, C802, AD101D, AD101F2,A101B,A101D,A101E1,A101F1,A111,A141G,A201,A311,A500,A502, P501, P901, MD1D1, MH1D1, MHRG, PP1D1, PP1G, PR1G, M601, E601, E602, EP1G, T201C1, T201D1, T201D2, T302, T305, T401, T402, T500

MEP Addendum 2 Narrative

Technology Addendum 2 Narrative

A. SPECIFICATION SECTION

1. **Section 00 31 00 – Bid Form.** Replace this Specifications Section in its entirety with the attached.

2. Section 00 50 00 – Standard form of Agreement AIA 132.

   a. Add section 00 50 00d Schedule of Insurance requirements attached. Note that the Excess/Umbrella Insurance limit is $8,000,000.

3. **Section 01 12 00 – Multiple Contract Summary: 3.03 / A. Bid Category #1 – General Trades**

   Add the following Specifications section:

   02 41 19 Selective Demolition

4. **Section 01 12 00 – Multiple Contract Summary: 3.03 / A. Bid Category #1 – General Trades**

   a. Change all references of "At New Gymnasium Footprint" to "At Activity Center Footprint".

5. **Section 01 12 00 – Multiple Contract Summary: 3.03 / I. Bid Category #1 – General Trades**

   Add the following Clarification:

   10. Note requirement for providing internal curing admixture at all new SOG, see 03 30 00 / 2.5 / 5.
   11. Provide in base bid Moisture Barrier similar to 09 67 40 / 2.1 / G and as acceptable to flooring manufacturer at all Epoxy and Resinous floors.
   12. The Owner shall be responsible for demolition of any flooring requiring abatement. These rooms are designated with red stars on page 15 of Specification Section 01 32 00 and are limited to the High School. The Bid Category #1 contractor shall coordinate with the Owner for scheduling. All other flooring demolition is by Bid Category #1.
   13. At High School room D102 the contractor shall assume that the existing CMU walls extend through the floor to a footing below. Demo CMU to one course below the top of floor slab and infill with concrete.
   14. The removal of existing floor adhesive is by Bid Category #1, removal or encapsulation of any residue required by the flooring manufacturer is by Bid Category #9.

   10 Section 01 12 00 – Multiple Contract Summary: 3.03 / B. Bid Category #2 – Earthwork, Paving and Site Utilities.

   Add the following Specifications Sections:

   32 92 00 Turf and Grasses

11 Section 01 12 00 – Multiple Contract Summary: 3.03 / B. Bid Category #2 – Earthwork, Paving and Site Utilities.

Add the following Clarification:

2. See Specification Section 32 92 00 / 1.4 / C. and 2.3 / A. At ECC Refer to Geotech Report for depth of existing topsoil. NOTE: Stockpiled soil must meet 2.3 / A and further be free of any corn cobs, stalks or other crop materials and further meet all specified criteria to qualify as topsoil (planting soil). For the purpose of bidding the bidder may assume an existing pH of 7.8 and OM of 4%.
3. See Section 01 23 00 – Bid Alternates. Pricing for both alternate 8A and 8B is required.

11. Section 01 12 00 – Multiple Contract Summary: 3.03 / C. Bid Category #3 – Masonry.

Add the following Clarification:

12. See High School Drawing AD101D, Kitchen room D102. The Bid Category #3 Contractor shall assume existing masonry walls are coursed in where they "T" into walls to remain. Include in base bid toothing out and removing CMU and repairing (10) locations.

12. Section 01 12 00 – Multiple Contract Summary: 3.03 / H. Bid Category #8 - Metal Studs, Drywall and Ceilings

Add the following Specifications Sections:

07 2 00 Joint Sealants

13. Section 01 12 00 – Multiple Contract Summary: 3.03 / H. Bid Category #8 - Metal Studs, Drywall and Ceilings

Revise the following Clarification:

5. Blocking within new or existing metal stud wall systems including but not to limited to door, window and louver jambs, support for casework, writing/tackboards, toilet room accessories or other wall mounted items is by this bid category #8.

14. Section 01 12 00 – Multiple Contract Summary: 3.03 / I. Bid Category #9 – Flooring

Add the following Specifications Sections:

09 30 00 Tiling

15. Section 01 12 00 – Multiple Contract Summary: 3.03 / I. Bid Category #9 – Flooring

Add the following Clarification:

2. Include in the base bid price 50 -man hours at the highest skilled labor rate, including all benefits and expenses, for work to be performed at the direction of the Construction Manager.

3. Provide in base bid Moisture Barrier similar to 09 65 00 / 2.3 / A and as acceptable to flooring manufacturer at all Luxury Vinyl and Resilient Tile floors.
4. The removal of existing floor adhesive is by Bid Category #1, removal or encapsulation of any residue required by the flooring manufacturer is by Bid Category #9.

16. Section 01 12 00 – Multiple Contract Summary: 3.03 / J. Bid Category #10 – Painting and Wallcoverings

a. Remove the following Specifications Section:

09 30 00 Tiling

17. Section 01 12 00 – Multiple Contract Summary: 3.03 / L. Bid Category #12 – Plumbing and HVAC

Add the following Specifications Sections:

23 37 16 Fabric Air Distribution Devices.

18. Section 01 12 00 – Multiple Contract Summary: 3.03 / L. Bid Category #12 – Plumbing and HVAC

Add the following Clarification:

2. Items specified or identified on the P and M series drawings are included in this Bid Category #12 scope of work whether they are described in the Specifications Manual or not. In example: the Grease Interceptor described in the PLUMBING EQUIPMENT SCHEDULE on Drawing Sheet P601 is included in the Bid Category #12 scope of work.
3. See Food Service Drawings including but not limited to FS1.0 for additional work included in this Bid Category #13.

19. Section 01 12 00 – Multiple Contract Summary: 3.03 / M. Bid Category #13 – Electrical and Technology

Add the following Specifications Sections:

11 66 43 Electronic Scoreboards.
26 05 33.23 Surface Raceways for Electrical Systems
26 22 13 Low Voltage Distribution Transformers.

20. Section 01 12 00 – Multiple Contract Summary: 3.03 / M. Bid Category #13 – Electrical and Technology

Add the following Clarification:

2. Items specified or identified on the E and T series drawings are included in this Bid Category #13 scope of work whether they are described in the Specifications Manual or not. In example: the fixture L1 described in the INTERIOR/EXTERIOR/EMERGENCY & EXIT LIGHT FIXTURES SCHEDULE on Drawing Sheet E601 is included in the Bid Category #13 scope of work.
3. See Food Service Drawings including but not limited to FS1.0 for additional work included in this Bid Category #13.

21. Section 01 28 00 – Schedules of Value:

a. Add 1.02 / B. / 1. The Contractors will divide the Schedule of Values to show allocation of the Work by building.

22. Section 01 32 00 – Schedules and Reports:

a. Site logistics plan, page 24: Bid Category #2 provide temporary Parking Striping where new asphalt has been installed. Assure pavement from structure 209 to 210 is infilled to support vehicular traffic.

b. Site logistics plan, page 26: Bid Category #1 assure that storm line between structure 209 and 210 and is undamaged during construction of the Activity Center.

23. Section 09 64 66 – Wood Athletic-Flooring Assemblies:

a. Add 1.1 / A. / 2. Including Perimeter Base and other materials described in 2.2 Materials.

24. Section 01 23 00 – Alternates. Replace this Specifications Section in its entirety with the attached.

SECTION 00 10 00 - INSTRUCTIONS TO BIDDERS

To be considered, bids must be submitted in accordance with these Instructions to Bidders.

PART 1 - GENERAL

General Information Notes

A. Definitions set forth in the amended General Conditions of the Contract for Construction, In Section 00 70 00, are applicable to these Instructions to Bidders.

B. Communications for the administration of the Contract shall be as set forth in the amended General Conditions and, in general, shall be through the Construction Manager.

1.01 DOCUMENTS

A. Prime Bidders shall obtain complete sets of Bidding Documents at www.skillmanplanroom.com.

B. Non-Prime Bidders may select individual sheets. Non-Prime Bidders shall identify sheets requested. The Construction Manager/Architect shall not be responsible for choosing correct sheets for Non-Prime Bidders.

C. Failure to Execute Contract Documents: In the event the Bidder withdraws the bid or fails to execute a satisfactory Contract and furnish a satisfactory Contract Performance Bond and Payment Bond with a surety company in accordance with Article 1.16 of these Instructions to Bidders within 10 days after a contract has been awarded to the Bidder may forfeit their bid security required herein.

D. Test Boring Data concerning subsurface materials or conditions which are based upon test pits or test borings has been obtained by the Owner for the Architect's use in designing Project. A copy of this report is included in this Project Manual as Section 00 20 00. Its accuracy or completeness is not guaranteed by the Owner, Architect or Construction Manager and in no event is it to be considered as part of the Contract Drawings and Specifications. The Contractor must assume all responsibility in excavating for this Project and shall not rely on subsurface information obtained from Architect, Construction Manager, or Owner. Bidders shall make their own investigation of existing subsurface conditions; neither Owner, Construction Manager, nor Architect will be responsible in any way for additional compensation for excavation work performed under the Contract due to Contractor's assumptions based on Test Boring Data prepared solely for Architect's use.

1.02 BIDDERS' EXAMINATION AND REPRESENTATION

A. Before submitting a bid, each Bidder should carefully examine the Documents and the construction site and fully inform himself with the limitations and conditions related to the Work included in his bid and shall include in his Bid a sum to cover the cost of such items. Contractors will not be given extra payments for conditions, which could have been determined by examining the site and the documents.

B. It is the purpose and intent of the Contract Documents that a fully complete job be accomplished. It shall be each Bidder's responsibility to include costs necessary to provide labor and materials for that portion of the Work bid upon, including incidentals, whether or not specifically required in the Specifications and Drawings.

C. Each Bidder by making his bid represents that he has read and understands the bidding documents.

D. Each Bidder by making his Bid represents that he has visited the site and familiarized himself with the local conditions under which the Work shall be performed.

E. Each Bidder shall be responsible for being completely familiar with the work of other bid package(s), which require interface of Work with the bid package(s) on which the Bidder is bidding.

F. No allowance shall be subsequently made in behalf of a Bidder by reason of an error or oversight on its part resulting from its failure to so examine the Construction Documents for the other trades.

G. Each Bidder understands that past acceptance of products does not assure acceptance on this Project. Products not specifically specified require requests for approval prior to bid due date.

H. This is a construction management project. **There is no General Contractor.** All Contractors on this Project are considered Prime Contractors. The Owner will award separate Contracts for all Bid Categories involved in the Project. The Project will be managed and coordinated by the Construction Manager, as a representative of the Owner.

I. Safety Program. Each Contractor and subcontractor is responsible for the safety and security of employees and Work areas under their control and will, therefore, provide a written safety and HAZCOM program to The Skillman Corporation for jobsite file.

1.03 QUALIFICATIONS OF BIDDERS

A. The Owner shall have the right to take such other steps deemed necessary to determine the ability of the Bidder to perform the Work, and the Bidder shall furnish the Owner such data for this purpose as requested.

B. Each Bid and each exact copy thereof must be accompanied by a financial statement on the format of Indiana Form No. 96 (revised 2013), as prescribed by the State Board of Accounts of Indiana. This shall clearly show the Bidder's financial resources, his construction experience, his organization, and equipment available for Work contemplated.

1.04 CLARIFICATION OF BIDDERS' QUESTIONS

A. Questions for this Project shall be directed to the Construction Manager and the Architect.

B. Each Bidder is responsible for calling to the attention of the Construction Manager and the Architect ambiguities, inconsistencies, discrepancies, errors, or omissions, which occur in the Contract Documents for his part of the Work. Failing to request clarification, the Bidder will be expected to overcome such conditions without additions to his bid prices.

C. Prospective Bidders in doubt as to the true meaning of a part of the Drawings, Specifications, or other Contract Documents shall submit to the Construction Manager and the Architect, not less than ten (10) days before the date of the bid, a written request for interpretation and clarification.

D. Bidders are instructed to request interpretations and the issuing of Addenda if the Contract Documents call for materials, equipment, or methods which adversely affect the cost or quality of the Project or are unavailable.

1.05 APPROVAL BEFORE BIDDING

A. If a contractor preparing bids for submission on the Work is in doubt as to the acceptability of a manufacturer's material or equipment, under the requirements as set forth in the Specifications, he shall require that representatives of the proposed manufacturer or supplier contact the Architect and request a ruling on the acceptability of the material or equipment in question. The contact should be made within the time herein required before the date scheduled for the closing of bids, so that an Addendum can be issued to clarify the situation.

B. It is not possible to set the time allowance for the resolution of every problem; however, the time allowed shall not be less than 10 days before bid date. Each party requesting a ruling under this Article shall be responsible for the proper evaluation of the time involved and shall submit his request in ample time, as determined by the Architect, to process it.

C. Prior to receipt of bids, the Architect will consider proposals for substitution of materials, equipment, and methods only when such proposals are submitted in writing within the time period stated before the date and time set for receipt of bids, and are accompanied by full and complete technical data and other information required by the Architect to evaluate the proposed substitution.

D. Requests for product approval shall be submitted on sample form following this Section and sent to**:**

Misha Belyayev
Lancer Associates Architecture
mbelyayev@lancerarchitects.com
145 N East Street
Indianapolis, In 46204

1.06 ADDENDA

A. Additional information required by the Bidders, revisions in the Work, changes or additions, discrepancies in the Bidding Documents, or clarifications will be in the form of addenda written by the Architect and issued by the Construction Manager to Prime Bidders of Record as of the date of such addenda.

B. The Owner, Architect and Construction Manager reserve the right to issue addenda changing, altering, or supplementing the Contract Documents prior to the time set for receiving bids.

C. All addenda will be posted on www.skillmanplanroom.com and each Bidder of Record Shall be notified. Prospective Bidders requesting a copy shall be directed www.skillmanplanroom.com. Bidders who will submit a bid to the Owner with the intent of entering into a Contract with the Owner and are registered plan holders on www.skillmanplanroom are considered “Bidders of Record”. Copies of addenda will be available for inspection wherever Contract Documents are on file for that purpose.

D. Bidders are responsible for acquiring each issued addendum in time to incorporate them into their proposal.

E. In the event delivery of addenda to Bidders is delayed, for reasons not the fault of the Bidders, the Owner may be requested to allow a reasonable extension of time for the opening of bids, to permit inclusion of such addenda.

F. Each Bidder shall enumerate in his Bid each addendum he has received.

G. If a Bidder fails to indicate receipt of each addendum through the last addendum, issued by the Architect and Construction Manager, on its Bid Proposal Form, the bid of such Bidder shall:

1. Clearly indicate that the Bidder received the addendum, such as where the addendum added another item to be bid upon and the Bidder submitted a bid on that item; or
2. Indicate the addendum involves only a matter of form or is one which has either no effect or has merely a trivial or negligible effect, as determined by the Construction Manager on price, quantity, quality, or delivery of the item bid upon.

Failure to include either item above will be reason to deem the bid non-responsive.

1.07 ALTERNATES

A. Requested alternates are listed on the Bid Proposal Form and are described in detail under Section 01 23 00 - Alternates, Division 1 - General Requirements. They must be bid with base bid. NOTE: The terms "alternate" and "alternative" are used interchangeably to have the same meaning in this Project Manual and on the Drawings.

B. The cost of each alternate shall include omissions, additions, and adjustments of trades as may be necessary because of each change, substitution, addition, or omission.

C. Each Bidder shall be responsible for bidding alternates which affect the Work of the base bid he is bidding, regardless of whether listed or not listed on the Supplemental Bid Proposal Form. If an applicable alternate(s) is not listed on the Supplemental Bid Proposal Form, the Bidder shall submit on his letterhead the cost of said alternate(s). No additional costs will be allowed after signing of Contract for failure to bid applicable alternates.

D. The Owner retains the right to include or exclude work required by Alternates, for the sums established exercisable within one hundred twenty (120) days from the date of the Contract.

1.08 UNIT PRICES – NOT USED

1.09 ARCHITECT'S AND CONSTRUCTION MANAGER'S COOPERATION DURING BIDDING PERIOD

A. Each Bidder is encouraged to contact the Architect and Construction Manager in the event that problems occur, or questions arise in analyzing the Drawings and Specifications, where additional clarification or information would be helpful in the preparation of a proper bid.

B. The Architect and Construction Manager will cooperate fully in connection with requests, and will provide information required, providing the Architect's and Construction Manager's ethical responsibilities are not encroached upon. This will include, upon request, providing information in order to clarify basic intentions of

the Specifications; and other assistance as may be helpful in the preparation of a proper, competitive bid.

C. It is the general policy of the Architect and Construction Manager to be as helpful as possible to Bidders, insofar as is consistent with fair and open competition.

1.10 BIDDING PROCEDURES

A. Each bid shall be submitted on the Bid Form and sealed in an envelope clearly marked as containing a bid, indicating the Project Name, the Bidder's name, the bid package (scope), the date and time of the bid opening, Owner's address, and address to where bid is delivered on the envelope.

B. Every Bidder on a Public Works Project shall comply with the Indiana Public Works Law in accordance with Indiana Code 5-16-13 to include the provisions listed herein:

1. Tier 1 –General/Prime Contractors to self-perform 15% of their total Contract.
2. Qualification thru the Department of Administration or INDOT requirement in accordance with IC 4-13.6-4.
    a. **Bids shall not be considered unless (1) the Prime Bidder and (2) all lower tiered subcontractors whose subcontract value is estimated to be $300,000 or more are qualified at the time of the bid in accordance with IC 4 – 13.6 – 4.**
3. **Include Written Drug Testing Plan** that covers all employees of the bidder who will perform work on the public work project and meets or exceeds the requirements set in IC 4-13-18-5 or IC 4-13-18-6 **with Bid.**
4. Minimum Insurance Requirements $1M/occurrence $2M/aggregate. However, check your bidding requirements as the Owners may have higher limit requirements.
5. Mandatory enrollment in E-Verify by all contractors down to the 4th Tier Sub Contracts and must provide the case verification number of all employees working on the project.
6. Prohibits contractors down to the 4th Tier Sub Contract from paying employees in cash.
7. Requirement to retain payroll records for 3 years
8. All contractors down to the 4th Tier Sub Contract must comply with Fair Labor Act, Indiana's Workers Compensation and Unemployment Compensation Insurance.
9. Mandatory Training Requirements based upon number of employees.
10. Failure to comply may result in debarment from public works projects for up to 4 years.

C. Any substantial change, alteration or addition in the wording of the Bid Form may cause a bid to be rejected as not responsive for award of a Contract.

D. Unless the Bidder withdraws the bid as provided in Article 1.12 hereof, the Bidder will be required to comply with all requirements of the Contract Documents, regardless of whether the Bidder had actual knowledge of requirements and regardless of any statement or omission made by the Bidder which might indicate a contrary intention.

E. Bids shall be executed upon the Bid Proposal Form provided, and relevant blank spaces in the form shall be written in ink and not in pencil. The signature shall be in longhand and the completed form shall be without interlineation, alteration, or erasure. Each Bidder is required to bid every item called for, including alternate and unit costs.

F. The Bidder shall show all bid amounts in both words and figures. In case of a conflict between the words and figures, the amount shown in words shall govern, where such words are not ambiguous. When the Bidder's intention and the meaning of the words are clear, omissions or misspelling of words will not render the words ambiguous.

G. Any alteration or erasure of items inserted on the Bid Form shall be initialed by the Bidder.

H. A bid is non-responsive if it has not been deposited at the designated location prior to the time and date for receipt of bids indicated in the Notice To Bidders, or prior to extension thereof issued to the Bidders.

I. Telecommunicated bids will not be considered.

J. Bids which are not signed by the individuals making them shall have attached thereto a Power of Attorney evidencing authority to sign the bid in the name of the person for whom it is signed. Bids, which are signed for a partnership, shall be signed by the partners, or by an attorney-in-fact. If signed by an attorney-in-fact, there shall be attached to the bid a Power of Attorney evidencing authority to sign the bid, executed by the partners.

K. Each Bidder shall enumerate in his bid the addenda he has incorporated into his proposal.

L. It is the Bidder's responsibility to include in his bid costs necessary for a completed and finished project for items of Work bid upon.

M. **Submit bids in duplicate** with Bid Security and other requested supplemental material attached; properly and completely executed.

N. When an alternate is listed on the bid Form, the Bidder shall fill in the applicable blank with an increased or decreased bid amount. The Owner reserves the right to accept or reject any or all bids on alternates, in whole or in part, and in any order.

O. If no change in the bid amount is required, indicate "No Change".

P. A blank entry or an entry of "No Bid", "N/A", or similar entry on any alternate affecting the Contractor's scope of work, will cause the bid to be rejected as non-responsive only if that alternate is selected.

Q. If an alternate is not selected, an entry as listed in paragraph hereinbefore on that alternate will not, by itself, render a bid non-responsive.

R. In a combined bid, a blank entry or an entry of "No Bid", "N/A", or similar entry on an alternate will cause the bid to be rejected as non-responsive only if that alternate applies to the combined bid and that alternate is selected.

S. Proposals for Work shall not include the Indiana Sales Tax for materials to be incorporated into this Project. Owner will provide necessary tax exemption forms.

T. Out-of-state Bidders, which are corporations, shall submit their Certificate of Authority to transact business in the State of Indiana with their bid.

1.11 BID SECURITY

A. The amount of bid security required, and the type acceptable, is defined in the Notice to Bidders. The Surety for bid security shall be one complying with the requirements of these Instructions to Bidders.

B. Bid security of the two (2) Apparent Low Bidders may be held following the bid opening, for not more than the maximum number of days stipulated in the Notice to Bidders, unless the Owner and Bidders agree otherwise; except that in the event a Bidder has been awarded the Contract and has failed to execute same or furnish proper performance and payment bonds, then the bid security of such Bidder will be subject to forfeit, and the next responsive Bidder, if tendered the Contract, will be subject to the same provisions as hereinbefore set forth. Should the award fall to the third responsive Bidder because of default of the previous two Bidders, the same condition will apply to the third Bidder as hereinbefore set forth.

C. The bid security of Bidders, other than the three (3) apparent Low Bidders for each category, may be returned within three (3) days after the opening of bids, at the Owner's or Construction Manager's option.

D. The bid security of the two (2) apparent Low Bidders will be returned within forty-eight (48) hours after the Form of Agreement has been executed, upon request.

E. In the event that the Owner should decide to reject all bids, the bid securities will be returned within 72 hours following that decision.

F. Bid security is subject to forfeiture if a bid is withdrawn during the time period bids are to be held.

G. The two (2) low Bidders will be required to submit a complete list of subcontractors, material suppliers, and products on Section 00 43 50 – Subcontractors and Products List, to the Construction Manager within 48 hours, after being notified by the Skillman Corporation. Failure to submit this information within the required time may be considered as grounds for rejection of the bid.

H. Manufacturers approved by addenda may be written in appropriate location.

I. If Bidder awarded the Contract fails to indicate a specific product or manufacturer or lists multiple products and manufacturers for the same product, that Bidder (Contractor) shall provide the first listed product and manufacturer in the specification section.

1.12 MODIFICATION OR WITHDRAWAL OF BID PROPOSAL

A. A Bidder may withdraw his bid prior to the scheduled time for the receipt of bids, without forfeiture of bid security. If a postponement of the time for receiving bids is made, the new time established therein shall be the time within the meaning of this Article.

B. Bids may be modified prior to bid opening time.

C. After commencement of the opening of bids, no Bidder may recall his bid.

1.13 OPENING OF BIDS

A. The Notice to Bidders indicates the time and place fixed for opening of bids.

B. Bids received prior to the time of opening will be securely kept, unopened. The officer whose duty it is to open them will decide when the specified time has arrived, and no Bid received thereafter will be considered responsive.

C. No responsibility will be attached to an officer for the premature opening of a bid not properly addressed and identified.

D. The amounts involved in alternates requested will be read or disclosed as part of the requirements of this Article. Voluntary alternates will not be considered.

E. The Owner reserves the right to delay the time for opening of bids when, in his judgment, it is desirable or necessary.

1.14 DISQUALIFICATION

A. The Owner reserves the right to reject each and every Bid, to waive formalities or informalities in bidding, to accept or reject alternates regardless of their order or sequence.

B. The right is reserved to reject a Bid where an investigation of the available evidence of information does not satisfy the Owner that the Bidder is responsible to perform the terms of the Contract Documents.

C. Only “bona fide” bids in a definite stated amount, without special clauses governing price of labor and material increases, will be considered. The Contract shall not include what is commonly known as an “Escalator Clause".

D. Bids which contain qualifications or conditions that are contrary to the text or intent of the Contract Documents, and which are inserted in the bid for the purpose of limiting or otherwise qualifying the responsibility of the Bidder, outside of the text or intent of the Contract Documents, will be determined to be non-responsive.

E. Failure to submit the requested information with the bid shall be grounds for rejecting the bid.

F. The ability of the Bidder to obtain or qualify for a performance bond or payment bond shall not be regarded as a sole test of such Bidder's competence or responsibility.

G. The Bidder acknowledges the right of the Owner to reject bids and to waive informalities or irregularities in bids received. In addition, the Bidder recognizes the right of the Owner to reject a bid if the Bidder failed to furnish the required bid security or to submit the data required by the bidding Documents or if the bid is incomplete or irregular.

1.15 DETERMINATION OF LOWEST RESPONSIBLE AND RESPONSIVE BID

A. Subject to the right of the Owner to reject each and every bid, the Owner will award the Contract for the Work to the Bidder submitting the lowest responsive and responsible bid. In making their determination the Owner may take into consideration not only the amount of the bid but also:
   1. Whether the Bidder has submitted a bid or quote that conforms in all material respects to the specifications.
   2. Whether the Bidder has submitted a bid that complies specifically with the Invitation to Bid and the Instructions to Bidders.
   3. Whether the Bidder has complied with all applicable statutes.
   4. The ability and capacity of the Bidder to perform the Work.
   5. The integrity, character, and reputation of the Bidder.
   6. The competence and experience of the Bidder.

B. The failure to submit requested information on a timely basis may result in the determination that the Bidder is not responsible.

C. In addition to the above items; the Owner will consider in awarding Work if the intent of the Guideline Schedule and completion of Work can be met within the specified number of consecutive calendar days.

1.16 PERFORMANCE BOND AND PAYMENT BOND

A. The successful Bidder, awarded the Contract on this Project and prior to the execution of the Form of Agreement, shall provide a Performance Bond and Payment Bond, covering the faithful performance of the Contract and the payment of obligations arising thereunder in a penal sum equal to 100 percent of the amount of the Contract sum. Said bonds shall remain in effect for 12 months after date established as start of one-year correction period. Premiums shall be included and paid-for by the Contractor.

B. Bonds shall be submitted on AIA Doc. A312.

C. The Bidder shall deliver the required bonds to the Owner not later than the date of execution of the Contract.

D. The Bidder shall require the attorney-in-fact that executes the required bonds on behalf of the Surety to affix thereto a certified and current copy of his Power of Attorney indicating the monetary limit of such power.

E. Surety Company shall comply with the following:

1. Insurance and Surety Companies shall be deemed qualified and acceptable to the Owner in connection with Contractor bonding and insurance requirements under said Contracts only if such companies have a policy holders rating of "A+", "A", or "A-", a financial category not less than Class VII as shown on Best's Key Rating Guide, latest edition; provided, however, that the bond is furnished by one of the aforesaid qualified Sureties who is also listed in the Department of the Treasury Circular 570, Volume 41, No. 132 Part V (Federal Register) and is licensed in the State of Indiana and the penal sum of the bond does not extend the underwriting limitation set forth in the subject Circular, unless the excess, if any, is reinsured with the approval of the Owner.
2. Bonds shall be executed and be in force on the date of the execution of the Contract.
3. The bonds shall be made out for not less than 100 percent of the entire amounts due under the Contract, and shall make provisions to cover additional amounts which may be authorized as provided for under changes in the work; and authorized as provided for under changes in the work; and authorized extensions of time by either making provisions for such additional items in the text of the bond or by the issuance of an amendment or rider to provide for such additional coverage.

1.17 EXECUTION OF THE CONTRACT

A. Subsequent to the award, and within ten (10) days after the prescribed Form of Agreement is presented for his signature, the Awardee shall execute and deliver them to the Owner through the Construction Manager, in such number of counterparts as the Owner may require.

B. The failure of the Awardee to execute such Contract and to supply the required bonds when the Agreement is presented for signature or within such extended period as the Owner may grant, based upon reasons determined adequate by the Owner, shall constitute a default; and the Owner may either award the Contract to the next responsible Bidder or re-advertise for bids. In the event of default, the Owner shall have the right to declare the amount of the bid security forfeited. It shall be a further condition that the Owner shall not collect more on a defaulted Bid than the difference between the defaulted bid amount and the bid of the firm to which the award is made, after giving due weight and consideration to alternates accepted.

1.18 TIME OF COMMENCEMENT AND COMPLETION

A. The Contractor shall commence work within ten (10) days after the effective date of the Contract, or when notified in writing to proceed, and shall complete the Work within the time limitations established in the Form of Agreement, these instructions to Bidders, and in Section 01 12 00 – Multiple Contract Summary.
   1. It is anticipated that construction will start within **(60) sixty** calendar days after receipt of bids.
   2. Construction shall be complete within **(650) six hundred and fifty** consecutive calendar days, or earlier, after Notice to Proceed.
   3. See Section 01 32 00 – Schedules and Reports, for Guideline Project Schedule.

1.19 WAGE RATES – NOT APPLICABLE

1.20 COMBINED BIDS

A. Bids shall be submitted for each individual bid category. Bids may also be submitted for a combination of two or more bid categories but may not be accepted unless individual bids have been submitted for each bid in the combination.

B. Combination bid shall be submitted on a separate bid form. Insert the combination of bid categories on the bid form where noted "Insert Category No.(s) and Name(s)" and address all alternates for the combination bid.

C. Separate bids and combination bids may be enclosed in a single envelope.

D. A single bid bond is acceptable if the amount of the bond is for the maximum amount of any individual bid or combination bid to include any alternates.

1.21 LIST OF MAJOR SUBCONTRACTORS, SUPPLIERS, AND MANUFACTURERS

A. The two low responsive Bidders shall submit a listing of major subcontractors and manufacturers within two (2) working days (48 hrs.) of the reading of the bids.

B. After submission of this list by the Bidder, and after approval by the Owner, Construction Manager, and Architect, it shall not be changed unless written approval of change is authorized by the Owner, Construction Manager, and Architect.

1.22 OUT-OF-STATE CONTRACTORS

A. Out-of-state Contractor, which is a corporation, shall obtain a Certificate of Authority from the Secretary of State, State of Indiana, Indianapolis, Indiana prior to transacting business in the State of Indiana in accordance with Indiana Code 23-1-49-1.

B. Proof of payment of Indiana Gross Income Tax, as provided in Chapter 370, Section 2, Subsection E, Acts of 1947, shall be submitted by out-of-state Contractor before final payment will be approved.

C. If the out-of-state Contractor is not a corporation or is a corporation but does not obtain authorization to do business in the State of Indiana, taxes will be withheld by the Owner.

END OF SECTION 00 10 00

CONTRACTOR'S BID FOR PUBLIC WORKS FORM NO. 96

Format (Revised 2013)
(Amended for RBBCSC)

Richland-Bean Blossom Community School Corporation
For All Work
Including:
Edgewood High School - Additions and Renovations
Early Childhood Center
Intermediate School Renovations
Primary School Renovations

PART I

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

Date (month, day, year):_____

BIDDER (Firm) _____

Address _____ P.O. Box _____

City/State/Zip _____

Telephone Number: _____ Email Address: _____

Person to contact regarding this Bid_____

Pursuant to notices given, the undersigned offers to furnish labor and/or materials necessary to complete the public works project of:

_____
Insert Category No. (s) and Name(s)

Of public works project, ***Richland-Bean Blossom C.S.C.***, in accordance with Plans and Specifications prepared by ***Lancer Associates Architecture, 145 N East St., Indpls, In. 46204***, as follows:

BASE BID

For the sum of _____
(Sum in words)

_____DOLLARS ($_____)
(Sum in figures)

The undersigned acknowledges receipt of the following Addenda:
Receipt of Addenda No. (s) _____

PROPOSAL TIME

Bidder agrees that this Bid shall remain in force for a period of sixty (60) consecutive calendar days from the due date, and Bids may be accepted or rejected during this period. Bids not accepted within said sixty (60) consecutive calendar days shall be deemed rejected.

Attended pre-bid conference YES _____ NO_____

Has visited the jobsite YES _____ NO_____

The Bidder has reviewed the Guideline Schedule in Section 01 32 00 and the intent Of the schedule can be met. YES _____ NO_____

Bidder has included their Written Drug Testing Plan that covers all employees of the bidder who will perform work on the public work project and meets or exceeds the requirements set in IC 4-13-18-5 or IC 4-13-18-6. YES _____ NO_____

The Skillman Corporation's diversity initiative is to create a program to encourage, assist and measure the active participation of Minority- Owned, Women-Owned, Veteran – Owned and Disabled Individual-Owned Businesses. The Program is to ensure that MWVDBEs are provided full and equal opportunity to participate in all Skillman Corporation's Projects.

Bidder has included: DBE: YES _____% NO _____
MBE: YES _____% NO _____
WBE: YES _____% NO _____
VBE: YES _____% NO _____

The undersigned further agrees to furnish a bond or certified check with this Bid for an amount specified in the Notice to Bidders. If Alternate Bids apply, submit a proposal for each in accordance with the Plans and Specifications.

If additional units of material included in the contract are needed, the cost of units must be the same as that shown in the original contract if accepted by the governmental unit. If the bid is to be awarded on a unit bases, the itemization of the units shall be shown on a separate attachment.

The contractor and his subcontractors, if any, shall not discriminate against or intimidate any employee, or applicant for employment, to be employed in the performance of this contract, with respect to any matter directly or indirectly related to employment because of race, religion, color, sex, national origin or ancestry. Breach of this covenant may be regarded as a material breach of the contract.

CERTIFICATION OF USE OF UNITED STATES STEEL PRODUCTS
(if applicable)

I, the undersigned bidder, or agent as a contractor on a public works project, understand my statutory obligation to use steel products made in the United States (I.C. 5-16-8-2). I hereby certify that I and all subcontractors employed by me for this project will use U.S. steel on this project if awarded. I understand that violations hereunder may result in forfeiture of contractual payments.

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".

****MARK "ADD" OR "DEDUCT" FOR EACH ALTERNATE****

Alternate Bid No. 1A: Mechanical Controls - Alerton/OCS:

Change to the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 1B: Mechanical Controls - Johnson Controls:

Change to the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 2A: Addressable Fire-Alarm System: - Fire Lite:

Change to the Base Bid the sum of_____
(sum in words)

_____DOLLARS ($_____) ADD DEDUCT
(sum in figures)

Alternate Bid No. 2B: Addressable Fire-Alarm System - Siemens:

Change to the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 2C: Addressable Fire-Alarm System - Edwards:

Change to the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 3: H.S. Cafeteria Floor and Base:

Change to the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 4: Precast Panels:

Change to the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 5: H.S. Admin / Media Center / Print Shop:

Change to the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 6: Solid Surface:

Change to the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($_____) ADD / DEDUCT
(sum in figures)

Alternate Bid No. 7: Ceramic Tile:

Change to the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($_____) ADD / DEDUCT

(sum in figures)

Alternate Bid No. 8A: Emergency Access Road Porous Paving

Change to the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($_____) ADD / DEDUCT

(sum in figures)

Alternate Bid No. 8B: Emergency Access Road Asphalt

Change to the Base Bid the sum of _____
(sum in words)

_____ DOLLARS ($_____) ADD / DEDUCT

(sum in figures)

PART II

(For projects of $150,000 or more – IC 36-1-12-4)

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 for the period of one (1) year prior to the date of the current bid?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

2. What public works projects are now in process of construction by your organization?

Contract Amount	Class of Work	Completion Date	Name and Address of Owner

3. Have you ever failed to complete any work awarded to you?_____If so, where and why?

_____

_____

_____

4. List references from private firms for which you have performed work.

_____

_____

_____

SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed Work. (Examples could include a narrative of when you could begin, complete the project, number of workers, etc. and any

other information which you believe would enable the governmental unit to consider your bid.)

2. Please list the names and addresses of all subcontractors (i.e. persons or firms outside your own firm who have performed part of the work) that you have used on public works projects during the past five (5) years along with a brief description of the work done by each subcontractor.

3. If you intend to sublet any portion of the work, state the name and addresses of each subcontractor, equipment to be used by the subcontractor, and whether you will required a bond. However, if you are unable to currently provide a listing, please understand a listing must be provided prior to contract approval. Until the completion of the proposed project, you are under a continuing obligation to immediately notify the governmental unit in the event that you subsequently determine that you will use a subcontractor on the proposed project.

4. What equipment do you have available to use for the proposed Project? Any equipment used by subcontractors may also be required to be listed by the governmental unit.

5. Have you into contracts or received offers for all materials which substantiate the prices used in preparing your proposal? If not, please explain the rationale used which corroborate the process listed.

_____

_____

_____

_____

SECTION III CONTRACTOR'S FINANCIAL STATEMENT

Attachment of Bidder's financial statement is mandatory. Any Bid submitted without said financial statement as required by statute shall thereby be rendered invalid. The financial statement provided hereunder to the governing body awarding the Contract must be specific enough in detail so that said governing body can make a proper determination of the Bidder's capability for completing the Project if awarded.

SECTION IV CONTRACTOR 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 contract.

SECTION V 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

Dated at _____this _____ day of _____, 20

_____
(Name of Organization)

By
_____

_____
(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF _____)
) SS:
COUNTY OF _____)

Before me, a Notary Public, personally appeared the above-named
_____

Swore that the statements contained in the foregoing document are true and correct.

Subscribed and sworn to before me this _____ day of _____,
_____
(Title)

_____
Notary Public

My Commission Expires: _____

County of Residence: _____

END OF SECTION 00 31 00

SECTION 00 50 00d – SCHEDULE OF INSURANCE REQUIREMENTS

PRODUCER

THIS CERTIFICATE IS ISSUED AS A MATTER OF INFORMATION ONLY AND CONFERS NO RIGHTS UPON THE CERTIFICATE HOLDER. THIS CERTIFICATE DOES NOT AMEND, EXTEND OR ALTER THE COVERAGE AFFORDED BY THE POLICIES BELOW.

INSURERS AFFORDING COVERAGE

INSURER A

INSURED

INSURER B

INSURER C

INSURER D

COVERAGES

THE POLICIES OF INSURANCE LISTED BELOW HAVE BEEN ISSUED TO THE INSURED NAMED ABOVE FOR THE POLICY PERIOD INDICATED. NOTWITHSTANDING ANY REQUIREMENT, TERM OR CONDITION OF ANY CONTRACT OR OTHER DOCUMENT WITH RESPECT TO WHICH THIS CERTIFICATE MAY BE ISSUED OR MAY PERTAIN, THE INSURANCE AFFORDED BY THE POLICIES DESCRIBED HEREIN IS SUBJECT TO ALL THE TERMS, EXCLUSIONS AND CONDITIONS OF SUCH POLICIES. AGGREGATE LIMITS SHOWN MAY HAVE BEEN REDUCED BY PAID CLAIMS.

INSR LTR	ADD'L NSRD	TYPE OF INSURANCE	POLICY NUMBER	POLICY EFFECTIVE DATE (MM/DD/YY)	POLICY EXPIRATION DATE (MM/DD/YY)	LIMITS	
	X	GENERAL LIABILITY				EACH OCCURRENCE	**$1,000,000**
		COMMERCIAL GENERAL LIABILITY				DAMAGE TO RENTED PREMISES (Ea. occurrence)	**$50,000**
		CLAIMS MADE x OCCUR				MED EXP (Any one person)	**$5,000**
						PERSONAL & ADV. INJURY	**$1,000,000**
		GEN'L AGGREGATE LIMIT APPLIES PER				GENERAL AGGREGATE	**$2,000,000**
		POLICY PROJECT LOC				PRODUCTS-COMP/OP AGG	**$2,000,000**
	X	AUTOMOBILE LIABILITY				COMBINED SINGLE LIMIT (Ea. accident)	**$1,000,000**
		x ANY AUTO				BODILY INJURY (Per person)	**$**
		ALL OWNED AUTOS				BODILY INJURY (Per accident)	**$**
		SCHEDULE AUTOS				PROPERTY DAMAGE (Per accident)	**$**
		HIRED AUTOS					
		NON-OWNED AUTOS					
		GARAGE LIABILITY				Auto only – ea. accident	**$**
		ANY AUTO				Other than auto only: EA ACC	**$**
						AGG	**$**
	X	EXCESS/UMBRELLA LIABILITY				EACH OCCURRENCE	**$8,000,000**
		OCCUR CLAIMS MADE				AGGREGATE	**$8,000,000**
							$
		DEDUCTIBLE					**$**
		RETENTION					**$**
		WORKER'S COMPENSATION AND EMPLOYERS' LIABILITY				WC STATUTORY LIMITS OTHER	**$**
		ANY PROPRIETORY/PARTNER/EXECUTIVE OFFICER MEMBER EXCLUDED?				E.L. EACH ACCIDENT	**$500,000**
		If yes, describe under SPECIAL PROVISIONS below				E.L. DISEASE – EA EMPLOYEE	**$500,000**
						E.L. DISEASE – POLICY LIMIT	**$500,000**
		OTHER					

DESCRIPTION OF OPERATIONS/LOCATIONS/VEHICLES/EXCLUSIONS ADDED BY ENDORSEMENT/SPECIAL PROVISIONS

Project: 223030 - The Skillman Corporation & all parties required by contract are added as add'l ins on GL including completed operations & add'l ins on Auto Liab but only w/respects to liability arising out of the work performed by/on behalf of named ins for above project with coverage being primary & noncontributory. Waiver of Subrogation is added to GL, Auto & WC in favor of add'l insureds. Umbrella is to follow form to add'l ins/primary & noncontributory on GL and Waiver of Subrogation on GL & WC. WC applies in Indiana.

CERTIFICATE HOLDER

Richland-Bean Blossom Community School Corporation
Edgewood Schools
c/o The Skillman Corporation
3834 S. Emerson Avenue
Indianapolis, IN 46203

CANCELLATION

SHOULD ANY OF THE ABOVE DESCRIBED POLICIES BE CANCELLED BEFORE THE EXPIRATION DATED THEREOF, NOTICE WILL BE DELIVERED IN ACCORDANCE WITH THE POLICY PROVISIONS.

AUTHORIZED REPRESENTATIVE (Signed or stamped signature)

SECTION 01 23 00 - ALTERNATES

PART 1 - GENERAL

1.01 RELATED DOCUMENTS

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

1.02 PURPOSE

A. The Bids for the Alternates described herein are required in order for the Owner to obtain information necessary for the proper consideration of the Project in its entirety.

1.03 ALTERNATES

A. Definitions: Alternates are defined as alternate products, materials, equipment, installations or systems for the Work, which may, at Owner's option and under terms established by Instructions to Bidders, be selected and recorded in the Owner-Contractor Agreement to either supplement or displace corresponding basic requirements of Contract Documents. Alternates may or may not substantially change scope and general character of the Work; and must not be confused with "allowances", "unit prices", "change orders", "substitutions", and other similar provisions.

1.04 SCHEDULE OF ALTERNATES

A. ALTERNATE NO. 1A: Mechanical Controls - Alerton/OCS:

1. Base Bid: No work related to Specification Section 23 09 00.
2. Alternate Bid: Provide all work and materials required to install building controls by Alerton/OCS.

B. ALTERNATE NO. 1B: Mechanical Controls - Johnson Controls:

1. Base Bid: No work related to Specification Section 23 09 00.
2. Alternate Bid: Provide all work and materials required to install building controls by Johnson Controls.

C. ALTERNATE NO. 2A: Addressable Fire-Alarm System: - Fire Lite:

1. Base Bid: No work related to Specification Section 28 46 21.11
2. Alternate Bid: Provide all work and materials required to install Addressable Fire-Alarm System by Fire Lite.

D. ALTERNATE NO. 2B: Addressable Fire-Alarm System - Siemens:

1. Base Bid: No work related to Specification Section 28 46 21.11
2. Alternate Bid: Provide all work and materials required to install Addressable Fire-Alarm System by Siemens.

E. ALTERNATE NO. 2C: Addressable Fire-Alarm System - Edwards:

1. Base Bid: No work related to Specification Section 28 46 21.11
2. Alternate Bid: Provide all work and materials required to install Addressable Fire-Alarm System by Edwards.

F. ALTERNATE NO. 3: H.S. Cafeteria Foor and Base:
At Edgewood High School Cafeteria Room A-D01:

1. Base Bid: Demo bid demo and provide the new flooring and wall base to the south of the line indicated on page A721D
2. Alternate Bid: Demo and provide new flooring and new wall base in the room A-D01 to the north of the line indicated on page A721D. Continue the pattern of VCT 2 and VCT 3

G. ALTERNATE NO. 4: H.S. Precast Panels:

1. Base Bid: The Exterior face of the precast wall panels to be painted smooth panels with joints as indicated on drawings.
2. Alternate Bid: The Exterior face of the wall panels face concrete mix shall incorporate white cement, Woodville sand, Indiana limestone, and integral color to match architect's sample (similar to Coreslab Mix 20). Finish shall be a light to medium acid etch finish.

H. ALTERNATE NO. 5: H.S. Admin / Media Center / Print Shop:

1. Base Bid: No work in the following rooms:
    a. Admin Area: E-A145, E-A146, E-A144,E-A143, E-A136, E-A137, E-A139, E-A140A, E-A143, E-A124, A-A124A, E-A137A, A106, A107, A105, A104, A103, A102, A101
    b. Media Center: E-F108
    c. Print Shop: E-B136A
2. Alternate Bid: Complete work in the following rooms as shown on drawings:
    a. Admin Area: E-A145, E-A146, E-A144,E-A143, E-A136, E-A137, E-A139, E-A140A, E-A143, E-A124, A-A124A, E-A137A, A106, A107, A105, A104, A103, A102, A101
    b. Media Center: E-F108
    c. Print Shop: E-B136A

I. ALTERNATE NO. 6: Solid Surface:
At Edgewood High School, Early Childhood Center, Edgewood Primary School and Edgewood Intermediate School. NOTE: This alternate does not affect finishes inside the new kitchens at the High School and Early Childhood Center.

1. Base Bid: All countertops and window sills to be plastic laminate (standard Formica colors)
2. Alternate Bid: All countertops and window sills to be solid surface as indicated on the drawings.

J. ALTERNATE NO. 7: Ceramic Tile:
At Early Childhood Center.

1. Base Bid:
    a. In room B122 provide tile only on north, south and east wall to 6'-0"
    b. In room B121 provide tile only on north, south and west wall to 6'-0"
    c. In rooms B147, B143, B126, B109, B108, B117, A106, A116 provide tile on the plumbing wall and wall adjacent to the toilet to 6'-0" in height, other walls are painted.
    d. All other rooms to receive tile as indicated on drawings.
2. Alternate Bid: Provide tile in all rooms as shown on drawings.

K. ALTERNATE NO. 8A: Emergency Access Road Porous Paving:
Early Childhood Center. See Drawing Legend sheet C401 "Limits of Reinforced Earth Emergency Access Road".

1. Base Bid: Construct emergency access road as indicated. Road surface to be constructed of on site soil. Base Bid does not include:
    a. Underdrains,
    b. Gates and Gate Keepers.
    c. Curb removal and Replacement.
    d. Replacement and repair of pavement indicated at east end.
2. Alternate Bid: Construct Emergency Access Road as indicated using Porous Paving System per Detail 5/C802 as described in Specification Section 32 14 43 Porous Paving. This Alternate Includes:
    a. Underdrains,
    b. Gates and Gate Keepers.
    c. Curb removal and Replacement.
    d. Replacement and repair of pavement indicated at east end.

L. ALTERNATE NO. 8B: Emergency Access Road Asphalt:
Early Childhood Center. See Drawing Legend sheet C401 "Limits of Reinforced Earth Emergency Access Road".

1. Base Bid: Construct emergency access road as indicated. Road surface to be constructed of on site soil. Base Bid does not include:
    a. Underdrains,

b. Gates and Gate Keepers.
c. Curb removal and Replacement.
d. Replacement and repair of pavement indicated at east end.

2. Alternate Bid: Construct Emergency Access Road as indicated using Asphalt Paving per Detail 6/C801 as described in Specification Section 32 12 16 Asphalt Paving. This Alternate Includes:
    a. Aggregate base section consisting of 4" of compacted INDOT No. 53s over 4" of compacted INDOT No. 2s.
    e. Underdrains,
    f. Gates and Gate Keepers.
    g. Curb removal and Replacement.
    h. Replacement and repair of pavement indicated at east end.

PART 2 - PRODUCTS, PART 3 - EXECUTION (Not Used)

END OF SECTION 01 23 00

LANCER ASSOCIATES ARCHITECTURE

ADDENDUM NO. TWO

PROJECT: **EDGEWOOD SCHOOLS – ADDITIONS AND RENOVATIONS**

PROJECT NUMBER: **23117**

DATE OF ADDENDUM: **2024.28.16**

THIS ADDENDUM FORMS A PART OF THE CONTRACT DOCUMENTS AND IS ISSUED IN ACCORDANCE WITH THE INSTRUCTIONS TO BIDDERS. ACKNOWLEDGE RECEIPT OF THIS ADDENDUM BY SIGNING THE ADDENDUM ACKNOWLEDGMENT SECTION OF THE BID FORM.

QUESTIONS

Q: Is there EIFS soffit on this project?
A: No, there are no EIFS soffits on any of the schools

Q: What roofing membrane is used on Early Childhood Center?
A: PVC roofing

Q: Is there wall tile in Student Activity Center restrooms?
A: No, there is no wall tile in Student Activity Center restrooms

Q: Where are the cubicle curtains used on this project?
A: Provide (2) cubicle curtains in the clinic at Early Childhood Center

Q: Is there a requirement for warranty or owner training for cubicle curtains?
A: Provide typical manufacturer's warranty on the product. No training is required

Q: Is there a need for a LEED report for Window Shades?
A: No, delete all LEED requirements from the Window Shades spec section

LANCER ASSOCIATES ARCHITECTURE

Q: Is there a requirement for shop drawings for spec section 12 24 00?
A: Yes, provide shop drawings

Q: On drawing 3/A311 at Early Childhood Cener who decides whether metal stud bracing is needed?
A: Delegated design by CFS supplier

Q: Who is responsible for designing metal stud clips back to the structure?
A: CFS supplier to provide delegated design for those connections, see S100

Q: Is there any difference between rigid insulation that appears black or blue on the drawings?
A: No, the insulation is the same

Q: Is air/water resistive barrier and fluid applied air/water/vapor barrier?
A: No, they are the same

Q: What is the thickness of roof insulation on Early Childhood Center?
A: 4", R20 min

Q: Is there a need for sound batts in the walls?
A: See wall types for where sound batts are needed

Q: Based on alternate descriptions, if drawings call out for solid surface, what is base bid?
A: Provide plastic laminate for all countertop surfaces (not in kitchen/serving equipment) as base bid and solid surface as alternate.

Q: Are there any glass inserts in the doors of the cabinetry?
A: No, all cabinetry doors are solid with no windows

Q: Can the interior material of the cabinetry be white melamine?
A: Yes, surfaces not exposed to view can be while, see spec section 2.6.B

Q: In the High School First Floor - Unit D1, drawing A721D. The Servery Room AD130 flooring calls out EPX-2, but the transition calls out EPX-3. Can you help clarify which epoxy system is required for that room?
A: Change Flooring in room AD130 to EPX-3

SPECIFICATIONS

1. Add spec section 02 41 13 Selective Site Demolition on its Entirety (see attached)
2. Add spec section 32 18 16.13 Playground and Protective Surfacing in its entirety (see attached)
3. Spec Section 12 32 16
    a. Add Midwest Cabinet Solutions as an approved manufacturer

LANCER ASSOCIATES ARCHITECTURE

4. Spec Section 09 65 66
    a. Add Robins Flooring as an acceptable manufacturer
5. Spec Section 09 64 66
    a. Add Aacer Channel VLP HC flooring as an acceptable manufacturer
    b. Add Pulastic Classic 90 system as an approved manufacturer
    c. Add Anchor Flex Combi with Herculan 7+2 as an approved manufacturer
6. Spec Section 331000 – Water Utilities
    a. Revise Part 2.7.B.2. to read: Sign shall be aluminum with a white reflective background and red lettering noting the FDC and respective street address.
7. Spec Section 10 21 13 Toilet Compartments
    a. Add Hiny Hiders Solid Plastic as an approved manufacturer
8. Spec Section 10 22 26 Operable Partition
    a. Add Coreflex Series 5650 Paireed Panel Series as an approved manufacturer
    b. Add Modernfold Paired Panel Operable Partitions as an approved manufacturer
9. Spec Section 11 68 00 Playfield Equipment and Structures
    a. Add Kompan as an approved manufacturer
10. Spec Section 07 95 13 Expansion Joint Covers
    a. Add Erie Metal Specialties as an approved manufacturer

DRAWINGS REVISIONS – EARLY CHILDHOOD CENTER:

1. Sheet C601 – Site Utility Plan – Remove and replace with attached.

    1. Revise location of sanitary sewer lateral exiting the building.

    2. Add Plan Note 25 to the east wall of the mechanical room.

    3. Revise General Note T to include sanitary force main piping.

    4. Add Plan Note 25 for FDC signage.

2. Sheet C602 – Site Utilities Profiles – Remove and replace with attached.

    1. Revise invert elevation at the Face of Building and Yard Cleanout.

    2. Revise slope of gravity sewer from building to lift station.

3. Sheet C801 – Site Details – Remove and replace with attached.

    1. Add callout of Storz Connection to Fire Hydrant Detail 18.

4. Sheet C802 – Site Details – Remove and replace with attached.

1. Remove “By Others” from the lift station anti-flotation base from Detail 6.

2. Add Detail 11 for FDC signage.

3. Revise Detail 5 to include stone base description for the Presto Geoweb Details.

5. Drawing Number: S100A
   Drawing Title: Foundation Plan
   Revision:
   Updated utility crossing

6. Drawing Number A101A:
   Drawing Title: Floor Plan-First Floor- Unit A
   Revision:

   a. Add chase walls for rooms A101, A112, A120
   b. Add wall types, See attached sheet

7. Drawing Number: A101B
   Drawing Title: Floor Plan- First Floor-Unit B
   Revision:

   1. Add Door number for Trash/Recycle Enclosure.

8. Drawing Number: A601
   Drawing Title: DOOR SCHEDULE
   Revision:

   1. Add Trash/Recycle Gate Elevation 5/A601
   2. Add Door B163 to door schedule.

9. Drawing Number: A761
   Drawing Title: Casework Plans and Elevations
   Revision:

   1. Add keynote 30, see attached sheet.

DRAWINGS REVISIONS – EDGEWOOD PRIMARY SCHOOL:

10. Drawing Number AD101A-A101D
    Drawing Title: Demo Unit Plans
    Revision:

    Added note to demo markerboards and patch walls, added demo work in the clinic

11. Drawing Number: A101B

Drawing Title: FLOOR PLAN – FIRST FLOOR – UNIT B
Revision:

Added new area of scope, Clinic B158. Added casework and floor plan note #9.

12. Drawing Number: A721B
    Drawing Title: INTERIOR FINISH PLAN – FIRST FLOOR – UNIT B
    Revision:

    Added new area of scope, Clinic B158. Added finish tags and casework.

13. Drawing Number: A760
    Drawing Title: CASEWORK ELEVATIONS
    Revision:

    Added sheet A760. Added interior elevations 1/A760 INT. ELEV. – B158 CLINIC WEST and 2/A760 INT. ELEV. – B158 CLINIC NORTH.

14. Drawing Number: A767
    Drawing Title: CASEWORK SECTIONS
    Revision:

    Added view 11/A767 CSWK – TYP. COUNTERTOP SECTION.

DRAWINGS REVISIONS – EDGEWOOD HIGH SCHOOL:

15. Sheet C101 – Existing Site Condition Plan – Remove and replace with attached.

    1. Add existing water line from the 6” main to the high school.

    2. Add existing water line from the south side of the high school to the service building.

16. Sheet C301 – Selective Site Demolition Plan – Remove and replace with attached.

    1. Revise pavement removal limits on the south and west sides of the high school.

    2. Revise water line removal limits on west side of the high school.

    3. Revise Plan Notes 10, 11, and 12.

    4. Add Plan Note 13.

17. Sheet C601 – Site Utilities Plan – Remove and replace with attached.

1. Remove proposed water line W-2.
2. Extend 6” water main relocation to the north.
3. Relocate the existing fire hydrant on the west side of the parking lot along relocated main.
4. Add connection of 4” domestic service line to new combined 6” service.
5. Revise Plan Notes 1, 8, 10, 11, and 12.
6. Add Plan Notes 15, 16, 17, 18, and 19.

18. Sheet C602 – Site Utilities Profiles – Remove and replace with attached.
    1. Remove references to water line W-2 from Storm Drainage Profiles SD-01, 2, 4, and 5.
    2. Add roof drain laterals to storm structures STR-201 and STR-203.
    3. Add existing water line to be abandoned to Storm Drainage Profiles SD-04 and SD-05.
    4. Add Storm Structure Data Table Note 5.
    5. Revise Pipe Invert Out elevation for storm structure STR-203.
19. Sheet C603 – Site Utilities Profiles – Remove and replace with attached.
    1. Revise Water Profile W-1.
    2. Remove Water Profile W-2.
    3. Revise Water Profile W-3.
    4. Add Profile Note 5.
20. Sheet C801 – Site Details – Remove and replace with attached.
    1. Revise Details 15 and 22.
21. Sheet C802 – Site Details – Remove and replace with attached.
    1. Add Details 6 and 7.
22. Drawing Number 721D
    a. Change Flooring in room AD130 (server) to EPX-3

LANCER ASSOCIATES ARCHITECTURE

23. Drawing Number AD101D
    Drawing Title: Demolition Plan – First Floor Unit D
    Change:

    Added note about foundation walls

24. Drawing Number: AD101F2
    Drawing Title: Demolition Plan – First Floor Unit F2
    Change:

    Added notes to patch existing drywall

25. Drawing Number: A101B
    Drawing Title: First Floor Unit Plan – Unit B
    Change:

    Added note to laminate drywall to walls

26. Drawing Number: A101D
    Drawing Title: First Floor Unit Plan – Unit D
    Change:

    Added note for topping slab

27. Drawing Number: A101E1
    Drawing Title: First Floor Unit Plan – Unit E1
    Change:

    Added note to laminate drywall to walls

28. Drawing Number: A101F1
    Drawing Title: First Floor Unit Plan – Unit F1
    Change:

    Added note to laminate drywall to walls. Added new visual display boards

29. Drawing Numbers: A111, A141G, A201, A311, A500, A502
Change:

Adjusted Parapet wall with glazed brick configuration

30. Drawing Number: A502
    Drawing Title: Plan Details:

    Change:

LANCER ASSOCIATES ARCHITECTURE

Added detail to show typical athletic flooring detail

Attachments:

Specifications: Spec Sections: 02 41 19, 11 66 43, 23 37 13.13, 23 37 16, 26 05 33.23, 26 22 13, 27 05 53, 27 15 00.23, 27 41 16, 27 51 16, 27 51 23, 32 18 16.13

Drawings:

Early Childhood Center: C601, C602, C801, C802, S100A, A101A, A101B, A503, A601, A761, ES102, P904, P905, PF1A, PF1B, PP1A, PP1B, T301, T500

Edgewood Primary School: AD101A, AD101B, AD101C, AD101D, A101B, A721B, A760, A767

Edgewood High School: C101, C301, C601, C602, C603, C801, C802, AD101D, AD101F2, A101B, A101D, A101E1, A101F1, A111, A141G, A201, A311, A500, A502, P501, P901, MD1D1, MH1D1, MHRG, PP1D1, PP1G, PR1G, M601, E601, E602, EP1G, T201C1, T201D1, T201D2, T302, T305, T401, T402, T500

MEP Addendum 2 Narrative

Technology Addendum 2 Narrative

End of Addendum 2

creative engineering solutions
mechanical • electrical • plumbing

PROJECT NAME: EDGEWOOD HS – ADDITION & RENOVATIONS
OWNER NAME: RICHLAND-BEAN BLOSSOM CSC
CES PROJECT NO. 2023-018.000 / ARCHITECT PROJECT NO. 23317
ADDENDUM NO. 2
DATED: FEBRUARY 28, 2024

This Addendum consists of three (3) Addendum page(s) and thirty-seven (37) attachment pages totaling forty (40) pages. This Addendum shall supplement, amend, and become part of the Bid Documents. All Bids shall be based on these modifications. Bidders shall acknowledge the receipt of this addendum on their Bid Form.

PART 1 - CHANGES TO THE PROJECT MANUAL

Modifications described herein shall be incorporated in the Project Manual. All other Work shall remain unchanged.

1.1 DIVISION 11 – EQUIPMENT

A. **Section 116643 "SCOREBOARD"**

1. ADD Document in its entirety.

1.2 DIVISION 23 - HEATING, VENTILATING, AND AIR-CONDITIONING(HVAC)

A. **Section 233713 "DIFFUSERS, REGISTERS, AND GRILLES"**

1. DELETE AND REPLACE Document in its entirety.

B. **Section 233716 "FABRIC AIR-DISTRIBUTION DEVICES"**

1. ADD Document in its entirety.

C. **Section 233600** "**AIR TERMINAL UNITS**"

1. INSERT Text within paragraph 2.2 A

" Titus"

" METALAIRE"

2. MODIFY Text within paragraph 2.2 A

Remove "Trane"

D. **Section 237416.11 "PACKAGED ROOFTOP AIR-CONDITIONING UNITS**"

1. MODIFY Text within paragraph 2.2 A

Remove “Trane”

E. **SECTION 238219 “FAN COIL UNITS”**

1. MODIFY Text within paragraph 2.2.A, Remove “Trane”

F. **SECTION 238823 “UNIT VENTILATORS”**

1. MODIFY Text within paragraph 2.2A, Remove “Trane, Add Krueger”

1.3 DIVISION 26 – ELECTRICAL

A. **Section 260533.23 “SURFACE RACEWAYS FOR ELECTRICAL SYSTEMS”**

1. ADD Document in its entirety.

B. **Section 262213 “LOW-VOLTAGE DISTRIBUTION TRANSFORMERS”**

1. ADD Document in its entirety.

PART 2 - CHANGES TO THE DRAWINGS

M-SERIES DRAWINGS (HIGH SCHOOL)

M601	DELETE AND REPLACE
MD1D1	DELETE AND REPLACE
MH1D1	DELETE AND REPLACE
MHRG	DELETE AND REPLACE

P-SERIES DRAWINGS (EARLY CHILDHOOD CENTER)

P904	DELETE AND REPLACE
P905	DELETE AND REPLACE
PF1A	DELETE AND REPLACE
PF1B	DELETE AND REPLACE
PF1A	DELETE AND REPLACE
PP1B	DELETE AND REPLACE

P-SERIES DRAWINGS (HIGH SCHOOL)

P501	DELETE AND REPLACE
P901	DELETE AND REPLACE
PP1D1	DELETE AND REPLACE
PP1G	DELETE AND REPLACE
PR1G	DELETE AND REPLACE

E-SERIES DRAWINGS (HIGH SCHOOL)

EP1G	DELETE AND REPLACE
E601	DELETE AND REPLACE
E602	DELETE AND REPLACE

E-SERIES DRAWINGS (EARLY CHILDHOOD CENTER)

ES102	DELETE AND REPLACE

END OF ADDENDUM NO. 2

DESIGN 27 TECHNOLOGY + ACOUSTICS	Richland-Bean Blossom CSC Additions & Renovations Addendum 2 Narrative	February 28, 2024

SPECIFICATIONS:

1) Specification 27 41 16 – INTEGRATED AUDIO VIDEO SYSTEMS AND EQUIPMENT
   a) Updated Part 1.1.E to include "EQUIPMENT RACK SHELVES" and "EQUIPMENT RACK DRAWERS". Removed "RACKMOUNT BLUETOOTH RECEIVER"
   b) Removed Part 2.3 "RACKMOUNT BLUETOOTH RECEIVER"
   c) Added "AMX Varia-100N" to Part 2.5.8 "Acceptable Manufacturers"
   d) Added Part 2.6 "WIRELESS CONTROLLER"
   e) Changed "Crestron CP4" from Part 2.12.4.a to "Crestron CP4N"
   f) Added "AMX MU-2300" to Part 2.12.4 "Acceptable Manufacturers"
   g) Added Part 2.38 "EQUIPMENT RACK SHELVES"
   h) Added Part 2.39 "EQUIPMENT RACK DRAWERS"
   i) Updated the AV system functionality for each room type in Part 3.3.C

2) Specification 27 51 16 – PUBLIC ADDRESS SYSTEMS
   a) Updated Part 1.1.D to include "EQUIPMENT RACK SHELVES" and "EQUIPMENT RACK DRAWERS"
   b) Added Part 2.8 "BLUETOOTH EXPANSION MODULE"
   c) Added Part 2.27 "EQUIPMENT RACK SHELVES"
   d) Added Part 2.28 "EQUIPMENT RACK DRAWERS"
   e) Removed Part 2.32 "GPIO/RELAY CABLING"
   f) Removed Part 2.36 "ETHERNET PANEL MOUNT CONNECTORS

3) Specification 27 15 00.23 – AUDIO VIDEO COMMUNICATIONS HORIZONTAL CABLING
   a) Updated Part 1.1.C to include "HDMI PANEL MOUNT CONNECTORS", "USB PANEL MOUNT CONNECTORS", "ETHERNET PANEL MOUNT CONNECTORS", "3.5MM PANEL MOUNT CONNECTORS", and "XLR PANEL MOUNT CONNECTORS
   b) Added Part 2.14 "HDMI PANEL MOUNT CONNECTORS"
   c) Added Part 2.15 "USB PANEL MOUNT CONNECTORS"
   d) Added Part 2.16 "ETHERNET PANEL MOUNT CONNECTORS"
   e) Added Part 2.17 "3.5MM PANEL MOUNT CONNECTORS"
   f) Added Part 2.18 "XLR PANEL MOUNT CONNECTORS"

4) Specification 27 05 53 – IDENTIFICATION FOR COMMUNICATIONS SYSTEMS
   a) Updated Part 3.1.I.4.a to read "MDF is always 00"
   b) Updated Part 3.1.I.5.b to read "Each port of the patch panel is to be labeled with the information outlet room number."
   c) Changed "TOs" to "IOs" in Part 3.1.I.6

5) Specification 27 51 23 – CENTRAL SOUND AND PAGING SYSTEM
    a) Changed Part 1.1.C.8 from “CEILING MOUNTED PAGING SPEAKER” to “CEILING MOUNTED SPEAKER”. Removed Part 1.1.C.9 “CEILING MOUNTED INTERCOM SPEAKER”
    b) Changed “WALL-MOUNTED INTERCOM STATION” in Part 1.1.C to “INTERCOM STATION”
    c) Changed “WALL-MOUNTED PAGING HORN” in Part 1.1.C to “WALL-MOUNTED HORN”

EDGEWOOD HIGH SCHOOL DRAWINGS:

1) Sheet T201C1 – FIRST FLOOR TECHNOLOGY PLAN – UNIT C1
    a. Updated the audio connection location type 3 symbol on the floor plan to match the annotation symbol in the technology legend.
    b. Added two data drops to the audio connection location type 3, labeled, and tagged.
    c. Updated device labeling.

2) Sheet T201D1 – FIRST FLOOR TECHNOLOGY PLAN – UNIT D1
    a. Updated device labeling.

3) Sheet T201D2 – FIRST FLOOR TECHNOLOGY PLAN – UNIT D2
    a. Updated device labeling.

4) Sheet T302 – RACK ELEVATIONS
    a. Updated the heading for each equipment frame in the new IDF E-107A (07) rack elevation, the new IDF E-C130 (08) rack elevation, and the new IDF G108 (09) rack to include the exact verbiage found in Part 2.1 of specification 27 11 16 “FLOOR MOUNTED 2-POST EQUIPMENT FRAME”.
    b. Updated the heading for each equipment cabinet in the new MDF E-E154 (00) rack elevation to include the verbiage “EXISTING NETWORK CABINET”.
    c. Added a dedicated rack mounted shelf for a new wireless controller in rack 1 of the IDF E-C130 (08) rack elevation.
    d. Moved the laptop drawer in rack 2 of the IDF E-C130 (08) rack elevation to rack unit 24 and relabeled it from “LAPTOP DRAWER” to “RACK DRAWER FOR O.F.O.I. LAPTOP”
    e. Added a dedicated rack mounted shelf for a new wireless controller in rack 2 of the IDF G108 (09) rack elevation.

5) Sheet T305 – AV DIAGRAMS
    a. Updated the existing IDF E-F107A (07) rack outline to exclude the field devices.
    b. Added a note for the contractor to provide the new quantity of cables required to connect to the new quantity of switching modules.
    c. Updated the speaker labels to match the 27 51 23 specification.

6) Sheet T401 – TECHNOLOGY DETAILS
    a. Added a new football field audio connection location detail.
    b. Updated the annotation symbols of audio connection location type 3 and audio connection location type 4 to match what is shown on the floorplans and technology legend.

c. Updated the detail numbering.

7) Sheet T402 – TECHNOLOGY DETAILS
    a. Updated the detail numbering.

8) Sheet T500 – TELECOM / SECURITY SCHEDULES
    a. Updated the IDF 08 telecom schedule to reflect the additional data drops and labeling changes to various telecom and AV devices.
    b. Removed the key plan from the title block.

EDGEWOOD EARLY CHILDHOOD CENTER DRAWINGS:

1) Sheet T301 – TR ENLARGED LAYOUTS/RACK ELEVATIONS
    a. Updated the heading for each equipment frame in the new MDF B152 (00) rack elevation to include the exact verbiage found in Part 2.1 of specification 27 11 16 “FLOOR MOUNTED 2-POST EQUIPMENT FRAME”.
    b. Added a half rack AV network switch and a 1 RU Brush Pass-Thru Plate to the Activity Center & Cafeteria AV Rack Elevation.

2) Sheet T500 – TELECOM / SECURITY SCHEDULES
    a. Added a note directing the low voltage contractor to the Primary School and Intermediate School A-series and E-series drawings to coordinate re-locating existing data voice locations serving the library circulation desks in both schools.

EDGEWOOD HIGH SCHOOL SHEET INDEX:

1. T201C1 – FIRST FLOOR TECHNOLOGY PLAN – UNIT C1
2. T201D1 – FIRST FLOOR TECHNOLOGY PLAN – UNIT D1
3. T201D2 – FIRST FLOOR TECHNOLOGY PLAN – UNIT D2
4. T302 – RACK ELEVATIONS
5. T305 – AV DIAGRAMS
6. T401 – TECHNOLOGY DETAILS
7. T402 – TECHNOLOGY DETAILS
8. T500 – TELECOM / SECURITY SCHEDULES

EDGEWOOD EARLY CHILDHOOD CENTER SHEET INDEX:

1. T301 – TR ENLARGED LAYOUTS / RACK ELEVATIONS
2. T500 – TELECOM / SECURITY SCHEDULES

SECTION 02 4119 - SELECTIVE DEMOLITION

PART 1 GENERAL

1.1 SUMMARY

A. Section Includes:

1. Demolish and remove all items required to complete the work indicated.
2. Refer to all drawings for new work required. Demolish and remove any item required to make way for new work.
3. Demolish designated building equipment and fixtures.
4. Demolish designated construction.
5. Cutting and alterations for completion of the Work.
6. Removing designated items for reuse or Owner’s retention as indicated.
7. Protecting items designated to remain.
8. Removing demolished materials.
9. Cap and identify existing utilities.
10. Provide adequate shoring and bracing.
11. Patching all substrates and finishes after demolition to match existing.

1.2 SUBMITTALS

A. Division 01 - Submittal Procedures: Requirements for submittals.

B. Demolition Schedule: Indicate overall schedule and interruptions required for utility and building services.

C. Shop Drawings:

1. Indicate demolition and removal sequence.
2. Indicate location of items designated for reuse or Owner’s retention.
3. Indicate location and construction of temporary work.

1.3 CLOSEOUT SUBMITTALS

A. Project Record Documents: Accurately record actual locations of capped utilities, concealed utilities discovered during demolition and subsurface obstructions.

B. Operation and Maintenance Data: Submit description of system, inspection data, and parts lists.

1.4 QUALITY ASSURANCE

A. Conform to applicable code for demolition work, dust control, products requiring electrical disconnection and re-connection.

B. Conform to applicable code for procedures when hazardous or contaminated materials are discovered.

C. Obtain required permits from authorities having jurisdiction.

1.5 PRE-INSTALLATION MEETINGS

A. Administrative Requirements: Pre-installation meeting.

B. Convene minimum one week prior to commencing work of this section.

1.6 SCHEDULING

A. Schedule Work to coincide with new construction.

B. Cooperate with Owner in scheduling noisy operations and waste removal that may impact Owners operation and in adjoining spaces.

C. Perform noisy or dusty work as scheduled with the Owner.

D. Coordinate utility and building service interruptions with Owner.

1. Do not disable or disrupt building fire or life safety systems without three days prior written notice to Owner.
2. Schedule tie-ins to existing systems to minimize disruption.
3. Coordinate Work to ensure fire sprinklers, fire alarms, smoke detectors, emergency lighting, exit signs and other life safety systems remain in full operation in occupied areas.

1.7 PROJECT CONDITIONS

A. Conduct demolition to minimize interference with adjacent and occupied building areas.

B. Cease operations immediately if structure appears to be in danger and notify Architect/Engineer. Do not resume operations until directed.

PART 2 PRODUCTS

Not Used.

PART 3 EXECUTION

3.1 PREPARATION

A. Notify affected utility companies before starting work and comply with their requirements.

B. Mark location and termination of utilities.

C. Erect, and maintain temporary barriers and security devices, including warning signs and lights, and similar measures, for protection of the public, Owner, and existing improvements indicated to remain.

D. Layout cuts in post tensioned concrete elements to avoid cutting concrete within 12 inches (300 mm) of any stressing tendon. Notify Architect/Engineer three days in advance of cutting post-tensioned concrete.

E. Erect and maintain weatherproof closures for exterior openings.

F. Erect and maintain temporary partitions to prevent spread of dust, odors, and noise to permit continued Owner occupancy.

G. Prevent movement of structure; provide temporary bracing and shoring required to ensure safety of existing structure.

H. Provide appropriate temporary signage including signage for exit or building egress.

I. Do not close or obstruct building egress path.

J. Do not disable or disrupt building fire or life safety systems without 3 days prior written notice to Owner.

3.2 SALVAGE REQUIREMENTS

A. Coordinate with Owner to identify building components and equipment required to be removed and delivered to Owner.

B. Tag components and equipment Owner designates for salvage.

C. Protect designated salvage items from demolition operations until items can be removed.

D. Carefully remove building components and equipment indicated to be salvaged.

E. Disassemble as required to permit removal from building.

F. Package small and loose parts to avoid loss.

G. Mark equipment and packaged parts to permit identification and consolidation of components of each salvaged item.

H. Prepare assembly instructions consistent with disassembled parts. Package assembly instructions in protective envelope and securely attach to each disassembled salvaged item.

I. Deliver salvaged items to Owner. Obtain signed receipt from Owner.

3.3 DEMOLITION

A. Conduct demolition to minimize interference with adjacent and occupied building areas.

B. Maintain protected egress from and access to adjacent existing buildings at all times.

C. Do not close or obstruct roadways or sidewalks without permits.

D. Cease operations immediately when structure appears to be in danger and notify Architect/Engineer.

E. Disconnect and remove designated utilities within demolition areas.

F. Cap and identify abandoned utilities at termination points when utility is not completely removed. Annotate Record Drawings indicating location and type of service for capped utilities remaining after demolition.

G. Demolish in orderly and careful manner. Protect existing improvements and supporting structural members.

H. Carefully remove building components indicated to be reused.

1. Disassemble components as required to permit removal.
2. Package small and loose parts to avoid loss.
3. Mark components and packaged parts to permit reinstallation.
4. Store components, protected from construction operations, until reinstalled.

I. Remove demolished materials from site except where specifically noted otherwise. Do not burn or bury materials on site.

J. Remove materials as Work progresses. Upon completion of Work, leave areas in clean condition.

K. Remove temporary Work.

L. After demolition, patch all substrates and finishes to match existing.

END OF SECTION 02 4119

PART 1 GENERAL

1.01 SECTION INCLUDES
A. Single-sided LED basketball scoreboard

1.02 REFERENCES
A. Standard for Electric Signs, UL 48
B. Standard for CSA C22.2 #207
C. Federal Communications Commission Regulation Part 15
D. National Electric Code

1.03 SUBMITTALS
A. Product data: Submit manufacturer's product illustrations, data and literature that fully describe the scoreboards and accessories proposed for installation.
B. Shop drawings: Submit mechanical and electrical drawings.
C. Maintenance data: Submit manufacturer's installation, operation, and maintenance manuals.

1.04 DELIVERY, STORAGE, AND HANDLING
A. Product delivered on site.
B. Scoreboard and equipment to be housed in a clean, dry environment.

1.05 PROJECT CONDITIONS
A. Environmental Limitations: Do not install scoring equipment until spaces are enclosed and weatherproof, wet work in spaces is complete and dry, and ambient temperature and humidity conditions are maintained at the levels indicated for project when occupied for its intended use.
B. Field Measurements: Coordinate scoreboard location and height with the customer. Verify dimensions by field measurements.
C. Supply weight and mounting method for owner to verify that building structure is capable of supporting the scoreboard's weight in addition to the auxiliary equipment.

1.06 QUALITY ASSURANCE
A. For indoor use only
B. Source Limitations: Obtain each type of scoring equipment and electronic displays through one source from a single manufacturer.
C. ETL listed to UL 48
D. NEC compliant
E. FCC compliant
F. ETLC listed to CSA 22.2 #207

1.07 WARRANTY
A. Provide 5 years of no cost parts exchange including standard shipping on electronics parts and radios due to manufacturing defects
B. Provide toll-free service coordination
C. Provide technical online and phone support during Daktronics business hours

PART 2 PRODUCTS

2.01 MANUFACTURER

A. Model #: BB-2123, Daktronics, Inc., 201 Daktronics Drive, P.O. Box 5128, Brookings, SD 57006-5128
B. Approved equal.

2.02 PRODUCT

A. Daktronics BB-2123 single-sided basketball scoreboard displays period time to 99:59, HOME and GUEST scores to 199, PERIOD to nine, team FOULS to 99, player (PLYR) number to 99, player FOUL to nine, player points (PTS) to 99, T.O.L. (time outs left) to nine and indicates possession and bonus. During the last minute of the period, scoreboard displays time to 1/10 of a second. Scoreboard can also score volleyball and wrestling with included caption panels, as well as any sport requiring a clock, score and period function.

2.03 SCOREBOARD

A. General information
   1. Dimensions: 6'-0" (1.83 m) high, 10'-0" (3.05 m) wide, 0'-6" (152 mm) deep
   2. Base weight: 260 lb (118 kg) – options may increase weight
   3. Base power requirement: 250 W – options may increase wattage
   4. Color: choose from manufacturer's standard paint selections
B. Construction
   1. All-aluminum construction
   2. Scoreboard back, face, and perimeter: 0.063" (1.60 mm) thick
   3. Cabinet withstands high-velocity impact from air-filled sports balls without the need for protective screens
C. Digits & Indicators
   1. Coordinate with owner:
      a. LED color (SELECT ONE DIGIT COLOR IN BRACKETS ONLY):
      Amber clock/colon, PERIOD, PLYR/FOUL/PTS and T.O.L. digits and bonus indicators with Red score and FOULS digits and possession indicators
      or
      All White digits and indicators
   2. Clock and score digits: 13" (330 mm) high
   3. PERIOD, FOULS, PLYR/FOUL/PTS and T.O.L. digits: 10" (254 mm) high
   4. Bonus indicators: 4" (102 mm) high
   5. Possession arrows: 3" (76 mm) high
   6. Seven bar segments per digit
   7. PanaView® (PV) digit technology – discrete LEDs protrude through the scoreboard face.
D. Captions
   1. Vinyl applied directly to scoreboard face and changeable panels.
   2. HOME and GUEST captions: 6" (152 mm) high.
   3. PERIOD, FOULS, PLYR/FOUL/PTS and T.O.L. captions: 4" (102 mm) high.
   4. Color: standard white or choose from manufacturer's vinyl color selections.
E. Border Striping
   1. Vinyl striping applied around the clock and scoreboard face.
   2. Color: standard white or choose from manufacturer's vinyl color selections
F. Horn
   1. Vibrating horn mounted inside the scoreboard cabinet behind the face.
   2. Sounds automatically when period clock counts down to zero.

3. Sounds manually as directed by operator.

G. Power Cord
1. Cord is 11' (3.35 m) long.
2. Cord plugs into a standard grounded outlet.

H. Accessory Equipment
(**Coordinate with owner**)
1. Custom vinyl team name caption in place of HOME
or
Two 6" (152 mm) high Programmable Team Name Message Centers (TNMCs) in place of vinyl HOME and GUEST captions – add 15 lb (7 kg) and 60 W
2. Two 17" (432 mm) high, 33" (838 mm) wide aluminum panels in upper corners with vinyl logo/sponsor decoration

2.04 SCORING CONSOLE

A. Console is an All Sport® 5000 controller
B. Scores multiple sports using changeable keyboard inserts
C. Controls multiple scoreboards, stats displays and shot clocks, including other All Sport 5000 controlled displays currently owned by customer
D. Recalls clock, score, and period information if power is lost
E. Runs Time of Day and Segment Timer modes
F. Console includes:
1. Rugged aluminum enclosure to house electronics
2. Sealed membrane water-resistant keyboard
3. 32-character backlit LCD to verify entries and recall information currently displayed
4. Power cord that plugs into a standard grounded outlet; 6 watts max
5. Control cable to connect to the control receptacle junction box (wired system only)
6. Hand-held switch for main clock start/stop and horn
7. Soft-sided carrying case

G. Accessory Equipment
(**Coordinate with owner**)
1. 2.4 GHz spread spectrum radio system with frequency hopping technology and 64 non-interfering channels; system includes a transmitter installed inside the console and a receiver installed inside the scoreboard(s)
2. Hard carrying case

PART 3 EXECUTION

3.01 EXAMINATION

A. Verify that mounting surface is ready to receive scoreboard. Verify that placement of conduit and junction boxes are as specified and indicated in plans and shop drawings.

3.02 INSTALLATION

A. Power conduit, power conductors, and signal conduit to within 3' (0.9 m) of displays will be installed by Customer. Control wiring and labor to install will be the responsibility of the contractor assigned to the display equipment. Power conduit, signal conduit, and all electrical connections from within 3' (0.9 m) of displays will be the responsibility of the contractor assigned to the display equipment.

B. Mount scoreboards and interior displays to wall in location detailed and in accordance with manufacturer's instructions. Unit to be plumb and level.

3.03 INSTALLATION—CONTROL CENTER

A. Provide boxes, cover plates and jacks as required to meet control specification requirements. Control cables to control panels shall be concealed.
B. Test the operation of the scoreboard, controller and all control jacks; leave control unit in carrying case and other loose items with owner's designated representative.
C. Conduct operator training on the scoreboard/controller operation.

END OF SECTION

SECTION 233713 - DIFFUSERS, REGISTERS, AND GRILLES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section Includes:

1. Rectangular and square ceiling diffusers.
2. Linear slot diffusers.
3. Fixed face grilles.

B. Related Requirements:

1. Section 233300 "Air Duct Accessories" for fire and smoke dampers and volume-control dampers not integral to diffusers.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Data Sheet: Indicate materials of construction, finish, and mounting details; and performance data including throw and drop, static-pressure drop, and noise ratings.
2. Diffuser Schedule: Indicate drawing designation, room location, quantity, model number, size, and accessories furnished.

PART 2 - PRODUCTS

2.1 RECTANGULAR AND SQUARE CEILING DIFFUSERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Krueger-HVAC; brand of Johnson Controls International plc, Global Products.
2. METALAIRE, Inc.
3. Nailor Industries Inc.
4. Price Industries Limited.
5. Tuttle & Bailey; brand of Johnson Controls International plc, Global Products.
6. Titus.

B. Devices shall be specifically designed for variable-air-volume flows.

C. Material: Aluminum.

D. Finish: Baked enamel, white.

E. Face Size: Refer to schedule on drawings.

F. Face Style: Three cone.

G. Mounting: Surface or T-bar to match ceiling type.

H. Pattern: Adjustable.

I. Accessories: Provide mounting frames, mounting hardware, and accessories as appropriate for ceiling type(s). Refer to schedule on drawings and architectural reflected ceiling plans.

2.2 LINEAR SLOT DIFFUSERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. Krueger-HVAC; brand of Johnson Controls International plc, Global Products.
2. METALAIRE, Inc.
3. Nailor Industries Inc.
4. Price Industries Limited.
5. Tuttle & Bailey; brand of Johnson Controls International plc, Global Products.
6. Titus.

B. Devices shall be specifically designed for variable-air-volume flows.

C. Material - Shell: Aluminum.

D. Material - Pattern Controller and Tees: Aluminum.

E. Finish - Face and Shell: Baked enamel, white.

F. Finish - Pattern Controller: Baked enamel, black.

G. Finish - Tees: Baked enamel, white.

H. Pattern Controller: Ice-tong shape for 180-degree air pattern control.

I. Slot Width: Refer to schedule on drawings.

J. Number of Slots: Refer to schedule on drawings.

K. Length: Refer to schedule on drawings.

L. Plenum:

1. Material: Galvanized Steel.
2. Configuration: Side inlet, sloped shoulder for slot diffusers with one to four slots, mounted in ceilings 9’-11” or lower. Refer to schedule on drawings and plans for inlet size and plenum length.
3. Configuration: Side inlet, straight shoulder for slot diffusers with one to four slots, mounted in ceilings 10’-0” and higher. Refer to schedule on drawings and plans for inlet size and plenum length.

M. Accessories: Provide mounting frames, mounting hardware, and accessories as appropriate for ceiling type(s). Refer to schedule on drawings and architectural reflected ceiling plans.

2.3 GRILLES

A. Fixed Face Grille:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. Krueger-HVAC; brand of Johnson Controls International plc, Global Products.
   b. METALAIRE, Inc.
   c. Nailor Industries Inc.
   d. Price Industries Limited.
   e. Tuttle & Bailey; brand of Johnson Controls International plc, Global Products.
   f. Titus.
2. Material: Aluminum.
3. Finish: Baked enamel, white.
4. Face Blade Arrangement: Horizontal; spaced 3/4 inch apart.
5. Core Construction: Integral.
6. Frame: 1-1/4 inches wide.
7. Mounting: Coordinate with ceiling and wall type(s). Refer to schedule on drawings and architectural reflected ceiling and floor plans.

B. Fixed Face Grille:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
   a. Krueger-HVAC; brand of Johnson Controls International plc, Global Products.
   b. METALAIRE, Inc.
   c. Nailor Industries Inc.
   d. Price Industries Limited.
   e. Tuttle & Bailey; brand of Johnson Controls International plc, Global Products.
   f. Titus.
2. Material: Aluminum.
3. Finish: Baked enamel, white.
4. Face Arrangement: Egg crate.
5. Core Construction: Integral.
6. Frame: 1-1/4 inches wide.
7. Mounting: Coordinate with ceiling and wall type(s). Refer to schedule on drawings and architectural reflected ceiling and floor plans.

2.4 SOURCE QUALITY CONTROL

A. Verification of Performance: Rate diffusers according to ASHRAE 70, "Method of Testing for Rating the Performance of Air Outlets and Inlets."

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine areas where diffusers are installed for compliance with requirements for installation tolerances and other conditions affecting performance of equipment.

B. Proceed with installation only after unsatisfactory conditions have been corrected.

3.2 INSTALLATION

A. Install diffusers, registers and grilles level and plumb.

B. Ceiling-Mounted Outlets and Inlets: Drawings indicate general arrangement of ducts, fittings, and accessories. Air outlet and inlet locations have been indicated to achieve design requirements for air volume, noise criteria, airflow pattern, throw, and pressure drop. Make final locations where indicated, as much as practical. For units installed in lay-in ceiling panels, locate units in the center of panel. Where architectural features or other items conflict with installation, notify Architect for a determination of final location.

C. Install diffusers, registers and grilles with airtight connections to ducts and to allow service and maintenance of dampers, air extractors, and fire dampers.

3.3 ADJUSTING

A. After installation, adjust diffusers to air patterns indicated, or as directed, before starting air balancing.

END OF SECTION 233713.13

SECTION 233716 - FABRIC AIR-DISTRIBUTION DEVICES

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

1.2 SUMMARY

A. Section includes continuous, tubular, fabric air-distribution devices.

1.3 ACTION SUBMITTALS

A. Product Data: For each type of product.

1. Data Sheet: Indicate materials of construction, finish, and mounting details; and performance data including throw and drop, static-pressure drop, and noise ratings.

B. Shop Drawings: For fabric air-distribution devices.

1. Include plans, elevations, sections, and suspension and attachment details.

C. Samples for Initial Selection: For diffusers with factory-applied color finishes.

D. Samples for Verification: For diffusers, in manufacturer's standard sizes to verify color selected.

E. Diffuser Schedule: Use same designations indicated on Drawings. Indicate room location, quantity, model number, size, and accessories furnished.

1.4 INFORMATIONAL SUBMITTALS

A. Coordination Drawings: Reflected ceiling plans, drawn to scale, on which the following items are shown and coordinated with each other, using input from Installers of the items involved:

1. Ceiling suspension assembly members.
2. Method of attaching hangers to building structure.
3. Ceiling-mounted items including lighting fixtures, diffusers, grilles, speakers, sprinklers, access panels, and special moldings.

B. Source quality-control reports.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

1. FabricAir Inc.
2. Prihoda North America.
3. Duct Sox.

2.2 PERFORMANCE REQUIREMENTS

A. Continuous tubular diffuser materials shall be listed and labeled as complying with NFPA 90A.

B. Air permeability of fabric will comply with ASTM D737.

2.3 CONTINUOUS TUBULAR DIFFUSERS

A. Description:

1. Fabric: Woven permeable polyester.
2. Shape: Round.
3. Air-Outlet Configuration: Permeable fabric. As indicated on drawings.
4. Air-Outlet Configuration: Circumferential hole pattern with diffusion-hole as specified on drawings. As indicated on drawings
5. Air-Outlet Configuration: Lengthwise mesh. As indicated on drawings
6. Air-Outlet Configuration: Lengthwise hole pattern; with diffusion-hole diameter of. As indicated on drawings
7. Air-Outlet Configuration: Periodic nozzles. As indicated on drawings
8. Air-Outlet Configuration: Linear vents. As indicated on drawings
9. Color: by Architect.

B. Duct Connection Type: Round zipper.

C. Accessories:

1. Quick-connect joint.
2. Snap hooks.
3. Cleanout zipper.
4. Condensate drain.
5. Fabric damper.
6. End cap.
7. Draw cords.
8. Removable support hoops.
9. Elbows.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Drawings indicate general arrangement of ducts, fittings, and accessories. Air outlet locations have been indicated to achieve design requirements for air volume, noise criteria, airflow pattern, throw, and pressure drop. Make final locations where indicated, as much as practical. Where architectural features or other items conflict with installation, notify Architect for a determination of final location.

END OF SECTION 233716

SECTION 260533.23 - SURFACE RACEWAYS FOR ELECTRICAL SYSTEMS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:

1. Surface metal raceways and fittings.
2. Wireways and auxiliary gutters.

B. Products Installed, but Not Furnished, under This Section:

1. See Section 260553 "Identification for Electrical Systems" for electrical equipment labels.

C. Related Requirements:

1. Section 260010 "Supplemental Requirements for Electrical" for additional abbreviations, definitions, submittals, qualifications, testing agencies, and other Project requirements applicable to Work specified in this Section.

1.2 ACTION SUBMITTALS

A. Product Data:

1. Surface metal raceways and fittings.
2. Wireways and auxiliary gutters.

1.3 INFORMATIONAL SUBMITTALS

A. Manufacturers' Published Instructions:

1. Surface metal raceways and fittings.
2. Wireways and auxiliary gutters.

PART 2 - PRODUCTS

2.1 SURFACE METAL RACEWAYS AND FITTINGS

A. Performance Criteria:

1. Regulatory Requirements: Listed and labeled in accordance with NFPA 70, by qualified electrical testing laboratory recognized by authorities having jurisdiction, and marked for intended location and application.
2. Listing Criteria: UL CCN RJBT; including UL 5.

B. Source Quality Control:

1. Product Data: Prepare and submit catalog cuts, brochures, and performance data illustrating size, physical appearance, and other characteristics of product.
2. Manufacturer's Published Instructions: Prepare and submit installation, testing, and operating instructions for product.
3. Samples:

    a. Surface Metallic Raceway Nonmetallic Cover Samples for Initial Selection: Manufacturer's standard color sheets, showing full range of available colors for each type, 12 inch long.

C. UL RJBT - Surface Metal Raceways and Fittings with Metal Covers:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. Hubbell Wiring Device-Kellems; brand of Hubbell Electrical Solutions; Hubbell Incorporated.
    b. Wiremold; Legrand North America, LLC.

2. Options:

    a. Aluminum base with snap-on covers.
    b. Manufacturer's standard enamel finish in color selected by Architect.
    c. Wiring Channels: Single Dual. Multiple channels must be capable of housing a standard 20 to 30 A device flush within the raceway.

2.2 WIREWAYS AND AUXILIARY GUTTERS

A. Performance Criteria:

1. Regulatory Requirements: Listed and labeled in accordance with NFPA 70, by qualified electrical testing laboratory recognized by authorities having jurisdiction, and marked for intended location and application.
2. Listing Criteria:

    a. UL CCN ZOYX; including UL 870.
    b. UL 94, V-0 requirements for self-extinguishing characteristics.

B. Source Quality Control:

1. Product Data: Prepare and submit catalog cuts, brochures, and performance data illustrating size, physical appearance, and other characteristics of product.

2. Manufacturer's Published Instructions: Prepare and submit installation, testing, and operating instructions for product.

C. UL ZOYX - Metal Wireways and Auxiliary Gutters:

1. Manufacturers: Subject to compliance with requirements, provide products by one of the following:

    a. ABB, Electrification Business.
    b. Cooper B-line; brand of Eaton, Electrical Sector.
    c. Hoffman; brand of nVent Electrical plc.

d. MonoSystems, Inc.
e. Square D; Schneider Electric USA.
f. Wiegmann; brand of Hubbell Electrical Solutions; Hubbell Incorporated.

2. Additional Characteristics:

a. Fittings and Accessories: Include covers, couplings, offsets, elbows, expansion joints, adapters, hold-down straps, end caps, and other fittings to match and mate with wireways as required for complete system.
b. Finish: Manufacturer's standard enamel finish.

3. Options:

a. Degree of Protection: Type 1 unless otherwise indicated.
b. Wireway Covers: Hinged type unless otherwise indicated.

PART 3 - EXECUTION

3.1 INSTALLATION OF SURFACE RACEWAYS FOR ELECTRICAL SYSTEMS

A. Comply with manufacturer's published instructions.

B. Reference Standards for Installation: Unless more stringent installation requirements are specified in Contract Documents or manufacturers' published instructions, comply with the following:

1. Auxiliary Gutters: Article 366 of NFPA 70.
2. Surface Metal Raceway: Article 386 of NFPA 70.
3. Consult Architect for resolution of conflicting requirements.

C. Special Installation Techniques:

1. Install surface raceways only where indicated on Drawings.
2. Install surface raceway with a minimum 2 inch radius control at bend points.
3. Secure surface raceway with screws or other anchor-type devices at intervals not exceeding 48 inch and with no less than two supports per straight raceway section. Support surface raceway in accordance with manufacturer's published instructions. Tape and glue are unacceptable support methods.
4. Identification: Provide labels for surface raceways and associated electrical equipment.

a. Identify field-installed conductors, interconnecting wiring, and components.
b. Provide warning signs.

3.2 PROTECTION

A. After installation, protect surface raceways from construction activities. Remove and replace items that are contaminated, defaced, damaged, or otherwise caused to be unfit for use prior to acceptance by Owner.

END OF SECTION 260533.23

SECTION 262213 - LOW-VOLTAGE DISTRIBUTION TRANSFORMERS

PART 1 - GENERAL

1.1 SUMMARY

A. Section Includes:
1. Distribution, dry-type transformers with nominal primary and secondary rating of 600 V and less, with capacities up to 1500 kVA.

B. Related Requirements:
1. Section 260010 "Supplemental Requirements for Electrical" for additional abbreviations, definitions, submittals, qualifications, testing agencies, and other Project requirements applicable to Work specified in this Section.

1.2 ACTION SUBMITTALS

A. Product Data:
1. For each type of product.

B. Shop Drawings:
1. Detail equipment assemblies and indicate dimensions, weights, loads, required clearances, method of field assembly, components, and location and size of field connections.
2. Vibration Isolation Base Details: Detail fabrication including anchorages and attachments to structure and to supported equipment.
3. Include diagrams for power, signal, and control wiring.

C. Field Quality-Control Submittals:
1. Field quality-control reports.

1.3 INFORMATIONAL SUBMITTALS

A. Manufacturers' Published Instructions: Record copy of official installation and testing instructions issued to Installer by manufacturer for the following:
1. Transformer working clearances, anchoring, torque values, and insulation-resistance testing.

B. Source quality-control reports.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

A. Manufacturers: Subject to compliance with requirements, provide products by one of the following:
1. ABB, Electrification Business.
2. Eaton.

3. Hammond Power Solutions Inc.
4. Siemens Industry, Inc., Energy Management Division.
5. SolaHD; Emerson Electric Co., Automation Solutions.
6. Square D; Schneider Electric USA.

2.2 GENERAL TRANSFORMER REQUIREMENTS

A. Description: Factory-assembled and -tested, air-cooled units for 60 Hz service.

B. Electrical Components, Devices, and Accessories: Listed and labeled in accordance with NFPA 70, by qualified electrical testing laboratory recognized by authorities having jurisdiction, and marked for intended location and application.

C. Transformers Rated 15 kVA and Larger:
1. Comply with 10 CFR 431 (DOE 2016) efficiency levels.
2. Marked as compliant with DOE 2016 efficiency levels by qualified electrical testing laboratory recognized by authorities having jurisdiction.

2.3 DISTRIBUTION TRANSFORMERS

A. Comply with NFPA 70, and list and label as complying with UL 1561.

B. Cores: Electrical grade, non-aging silicon steel with high permeability and low hysteresis losses.
1. One leg per phase.

C. Coils: Continuous windings except for taps.
1. Coil Material: Aluminum.
2. Internal Coil Connections: Brazed or pressure type.
3. Terminal Connections: Welded.

D. Enclosure: Ventilated.
1. Core and coil must be encapsulated within resin compound using vacuum-pressure impregnation process to seal out moisture and air.
2. KVA Ratings: Based on convection cooling only and not relying on auxiliary fans.
3. Wiring Compartment: Sized for conduit entry and wiring installation.
4. Environmental Protection:
   a. Indoor: UL 50E, Type 2.

E. Taps for Transformers 25 kVA and Larger: Two 2.5 percent taps above and two 2.5 percent taps below normal full capacity.

F. Insulation Class, 30 kVA and Larger: 220 deg C, UL-component-recognized insulation system with maximum of 150 deg C rise above 40 deg C ambient temperature.

G. Grounding: Provide ground-bar kit or ground bar installed on inside of transformer enclosure.

2.4 IDENTIFICATION

A. Nameplates:
1. Self-adhesive label for distribution transformers. Self-adhesive labels are specified in Section 260553 "Identification for Electrical Systems."

PART 3 - EXECUTION

3.1 EXAMINATION

A. Examine conditions for compliance with enclosure- and ambient-temperature requirements for transformers.

B. Verify that field measurements are as needed to maintain working clearances required by NFPA 70 and manufacturer's published instructions.

C. Examine walls, floors, roofs, and concrete bases for suitable mounting conditions where transformers will be installed.

D. Verify that ground connections are in place and requirements in Section 260526 "Grounding and Bonding for Electrical Systems" have been met. Maximum ground resistance must be 5 Ω at location of transformer.

E. Environment: Enclosures must be rated for environment in which they are located. Covers for UL 50E, Type 4X enclosures may not cause accessibility problems.

3.2 INSTALLATION

A. Construct concrete bases and anchor floor-mounted transformers in accordance with manufacturer's published instructions and requirements in Section 260529 "Hangers and Supports for Electrical Systems."
   1. Coordinate size and location of concrete bases with actual transformer provided. Cast anchor-bolt inserts into bases. Concrete, reinforcement, and formwork requirements are specified with concrete.

B. Secure transformer to concrete base in accordance with manufacturer's published instructions.

C. Secure covers to enclosure and tighten bolts to manufacturer-recommended torques to reduce noise generation.

D. Remove shipping bolts, blocking, and wedges.

3.3 CONNECTIONS

A. Ground equipment in accordance with Section 260526 "Grounding and Bonding for Electrical Systems."

B. Connect wiring in accordance with Section 260519 "Low-Voltage Electrical Power Conductors and Cables."

C. Tighten electrical connectors and terminals in accordance with manufacturer's published torque-tightening values. If manufacturer's torque values are not indicated, use those specified in UL 486A-486B.

D. Provide flexible connections at conduit and conductor terminations and supports to eliminate sound and vibration transmission to building structure.

3.4 FIELD QUALITY CONTROL

A. Tests and Inspections:
   1. Small (Up to 167 kVA Single-Phase or 500 kVA Three-Phase) Dry-Type Transformer Field Tests:
      a. Visual and Mechanical Inspection.
         1) Inspect physical and mechanical condition.
         2) Inspect anchorage, alignment, and grounding.
         3) Verify that resilient mounts are free and that shipping brackets have been removed.
         4) Verify that unit is clean.
         5) Perform specific inspections and mechanical tests recommended by manufacturer.
         6) Verify that as-left tap connections are as specified.
         7) Verify presence of surge arresters and that their ratings are as specified.
      b. Electrical Tests:
         1) Measure resistance at windings, taps, and bolted connections.
         2) Perform insulation-resistance tests winding-to-winding and windings-to-ground. Apply voltage in accordance with manufacturer's published data. In absence of manufacturer's published data, comply with NETA ATS, Table 100.5. Calculate polarization index: value of index may not be less than 1.0.
         3) Perform turns-ratio tests at tap positions. Test results may not deviate by more than one-half percent from either adjacent coils or calculated ratio. If test fails, replace transformer.
         4) Verify correct secondary voltage, phase-to-phase and phase-to-neutral, after energization and prior to loading.

B. Test Labeling: On completion of satisfactory testing of units, attach dated and signed "Satisfactory Test" label to tested components.

C. Nonconforming Work:
   1. Transformer will be considered defective if it does not pass tests and inspections.
   2. Remove and replace units that do not pass tests or inspections and retest as specified above.

D. Assemble and submit test and inspection reports.

3.5 CLEANING

A. Vacuum dirt and debris; do not use compressed air to assist in cleaning.

END OF SECTION 262213

SECTION 27 05 53 - IDENTIFICATION FOR COMMUNICATIONS SYSTEMS

PART 1 - GENERAL

1.1 DESCRIPTION

A. This section includes the minimum requirements for the installation, termination, and labeling of all faceplates and connectors as depicted on the Technology Drawings and required by these specifications.

B. Related Sections include the following:

1. 27 05 26 - Grounding and Bonding for Communications Systems
2. 27 11 16 - Communications Cabinets, Racks, Frames and Enclosures
3. 27 11 19 - Communications Termination Blocks and Patch Panels
4. 27 15 13 - Communications Copper Horizontal Cabling
5. 27 15 43 - Communications Faceplates and Connectors

1.2 SUBMITTALS

A. Contractor shall provide all submittals according to Section 27 05 00.

PART 2 - PRODUCTS

2.1 LABELS

A. Products shall provide labeling options that comply with the TIA/EIA-606-B Standard. All products shall be clearly identified. Products shall include faceplates, surface mount boxes, patch panels, marker ties, printers and accessories.

B. Shall meet the legibility, defacement, exposure and adhesion requirements of UL 969.

C. Shall be preprinted or laser printed type. Handwritten IS NOT acceptable.

D. Where used for cable marking provide vinyl substrate with a white printing area and a clear “tail” that self laminates the printed area when wrapped around the cable.

E. Where insert type labels are used, provide clear plastic cover over label.

F. A standard style, size 10, bold font type shall be used when making faceplate labels. All label heights shall be the same to allow for consistent labeling. A Cable Management Inventory Record shall be used to record all installation details.

G. Acceptable Manufacturers:

1. Brady
2. Brother
3. Dymo
4. Or Approved Equal

PART 3 - EXECUTION

3.1 IDENTIFICATION AND LABELING

A. The telecommunications Contractor's onsite representative(s) shall schedule a meeting with the Owner's representative through the appropriate Project Manager prior to the permanent labeling of Information Outlets and TR patch panels.

B. Label all horizontal cabling specifically corresponding to where the cable terminates in the ER/TR. Label both ends of each horizontal cable as shown on the drawings or as required by these specifications. Numbers shall be sequential and Contractor shall confirm labeling with Owner prior to installation.

C. Faceplates and Patch Panels:

1. Label faceplates at the Information Outlets specifically corresponding to the horizontal cable labeling scheme.
2. Labels shall be mounted in a manner which permits easy access and viewing.

D. Information Outlet receptacles, cables, and terminations shall be labeled with a standard identification tag at both the Information Outlet and on the patch panels/wiring blocks in the ER/TR.

E. Audio visual equipment, cabling, and boxes shall be labeled with a standard identification tag according at both the source and destination end of the cabling and equipment.

F. Tags shall be preprinted or computer printed with indelible water proof ink and mechanically secured in a permanent fashion; for example, such as using an appropriate label maker with 3/8" tape.

G. Handwritten labels are NOT acceptable.

H. Where existing system is being maintained, utilize the Owner's specific identification scheme.

I. Horizontal Copper Cable Labeling scheme:

1. Horizontal cabling shall be labeled specifically corresponding to where the cable terminates in the MDF/IDF. Label both ends of each horizontal cabling as follows:
2. Labeling on the cables must be the same on either end of the cable.
3. All labeling will be done in all capital letters.
4. Room Numbering

a. MDF is always 00
b. IDFs are numbered with 01 for IDF1, 02 for IDF2, 03 for IDF3, etc.

5. Data and Voice

a. Ports shall be numbered by the rack number and then by patch panel (A, B, C, D, etc.) and then by port within each patch panel (01-48). For example, the first port in the first patch panel in the MDF would be labeled 00-01-A-01, the second would be 00-01-A-02, the third would be 00-01-A-03, etc.

b. Patch panels are to be labeled to the left of the patch panel. Each panel shall be labeled from top to bottom starting with A through to Z. Each port of the patch

panel is to be labeled with the information outlet room number. Contractor shall only place a label on a patch panel port if the port number is already printed on the patch panels by the manufacturer.

6. Label faceplates at the IOs specifically corresponding to the horizontal cable labeling scheme. Refer to the Typical device labeling detail in the T-series sheets for additional outlet labeling information. Contractor shall confirm final labeling scheme with owner prior to the start of installation.

J. Riser Fiber Optic Cabling Labeling Scheme:

1. Riser cabling shall be labeled specifically corresponding to where the cable terminates in the MDF/IDF. Label both ends of each riser cabling.
2. Label all strands or pairs with the designated number.
3. Labeling on the cables must be the same on either end of the cable.
4. All labeling will be done in all capital letters.

K. Label fiber optic backbone cabling identifying origination and destination and cable type/service.

L. The identifier shall be inserted into the Outlet ID, between the room number and the Outlet designator as indicated in the drawings.

M. All labeling shall be coordinated with and approved by an appropriate Owners representative.

1. Schedule a meeting with the Owner's Information Technology representative through the Architect prior to the permanent labeling of Information Outlets and ER/TR patch panels.

N. The contractor is to submit a floor plan to owner before substantial completion indicating the MAC addresses of the installed wireless access points and their location in the building.

3.2 RECORD COPY AND AS - BUILT DRAWINGS

A. Refer to section 27 05 00 for all record copy and as-built drawing requirements.

END OF SECTION

SECTION 27 15 00.23 - AUDIO-VIDEO COMMUNICATIONS HORIZONTAL CABLING

PART 1 - GENERAL

1.1 SCOPE OF WORK

A. This section includes the minimum requirements for the installation, configuration, and training of the audio visual components as depicted on the Drawings and required by these specifications.

B. These Specifications, together with the Drawings accompanying them, are intended to depict the installation requirements necessary to support this Project. Contractor shall furnish materials shown and/or called for on the Drawings but not mentioned in the Specifications, or vice versa, that are necessary for the installation and support of communications cabling, whether or not specifically called for in both. In addition, Contractor shall provide incidental equipment and materials required for the completion of systems included in this contract whether or not specified or shown on the drawings.

C. This section includes minimum requirements for the following:

1. Balanced Microphone / Line Level Cabling
2. 12 AWG Loudspeaker Cabling
3. 16 AWG Loudspeaker Cabling
4. UTP Cabling
5. STP Cabling
6. HDMI Cabling
7. USB Cabling
8. RS-232 Cabling
9. Relay Cabling
10. RF Cabling
11. Custom Faceplates
12. Grommeted Faceplates
13. HDMI Panel Mount Connectors
14. USB Panel Mount Connectors
15. Ethernet Panel Mount Connectors
16. 3.5mm Panel Mount Connectors
17. XLR Panel Mount Connectors

D. Related Sections include the following:

1. Division 26 – Electrical
2. 27 05 00 – Common Work Results for Communications
3. 27 05 28 – Pathways for Communications Systems
4. 27 15 13 – Communications Copper Horizontal Cabling

1.2 QUALITY ASSURANCE

A. The following industry Standards are the basis for the audio-visual system described herein. The list is incorporated by this reference to them.

1. ANSI - American National Safety Institute.
2. ASTM - American Society of Testing and Materials.
3. EIA - Electronics Industries Association.
4. FCC - Federal Communications Commission.

5. NEMA - National Electrical Manufacturer’s Association.
6. OSHA - Occupational Safety and Health Administration.
7. NEC - National Electric Code.
8. NFPA - National Fire Protection Association, NFPA-70.
9. IEEE - Institute of Electrical and Electronics Engineers.
10. ISO - International Standards Organization.
11. UL - Underwriters Laboratories.
12. BICSI Telecommunications Distribution Methods Manual (TDMM).
13. Davis and Davis, Sound System Engineering (2nd Edition), Howard W. Sams, 1987.
14. Giddings, Audio System Design and Installation (ASDI), Howard W. Sams, 1990.

B. All cable shall be installed in a neat and workmanlike manner. All methods of construction that are not specifically described or indicated in the contract documents shall be subject to the control and approval of the Technology Consultant and Owners Representative. Equipment and materials shall be of the quality and manufacture indicated. The equipment specified is based upon the acceptable manufacturers listed. Where "Or Approved equal" is stated, equipment shall be equivalent in every way to that of the equipment specified and subject to approval.

C. Materials and work specified herein shall comply with the requirements of the local Authority Having Jurisdiction. Refer to Section 270500 for all applicable standards and codes.

D. Contractor should have the following qualifications:

1. Experienced in the installation of systems similar in complexity and scale to those included within the scope of work. If requested, the Contractor shall provide the names, locations, and points of contact for at least three installations of the type and complexity specified herein.
2. Within the last two (2) years, installed an audio-visual system with similar equipment and functionality.
3. Have at least one (1) person on staff with CTS-I certification.

1.3 SUBMITTALS

A. Contractor shall provide all submittals according to Section 27 05 00.

B. Test Results and Documentation as per Section 270553 - Identification for Communications Systems.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Equipment and components shall arrive onsite properly protected and undamaged with containers, packaging and labels intact.

B. Store, handle and protect materials and equipment in accordance with Manufacturer's recommendations.

C. Store materials and equipment in dry, environmentally controlled space. Do not install equipment and materials until spaces are enclosed, watertight, and dry. Protect equipment from dust and other airborne materials.

D. Provide additional protection during handling as necessary to prevent breaking, scraping, marring, or otherwise damaging products or surrounding areas.

E. Protect all equipment and components that are to be installed within this project from theft, vandalism, and exposure to rain, freezing temperatures and direct sunlight.

F. Protect installed equipment and components from damage and prevent use by unauthorized persons.

1.5 WARRANTY

A. The Contractor shall warranty the completed work for a period of one (1) years, from the date of acceptance of the work, to be free of defect in design, workmanship, or material.

B. Contractor shall repair, adjust, and/or replace, whichever the District determines to be in its best interests, any defective equipment, materials, or workmanship, as well as such parts of the work damaged or destroyed by such defect, during the warranty period, at the Contractor's sole cost and expense. If parts or components need to be repaired, then a loaner will be supplied and installed until the part or component can be repaired and reinstalled.

C. All service work shall be performed by manufacturer certified technicians.

D. Contractor to provide District a phone number for technical support. All support calls shall be answered within twenty-four (24) hours. All repairs shall be underway within forty-eight (48) hours and completed (or loaner supplied) within seven (7) days.

E. In the event that the Contractor does not affect repair within forty-eight (48) hours from the date of notification of such defect, the District may secure repair services from other sources and charge the Contractor for such costs without voiding the warranty.

F. At the end of the warranty period, the Contractor shall complete one (1) site visit to evaluate the status of the audio-visual systems. All equipment within this scope of work found to be defective shall be replaced at no cost to the District.

G. Guarantees of material, equipment, and workmanship running in favor of the Contractor shall be transferred and assigned to the District on completion of the work and acceptance of said work by the District.

PART 2 - PRODUCTS

2.1 GENERAL

A. All materials shall meet or exceed all applicable referenced standards, federal, state and local requirements, and conform to codes and ordinances of authorities having jurisdiction.

B. All electrical conductors installed under this contract, unless otherwise specified, shall be soft drawn annealed stranded copper having a conductivity of not less than 98% of pure copper and meet appropriate ratings.

C. Cable shall carry appropriate fire rating on jacket of cable.

D. Provide plenum rated cable where required.

E. If cabling type is not listed, provide cabling according to manufacturer's recommendations.

2.2 MICROPHONE / LINE LEVEL CABLING

A. Contractor shall provide and install microphone/line level cabling as required.

1. Provide cabling meeting the following specifications:

a. Minimum shielded 22 AWG, 7x30 stranded cabling
b. Nominal conductor to conductor capacitance: 114 pF/m
c. Tinned copper drain wire
d. Cable to be PVC jacketed.

2. Acceptable Manufacturers

a. Belden 9451
b. Or Approved Equal

2.3 12AWG LOUDSPEAKER CABLING

A. Contractor shall provide and install 16AWG loudspeaker cabling as required.

1. Provide speaker cabling meeting the following specifications:

a. Minimum unshielded 12 AWG, 65x30 stranded cabling
b. Nominal conductor to conductor capacitance: 104 pF/ft
c. Cable to be PVC jacketed.

2. Acceptable Manufacturers:

a. Belden 5000UP
b. Or Approved Equal

2.4 16AWG LOUDSPEAKER CABLING

A. Contractor shall provide and install 16AWG loudspeaker cabling as required.

1. Provide speaker cabling meeting the following specifications:

a. Minimum unshielded 16 AWG, 65x34 stranded cabling
b. Nominal conductor to conductor capacitance: 98 pF/ft
c. Cable to be PVC jacketed.

2. Acceptable Manufacturers

a. Belden 5200UP
b. Or Approved Equal

2.5 UTP CABLING

A. Contractor shall provide and install UTP cabling as required per manufacturer’s recommendations.

1. Provide UTP cabling meeting the following specifications.

a. Minimum 24 AWG, eight (8) conductor cable

b. Nominal conductor to conductor capacitance: 15 pF/ft

2. Acceptable Manufacturers

a. Belden
b. Commscope
c. General Cable
d. Superior Essex
e. Or Approved Equal

2.6 STP CABLING

A. Contractor shall provide and install STP cabling as required per manufacturer's recommendations.

1. Provide STP cabling meeting the following specifications:

a. Minimum 24 AWG, eight (8) conductor cable
b. Nominal conductor to conductor capacitance: 15 pF/ft
c. Cable shall be shielded.
d. Outer jacket to be gray.

2. Acceptable Manufacturers

a. Crestron
b. Extron
c. Or Equal

2.7 HDMI CABLING

A. Contractor shall provide and install HDMI cabling as required.

1. Provide pre-molded cables in lengths as required.
2. Shall support HDMI signal transmission up to 328 ft. via optical cabling.
3. Shall support up to 4k 60Hz 4:4:4 HDR video.
4. Shall meet HDMI 2.0/HDCP 2.2 testing standards.
5. Shall be plenum rated.
6. Shall not require external power.
7. Any lengths greater than 25ft shall utilize optical fiber active HDMI cabling.
8. Acceptable Manufacturers

a. FSR HDMI 2.0 Digital Ribbon Cables
b. Extron HD Pro Plenum
c. Kramer AV CP-AOCH/60
d. Crestron
e. Or Approved Equal

2.8 USB CABLING

A. Contractor shall provide and install USB cabling as required meeting the following specifications;

1. Provide pre-molded cables in lengths as required.

2. Shall support USB 3.0 up to 5 Gbps.
3. Cable shall be plenum rated if routed through plenum spaces.
4. Acceptable Manufacturers:

    a. C2G
    b. Extron
    c. Crestron
    d. Or Approved Equal

2.9 RS-232 CABLING

A. Contractor shall provide and install RS-232 cabling as required.

1. Provide pre-molded cables in lengths as required.
2. Acceptable Manufacturers

    a. Crestron
    b. Extron
    c. Or Approved Equal

2.10 RELAY CABLING

A. Contractor shall provide and install audio video control cabling as required meeting the following specifications;

1. Minimum unshielded 22 AWG, 26x34 stranded cabling
2. Nominal conductor to conductor capacitance: 98 pF/m
3. Provide number of conductors as required.
4. Cable shall be plenum rated if routed through plenum spaces.
5. Acceptable Manufacturers

    a. Belden
    b. Or Approved Equal

2.11 RF CABLING

A. Contractor shall provide and install antenna cabling as required meeting the following specifications;

1. Provide RG-8X type cable.
2. Center conductor 16 AWG solid.
3. Gas-injected FPE insulation
4. Cable to be PVC jacketed.
5. Cable shall be plenum rated if routed through plenum spaces.
6. Acceptable Manufacturers:

    a. Belden 9258
    b. Or Approved Equal

2.12 CUSTOM FACEPLATE

A. Contractor shall provide plates as required by the T-series drawings. Engrave as shown on the drawings.

B. Contractor shall coordinate plate finish and color with the Owner. Plastic plates are not acceptable.

C. Plate label engraving shall be 1/8 in. block sans serif characters unless noted otherwise. On dark plates, letters shall be white; on stainless steel or brushed natural aluminum plates, letters shall be black.

D. Custom and/or engraved plates/panels:

1. Custom panels constructed of 1/8 inch brushed aluminum
2. Finish: Black Anodized.
3. Acceptable Manufacturer:

a. ProCo
b. Or Approved Equal

2.13 GROMMETTED FACEPLATES

A. Contractor shall provide grommet faceplates as needed by audio and video locations as shown on the T-series drawings.

B. Grommet faceplates shall provide a minimum of 1.5” Diameter opening for cable pass-through unless otherwise noted.

C. Contractor shall coordinate plate finish and color with the Owner. Plastic plates are not acceptable.

D. Grommeted plates/panels:

1. Custom panels constructed of 1/8 inch brushed aluminum
2. Finish: Black Anodized.
3. Acceptable Manufacturer:

a. ProCo
b. Or Approved Equal

2.14 HDMI PANEL MOUNT CONNECTORS

A. Contractor shall provide the quantity of HDMI couplers as shown on the T-series drawings.

B. Provide HDMI coupler meeting the following specifications:

1. HDMI coupler shall be panel mounted with metal shell.
2. HDMI coupler shall be female Type A to female Type A.
3. HDMI coupler shall utilize bronze contact solder terminations.
4. HDMI coupler shall be a minimum HDMI 2.0 compliant.
5. Acceptable Manufacturers:

a. Neutrik
b. Switchcraft
c. Or Equal

2.15 USB PANEL MOUNT CONNECTORS

A. Contractor shall provide the quantity of USB couplers as shown on the T-series drawings.

B. Provide USB coupler meeting the following specifications:

1. USB coupler shall be panel mounted with metal shell.
2. USB coupler shall be female Type A to female Type A.
3. USB coupler shall utilize bronze contact solder terminations.
4. USB coupler shall be a minimum USB 3.0 compliant.
5. Acceptable Manufacturers:

    a. Neutrik
    b. Switchcraft
    c. Or Equal

2.16 ETHERNET PANEL MOUNT CONNECTORS

A. Contractor shall provide the quantity of Ethernet jacks as shown on the T-series drawings.

B. Provide Ethernet jack meeting the following specifications:

1. Ethernet jack shall be panel mounted with metal shell
2. Ethernet jack shall utilize bronze contact solder terminations.
3. Shell color shall match plate finish.
4. Acceptable Manufacturers:

    a. Neutrik
    b. Switchcraft
    c. Or Equal

2.17 3.5MM PANEL MOUNT CONNECTORS

A. Contractor shall provide the quantity of 3.5mm jacks as shown on the T-series drawings.

B. Provide 3.5mm jack meeting the following specifications:

1. 3.5mm jack shall be panel mounted with metal shell
2. 3.5mm jack shall utilize gold contact solder terminations.
3. Shell color shall match plate finish.
4. Acceptable Manufacturers:

    a. Neutrik
    b. Switchcraft
    c. Or Equal

2.18 XLR PANEL MOUNT CONNECTORS

A. Contractor shall provide the quantity of XLR jacks as shown on the T-series drawings.

B. Provide XLR jack meeting the following specifications:

1. XLR jack shall be panel mounted with metal shell

2. XLR jack shall utilize gold contact solder terminations.
3. Shell color shall match plate finish.
4. Acceptable Manufacturers:

    a. Neutrik
    b. Switchcraft
    c. Or Equal

PART 3 - EXECUTION

3.1 GENERAL

A. All cable routing shall meet Owners standards.

B. Run wire with conduit, exposed above accessible ceilings, below accessible floors, cable trays and in riser rooms.

C. Provide plenum cabling where required.

D. Utilize cable trays wherever possible. If J-hooks are used, cables shall be supported at a maximum of 5 feet intervals. Cables shall not rest on light fixtures, ceiling tiles, conduits, sprinkler pipes, HVAC ducting, or any other building structure. Provide appropriate support for all horizontal to vertical transitions to keep weight of cable from damaging the point of transition.

E. Horizontal cabling shall be in groups of no more than 60 cables when supported by J-hooks.

F. Cable runs shall be continuous from device location to the final point of termination. Properly installed transition points are acceptable.

G. Provide plastic cable ties or Velcro straps to bundle cabling. Electrical tape or adhesive backed cable ties are not acceptable.

H. Isolate cabling of different signals to minimize crosstalk. Separate wiring between microphone/line level circuits, loudspeaker circuits, and power circuits.

I. Dress, lace, and/or harness all wiring and cabling to prevent mechanical stress on electrical connections. Neatly tie cabling in bundles with cable lengths cut to minimize excess slack.

J. Provide adequate service loops to allow equipment racks to be pulled out for servicing.

K. To prevent against electrostatic hum, on unused shields, fold back shield over cable jacket and cover with heat-shrink tubing. Do not cut off unused shield.

L. Provide code compliant fire proofing techniques for all penetrations of fire rated partitions and slabs.

M. Provide grommets and strain relief material where necessary to avoid abrasion of wire and excess tension on wire and cable.

3.2 COMPONENT CONNECTIONS

A. Prepare wire ends for attachment to components in accordance with manufacturer recommendations.

B. Wire nuts shall not be an acceptable means of connecting wire or cable.

3.3 LABELING

A. Cables, jacks, system components, etc. shall be labeled according to ANSI/EIA/TIA-606-B specifications and in coordination with the District/Technology Consultant.

B. All Audio-Video cables shall be equipped with a self-laminating, wrap-around machine printed label at both ends of the cable.

C. Provide legible cable and wiring label permanently affixed for easy identification.

D. Cover labels with clear heat-shrink tubing.

E. Hand-written labels are not acceptable.

F. Locate the cable designator at the origination and destination of each circuit within 3 inches of the termination.

3.4 AUDIO VIDEO PLATE INSTALLATION

A. Install plate mounted connectors rigidly attached to plates, plumb and level.

B. Install XLR type connectors in accordance with IED-268 standard, with the following wiring scheme:

1. Pin 1 - Screen (shield)
2. Pin 2 - Hot (high)
3. Pin 3 - ground (low)

3.5 TESTING

A. The audio-video wiring system and associated systems shall be tested end-to-end complete.

3.6 SYSTEM ACCEPTANCE

A. Contractor shall demonstrate to the Owner that all systems have been installed per the plans and specifications and that all programming functions, display functions, control functions and all interfaced equipment operate as expected.

B. Contractor shall demonstrate to the Owner that all the end user staff has a working knowledge of how to operate the installed equipment and that the facilities staff also has a working knowledge of the troubleshooting methods for non-critical service problems.

C. Contractor shall have a Delivery and Acceptance form signed by the Owner representative, agreeing that the installation is complete and its operation is acceptable except as noted on the Delivery and Acceptance form. This will also serve as the start of the warranty period.

D. Contractor shall work with the General Contractor to complete all punch lists and work required to allow the General Contractor to close out his project in a timely manner. This will include but not limited to any work that would impact any final inspection for turnover of the building.

END OF SECTION

SECTION 27 41 16 - INTEGRATED AUDIO VIDEO SYSTEMS AND EQUIPMENT

PART 1 - GENERAL

1.1 SCOPE OF WORK

A. This section includes the minimum requirements for the installation, configuration, and training of the audio visual components as depicted on the Drawings and required by these specifications.

B. This section applies only to AV systems located in main buildings. Refer to section 27 51 16 for AV systems on exterior athletic fields and associated outbuildings.

C. These Specifications, together with the Drawings accompanying them, are intended to depict the installation requirements necessary to support this Project. Contractor shall furnish materials shown and/or called for on the Drawings but not mentioned in the Specifications, or vice versa, that are necessary for the installation and support of communications cabling, whether or not specifically called for in both. In addition, Contractor shall provide incidental equipment and materials required for the completion of systems included in this contract whether or not specified or shown on the drawings.

D. All required cabling infrastructure including back boxes and conduit to support the AV systems are provided and installed by others. Contractor is required to provide, install, test, and configure all cabling, equipment, and AV systems as described within this specification and as shown on the T-series drawings.

E. This section includes minimum requirements for the following:

1. AV Transmitter
2. AV Receiver
3. Bluetooth Receiver
4. Bluetooth Expansion Module
5. Touch Panel
6. Wireless Controller
7. AV Switcher Type 1
8. AV Switcher Type 2
9. Digital Media DA
10. Video Conferencing Bar
11. Video Projector
12. Ceiling Mounted Electric Projection Screen
13. AV Control Processor
14. AV Network Switch
15. Digital Signal Processor Type 1
16. Digital Signal Processor Type 2
17. Digital Input Expander
18. Digital Output Expander
19. Wireless Microphone Receiver
20. Hearing Assistance System
21. Partition Sensor
22. Power Sequencing System
23. Power Amplifier Type 1
24. Power Amplifier Type 2
25. Power Amplifier Type 3
26. Power Amplifier Type 4
27. Power Amplifier Type 5
28. Loudspeaker Type 1
29. Loudspeaker Type 2
30. Loudspeaker Type 3
31. Loudspeaker Type 4

32. Loudspeaker Type 5
33. Loudspeaker Type 6
34. Loudspeaker Type 7
35. Speaker Rigging Components
36. Rack Mount Power Conditioner
37. Equipment Rack Blanks
38. Equipment Rack Vents
39. Equipment Rack Shelves
40. Equipment Rack Drawers
41. AV Equipment Rack

1.2 QUALITY ASSURANCE

A. The following industry Standards are the basis for the audio-visual system described herein. The list is incorporated by this reference to them.

1. ANSI - American National Safety Institute
2. ASTM - American Society of Testing and Materials
3. EIA - Electronics Industries Association
4. FCC - Federal Communications Commission
5. NEMA - National Electrical Manufacturer's Association
6. OSHA - Occupational Safety and Health Administration
7. NEC - National Electric Code.
8. NFPA - National Fire Protection Association.
9. IEEE - Institute of Electrical and Electronics Engineers.
10. ISO - International Standards Organization.
11. UL - Underwriters Laboratories
12. Davis and Davis, Sound System Engineering (2nd Edition), Howard W. Sams, 1987
13. Giddings, Audio System Design and Installation (ASDI), Howard W. Sams, 1990

B. All cable and equipment shall be installed in a neat and workmanlike manner. All methods of construction that are not specifically described or indicated in the contract documents shall be subject to the control and approval of the Design 27 Project Manager. Equipment and materials shall be of the quality and manufacturer indicated. The equipment specified is based upon the acceptable manufacturers listed. Where "Or equal" is stated, equipment shall be equivalent in every way to that of the equipment specified and subject to approval.

C. Materials and work specified herein shall comply with the requirements of the local Authority Having Jurisdiction.

D. Contractor should have the following qualifications:

1. Experienced in the installation of systems similar in complexity and scale to those included within the scope of work. If requested, the Contractor shall provide the names, locations, and points of contact for at least three installations of the type and complexity specified herein.
2. Within the last two (2) years, installed an audio-visual system with similar equipment and functionality.
3. Have at least one (1) person on staff with CTS-I certification.

1.3 SUBMITTALS

A. As part of this specification section, Contractor shall be responsible for providing the following submittals.
   1. Manufacturer Product Data
   2. Pre-Installation Shop Drawings
   3. User Interface Submittal
   4. As-Built Drawings
   5. Configuration files and Source Code

B. Manufacturer Product Data - The Contractor shall provide manufacturers' catalog sheets, specifications, and installation instructions for all products to be installed within the scope of work. This is to verify that the submitted components comply with the Contract Documents. Submittals shall be formatted as follows.

   1. Submit only products that appear in this section or that are required for a complete installation relating to the products in this section. Submission of products from multiple sections will be cause for rejection of submittal without review and subject to reformatting and resubmittal by Contractor.
   2. Each product intended to be used shall be included one time only. Do not submit similar products multiple times.
   3. Submittal shall include an index with page(s) listed in order of specification within corresponding section, with subsection number and generic name correlated to product submitted. Sheet index and/or product data sheets organized alphabetically, randomly or in any manner which does not match the specification order will be cause for rejection of submittal without review and subject to reformatting and resubmittal by Contractor.
   4. Following index sheet, include Manufacturer specification sheet stapled in order of properly organized index.
      a. Where multiple products exist on a single sheet, Contractor shall clearly indicate, whether with highlight, arrow, PDF stamp, etc. the product intending to be used.
      b. Failure to indicate specific product to be used will be cause for marking submittal Revise and Resubmit.

C. Pre-Installation Shop Drawings – Prior to the start of field work the Contractor shall provide pre-installation shop drawings noting the intended installation means and methods for this scope of work. This is to ensure the Contractor understands the scope of work and to provide the field installation teams with all information necessary for successful implementation.

   1. Drawings shall be created using modeling software, such as Autodesk AutoCAD. In addition, they shall be exported in PDF format for review by the designer and Owner.
   2. Drawings shall contain floor plans, RCPs (if applicable), section views, and details illustrating equipment location, including but not limited equipment racks, IR amplifiers, projection screens, connection panels, flat panel displays, and loudspeakers. Drawings shall be at no less than 1/8"=1'-0" scale.
   3. Detailed wiring diagrams showing the interconnection between equipment devices. This shall include cable labeling, cable types, connector types and termination details, wiring color codes, and equipment manufacturer and models. Note cabling provided by Others. Diagrams included as part of Construction Docu-

ments are included to convey design intent and are not acceptable for use in Pre-Installation Shop Drawings and will be cause for rejection.

4. Loudspeaker, video projector, projector lift, and projection screen mounting details, including hardware type, material, and load capacity. For all equipment mounted overhead, mounting details and design calculations shall be signed and sealed by a professional structural engineer currently licensed to practice in the State of the work to be performed. The details included in the Construction Documents are included to convey design intent and are not acceptable for use in Pre-Installation Shop Drawings and will be cause for rejection.
5. Dimensioned plate and panel details that are custom for the project. Details shall include dimensioned locations of components, component type, engraving information, bill of materials, and plate finish and color. If custom part numbers are generated by a manufacturer, they shall be included on the plate details.
6. Rack elevations showing equipment layout within racks with dimensions. The Contractor shall allocate space in the rack for all equipment that will ultimately be installed within, including any and all Owner Furnished equipment.
7. Wiring schedule showing the source and destination of wiring and indicating whether the wire is in conduit or cable tray.

D. User Interface Submittals – The Contractor shall provide user interface submittals to convey the look and feel of user interfaces along with intended functionality. This is to ensure the Contractor understands the scope of work and to streamline the programming process prior to field installation.

1. Submit within 14 days of Pre-Installation Shop Drawing submittal.
2. Submit individual PDF files with screenshots of touch panels to be configured for the project.
    a. In text below screenshot, describe what pressing each button will accomplish in the program.
    b. Include both what users would experience in the room as well as on the touch panel. Ex. “Pressing Power On will turn on projector, lower projector screen and take users to the [SOURCES] page of touch panel.
    c. Where identical buttons exist on multiple pages, describe their function only once.
3. If button panels with user replaceable or custom buttons are included in project scope, submit PDF screenshot of proposed button configuration.
    a. In text below screenshot, describe what pressing each button will accomplish in the program.

E. As-Built Drawings - The Contractor shall provide Final documentation noting the actual installed conditions for this scope of work. This is to provide the Owner with accurate historical data of the project for future reference. As-Built Drawings shall be submitted during project close-out for inclusion in the O&M manual. Submittals shall be formatted as follows.

1. Submit one (1) PDF set of redlined Contractor generated As-Built Drawings. The Owner reserves the right to request an electronic copy of the shop drawings in both Autodesk CAD (.DWG) format and PDF format.
2. As-Built Drawings that utilize the Contract Documents as a base, shall be inclusive of all Published Addendums, ASIs, Accepted PCOs, PRs, SIs, etc. Changes made via RFI or Field Directive that were not published changes to the Contract Drawings shall be noted as such on the As-Builts with the noted RFI or FD #.

3. All text notes included on As-Builts shall be easily legible on PDF. Handwritten notes that are not legible shall be replaced with PDF text.
4. Include equipment manufacturer/model as installed in the field.
5. Include revised functional diagrams based on those submitted and approved during the Pre-Installation Shop Drawing submittal

D. Configuration Files and Source Code – The Contractor shall provide the final equipment configuration files and Source Code installed on the project. These files shall be submitted concurrently with As-Built Drawings.
1. Include configuration files for all equipment, including but not limited to, digital signal processors, video switchers, control processors, amplifiers, etc. Owner notes that any changes made during the warranty period not completed by the Contractor will void the system warranty.
2. Include any passwords that may have been created that are required to access equipment. Owner notes that any changes made during the warranty period not completed by the Contractor will void the system warranty.
3. Contractor is not required to provide manufacturer software used for configuration.
4. Include any control processor source code in its uncompiled format. Owner notes that any changes made during the warranty period not completed by the Contractor will void the system warranty.

1.4 CLOSE-OUT DOCUMENTS

A. Provide close-out documents in accordance with the General Conditions unless otherwise indicated:

1. Provide the following for products incorporated into the final installation:

a. Manufacturer's data for each type of product. Include manufacturer’s serial numbers within the list of product.
b. Each products Owner/Instruction Manual. Provide high quality copies where necessary, with all text legible and illustrations of equal resolution and sharpness as the original manual. Faxed copies or copies with portions of the information missing or smeared not acceptable.

2. Provide as-built drawings depicting what is actually incorporated within the project delivered as electronic files. All text within drawings shall be legible.
3. Provide recorded test reports of Contractor commissioning.
4. Prepare and provide a complete and typical procedure for the operation of the equipment as a system including:

a. Describe the operation of system capabilities.
b. Assume the intended reader of the manual to be technically inexperienced and unfamiliar with this facility.

5. Any other pertinent data generated during the project or required for future service.

1.5 DELIVERY, STORAGE, AND HANDLING

A. Equipment and components shall arrive onsite properly protected and undamaged with containers, packaging and labels intact.

B. Store, handle and protect materials and equipment in accordance with Manufacturer's recommendations.

C. Store materials and equipment in dry, environmentally controlled space. Do not install equipment and materials until spaces are enclosed, watertight, and dry. Protect equipment from dust and other airborne materials.

D. Provide additional protection during handling as necessary to prevent breaking, scraping, marring, or otherwise damaging products or surrounding areas.

E. Protect all equipment and components that are to be installed within this project from theft, vandalism, and exposure to rain, freezing temperatures and direct sunlight.

F. Protect installed equipment and components from damage and prevent use by unauthorized persons.

1.6 WARRANTY

A. The Contractor shall warrantee the completed work for a period of one (1) year, from the date of acceptance of the work, to be free of defect in design, workmanship, or material.

B. Contractor shall repair, adjust, and/or replace, whichever the Owner determines to be in its best interests, any defective equipment, materials, or workmanship, as well as such parts of the work damaged or destroyed by such defect, during the warranty period, at the Contractor’s sole cost and expense. If parts or components need to be repaired, then a loaner will be supplied and installed until the part or component can be repaired and reinstalled.

C. All service work shall be performed by manufacturer-certified technicians.

D. Contractor to provide Owner a phone number for technical support. All support calls shall be answered within twenty-four (24) hours. All repairs shall be underway within forty-eight (48) hours and completed (or loaner supplied) within seven (7) days.

E. At the end of the warranty period, the Contractor shall complete one (1) site visit to evaluate the status of the audio-visual systems. All equipment within this scope of work found to be defective shall be replaced at no cost to the Owner.

F. Guarantees of material, equipment, and workmanship running in favor of the Contractor shall be transferred and assigned to the Owner on completion of the work and acceptance of said work by the Owner.

PART 2 - PRODUCTS

2.1 AV TRANSMITTER

A. Shall meet or exceed the following specifications:

1. Shall be capable of accepting digital video input.
2. Shall be capable of transmitting audio and video over UTP cabling.
3. Shall have a minimum of one (1) HDMI input.
4. Shall have a minimum of one (1) STP output.
5. Shall support resolutions up to and including 1920x1200p.
6. Shall be HDCP compliant.
7. Shall be wall-mountable.

8. Confirm the final color and finish with the Architect.
9. Acceptable Manufacturers:

    a. Crestron DM-TX-4KZ-100-C-1G
    b. Or Equal

2.2 AV RECEIVER

A. Shall meet or exceed the following specifications:

1. Shall have a STP cabling input.
2. Shall have a minimum of one (1) HDMI output with RS-232 control.
3. Shall support resolutions of up to and including 1920x1200 or higher.
4. Acceptable Manufacturers:

    a. Crestron DM-RMC-4KZ-100-C
    b. Or Equal

2.3 BLUETOOTH RECEIVER

A. Shall meet or exceed the following specifications:

1. Shall have a minimum of one (1) STP output.
2. Shall support playback of WAV, MP3, and AAC files.
3. Shall provide Bluetooth capability.
4. Shall provide push button to sync device to Bluetooth.
5. Shall come in a wall plate form factor.
6. Confirm final color and finish with Architect.
7. Acceptable Manufacturers:

    a. QSC Axiom BT1
    b. Or Equal

2.4 BLUETOOTH EXPANSION MODULE

A. Shall meet or exceed the following specifications:

1. Shall have a minimum of one (1) STP input.
2. Shall have a maximum of one (1) analog audio output.
3. Shall support playback of WAV, MP3, and AAC files.
4. Acceptable Manufacturers:

    a. QSC Axiom AXPio
    b. Or Equal

2.5 TOUCH PANEL

A. Shall meet the following specifications:

1. Shall have Ethernet monitoring and control.
2. Shall have a capacitive touch screen interface.
3. Shall have a resolution of 1920x1200.
4. Shall be 10” diagonal.
5. Shall have a brightness of 400 nits.

6. Provide all necessary hardware and brackets required for installation as shown on the T-series drawings.
7. Confirm the final color and finish with Architect.
8. Acceptable Manufacturers:

    a. Crestron TSW-1070-X-S
    b. AMX Varia-100N
    c. Or Equal

2.6 WIRELESS CONTROLLER

A. Shall meet the following specifications:

1. Shall have a minimum 10” diagonal screen.
2. Shall have a minimum resolution of 1920 x 1080.
3. Shall support capacitive touch interface.
4. Shall support the AV CONTROL PROCESSOR control application. Contractor shall be responsible for providing and configuring control applications.
5. Shall communicate wirelessly with AV control system.
6. Acceptable Manufacturers:

    a. Apple
    b. iPort Luxe BaseStation
    c. iPort Luxe Case compatible with wireless controller
    d. Or Equal

2.7 AV SWITCHER TYPE 1

A. Shall meet or exceed the following specifications:

1. Shall have a minimum of one (1) HDMI input.
2. Shall have a minimum of two (2) STP inputs.
3. Shall have a minimum of one (1) HDMI output.
4. Shall have a minimum of one (1) STP output.
5. Shall have a minimum of one (1) balanced stereo audio output.
6. Shall have a minimum of one (1) RS-232 control port and ethernet control.
7. Shall have a relay port to connect to a projection screen.
8. Shall support resolutions up to and including 1920x1080p.
9. Shall be HDCP compliant.
10. Acceptable Manufacturers:

    a. Crestron DMPS3-4K-350-C
    b. Or Equal

2.8 AV SWITCHER TYPE 2

A. Shall meet or exceed the following specifications:

1. Shall have a minimum of three (3) STP inputs.
2. Shall have a minimum of one (1) HDMI input.
3. Shall have a minimum of six (6) STP outputs.
4. Shall have a minimum of one (1) HDMI output for analog audio extraction.
5. Shall support resolutions up to and including 1920x1080p.
6. Shall be controllable via ethernet.
7. Shall be HDCP compliant.

8. Acceptable Manufacturers:

    a. Crestron DM-MD8x8-CPU3 with required input/output cards
    b. Or Equal

2.9 DIGITAL MEDIA DA

A. Shall meet or exceed the following specifications:

1. Shall have a minimum of one (1) HDMI output.
2. Shall have a minimum of one (1) HDMI input.
3. Shall have a minimum of four (4) STP outputs.
4. Shall support resolutions up to and including 1920x1080p.
5. Shall be controllable via ethernet.
6. Shall be HDCP compliant.
7. Acceptable Manufacturers:

    a. Crestron DM-DA4-4K-C with Crestron PW-4830DUS
    b. Or Equal

2.10 VIDEO CONFERENCING BAR

A. Shall meet or exceed the following specifications:

1. Shall support a native resolution of 1920x1080.
2. Shall accept a minimum of one (1) HDMI input.
3. Shall have a minimum of one (1) HDMI output.
4. Shall provide a minimum microphone pickup range of 23’.
5. Shall be USB plug-and-play with virtually any video-conferencing application.
6. Provide all mounts and associated mounting accessories required.
7. Acceptable Manufacturers:

    a. Logitech Rally Bar
    b. Or Equal

2.11 VIDEO PROJECTOR

A. Shall meet or exceed the following specifications:

1. Shall support a native resolution of 1920x1200.
2. Shall accept a minimum of one (1) HDMI input.
3. Shall provide a minimum output of 8,500 lumens.
4. Shall be RS-232 controllable.
5. Provide lens as required based on aspect ratio and distance to screen.
6. Provide all mounts and associated mounting accessories required.
7. Confirm final color and finish with Architect.
8. Acceptable Manufacturers:

    a. Epson Pro EB-PU1008
    b. Or Equal

2.12 CEILING MOUNTED ELECTRIC PROJECTION SCREEN

A. Contractor shall provide ceiling-mounted electric projection screens properly sized as shown on the T-series drawings.

B. Shall meet or exceed the following specifications:

1. Reference T-series drawings for required screen sizes.
2. Screen surface material shall be matte white.
3. Screen material shall have a minimum gain of 1.0.
4. Screen shall have a minimum 2” black border. Reference required black drop on T-series elevations.
5. Screen shall be tab-tensioned.
6. Acceptable Manufacturers:

a. Draper, Inc. Access V
b. Da-Lite
c. Or Equal

2.13 AV CONTROL PROCESSOR

A. Shall meet or exceed the following specifications:

1. Shall have a minimum of three (3) RS-232 ports.
2. Shall support one-way device control via IR port.
3. Shall function as a control processor for additional components found on the network.
4. Acceptable Manufacturers:

a. Crestron CP4N
b. AMX MU-2300
c. Or Equal

2.14 AV NETWORK SWITCH

A. Shall meet or exceed the following specifications:

1. Shall have the quantity of Ethernet ports required to support audio-visual systems as shown on the T-series drawings.
2. Shall be manageable.
3. Shall be DANTE enabled.
4. Shall be 1RU rack mountable.
5. Acceptable Manufacturers:

a. Aruba 2530 Switch Series
b. Or Equal

2.15 DIGITAL SIGNAL PROCESSOR TYPE 1

A. Shall meet or exceed the following specifications:

1. Shall have a minimum of twelve (12) mic/line inputs.
2. Shall have a minimum of four (4) mic/line outputs.
3. Shall be Dante compatible.
4. Shall route analog and digital inputs and outputs.

5. Shall provide an open architecture for signal routing.
6. Shall be RS-232 controllable
7. Control software to include, but not limited to: matrix mixers, limiters, gain adjustment, delay, parametric equalizers, crossovers, and compressors.
8. Acceptable Manufacturers:

    a. BSS Audio BLU-806DA with required input/output cards
    b. Or Equal

2.16 DIGITAL SIGNAL PROCESSOR TYPE 2

A. Digital signal processor shall meet or exceed the following specifications:

1. Shall have twelve (12) inputs and eight (8) outputs.
2. Shall provide for analog and digital input/outputs.
3. Shall provide an open architecture for signal routing.
4. Shall be RS-232 controllable
5. Control software to include, but not limited to: matrix mixers, limiters, gain adjustment, delay, parametric equalizers, crossovers, and compressors.
6. Acceptable Manufacturers:

    a. BSS Audio BLU-100
    b. Or Equal

2.17 DIGITAL INPUT EXPANDER

A. Shall meet or exceed the following specifications:

1. Shall have a minimum of two (4) line level inputs.
2. Shall convert analog audio to networked audio via BLU LINK.
3. Shall be rack mountable.
4. Acceptable Manufacturers:

    a. BSS Audio BLU-BIB
    b. Or Equal

2.18 DIGITAL OUTPUT EXPANDER

A. Shall meet or exceed the following specifications:

1. Shall have a minimum of two (4) line-level outputs.
2. Shall convert analog audio to networked audio via BLU LINK.
3. Shall be rack mountable.
4. Acceptable Manufacturers:

    a. BSS Audio BLU-BOB
    b. Or Equal

2.19 WIRELESS MICROPHONE RECEIVER

A. Shall meet or exceed the following specifications:

1. Shall utilize a 64 MHz bandwidth
2. Shall provide digital predictive switching for true diversity.

3. Shall have up to 60 frequency presets available.
4. Shall provide automatic frequency scanning.
5. Transmitters and receivers shall utilize a metal housing.
6. Coordinate operating frequency with local RF environment.
7. Acceptable Manufacturers:

    a. Shure QLX-D
    b. Shure QLXD2/SMB58 (Quantity: 1 per receiver)
    c. Shure QLXD1 (Quantity: 1 per receiver)
    d. Shure MX183 (Quantity: 1 per receiver)
    e. Shure UA844+ (as required)
    f. Shure SB900B Rechargeable Battery (Quantity: 1 per wireless device)
    g. Shure SBC2000 Dual Charging Case (Quantity: 1 per every 2 handheld wireless mics)
    h. Shure UA8 (Provide quantity shown on AV Diagrams shown in Early Childhood Center)
    i. Shure UA874 (Provide quantity shown on AV Diagrams shown in High School)
    j. Or Equal

2.20 HEARING ASSISTANCE SYSTEM

A. Shall meet or exceed the following specifications:

1. Shall have a minimum of two (2) balanced audio inputs on XLR and/or RCA connectors.
2. Shall have an internal audio compressor.
3. Shall have an operating frequency of 216MHz.
4. Shall have a maximum output power of 100mW.
5. Provide a remote antenna as shown on the T-series drawings.
6. Provide quantity and type of receivers to meet ADA requirements.
7. Provide charging carrying case to accommodate all receivers.
8. Acceptable Manufacturers:

    a. Listen Tech LT-800-216
    b. Listen Tech LA-122
    c. Listen Tech LT-4200-216 (Quantity: 16)
    d. Listen Tech LA-164 (Quantity: 16)
    e. Listen Tech LA-165 (Quantity: 16)
    f. Listen Tech LA-438 (Quantity: 10)
    g. Listen Tech LA-311 (Quantity: 3)
    h. Listen Tech LA-362 (Quantity: 16)
    i. Or Equal

2.21 PARTITION SENSOR

A. Shall meet or exceed the following specifications:

1. Shall be surface mounted.
2. Shall utilize Cresnet wired network for power and communication.
3. Shall have digital output provide either a 24 Volt, 10mA output or a closure to ground.
4. Acceptable Manufacturers:

    a. Crestron GLS-PART-CN
    b. Or Equal

2.22 POWER SEQUENCING SYSTEM

A. Contractor to provide and install a power sequencing system within the AV equipment rack for all AV systems.

B. Contractor to ensure all equipment is powered in the correct order to avoid audible pops and clicks from the audio-video system in response to power sequencing.

C. Shall meet or exceed the following specifications:

1. Shall include a sequencer with a minimum of six (6) sequenced contact closures for connection to power modules.
2. Shall include power modules capable of handling 20A circuits.
3. Provide quantity of power modules as required based on equipment quantities.
4. Shall allow for adjustable start delay times.
5. Shall be installed in the rear of the AV equipment rack.
6. Shall be integrated with AV control system for powering the system down via touch panel.
7. Acceptable Manufacturers:

    a. Middle Atlantic MPR Series
    b. Or Equal

2.23 POWER AMPLIFIER TYPE 1

A. Shall meet or exceed the following specifications:

1. Shall have a continuous power rating of a minimum of 400 watts into 8 ohm or 70V load per channel.
2. Shall provide two channels of amplification.
3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
4. Shall have a maximum of 0.5% THD from 20Hz – 20000Hz.
5. Shall have a signal to noise ratio of at least 103dB.
6. Shall have a maximum input level of +20dBu.
7. Acceptable Manufacturers:

    a. EXTRON XPA 4002
    b. Or Equal

2.24 POWER AMPLIFIER TYPE 2

A. Shall meet or exceed the following specifications:

1. Shall have a continuous power rating of a minimum of 600 watts into 8 ohm or 70V load per channel.
2. Shall provide four channels of amplification.
3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
4. Shall have a maximum of 0.35% THD from 20Hz – 20000Hz.
5. Shall have a signal to noise ratio of at least 108dB.
6. Shall have a maximum input level of +20dBu.
7. Shall be capable of transporting digital network audio over proprietary communication protocol.
8. Acceptable Manufacturers:

a. Crown Audio DCi 4|600N
b. Or Equal

2.25 POWER AMPLIFIER TYPE 3

A. Shall meet or exceed the following specifications:

1. Shall have a continuous power rating of a minimum of 300 watts into 8 ohm or 70V load per channel.
2. Shall provide four channels of amplification.
3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
4. Shall have a maximum of 0.35% THD from 20Hz – 20000Hz.
5. Shall have a signal to noise ratio of at least 108dB.
6. Shall have a maximum input level of +20dBu.
7. Shall be capable of transporting digital network audio over proprietary communication protocol.
8. Acceptable Manufacturers:

a. Crown Audio DCi 4|300N
b. Or Equal

2.26 POWER AMPLIFIER TYPE 4

A. Shall meet or exceed the following specifications:

1. Shall have a continuous power rating of a minimum of 1250 watts into 8 ohm or 70V load per channel.
2. Shall provide two channels of amplification.
3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
4. Shall have a maximum of 0.35% THD from 20Hz – 20000Hz.
5. Shall have a signal to noise ratio of at least 108dB.
6. Shall have a maximum input level of +20dBu.
7. Shall be capable of transporting digital network audio over proprietary communication protocol.
8. Acceptable Manufacturers:

a. Crown Audio DCi 2|1250N
b. Or Equal

2.27 POWER AMPLIFIER TYPE 5

A. Shall meet or exceed the following specifications:

1. Shall have a continuous power rating of a minimum of 1250 watts into 8 ohm or 70V load per channel.
2. Shall provide four channels of amplification.
3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
4. Shall have a maximum of 0.35% THD from 20Hz – 20000Hz.
5. Shall have a signal to noise ratio of at least 108dB.
6. Shall have a maximum input level of +20dBu.
7. Shall be capable of transporting digital network audio over proprietary communication protocol.

8. Acceptable Manufacturers:

    a. Crown Audio DCi 4|1250N
    b. Or Equal

2.28 LOUDSPEAKER TYPE 1

A. Shall meet or exceed the following specifications:

1. Shall be a two-way configuration with an 8” LF driver and 32mm dome tweeter.
2. Shall have a coverage pattern of 115º conical.
3. Shall have a nominal continuous power handling of no less than 175W at 7 ohms.
4. Shall have a sensitivity of no less than 94dB.
5. Shall have a frequency response of 75Hz – 20000Hz ±10dB.
6. Shall have 70V tap. Tap loudspeaker as shown on T-series drawings.
7. Provide all necessary hardware and brackets required for installation.
8. Confirm final color and finish with Architect.
9. Acceptable Manufacturers:

    a. Biamp DX-IC8
    b. Or Equal

2.29 LOUDSPEAKER TYPE 2

A. Shall meet or exceed the following specifications:

1. Shall be a two-way configuration with an 6” LF driver and 25mm dome tweeter.
2. Shall have a coverage pattern of 140º conical.
3. Shall have a nominal continuous power handling of no less than 120W at 6.5 ohms.
4. Shall have a sensitivity of no less than 94dB.
5. Shall have a frequency response of 75Hz – 20000Hz ±10dB.
6. Shall have 70V tap. Tap loudspeaker as shown on T-series drawings.
7. Provide all necessary hardware and brackets required for installation.
8. Confirm final color and finish with Architect.
9. Acceptable Manufacturers:

    a. Biamp DX-IC6
    b. Or Equal

2.30 LOUDSPEAKER TYPE 3

A. Contractor shall install ceiling-mounted loudspeakers within the activity center as shown on the T-series drawings.
B. Speakers shall meet or exceed the following specifications:

1. Shall be a two-way coaxial configuration with an 12” horn and 25mm driver.
2. Shall have a coverage pattern of 90º conical.
3. Shall have a power rating of no less than 250W.
4. Shall have a sensitivity of no less than 94dB.
5. Shall have a minimum frequency response of 60Hz – 16000Hz -3dB.
6. Shall have 70V tap, Tap loudspeaker as shown on T-series drawings.
7. Provide all necessary hardware and brackets required for installation.
8. Coordinate color and finish with the Owner.
9. Acceptable Manufacturers:

a. JBL Control 321CT with MTC-300BB12 backbox
b. Or Equal

2.31 LOUDSPEAKER TYPE 4

A. Shall meet or exceed the following specifications:

1. Shall be a two-way coaxial configuration with a 12” LF driver and a 1.4” HF driver.
2. Shall have a coverage pattern of 90º H x 90º V.
3. Shall have a power rating of no less than 800W.
4. Shall have a sensitivity of no less than 94dB.
5. Shall have a frequency response of 44Hz – 22400Hz ±3dB.
6. Provide all necessary hardware and brackets required for installation.
7. Confirm final color and finish with Architect.
8. Acceptable Manufacturers:

a. Biamp IP8-1122/99
b. Or Equal

2.32 LOUDSPEAKER TYPE 5

A. Shall meet or exceed the following specifications:

1. Shall be a two-way coaxial configuration with a 12” LF driver and a 1.4” HF driver.
2. Shall have a coverage pattern of 90º H x 40º V.
3. Shall have a power rating of no less than 800W.
4. Shall have a sensitivity of no less than 94dB.
5. Shall have a frequency response of 44Hz – 22400Hz ±3dB.
6. Provide all necessary hardware and brackets required for installation.
7. Confirm final color and finish with Architect.
8. Acceptable Manufacturers:

a. Biamp IP8-1122/94
b. Or Equal

2.33 LOUDSPEAKER TYPE 6

A. Shall meet or exceed the following specifications:

1. Shall be a two-way coaxial configuration with a 15” LF driver.
2. Shall have a power rating of no less than 800W.
3. Shall have a sensitivity of no less than 99dB.
4. Shall have a frequency response of 36Hz – 155Hz ±3dB.
5. Provide all necessary hardware and brackets required for installation.
6. Confirm final color and finish with Architect.
7. Acceptable Manufacturers:

a. Biamp IS8-115
b. Or Equal

2.34 LOUDSPEAKER TYPE 7

A. Contractor shall install ceiling-mounted loudspeakers within the activity center as shown on the T-series drawings.

B. Speakers shall meet or exceed the following specifications:

1. Shall be a two-way coaxial configuration with an 12” horn and 25mm driver.
2. Shall have a coverage pattern of 90º conical.
3. Shall have a power rating of no less than 400W.
4. Shall have a sensitivity of no less than 94dB.
5. Shall have a minimum frequency response of 60Hz – 16000Hz -3dB.
6. Shall have 70V tap, Tap loudspeaker as shown on T-series drawings.
7. Provide all necessary hardware and brackets required for installation.
8. Coordinate color and finish with the Owner.
9. Acceptable Manufacturers:

a. JBL Control 312CS with MTC-300BB12 backbox
b. Or Equal

2.35 SPEAKER RIGGING COMPONENTS

A. Contractor shall provide and install speaker rigging components as necessary to mount main loudspeakers as shown on the T-series drawings.

B. Structural support members to have a safety factor of at least 5. Mounting hardware and wire rope to have a safety factor of 8. All fasteners to be graded and certified for use in the intended applications. Overhead suspension hardware shall comply with ASME B30.20 standards and all applicable local building and safety codes.

C. Overhead suspension hardware must be of a type that includes product traceability controls.

D. Rigging, mounting and support systems for loudspeakers shall be designed and sealed by a registered professional engineer licensed to practice in the State of Indiana. Once the systems are installed, the engineer shall physically inspect the methods and means used to verify compliance with the original design.

E. Loudspeaker Rigging Components shall meet or exceed the following specifications:

1. Loudspeaker Rigging Components shall be made of quenched or tempered forged steel.
2. Loudspeaker Rigging Components shall meet or exceed all the requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements
3. Loudspeaker Rigging Components shall be hot dip galvanized or self-colored.
4. Shackles shall meet the performance requirements of Federal Specification RR-C-271D Type IVA, Grade A, Class1.
5. Turnbuckles shall meet the performance requirements of Federal Specifications FF-T-791b, Type 1 Form 1 - CLASS 4, and ASTM F-1145.
6. Wire rope thimble shall meet the performance requirements of Federal Specification FF-T-276b Type II.
7. Wire rope shall be sized as 7x19 utility cable.
8. Provide all screw pin type shackles with mouse wire.
9. All end fittings shall be moused to the body with mousing cable.
10. Select size of product-based working load limits required.
11. Acceptable Manufacturers:

a. Chicago Hardware Company
b. Crosby Group
c. Wire Rope Corporation of America (WRCA)

d. Or Equal

2.36 RACK MOUNT POWER CONDITIONER

A. Shall meet or exceed the following specifications:

1. Shall include a minimum of nine (9) outlets.
2. Shall be capable of handling 20A circuits.
3. Shall be rack-mountable.
4. Provide a minimum of one (1) power conditioner per AV equipment rack. Reference T-series drawings for quantity required.
5. Acceptable Manufacturers:

a. Furman PL-PRO DMC
b. Or Equal

2.37 EQUIPMENT RACK BLANKS

A. Contractor to provide equipment rack blanks where required as shown on T-series drawings.

B. Shall meet or exceed the following specifications:

1. Shall have a flanged construction.
2. Shall be made of 1/16” thick aluminum.
3. Shall have a black brushed and anodized finish.
4. Provide rack blank sizes as required.
5. Acceptable Manufacturers:

a. Middle Atlantic BL Series
b. Or Equal

2.38 EQUIPMENT RACK VENTS

A. Contractor to provide equipment rack vents where required as shown on T-series drawings.

B. Equipment rack vents shall meet or exceed the following specifications:

1. Shall have a flanged construction.
2. Shall be made of 1/16” thick aluminum.
3. Shall have a black brushed and anodized finish.
4. Provide rack vent sizes as required.
5. Acceptable Manufacturers:

a. Middle Atlantic VTP Series
b. Or Equal

2.39 EQUIPMENT RACK SHELVES

A. Contractor to provide equipment rack shelves where required as shown on T-series drawings.

B. Equipment rack shelves shall meet or exceed the following specifications:

1. Shall have a flanged construction.
2. Shall have 16-gauge steel construction with black textured powder coat finish.

3. Shall have a minimum load capacity of 50 pounds.
4. Provide rack shelf sizes as required.
5. Acceptable Manufacturers:

    a. Middle Atlantic U Series
    b. Or Equal

2.40 EQUIPMENT RACK DRAWERS

A. Contractor to provide equipment rack drawers where required as shown on T-series drawings.

B. Equipment rack drawers shall meet or exceed the following specifications:

1. Shall have a flanged construction.
2. Shall have 16-gauge steel construction with black textured powder coat finish.
3. Shall have a minimum load capacity of 50 pounds.
4. Provide rack drawer sizes as required.
5. Acceptable Manufacturers:

    a. Middle Atlantic UD Series
    b. Or Equal

2.41 AV EQUIPMENT RACK

A. Shall meet or exceed the following specifications:

1. Shall have 24 units of available rack space.
2. Shall have 16-gauge steel construction with black textured powder coat finish.
3. Shall have locking, vented doors, side panels, and fans.
4. Shall have an overall depth of 22” and useable depth of 20”.
5. Shall be constructed to swing open for cabling access.
6. Shall have a large 12.5” x 12.5” knockout at the rear along with additional knockouts in the sides of the racks.
7. All AV equipment racks within the project shall be keyed the same so that any AV rack key may be used on any rack. Provide a minimum of one (1) key per rack.
8. Acceptable Manufacturers:

    a. Middle Atlantic DWR-24-22
    b. Or Equal

PART 3 - EXECUTION

3.1 GENERAL

A. Coordinate incorporation of the Work specified herein with other project work so as to facilitate a cohesive final product.

B. The installation recommendations contained within ASDI and Telecommunications Distribution Methods Manual are mandatory minimum standards and requirements.

C. Mount equipment and enclosures plumb and level.

D. Permanently installed equipment to be firmly and safely held in place. Design equipment supports to support loads imposed with a safety factor of at least five. Seismic bracing shall be installed on appropriate equipment where local codes require such installation.

E. Verify all locations of equipment in all rooms with Owner's Representative, Owner, and Consultant.

F. Follow all manufacturer requirements and recommendations for the installation of all AV equipment.

3.2 PENDANT MOUNTED SPEAKERS

A. Shall be wired in parallel according to Manufacturer specifications.

B. All speaker cabling shall be supported above the ceiling and may not rest on ceiling tiles or other structural devices. Wiring shall be in conduit when exposed to public view.

C. A minimum five (5) foot service loop shall be provided and secured above each speaker.

3.3 AUDIO VIDEO CONTROL SYSTEM

A. Control system shall be programmed to at a minimum switch between available AV sources, power on/off video displays, raise/lower projection screen, control system volume, and control zone selection of audio where applicable.

B. Contractor to provide a minimum of three iterations of the touch screen layout and programming for review by the Owner and Consultant. The first phase will involve only the layout and proposed operation. Once reviewed, the Contractor will utilize this information to begin programming the touch screens. The touch screens will be reviewed again after the programming has been implemented in the field. Any changes from this phase shall be incorporated into the work. The final review will occur at the one year walk-through.

C. All touch panels shall be programmed with a custom lockable pin code. System shall remain locked by default to prevent unwanted usage. Coordinate pin code for each touch panel and wireless controller with owner. Additional control system and room type functionality shall be programmed at a minimum as described below:

1. ECC – CAFETERIA / STUDENT ACTIVITY CENTER

a. Shall include two (2) wall mounted custom programmed touch panels. Programming shall include volume control, source selection, source routing, and monitor power. When the partition is open, touch panel programming shall be mirrored allowing either touch panel to control the cafeteria or the student activity center AV equipment. When the partition is closed, touch panel programming shall be independent of one another limiting each touch panel to control only the AV equipment in the room it is installed.
b. Shall include ceiling-mounted video projector for video playback. Contractor shall utilize vertical lens shift as required to keep the projector pole as short as possible allowing for maximum clearance beneath the projector.
c. Electric projection screen control shall be accessed by the user through the touch panel.
d. Video sources shall be programmed to switch between HDMI inputs and O.F.O.I. wireless presentation receivers.

e. Shall include two (2) wall mounted flat panel displays in the cafeteria and one (1) ceiling mounted projector in the Student Activity Center for local video playback. Both flat panel displays and the projector shall be capable of receiving an independent video source or a shared video source via the AV matrix switcher. Video source selection and video source routing shall be programmed for the user to select via either touch panel.
f. Shall include two (2) digital AV output locations allowing the user to connect to O.F.O.I. flat panel display mobile carts.
g. Shall include Bluetooth connectivity for audio playback.
h. Shall include wireless microphone package for voice and audio reinforcement.
i. Shall include an audio system consisting of in-ceiling speakers.
j. The digital signal processor shall be connected to a relay from the paging and intercom system. When the relay is closed, the cafeteria program audio system shall mute.
k. Coordinate AV network switch setup requirements with the owner. Coordinate all additional AV traffic and protocols on the schools network with the owner prior to programming and commissioning.

2. HIGH SCHOOL – CAFETERIA / EXPANSION

a. Shall include two (2) wall mounted custom programmed touch panels. Programming shall include volume control, source selection, source routing, and monitor power.
b. Video sources shall be programmed to switch between HDMI inputs and O.F.O.I. wireless presentation receivers.
c. Shall include four (4) wall mounted flat panel displays for local video playback. All flat panel displays shall be capable of receiving an independent video source or a shared video source via the AV matrix switcher. Video source selection and video source routing shall be programmed for the user to select through either touch panel or the wireless controller.
d. Shall include two (2) digital AV output locations allowing the user to connect to O.F.O.I. flat panel display mobile carts.
e. Shall include three (3) HDMI input locations. Two (2) HDMI inputs in the main cafeteria and one (1) HDMI input in the cafeteria expansion.
f. Shall allow the user to route program audio over the DANTE network from the High School Cafeteria to the High School Main Existing Gymnasium and/or the High School Activity Center via either touch panel or the wireless controller.
g. Shall allow the user to receive program audio over the DANTE network from the High School Existing Main Gymnasium or the High School Activity Center to the High School Cafeteria via either touch panel or the wireless controller.
h. Shall include Bluetooth connectivity for audio playback.
i. Shall include a wireless microphone package for voice and audio reinforcement.
j. Shall include ceiling-mounted loudspeakers for audio reinforcement.
k. The digital signal processor shall be connected to a relay from the paging and intercom system. When the relay is closed, the cafeteria program audio system shall mute.
l. Shall include an assisted listening system to meet ADA standards. Contractor shall limit the output of the receivers to prevent hearing damage.
m. Coordinate AV network switch setup requirements with the owner. Coordinate all additional AV traffic and protocols on the school's network with the owner prior to programming and commissioning.

3. EXISTING MAIN GYMNASIUM

a. Shall include a wall mounted custom programmed touch panel and a rack mounted custom programmed wireless controller. Programming shall include volume control, source selection, and source routing.
b. Shall include Bluetooth connectivity for audio playback.
c. Coordinate AV network switch setup requirements with the owner. Coordinate all additional AV traffic and protocols on the school's network with the owner prior to programming and commissioning.
d. Shall include six (6) additional analog audio connection locations.
e. Shall allow the user to route program audio over the DANTE network from the Existing Main Gymnasium to the High School Cafeteria and/or the High School Activity Center via the touch panel or wireless controller.
f. Shall allow the user to receive program audio over the DANTE network from the High School Cafeteria or the High School Activity Center to the Existing Main Gymnasium via the touch panel or wireless controller.
g. Shall include wireless microphone package for voice and audio reinforcement.
h. Shall include point source loudspeakers for audio reinforcement.
i. Shall include an assisted listening system to meet ADA standards. Contractor shall limit the audio output of each receiver to prevent hearing damage.
j. Shall include a refreshed audio system tuned for the space. Contractor shall ensure loudspeaker coverage of 76 dBA at a minimum and no more than 85 dBA at a maximum based on the volume range configured on the touch panel. All seats shall have consistent coverage no greater than ±2 dB.

4. HIGH SCHOOL ACTIVITY CENTER

a. Shall include a wall mounted custom programmed touch panel and a rack mounted custom programmed wireless controller. Programming shall include volume control, source selection, and source routing.
b. Shall include Bluetooth connectivity for audio playback.
c. Shall include four (4) zones of audio reinforcement. Three of the four zones of audio reinforcement will cover the courts running east to west. The fourth zone will cover the bleachers located west of the court running north to south. The user shall have the ability to route audio to any of the four zones independently and the ability to combine in any possible configuration. Sources located within an audio reinforcement zone shall only be allowed to pass audio if the zone they are installed in is active.
d. Shall include four (4) additional analog audio connection locations.
e. Shall allow the user to route program audio over the DANTE network from the High School Activity Center to the High School Cafeteria and/or the Existing Main Gymnasium via the touch panel or wireless controller.
f. Shall allow the user to receive program audio over the DANTE network from the High School Cafeteria or the Existing Main Gymnasium to the High School Activity Center via the touch panel or wireless controller.
g. Shall include a wireless microphone package for voice and audio reinforcement.
h. Shall include pendant-mounted loudspeakers for audio reinforcement.
i. Shall include an assisted listening system to meet ADA standards. Contractor shall limit the audio output of each receiver to prevent hearing damage.
j. Shall include an audio system tuned for the space. Contractor shall ensure loudspeaker coverage of 76 dBA at a minimum and no more than 85 dBA at a maximum based on the volume range configured on the touch panel. All seats shall have consistent coverage no greater than ±2 dB.
k. The digital signal processor shall be connected to a relay from the paging and intercom system. When the relay is closed, the cafeteria program audio system shall mute.

l. Coordinate AV network switch setup requirements with the owner. Coordinate all additional AV traffic and protocols on the school's network with the owner prior to programming and commissioning.

5. TYPICAL CONFERENCE ROOM

a. The flat panel display and video conferencing bar remotes shall be used for AV control. Remotes shall be able to switch inputs, control volume and system power.
b. Shall include a wall mounted flat panel display for video playback.
c. Video sources shall be programmed to switch between HDMI inputs and an O.F.O.I. wireless presentation receiver.
d. Shall have a USB connection for the owner to host a virtual meeting from an O.F.O.I. device
e. Shall have a Video Conferencing Bar mounted below the display.

3.4 TESTING

A. Prior to turning on the system, verify all electronic devices are properly grounded and each audio video AC receptacle has the proper hot, neutral, and ground connections.

B. Audio Testing:

1. Contractor shall ensure all audio signals managed by a digital signal processor are optimized for the space and application, including but not limited to proper gain structure, feedback avoidance, automatic mixing, routing, and echo cancellation ad required.
2. Verify each amplifier channel is correctly wired by providing a test signal to each channel and verify the correct speakers are operating.
3. Adjust the input and output gain of each device to properly set the system gain.
4. Adjust the output level of each amplifier channel and/or speaker tap settings to achieve 85 dB ± 2 dB in the area covered by the respective speaker zone when the output of the sound reinforcement system is set to 0 dBu.
5. Equalize all loudspeakers to provide an acceptable frequency response based on the specifications of the provided loudspeakers.
6. Verify no hum or buzz is present in the system at all operating levels. If present, propose a resolution and correct the issue at no cost to the Owner.

3.5 TRAINING

A. After final completion, provide instruction to Owner designated personnel.

B. Provide a minimum of eight (8) hours of training to the Owner. Plan for multiple training trips to the site. Training session(s) shall cover the following topics at a minimum:

1. System Equipment Connectivity
2. Device Configurations
3. Operation, maintenance, and upgrade procedures.

C. Training to be arranged with Owner personnel. Training schedule shall be coordinated with Owner personnel and their needs.

D. Training to occur in maximum of 3-hour increments per personnel or groups of personnel.

E. Training plan, time line, and agenda shall be provided to Owner and signed off by Owner and Contractor.

F. Warranty certificate and agreement shall be provided to Owner at initial training session.

G. Provide a digital video copy of the training sessions.

H. Contractor to be present at first two (2) uses of the facility.

3.6 SYSTEM ACCEPTANCE

A. Contractor shall demonstrate to the Owner that all systems have been installed per the plans and specifications and that all programming functions, display functions, control functions and all interfaced equipment operate as expected.

B. Contractor shall demonstrate to the Owner that all the end user staff has a working knowledge of how to operate the installed equipment and that the facilities staff also has a working knowledge of the troubleshooting methods for non-critical service problems.

C. Contractor shall have a Delivery and Acceptance form signed by the Owner representative, agreeing that the installation is complete and its operation is acceptable except as noted on the Delivery and Acceptance form. This will also serve as the start of the warranty period.

D. Contractor shall work with the General Contractor to complete all punch lists and work required to allow the General Contractor to close out his project in a timely manner. This will include but not limited to any work that would impact any final inspection for turnover of the building.

END OF SECTION

SECTION 27 51 16 – PUBLIC ADDRESS SYSTEMS

PART 1 - GENERAL

1.1 SCOPE OF WORK

A. This section includes the minimum requirements for the installation, configuration, and training of the audio components as depicted on the Drawings and required by these specifications.

B. This section applies only to AV systems located on exterior athletic fields and associated outbuildings. Refer to sections 27 15 00.23 and 27 41 16 for AV systems within main buildings.

C. These Specifications, together with the Drawings accompanying them, are intended to depict the installation requirements necessary to support this Project. Contractor shall furnish materials shown and/or called for on the Drawings but not mentioned in the Specifications, or vice versa, that are necessary for the installation and support of communications cabling, whether or not specifically called for in both. In addition, Contractor shall provide incidental equipment and materials required for the completion of systems included in this contract whether or not specified or shown on the drawings.

D. This section includes minimum requirements for the following:

1. Announcer Microphone
2. Broadcast Microphone Boom Arm
3. Microphone Switch
4. Wireless Microphone Receiver
5. Digital Signal Processor
6. Digital I/O Expander
7. Bluetooth Receiver
8. Bluetooth Expansion Module
9. Volume Control Type 1
10. Volume Control Type 2
11. Volume Control Type 3
12. Power Amplifier Type 1
13. Power Amplifier Type 2
14. Power Amplifier Type 3
15. Power Amplifier Type 4
16. Power Amplifier Type 5
17. Loudspeaker Type 1
18. Loudspeaker Type 2
19. Loudspeaker Type 3
20. Loudspeaker Type 4
21. Loudspeaker Type 5
22. Loudspeaker Type 6
23. Speaker Rigging Components
24. Power Sequencing System
25. Equipment Rack Blanks
26. Equipment Rack Vents
27. Equipment Rack Shelves
28. Equipment Rack Drawers
29. Microphone/Line Level Cabling
30. 12 AWG Loudspeaker Cabling
31. 16 AWG Loudspeaker Cabling
32. UTP Cabling
33. STP Cabling

34. RF Cabling
35. Custom Faceplates
36. Grommeted Faceplates
37. XLR Panel Mount Connectors
38. XLR Cable Connectors

1.2 QUALITY ASSURANCE

A. The following industry Standards are the basis for the audio-visual system described herein. The list is incorporated by this reference to them.

1. ANSI - American National Safety Institute
2. ASTM - American Society of Testing and Materials
3. EIA - Electronics Industries Association
4. FCC - Federal Communications Commission
5. NEMA - National Electrical Manufacturer's Association
6. OSHA - Occupational Safety and Health Administration
7. NEC - National Electric Code.
8. NFPA - National Fire Protection Association.
9. IEEE - Institute of Electrical and Electronics Engineers.
10. ISO - International Standards Organization.
11. UL - Underwriters Laboratories
12. Davis and Davis, Sound System Engineering (2nd Edition), Howard W. Sams, 1987
13. Giddings, Audio System Design and Installation (ASDI), Howard W. Sams, 1990

B. All cable and equipment shall be installed in a neat and workmanlike manner. All methods of construction that are not specifically described or indicated in the contract documents shall be subject to the control and approval of the Design 27 Project Manager. Equipment and materials shall be of the quality and manufacturer indicated. The equipment specified is based upon the acceptable manufacturers listed. Where "Or equal" is stated, equipment shall be equivalent in every way to that of the equipment specified and subject to approval.

C. Materials and work specified herein shall comply with the requirements of the local Authority Having Jurisdiction.

D. Contractor should have the following qualifications:

1. Experienced in the installation of systems similar in complexity and scale to those included within the scope of work. If requested, the Contractor shall provide the names, locations, and points of contact for at least three installations of the type and complexity specified herein.
2. Within the last two (2) years, installed an audio-visual system with similar equipment and functionality.
3. Have at least one (1) person on staff with CTS-I certification.

1.3 SUBMITTALS

A. As part of this specification section, Contractor shall be responsible for providing the following submittals.
1. Manufacturer Product Data
2. Pre-Installation Shop Drawings
3. As-Built Drawings
4. Configuration files and Source Code

B. Manufacturer Product Data - The Contractor shall provide manufacturers' catalog sheets, specifications, and installation instructions for all products to be installed within the scope of work. This is to

verify that the submitted components comply with the Contract Documents. Submittals shall be formatted as follows.

1. Submit only products that appear in this section or that are required for a complete installation relating to the products in this section. Submission of products from multiple sections will be cause for rejection of submittal without review and subject to reformatting and resubmittal by Contractor.
2. Each product intended to be used shall be included one time only. Do not submit similar products multiple times.
3. Submittal shall include an index with page(s) listed in order of specification within corresponding section, with subsection number and generic name correlated to product submitted. Sheet index and/or product data sheets organized alphabetically, randomly or in any manner which does not match the specification order will be cause for rejection of submittal without review and subject to reformatting and resubmittal by Contractor.
4. Following index sheet, include Manufacturer specification sheet stapled in order of properly organized index.
    a. Where multiple products exist on a single sheet, Contractor shall clearly indicate, whether with highlight, arrow, PDF stamp, etc. the product intending to be used.
    b. Failure to indicate specific product to be used will be cause for marking submittal Revise and Resubmit.

C. Pre-Installation Shop Drawings – Prior to the start of field work the Contractor shall provide pre-installation shop drawings noting the intended installation means and methods for this scope of work. This is to ensure the Contractor understands the scope of work and to provide the field installation teams with all information necessary for successful implementation.

1. Drawings shall be created using modeling software, such as Autodesk AutoCAD. In addition, they shall be exported in PDF format for review by the designer and Owner.
2. Drawings shall contain floor plans, RCPs (if applicable), section views, and details illustrating equipment location, including but not limited equipment racks, IR amplifiers, projection screens, connection panels, flat panel displays, and loudspeakers. Drawings shall be at no less than 1/8"=1'-0" scale.
3. Detailed wiring diagrams showing the interconnection between equipment devices. This shall include cable labeling, cable types, connector types and termination details, wiring color codes, and equipment manufacturer and models. Note cabling provided by Others. Diagrams included as part of Construction Documents are included to convey design intent and are not acceptable for use in Pre-Installation Shop Drawings and will be cause for rejection.
4. Dimensioned plate and panel details that are custom for the project. Details shall include dimensioned locations of components, component type, engraving information, bill of materials, and plate finish and color. If custom part numbers are generated by a manufacturer, they shall be included on the plate details.
5. Rack elevations showing equipment layout within racks with dimensions. The Contractor shall allocate space in the rack for all equipment that will ultimately be installed within, including any and all Owner Furnished equipment.
6. Wiring schedule showing the source and destination of wiring and indicating whether the wire is in conduit or cable tray.

D. As-Built Drawings - The Contractor shall provide Final documentation noting the actual installed conditions for this scope of work. This is to provide the Owner with accurate historical data of the project for future reference. As-Built Drawings shall be submitted during project close-out for inclusion in the O&M manual. Submittals shall be formatted as follows.

1. Submit one (1) PDF set of redlined Contractor generated As-Built Drawings. The Owner reserves the right to request an electronic copy of the shop drawings in both Autodesk CAD (.DWG) format and PDF format.
2. As-Built Drawings that utilize the Contract Documents as a base, shall be inclusive of all Published Addendums, ASIs, Accepted PCOs, PRs, SIs, etc. Changes made via RFI or Field Directive that were not published changes to the Contract Drawings shall be noted as such on the As-Builts with the noted RFI or FD #.
3. All text notes included on As-Builts shall be easily legible on PDF. Handwritten notes that are not legible shall be replaced with PDF text.
4. Include equipment manufacturer/model as installed in the field.
5. Include revised functional diagrams based on those submitted and approved during the Pre-Installation Shop Drawing submittal

E. Configuration Files and Source Code – The Contractor shall provide the final equipment configuration files and Source Code installed on the project. These files shall be submitted concurrently with As-Built Drawings.

1. Include configuration files for all equipment, including but not limited to, digital signal processors, video switchers, control processors, amplifiers, etc. Owner notes that any changes made during the warranty period not completed by the Contractor will void the system warranty.
2. Include any passwords that may have been created that are required to access equipment. Owner notes that any changes made during the warranty period not completed by the Contractor will void the system warranty.
3. Contractor is not required to provide manufacturer software used for configuration.
   a. Include any control processor source code in its uncompiled format. Owner notes that any changes made during the warranty period not completed by the Contractor will void the system warranty.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Equipment and components shall arrive onsite properly protected and undamaged with containers, packaging and labels intact.

B. Store, handle and protect materials and equipment in accordance with Manufacturer's recommendations.

C. Store materials and equipment in dry, environmentally controlled space. Do not install equipment and materials until spaces are enclosed, watertight, and dry. Protect equipment from dust and other airborne materials.

D. Provide additional protection during handling as necessary to prevent breaking, scraping, marring, or otherwise damaging products or surrounding areas.

E. Protect all equipment and components that are to be installed within this project from theft, vandalism, and exposure to rain, freezing temperatures and direct sunlight.

F. Protect installed equipment and components from damage and prevent use by unauthorized persons.

1.5 WARRANTY

A. The Contractor shall warrantee the completed work for a period of one (1) year, from the date of acceptance of the work, to be free of defect in design, workmanship, or material.

B. Contractor shall repair, adjust, and/or replace, whichever the Owner determines to be in its best interests, any defective equipment, materials, or workmanship, as well as such parts of the work damaged or destroyed by such defect, during the warranty period, at the Contractor's sole cost and expense. If parts or components need to be repaired, then a loaner will be supplied and installed until the part or component can be repaired and reinstalled.

C. All service work shall be performed by manufacturer certified technicians.

D. Contractor to provide Owner a phone number for technical support. All support calls shall be answered within twenty-four (24) hours. All repairs shall be underway within forty-eight (48) hours and completed (or loaner supplied) within seven (7) days.

E. At the end of the warranty period, the Contractor shall complete one (1) site visit to evaluate the status of the audio-visual systems. All equipment within this scope of work found to be defective shall be replaced at no cost to the Owner.

F. Guarantees of material, equipment, and workmanship running in favor of the Contractor shall be transferred and assigned to the Owner on completion of the work and acceptance of said work by the Owner.

PART 2 - PRODUCTS

2.1 ANNOUNCER MICROPHONE

A. Announcer microphone shall meet or exceed the following specifications:

1. Shall have a sensitivity of -55dBV at 1Pa.
2. Shall have a frequency response of 50Hz – 16000Hz.
3. Shall have a maximum sound pressure level input of 132dB.
4. Shall be dynamic.
5. Shall have a shock mount.
6. Acceptable Manufacturers:

    a. Shure MV7X
    b. Or Equal

2.2 BROADCAST MICROPHONE BOOM ARM

A. Broadcast microphone boom arm shall meet or exceed the following specifications:

1. Shall be desk mountable.
2. Shall support microphones weighing between 1.5 and 2.4 pounds.
3. Shall have a maximum horizontal reach of up to 32 inches.
4. Shall have a maximum vertical reach of up to 33 inches.
5. Shall have a desk insert mounting adapter.
6. Acceptable Manufacurers:

    a. Rode PS1
    b. Or Equal

2.3 MICROPHONE SWITCH

A. Microphone switches shall meet or exceed the following specifications:

1. Shall have a switch.
2. Shall be capable of providing latching and momentary switching options.

a. Whirlwind MICMUTE PX (Quantity: 2)
b. Or Equal

2.4 WIRELESS MICROPHONE RECEIVER

A. Wireless microphone receivers shall meet or exceed the following specifications:

1. Shall utilize a 64 MHz bandwidth.
2. Shall provide digital predictive switching for true diversity.
3. Shall have up to 60 frequency presets available.
4. Shall provide automatic frequency scanning.
5. Transmitters and receivers shall utilize a metal housing.
6. Coordinate operating frequency with local RF environment.
7. Provide antenna distribution as required.
8. Acceptable Manufacturers:

a. Shure QLXD4
b. Shure QLXD2/SM58 (Quantity: 4)
c. Shure QLXD1 (Quantity: 4)
d. Shure UA874 (Qty. 4)
e. Shure UABIAST (Qty. 4)
f. Custom MiniTRS-TA4F Cable (Quantity: 4)
g. Or Equal

2.5 DIGITAL SIGNAL PROCESSOR

A. Digital signal processor shall meet or exceed the following specifications:

1. Shall be provided with input/output cards to provide a minimum of eight (8) inputs and eight (8) outputs.
2. Shall provide for analog and digital input/outputs.
3. Shall provide an open architecture for signal routing.
4. Shall have twelve (12) control ports and 6 logic outputs.
5. Shall have AES67 and Dante audio with support for Dante Domain Manager
6. Control software to include, but not limited to: matrix mixers, limiters, duckers, gain adjustment, delay, parametric equalizers, crossovers, and compressors.
7. Acceptable Manufacturers:

a. BSS Audio BLU-806DA
b. Or Equal

2.6 DIGITAL I/O EXPANDER

A. Digital I/O expander shall meet or exceed the following specifications:

1. Shall be provided with input/output cards to provide a minimum of eight (8) inputs and eight (8) outputs.
2. Shall provide for analog and digital input/outputs.
3. Shall provide an open architecture for signal routing.
4. Shall have twelve (12) control ports and 6 logic outputs.
5. Shall route audio between equipment through the manufacturer’s proprietary category cable routing solution.
6. Shall have AES67 and Dante audio with support for Dante Domain Manager
7. Acceptable Manufacturers:

a. BSS Audio BLU-326DA

b. Or Equal

2.7 BLUETOOTH RECEIVER

A. Bluetooth receiver shall meet or exceed the following specifications:

1. Bluetooth receiver shall meet or exceed the following specifications:
2. Shall have a minimum of one (1) STP output.
3. Shall support playback of WAV, MP3, and AAC files.
4. Shall provide Bluetooth capability.
5. Shall provide push button to sync device to Bluetooth.
6. Shall come in a wall plate form factor.
7. Confirm color/finish with architect.
8. Acceptable Manufacturers:

a. Q-SYS Axiom BT1
b. Or Equal

2.8 BLUETOOTH EXPANSION MODULE

A. Shall meet or exceed the following specifications:

1. Shall have a minimum of one (1) STP input.
2. Shall have a maximum of one (1) analog audio output.
3. Shall support playback of WAV, MP3, and AAC files.
4. Acceptable Manufacturers:

a. QSC Axiom AXPio
b. Or Equal

2.9 VOLUME CONTROL TYPE 1

A. Volume control shall meet or exceed the following specifications:

1. Shall have knob control with scale.
2. Shall provide eight (8) buttons for input and output source selection.
3. Shall operate over Ethernet communication.
4. Verify color with Architect.
5. Acceptable Manufacturers:

a. BSS Audio EC-8BV
b. Provide Angled Surface Box FSR-DSKB-4G
c. Or Equal

2.10 VOLUME CONTROL TYPE 2

A. Volume control shall meet or exceed the following specifications:

1. Shall have knob control with scale.
2. Shall provide four (4) buttons for output source selection.
3. Shall operate over Ethernet communication.
4. Verify color with Architect.
5. Acceptable Manufacturers:

a. BSS Audio EC-4BV

b. Or Equal

2.11 VOLUME CONTROL TYPE 3

A. Volume control shall meet or exceed the following specifications:

1. Shall have knob control with scale.
2. Shall have a 35W power rating.
3. Shall be able to attenuate 70-volt systems.
4. Verify color with Architect.
5. Acceptable Manufacturers:

a. Atlas AT35
b. Or Equal

2.12 POWER AMPLIFIER TYPE 1

A. Power amplifier shall meet or exceed the following specifications:

1. Shall have continuous power rating of a minimum of 2500 watts into 8 ohm load per channel.
2. Shall provide one channel of amplification.
3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
4. have a maximum of 0.35% THD from 20Hz – 20000Hz.
5. Shall have a signal to noise ratio of at least 108dB.
6. Shall have a maximum input level of +20dBu.
7. Shall route audio between equipment through the manufacturer’s proprietary category cable routing solution.
8. Acceptable Manufacturers:

a. Crown Audio DCi 2|1250N
b. Or Equal

2.13 POWER AMPLIFIER TYPE 2

A. Power amplifier shall meet or exceed the following specifications:

1. Shall have continuous power rating of a minimum of 600 watts into 4 ohm or 8 ohm load per channel.
2. Shall provide two channels of amplification.
3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
4. have a maximum of 0.35% THD from 20Hz – 20000Hz.
5. Shall have a signal to noise ratio of at least 108dB.
6. Shall have a maximum input level of +20dBu.
7. Shall route audio between equipment through the manufacturer’s proprietary category cable routing solution.
8. Acceptable Manufacturers:

a. Crown Audio DCi 2|600N
b. Or Equal

2.14 POWER AMPLIFIER TYPE 3

A. Power amplifier shall meet or exceed the following specifications:

1. Shall have continuous power rating of a minimum of 600 watts into 4 ohm load per channel.
2. Shall provide four channels of amplification.
3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
4. have a maximum of 0.35% THD from 20Hz – 20000Hz.
5. Shall have a signal to noise ratio of at least 108dB.
6. Shall have a maximum input level of +20dBu.
7. Shall route audio between equipment through the manufacturer's proprietary category cable routing solution.
8. Acceptable Manufacturers:

    a. Crown Audio DCi 4|600N
    b. Or Equal

2.15 POWER AMPLIFIER TYPE 4

A. Power amplifier shall meet or exceed the following specifications:

1. Shall have continuous power rating of a minimum of 300 watts into 4 ohm load per channel.
2. Shall provide four channels of amplification.
3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
4. have a maximum of 0.35% THD from 20Hz – 20000Hz.
5. Shall have a signal to noise ratio of at least 108dB.
6. Shall have a maximum input level of +20dBu.
7. Acceptable Manufacturers:

    a. Crown Audio DCi 4|300
    b. Or Equal

2.16 POWER AMPLIFIER TYPE 5

A. Power amplifier shall meet or exceed the following specifications:

1. Shall have a minimum continuous power rating of 200 watts into 70 volts per channel.
2. Shall provide one channel of amplification.
3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
4. have a maximum of 0.1% THD from 20Hz – 20000Hz.
5. Shall have a signal to noise ratio of at least 100dB.
6. Shall have a maximum input level of +20dBu.
7. Acceptable Manufacturers:

    a. Extron XPA 2001
    b. Or Equal

2.17 LOUDSPEAKER TYPE 1

A. Loudspeakers shall meet or exceed the following specifications:

1. Shall be two-way coaxial configuration with two (2) 12” LF driver, two (2) 2” MF driver, and one (1) 1” HF exit driver.
2. Shall have a coverage pattern of 50º x 20 º.
3. Shall have a power rating of no less than 1550W.
4. Shall have a sensitivity of no less than 110 dB.
5. Shall have a frequency response of 71Hz – 19.5kHz ±5dB.
6. Provide all necessary hardware and brackets required for installation.
7. Shall be weather-resistant with IP 55W rating.
8. Coordinate color and finish with the Owner.
9. Acceptable Manufacturers:

    a. Community R2-52MAX
    b. Or Equal

2.18 LOUDSPEAKER TYPE 2

A. Loudspeakers shall meet or exceed the following specifications:

1. Shall be two-way coaxial configuration with two (2) 12” LF driver, two (2) 2” MF driver, and one (1) 1” HF exit driver.
2. Shall have a coverage pattern of 50º x 20 º.
3. Shall have a power rating of no less than 400W.
4. Shall have a sensitivity of no less than 110 dB.
5. Shall have a frequency response of 70Hz – 16kHz ±5dB.
6. Provide all necessary hardware and brackets required for installation.
7. Shall be weather-resistant with IP 55W rating.
8. Coordinate color and finish with the Owner.
9. Acceptable Manufacturers:

    a. Community R2-52Z
    b. Or Equal

2.19 LOUDSPEAKER TYPE 3

A. Loudspeakers shall meet or exceed the following specifications:

1. Shall be two-way coaxial configuration with one (1) 8” LF driver, two (2) 2.35” MF, and one (1) 1” HF exit driver.
2. Shall have a coverage pattern of 90º x 60 º.
3. Shall have a power rating of no less than 400W.
4. Shall have a sensitivity of no less than 98 dB.
5. Shall have a frequency response of 80Hz – 16kHz ±5dB.
6. Provide all necessary hardware and brackets required for installation.
7. Shall be weather-resistant with IP 55W rating.
8. Coordinate color and finish with the Owner.
9. Acceptable Manufacturers:

    a. Community R.35-3896
    b. Or Equal

2.20 LOUDSPEAKER TYPE 4

A. Loudspeakers shall meet or exceed the following specifications:

1. Shall be two-way coaxial configuration with one (1) 12” LF driver and one (1) 1” HF exit driver.
2. Shall have a coverage pattern of 60º x 60 º.
3. Shall have a power rating of no less than 500W.
4. Shall have a sensitivity of no less than 103 dB.
5. Shall have a frequency response of 85Hz – 16kHz ±5dB.
6. Provide all necessary hardware and brackets required for installation.
7. Shall be weather-resistant with IP 55W rating.
8. Coordinate color and finish with the Owner.
9. Acceptable Manufacturers:

    a. Community R.5-66Z
    b. Or Equal

2.21 LOUDSPEAKER TYPE 5

A. Loudspeakers shall meet or exceed the following specifications:

1. Shall be two-way coaxial configuration with one (1) 6.5” LF driver and one (1) 1.25” HF exit driver.
2. Shall have a coverage pattern of 80º x 60 º.
3. Shall have a power rating of no less than 150W Program.
4. Shall have a sensitivity of no less than 94dB.
5. Shall have a frequency response of 90Hz – 16kHz ±5dB.
6. Provide all necessary hardware and brackets required for installation.
7. Shall be weather-resistant with IP 55W rating.
8. Coordinate color and finish with the Owner.
9. Acceptable Manufacturers:

    a. Community R.15COAX
    b. Or Equal

2.22 LOUDSPEAKER TYPE 6

A. Loudspeakers shall meet or exceed the following specifications:

1. Shall be two-way coaxial configuration with one (1) 6.5” LF driver and one (1) 1” HF exit driver.
2. Shall have a coverage pattern of 90º.
3. Shall have a power rating of no less than 60W Program.
4. Shall have a sensitivity of no less than 88dB.
5. Shall have a frequency response of 75Hz – 18.5kHz ±5dB.
6. Shall be pendant mounted.
7. Provide all necessary hardware required for installation.
8. Coordinate color and finish with the Owner.
9. Acceptable Manufacturers:

    a. Biamp Desono DX-IC6
    b. Or Equal

2.23 SPEAKER RIGGING COMPONENTS

A. Contractor shall provide and install speaker rigging components as necessary to mount main loudspeakers as shown on the T-series drawings.

B. Structural support members to have a safety factor of at least 5. Mounting hardware and wire rope to have a safety factor of 8. All fasteners to be graded and certified for use in the intended applications. Overhead suspension hardware shall comply with ASME B30.20 standards and all applicable local building and safety codes.

C. Overhead suspension hardware must be of a type that includes product traceability controls.

D. Rigging, mounting and support systems for loudspeakers shall be designed and sealed by a registered professional engineer licensed to practice in the State of Indiana. Once the systems are installed, the engineer shall physically inspect the methods and means used to verify compliance with the original design.

E. Loudspeaker Rigging Components shall meet or exceed the following specifications:

1. Loudspeaker Rigging Components shall be made of quenched or tempered forged steel.
2. Loudspeaker Rigging Components shall meet or exceed all the requirements of ASME B30.26 including identification, ductility, design factor, proof load and temperature requirements
3. Loudspeaker Rigging Components shall be hot dip galvanized or self-colored.
4. Shackles shall meet the performance requirements of Federal Specification RR-C-271D Type IVA, Grade A, Class1.
5. Turnbuckles shall meet the performance requirements of Federal Specifications FF-T-791b, Type 1 Form 1 - CLASS 4, and ASTM F-1145.
6. Wire rope thimble shall meet the performance requirements of Federal Specification FF-T-276b Type II.
7. Wire rope shall be sized as 7x19 utility cable.
8. Provide all screw pin type shackles with mouse wire.
9. All end fittings shall be moused to the body with mousing cable.
10. Select size of product based working load limits required.
11. Acceptable product:

    a. Chicago Hardware Company
    b. Crosby Group
    c. Wire Rope Corporation of America (WRCA)

2.24 POWER SEQUENCING SYSTEM

A. Contractor to provide and install a rack mounted power sequencing system within the AV equipment rack.

B. Contractor to ensure all equipment is powered in the correct order to avoid audible pops and clicks from the audio-video system in response to power sequencing.

C. Rack mounted power sequencing system shall meet or exceed the following specifications:

1. Shall include a sequencer with a minimum of six (6) sequenced outlets
2. Shall allow for adjustable start delay times.
3. Acceptable manufacturers:

    a. Middle Atlantic PDS-615R
    b. Or Equal

2.25 EQUIPMENT RACK BLANKS

A. Contractor to provide equipment rack blanks where required as shown on T-series drawings.

B. Equipment rack blanks shall meet or exceed the following specifications:

a. Equipment rack blanks shall have a flanged construction.
b. Equipment rack blanks shall be made of 1/16” thick aluminum.
c. Equipment rack blanks shall have a black brushed and anodized finish.
d. Provide rack blank sizes as required.
e. Acceptable Manufacturers:

a. Middle Atlantic BL Series
b. Or Equal

2.26 EQUIPMENT RACK VENTS

A. Contractor to provide equipment rack vents where required as shown on T-series drawings.

B. Equipment rack vents shall meet or exceed the following specifications:

1. Equipment rack vents shall have a flanged construction.
2. Equipment rack vents shall be made of 16-gauge aluminum.
3. Equipment rack vents shall have a black brushed and anodized finish.
4. Provide rack vents as required.
5. Acceptable Manufacturers:

a. Middle Atlantic VTP Series
b. Or Equal

2.27 EQUIPMENT RACK SHELVES

A. Contractor to provide equipment rack shelves where required as shown on T-series drawings.

B. Equipment rack shelves shall meet or exceed the following specifications:

1. Shall have a flanged construction.
2. Shall have 16-gauge steel construction with black textured powder coat finish.
3. Shall have a minimum load capacity of 50 pounds.
4. Provide rack shelf sizes as required.
5. Acceptable Manufacturers:

a. Middle Atlantic U Series
b. Or Equal

2.28 EQUIPMENT RACK DRAWERS

A. Contractor to provide equipment rack drawers where required as shown on T-series drawings.

B. Equipment rack drawers shall meet or exceed the following specifications:

1. Shall have a flanged construction.
2. Shall have 16-gauge steel construction with black textured powder coat finish.
3. Shall have a minimum load capacity of 50 pounds.

4. Provide rack drawer sizes as required.
5. Acceptable Manufacturers:

    a. Middle Atlantic UD Series
    b. Or Equal

2.29 MICROPHONE/LINE LEVEL CABLING

A. Contractor shall provide and install microphone/line level cabling as required.

B. Provide mic/line cabling meeting the following specifications:

1. Minimum shielded 22 AWG, 7x30 stranded cabling
2. Nominal conductor to conductor capacitance: 114 pF/m
3. Tinned copper drain wire.
4. Cable to be PVC jacketed.
5. Acceptable Manufacturers:

    a. Belden 9451
    b. Or Equal

2.30 12 AWG LOUDSPEAKER CABLING

A. Contractor shall provide and install 12 AWG loudspeaker cabling as required.

B. Provide speaker cabling meeting the following specifications:

1. Minimum unshielded 12 AWG, 65x30 stranded cabling
2. Nominal conductor to conductor capacitance: 32 pF/ft
3. Cable to be PVC jacketed.
4. Acceptable Manufacturers:

    a. Belden 5000UP
    b. Or Equal

2.31 16 AWG LOUDSPEAKER CABLING

A. Contractor shall provide and install 16 AWG loudspeaker cabling as required.

1. Provide speaker cabling meeting the following specifications:

    a. Minimum unshielded 16 AWG, 65x34 stranded cabling
    b. Nominal conductor to conductor capacitance: 98 pF/ft
    c. Cable to be PVC jacketed.

2. Acceptable Manufacturers

    a. Belden 5200UP
    b. Or Approved Equal

2.32 UTP CABLING

A. Contractor shall provide and install UTP cabling as required per manufacturer’s recommendations.

1. Provide UTP cabling meeting the following specifications.

    a. Minimum 24 AWG, eight (8) conductor cable
    b. Nominal conductor to conductor capacitance: 15 pF/ft

2. Acceptable Manufacturers

    a. Belden
    b. Commscope
    c. General Cable
    d. Superior Essex
    e. Or Approved Equal

2.33 STP CABLING

A. Contractor shall provide and install STP cabling as required per manufacturer's recommendations.

1. Provide STP cabling meeting the following specifications:

    a. Minimum 24 AWG, eight (8) conductor cable
    b. Nominal conductor to conductor capacitance: 15 pF/ft
    c. Cable shall be shielded.

2. Acceptable Manufacturers

    a. Crestron
    b. Extron
    c. Or Equal

2.34 RF CABLING

A. Contractor shall provide and install RF cabling as required.

B. Provide RF cabling meeting the following specifications:
1. RG-8X type cabling.
2. Center conductor 16 AWG solid.
3. Gas-injected FPE insulation.
4. Cable to be PVC jacketed.
5. Acceptable Manufacturers

    a. Belden 9258
    b. Or Equal

2.35 CUSTOM FACEPLATE

A. Contractor shall provide plates as required by the T-series drawings. Engrave as shown on the drawings.

B. Contractor shall coordinate plate finish and color with Owner. Plastic plates are not acceptable.

C. Plate label engraving shall be 1/8 in. block sans serif characters unless noted otherwise. On dark plates, letters shall be white; on stainless steel or brushed natural aluminum plates, letters shall be black.

D. Custom and/or engraved plates/panels:

1. Custom panels constructed of 1/8 inch brushed aluminum

2. Finish: Black Anodized
3. Acceptable Manufacturers:

    a. ProCo
    b. Or Equal

2.36 GROMMETED FACEPLATES

A. Contractor shall provide grommet faceplates as needed by audio and video locations as shown on the T-series drawings.

B. Grommet faceplates shall provide a minimum of 1.5” diameter opening for cable pass-through unless otherwise noted.

C. Contractor shall coordinate plate finish and color with Owner. Plastic plates are not acceptable.

D. Grommeted plates/panels:

1. Custom panels constructed of 1/8 inch brushed aluminum
2. Finish: Black Anodized
3. Acceptable Manufacturers:

    a. ProCo
    b. Or Equal

2.37 XLR PANEL MOUNT CONNECTORS

A. Contractor shall provide the quantity of XLR jacks as shown on the T-series drawings.

B. Provide XLR jack meeting the following specifications:

1. XLR jack shall be panel mounted with metal shell
2. XLR jack shall utilize gold contact solder terminations.
3. Shell color shall match plate finish.
4. Acceptable Manufacturers:

    a. Neutrik
    b. Switchcraft
    c. Or Equal

2.38 XLR CABLE CONNECTORS

A. Contractor shall provide the quantity of XLR cable connectors as shown on the T-series drawings.

B. Provide XLR cable connector meeting the following specifications:

1. XLR cable connector shall have black die-cast shell.
2. XLR cable connector shall utilize gold contact solder terminations.
3. XLR cable connector shall include strain relief.
4. Acceptable Manufacturers:

    a. Neutrik
    b. Switchcraft
    c. Or Equal

PART 3 - EXECUTION

3.1 GENERAL

A. Coordinate incorporation of the Work specified herein with other project work so as to facilitate a cohesive final product.

B. The installation recommendations contained within ASDI and Telecommunications Distribution Methods Manual are mandatory minimum standards and requirements.

C. Mount equipment and enclosures plumb and level.

D. Permanently installed equipment to be firmly and safely held in place. Design equipment supports to support loads imposed with a safety factor of at least five. Seismic bracing shall be installed on appropriate equipment where local codes require such installation.

E. Verify all locations of equipment in all rooms with Owner's Representative, Owner, and Consultant.

F. Follow all manufacturer requirements and recommendations for the installation of all AV equipment.

3.2 AUDIO CONTROL SYSTEM

A. Digital volume controls shall be programmed to at a minimum switch between available audio sources and control zone selection of audio where applicable.

B. All digital volume controls shall be programmed with a custom lockable pin code. System shall remain locked by default to prevent unwanted usage. Coordinate pin code for each touch panel and wireless controller with owner. Additional control system and room type functionality shall be programmed at a minimum as described below:

1. HOME PRESS BOX

a. Shall include one (1) digital volume control for system control, mounted in an angled surface box placed and free to move on the existing south side countertop of the center home press box room. Sources shall be selectable between the angled surface box announcer microphone input, the Bluetooth receiver, and both wireless microphones channels. Output volume control shall be selectable between the home press box north and south bleacher speakers, the home press box center bleacher speakers, the home press box center field speaker, and the home press box south pole mounted speaker.
b. Shall include Bluetooth capabilities for audio connectivity and playback, mounted in the same angled surface box as the digital volume control.
c. Shall include one (1) 3.5mm analog audio connectivity and playback, mounted in the same angled surface box as the digital volume control.
d. Shall include one (1) XLR analog microphone level connection for an announcer microphone and one (1) XLR analog line level output connection for audio connectivity to line level sources, mounted in the same angled surface box as the digital volume control.
e. Shall include three additional analog audio connections for audio connectivity. Each audio connection location shall include (1) XLR microphone level input connection and one (1) XLR line level output connection for audio connectivity. One shall be located in the north room of the home press box, one shall be located on the north side of the center room of the home press box, and one shall be located in the south room of the home press box.
f. Program audio from the visitor press box and home press box shall be routable to all connected public address system speakers, amplifiers, digital signal processors, and digital I/O expanders via DANTE protocol over the existing network. Contractor shall connect new public address system equipment to the existing network switches located in the home press box equipment rack in order to route audio between all three locations.

g. Shall include wireless microphone package for voice and audio reinforcement.
h. Coordinate the new network switch setup requirements with owner. Coordinate all additional AV traffic and protocols on the school's network with the owner prior to programming and commissioning.
i. Shall include a refreshed audio system tuned for the surrounding bleachers and field. Contractor shall ensure loudspeaker coverage of 80 dBA at a minimum and no more than 90 dBA at a maximum based on the volume range configured on the digital volume control. All surrounding areas shall have consistent coverage no greater than ±2 dB.

2. VISITOR PRESS BOX

a. Shall include one (1) digital volume control for system control, mounted in an angled surface box placed and free to move on the existing countertop of the visitor press box. Sources shall be selectable between the angled surface box microphone input, the Bluetooth receiver, and both wireless microphones channels. Output volume control shall be selectable between the visitor press box north and south bleacher speakers, the home press box center field speaker, and the home press box south pole mounted speaker.
b. Shall include Bluetooth capabilities for audio connectivity and playback, mounted in the same angled surface box as the digital volume control.
c. Shall include one (1) 3.5mm analog audio connectivity and playback, mounted in the same angled surface box as the digital volume control.
d. Shall include one (1) XLR analog microphone level connection for an announcer microphone and one (1) XLR analog line level output connection for audio connectivity to line level sources, mounted in the same angled surface box as the digital volume control.
e. Program audio from the visitor press box and home press box shall be routable to all connected public address system speakers, amplifiers, digital signal processors, and digital I/O expanders via DANTE protocol over the existing network. Contractor shall connect new public address system equipment to the existing network switches located in the visitor press box equipment rack in order to route audio between all three locations.
f. Shall include wireless microphone package for voice and audio reinforcement.
g. Coordinate the new network switch setup requirements with owner. Coordinate all additional AV traffic and protocols on the school's network with the owner prior to programming and commissioning.
h. Shall include a refreshed audio system tuned for the surrounding bleachers. Contractor shall ensure loudspeaker coverage of 80 dBA at a minimum and no more than 90 dBA at a maximum based on the volume range configured on the digital volume control. All surrounding areas shall have consistent coverage no greater than ±2 dB.

3. CONCESSIONS AND LOCKER ROOMS BUILDING

a. Shall include one (1) digital volume control for system control, flush wall mounted next to the equipment rack. Output volume control shall be selectable between the north.
b. Shall include Bluetooth capabilities for audio connectivity and playback, mounted in the same angled surface box as the digital volume control.
c. Shall include one (1) 3.5mm analog audio connectivity and playback, mounted in the same angled surface box as the digital volume control.
d. Shall include one (1) XLR analog microphone level connection for an announcer microphone and one (1) XLR analog line level output connection for audio connectivity to line level sources, mounted in the same angled surface box as the digital volume control.
e. Program audio from the visitor press box and home press box shall be routable to all connected public address system speakers, amplifiers, digital signal processors, and digital I/O expanders via DANTE protocol over the existing network. Contractor shall connect new public address system equipment to the existing network switches located in the concessions and locker rooms building equipment rack in order to route audio between all three locations.
f. Shall include wireless microphone package for voice and audio reinforcement.

g. Coordinate the new network switch setup requirements with owner. Coordinate all additional AV traffic and protocols on the school's network with the owner prior to programming and commissioning.
h. Shall include a refreshed audio system tuned for the interior and exterior spaces. Contractor shall ensure loudspeaker coverage of 76 dBA at a minimum and no more than 85 dBA at a maximum based on the volume range configured on the digital volume control. All surrounding areas shall have consistent coverage no greater than ±2 dB.

3.3 TESTING

A. Prior to turning on the system, verify all electronic devices are properly grounded and each audio video AC receptacle has the proper hot, neutral, and ground connections.

B. Audio Testing:

1. Contractor shall ensure all audio signals managed by a digital signal processor are optimized for the space and application, including but not limited to proper gain structure, feedback avoidance, automatic mixing, routing, and echo cancellation ad required.
2. Verify each amplifier channel is correctly wired by providing a test signal to each channel and verify the correct speakers are operating.
3. Adjust the input and output gain of each device to properly set the system gain.
4. Adjust the output level of each amplifier channel and/or speaker tap settings to achieve 85 dB ± 2 dB in the area covered by the respective speaker zone when the output of the sound reinforcement system is set to 0 dBu.
5. Equalize all loudspeakers to provide an acceptable frequency response based on the specifications of the provided loudspeakers.
6. Verify no hum or buzz is present in the system at all operating levels. If present, propose a resolution and correct the issue at no cost to the Owner.

3.4 TRAINING

A. After final completion, provide instruction to Owner designated personnel.

B. Provide a minimum of two (2) hours of training to the Owner. Plan for multiple training trips to the site. Training session(s) shall cover the following topics at a minimum:

1. System Equipment Connectivity
2. Device Configurations
3. Operation, maintenance, and upgrade procedures.

C. Training to be arranged with Owner personnel. Training schedule shall be coordinated with Owner personnel and their needs.

D. Training to occur in maximum of 3-hour increments per personnel or groups of personnel.

E. Training plan, time line, and agenda shall be provided to Owner and signed off by Owner and Contractor.

F. Warranty certificate and agreement shall be provided to Owner at initial training session.

G. Provide a digital video copy of the training sessions.

H. Contractor to be present at first two (2) uses of the facility.

3.5 SYSTEM ACCEPTANCE

A. Contractor shall demonstrate to the Owner that all systems have been installed per the plans and specifications and that all programming functions, display functions, control functions and all interfaced equipment operate as expected.

B. Contractor shall demonstrate to the Owner that all the end user staff has a working knowledge of how to operate the installed equipment and that the facilities staff also has a working knowledge of the troubleshooting methods for non-critical service problems.

C. Contractor shall have a Delivery and Acceptance form signed by the Owner representative, agreeing that the installation is complete and its operation is acceptable except as noted on the Delivery and Acceptance form. This will also serve as the start of the warranty period.

D. Contractor shall work with the General Contractor to complete all punch lists and work required to allow the General Contractor to close out his project in a timely manner. This will include but not limited to any work that would impact any final inspection for turnover of the building.

END OF SECTION

SECTION 27 51 23 – CENTRAL SOUND AND PAGING SYSTEM

PART 1 - GENERAL

1.1 SCOPE OF WORK

A. This section includes the minimum requirements for the installation, configuration, and training of the paging components as depicted on the Drawings and required by these specifications.

B. These Specifications, together with the Drawings accompanying them, are intended to depict the installation requirements necessary to support this Project. Contractor shall furnish materials shown and/or called for on the Drawings but not mentioned in the Specifications, or vice versa, that are necessary for the installation and support of communications cabling, whether or not specifically called for in both. In addition, Contractor shall provide incidental equipment and materials required for the completion of systems included in this contract whether or not specified or shown on the drawings.

C. This section includes minimum requirements for the following:

1. Central Paging Controller
2. Paging Switching Module
3. Analog Converter
4. Paging Amplifier
5. Call Station
6. Volume Control
7. Power Supply
8. Ceiling Mounted Speaker
9. Intercom Station
10. Wall Mounted Horn

D. Related Sections include the following:

1. Division 26 – Electrical
2. 27 05 00 – Common Work Results for Communications
3. 27 05 28 – Pathways for Communications Systems
4. 27 15 13 – Communications Copper Horizontal Cabling
5. 27 15 00.23 – Audio-Video Communications Horizontal Cabling

1.2 QUALITY ASSURANCE

A. The following industry Standards are the basis for the audio-visual system described herein. The list is incorporated by this reference to them.

1. ANSI - American National Safety Institute
2. ASTM - American Society of Testing and Materials
3. EIA - Electronics Industries Association
4. FCC - Federal Communications Commission
5. NEMA - National Electrical Manufacturer’s Association
6. OSHA - Occupational Safety and Health Administration
7. NEC - National Electric Code.
8. NFPA - National Fire Protection Association, NFPA-70
9. IEEE - Institute of Electrical and Electronics Engineers.
10. ISO - International Standards Organization.

11. UL - Underwriters Laboratories
12. BICSI Telecommunications Distribution Methods Manual (TDMM)
13. Americans with Disabilities Act (ADA)
14. Davis and Davis, Sound System Engineering (2nd Edition), Howard W. Sams, 1987
15. Giddings, Audio System Design and Installation (ASDI), Howard W. Sams, 1990
16. Infocomm International Installation Handbook.

B. All cable shall be installed in a neat and workmanlike manner. All methods of construction that are not specifically described or indicated in the contract documents shall be subject to the control and approval of the Architect and Owners Representative. Equipment and materials shall be of the quality and manufacture indicated. The equipment specified is based upon the acceptable manufacturers listed. Where "Or equal" is stated, equipment shall be equivalent in every way to that of the equipment specified and subject to approval.

C. Materials and work specified herein shall comply with the requirements of the local Authority Having Jurisdiction. Refer to Section 270500 for all applicable standards and codes.

D. Contractor should have the following qualifications:

1. Experienced in the installation of systems similar in complexity and scale to those included within the scope of work. If requested, the Contractor shall provide the names, locations, and points of contact for at least three installations of the type and complexity specified herein.
2. Within the last two (2) years, installed an audio-visual system with similar equipment and functionality.
3. Have at least one (1) person on staff with CTS-I certification.

1.3 SUBMITTALS

A. As part of this specification section, Contractor shall be responsible for providing the following submittals.
1. Manufacturer Product Data
2. Pre-Installation Shop Drawings
3. As-Built Drawings
4. Configuration files and Source Code

B. Manufacturer Product Data - The Contractor shall provide manufacturers' catalog sheets, specifications, and installation instructions for all products to be installed within the scope of work. This is to verify that the submitted components comply with the Contract Documents. Submittals shall be formatted as follows.

1. Submit only products that appear in this section or that are required for a complete installation relating to the products in this section. Submission of products from multiple sections will be cause for rejection of submittal without review and subject to reformatting and resubmittal by Contractor.
2. Each product intended to be used shall be included one time only. Do not submit similar products multiple times.
3. Submittal shall include an index with page(s) listed in order of specification within corresponding section, with subsection number and generic name correlated to product submitted. Sheet index and/or product data sheets organized alphabetically, randomly or in any manner which does not match the specification order will be cause for rejection of submittal without review and subject to reformatting and resubmittal by Contractor.
4. Following index sheet, include Manufacturer specification sheet stapled in order of properly organized index.

a. Where multiple products exist on a single sheet, Contractor shall clearly indicate, whether with highlight, arrow, PDF stamp, etc. the product intending to be used.
b. Failure to indicate specific product to be used will be cause for marking submittal Revise and Resubmit.

C. Pre-Installation Shop Drawings – Prior to the start of field work the Contractor shall provide pre-installation shop drawings noting the intended installation means and methods for this scope of work. This is to ensure the Contractor understands the scope of work and to provide the field installation teams with all information necessary for successful implementation.

1. Drawings shall be created using modeling software, such as Autodesk AutoCAD. In addition, they shall be exported in PDF format for review by the designer and Owner.
2. Drawings shall contain floor plans, RCPs (if applicable), section views, and details illustrating equipment location, including but not limited equipment racks, IR amplifiers, projection screens, connection panels, flat panel displays, and loudspeakers. Drawings shall be at no less than 1/8"=1'-0" scale.
3. Detailed wiring diagrams showing the interconnection between equipment devices. This shall include cable labeling, cable types, connector types and termination details, wiring color codes, and equipment manufacturer and models. Note cabling provided by Others. Diagrams included as part of Construction Documents are included to convey design intent and are not acceptable for use in Pre-Installation Shop Drawings and will be cause for rejection.
4. Dimensioned plate and panel details that are custom for the project. Details shall include dimensioned locations of components, component type, engraving information, bill of materials, and plate finish and color. If custom part numbers are generated by a manufacturer, they shall be included on the plate details.
5. Rack elevations showing equipment layout within racks with dimensions. The Contractor shall allocate space in the rack for all equipment that will ultimately be installed within, including any and all Owner Furnished equipment.
6. Wiring schedule showing the source and destination of wiring and indicating whether the wire is in conduit or cable tray.

D. As-Built Drawings - The Contractor shall provide Final documentation noting the actual installed conditions for this scope of work. This is to provide the Owner with accurate historical data of the project for future reference. As-Built Drawings shall be submitted during project close-out for inclusion in the O&M manual. Submittals shall be formatted as follows.

1. Submit one (1) PDF set of redlined Contractor generated As-Built Drawings. The Owner reserves the right to request an electronic copy of the shop drawings in both Autodesk CAD (.DWG) format and PDF format.
2. As-Built Drawings that utilize the Contract Documents as a base, shall be inclusive of all Published Addendums, ASIs, Accepted PCOs, PRs, SIs, etc. Changes made via RFI or Field Directive that were not published changes to the Contract Drawings shall be noted as such on the As-Builts with the noted RFI or FD #.
3. All text notes included on As-Builts shall be easily legible on PDF. Handwritten notes that are not legible shall be replaced with PDF text.
4. Include equipment manufacturer/model as installed in the field.
5. Include revised functional diagrams based on those submitted and approved during the Pre-Installation Shop Drawing submittal

E. Configuration Files and Source Code – The Contractor shall provide the final equipment configuration files and Source Code installed on the project. These files shall be submitted concurrently with As-Built Drawings.

1. Include configuration files for all equipment, including but not limited to, digital signal processors, video switchers, control processors, amplifiers, etc. Owner notes that any changes made during the warranty period not completed by the Contractor will void the system warranty.
2. Include any passwords that may have been created that are required to access equipment. Owner notes that any changes made during the warranty period not completed by the Contractor will void the system warranty.
3. Contractor is not required to provide manufacturer software used for configuration.
4. Include any control processor source code in its uncompiled format. Owner notes that any changes made during the warranty period not completed by the Contractor will void the system warranty.

1.4 DELIVERY, STORAGE, AND HANDLING

A. Equipment and components shall arrive onsite properly protected and undamaged with containers, packaging and labels intact.

B. Store, handle and protect materials and equipment in accordance with Manufacturer's recommendations.

C. Store materials and equipment in dry, environmentally controlled space. Do not install equipment and materials until spaces are enclosed, watertight, and dry. Protect equipment from dust and other airborne materials.

D. Provide additional protection during handling as necessary to prevent breaking scraping, marring, or otherwise damaging products or surrounding areas.

E. Protect all equipment and components that are to be installed within this project from theft, vandalism, and exposure to rain, freezing temperatures and direct sunlight.

F. Protect installed equipment and components from damage and prevent use by unauthorized persons.

1.5 WARRANTY

A. The Contractor shall warrantee the completed work for a period of three (3) years, from the date of acceptance of the work, to be free of defect in design, workmanship, or material.

B. Contractor shall repair, adjust, and/or replace, whichever the District determines to be in its best interests, any defective equipment, materials, or workmanship, as well as such parts of the work damaged or destroyed by such defect, during the warranty period, at the Contractor’s sole cost and expense. If parts or components need to be repaired, then a loaner will be supplied and installed until the part or component can be repaired and reinstalled.

C. All service work shall be performed by manufacturer certified technicians.

D. Contractor to provide District a phone number for technical support. All support calls shall be answered within twenty-four (24) hours. All repairs shall be underway within forty-eight (48) hours and completed (or loaner supplied) within seven (7) days.

E. In the event that the Contractor does not affect repair within forty-eight (48) hours from the date of notification of such defect, the District may secure repair services from other sources and charge the Contractor for such costs without voiding the warranty.

F. At the end of the warranty period, the Contractor shall complete one (1) site visit to evaluate the status of the paging systems. All equipment within this scope of work found to be defective shall be replaced at no cost to the District.

G. Guarantees of material, equipment, and workmanship running in favor of the Contractor shall be transferred and assigned to the District on completion of the work and acceptance of said work by the District.

PART 2 - PRODUCTS

2.1 GENERAL

A. All products to be new and shipped in accordance with manufacturer recommendations.

B. Replace, without costs to the Owner, any products damaged during shipping or installation.

2.2 CENTRAL PAGING CONTROLLER

A. Shall meet or exceed the following specifications:

1. Shall be compatible with all other system components listed in this specification.
2. Shall be capable of distributing audio to networked components over a proprietary network architecture.
3. Shall have integrated master clock with battery backup.
4. Acceptable Manufacturers:

    a. CareHawk CH1000(LT)

2.3 PAGING SWITCHING MODULE

A. Shall meet or exceed the following specifications:

1. Shall include a minimum of one RJ45 input connection homerun back to existing central cabinet SSxx port.
2. Shall include a minimum of sixteen (16) RJ45 outputs to expand call-in and bidirectional paging communications.
3. Provide module(s) based on the number of connections as required.
4. Acceptable Manufacturers:

    a. CareHawk SS16/SS32

2.4 ANALOG CONVERTER

A. Shall meet or exceed the following specifications:
1. Shall have an RJ45 port for connection to switching module.
2. Shall convert 25V audio to line level audio for connection to paging amplifier.
3. Shall be surface mountable.
4. Provide converter(s) based on the number of connections as required.
5. Acceptable Manufacturers:

    a. CareHawk AT1

2.5 PAGING AMPLIFIER

A. Shall meet or exceed the following specifications:

1. Shall have a minimum of one (1) channel of power amplification capable of a minimum of 100W into a 25V load.
2. Shall have a frequency response of 50Hz – 20kHz.
3. Shall have a THD+N of less than 0.5% at 1kHz.
4. Shall be 1RU rack mountable.
5. Provide amplifier(s) based on the number of connections as required.
6. Acceptable Manufacturers:

    a. CareHawk
    b. Or Equal

2.6 CALL STATION

A. Shall meet or exceed the following specifications:

1. Shall have a single pole momentary push button to initiate a call.
2. Shall be single-gang decora.
3. Shall have an RJ45 port for connection to switching module.
4. Shall be able to initiate a normal call or an emergency call.
5. Shall have an integrated cable breakout.
6. Confirm color and finish with architect.
7. Acceptable Manufacturers:

    a. CareHawk CS100
    b. Or Equal

2.7 VOLUME CONTROL

A. Shall meet or exceed the following specifications:

1. Shall be compatible with all one-way speakers
2. Shall have a built-in rotary volume control knob.
3. Shall be single-gang decora.
4. Shall have a 24VDC priority relay.
5. Shall have a 20W continuous power rating.
6. Confirm color and finish with architect.
7. Acceptable Manufacturers:

    a. Quam QC10P
    b. Or Equal

2.8 POWER SUPPLY

A. Shall meet or exceed the following specifications:

1. Shall provide 24 VDC output to volume control knobs, allowing incoming signals to be relayed at full volume.
2. Shall accept relay input from paging I/O controller for activation during fire alarm.
3. Power supply shall be able to power a minimum of 20 volume control knobs during fire alarm relay override.
4. Acceptable Manufacturers:

    a. Altronix
    b. Or Equal

2.9 CEILING MOUNTED SPEAKER

A. Contractor shall provide and install one-way paging speakers as shown on the T-series drawings.

B. Shall meet or exceed the following specifications:

1. Shall have a minimum 8” driver.
2. Shall have a minimum frequency response of 65Hz to 17kHz.
3. Shall have a minimum sensitivity of 95dB SPL at 1m with 1 watt of input.
4. Shall have a 25V internal transformer with taps at a minimum of 0.31, 0.63, 1.25, 2.5, and 5W.
5. Shall have a round form factor. If the speaker is installed in inaccessible or open ceilings, contractor shall provide the necessary mounting back cans, enclosures, and hardware to install the speaker within the required ceiling space.
6. Speakers shall be tapped at a minimum of 0.5W.
7. Speakers shall be ceiling mounted. Contractor to provide all necessary accessories to support speakers.
8. Confirm color and finish with architect.
9. Acceptable Manufacturers:

    a. Quam System 21
    b. Or equal

2.10 INTERCOM STATION

A. Contractor shall provide and install wall-mounted intercom speakers as shown on the T-series drawings.

B. Shall meet or exceed the following specifications:

1. Shall have two-way talkback intercom capability.
2. Shall have a minimum frequency response of 200Hz to 8kHz.
3. Shall be two gang decora.
4. Shall be flush mounted.
5. Shall have a 25V internal transformer with taps at a minimum of 0.25W, 0.5W, and 1W.
6. Shall have a minimum sensitivity of 87dB SPL into 1W at 1 meter.
7. Shall have a nominal coverage angle of 90°.
8. Contractor shall provide and install all necessary accessories.
9. Confirm final mounting height with architect prior to installation.
10. Confirm color and finish with architect.
11. Acceptable Manufacturers:

    a. Quam CIS4/25
    b. Or Equal

2.11 WALL MOUNTED HORN

A. Contractor shall provide and install one-way wall-mounted paging speakers within areas without a ceiling as shown on the T-series drawings.

B. Shall meet or exceed the following specifications:

1. Shall have a minimum frequency response of 450Hz to 15kHz.
2. Shall have a minimum sensitivity of 121dB into 16W at 1 meter.
3. Shall have a 25V internal 16W transformer with taps at 1, 2, 4, 8, and 16W.
4. Speakers shall be tapped at a minimum of 2W.
5. Shall be weatherproof if installed outside.
6. Coordinate with Architect for required color/finish based on area installed.
7. Acceptable Manufacturers:

    a. Quam QH16T
    b. Or Equal

PART 3 - EXECUTION

3.1 GENERAL

A. Coordinate incorporation of the Work specified herein with other project work so as to facilitate a cohesive final product.

B. The installation recommendations contained within ASDI and Telecommunications Distribution Methods Manual are mandatory minimum standards and requirements.

C. Mount equipment and enclosures plumb and level.

D. Permanently installed equipment to be firmly and safely held in place. Design equipment supports to support loads imposed with a safety factor of at least five. Seismic bracing shall be installed on appropriate equipment where local codes require such installation.

E. Verify all locations of equipment in all rooms with Owner's Representative, Owner, and Consultant.

3.2 TESTING

A. Prior to turning on the system, verify all electronic devices are properly grounded and each audio video AC receptacle has the proper hot, neutral, and ground connections.

B. Audio Testing:

1. Verify each amplifier channel is correctly wired by providing a test signal to each channel and verify the correct speakers are operating.
2. Adjust the input and output gain of each device to properly set the system gain.
3. Adjust the output level of each amplifier channel and/or speaker tap settings to achieve 85 dB ± 2 dB in the area covered by the respective speaker zone when the output of gateway is set to 0 dBu.
4. Equalize all loudspeakers to provide an acceptable frequency response based on the specifications of the provided loudspeakers.
5. Verify no hum or buzz is present in the system at all operating levels. If present, propose a resolution and correct the issue at no cost to the Owner.
6. Verify VoIP system is properly configured and integrated with paging system by testing various extensions for individual paging zones.

3.3 TRAINING

A. Provide a minimum of two (2) hours of training to the Owner's personnel. Plan for multiple training trips to the site. Training session(s) shall cover the following topics at a minimum:

1. System Equipment Connectivity
2. Device Configurations
3. Operation, maintenance, and upgrade procedures.

B. Training may occur in maximum of 2 hour increments per personnel or groups of personnel.

C. Contractor may provide manufacturer training vouchers for a portion of the training, which are valid during the warranty period.

D. Training shall be by certified manufacturer instructor.

E. Training schedule shall be coordinated with Owner personnel and their needs.

F. Training plan, timeline, and agenda shall be provided to Owner IT personnel and signed off by the Owner and Contractor.

G. Warranty certificate and agreement shall be provided to the Owner and IT personnel at initial training session.

H. Provide a digital video copy of the training sessions if applicable.

3.4 SYSTEM ACCEPTANCE

A. Contractor shall demonstrate to the Owner that all systems have been installed per the plans and specifications and that all programming functions, display functions, control functions and all interfaced equipment operate as expected.

B. Contractor shall demonstrate to the Owner that all the end user staff has a working knowledge of how to operate the installed equipment and that the facilities staff also has a working knowledge of the troubleshooting methods for non-critical service problems.

C. Contractor shall have a Delivery and Acceptance form signed by the Owner representative, agreeing that the installation is complete and its operation is acceptable except as noted on the Delivery and Acceptance form. This will also serve as the start of the warranty period.

D. Contractor shall work with the General Contractor to complete all punch lists and work required to allow the General Contractor to close out his project in a timely manner. This will include but not limited to any work that would impact any final inspection for turnover of the building.

END OF SECTION

SECTION 321816.13 – PLAYGROUND PROTECTIVE SURFACING

PART 1 - GENERAL

1.1 RELATED DOCUMENTS

A. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.

B. Handbook for Public Playground Safety

1.2 SUMMARY

A. This Section Includes the following:

1. Poured-In-Place Playground Surfacing System.

B. Related Sections:

1. Division 31 Section “Earth Moving” for subgrade preparation, aggregate course, and grading.

1.3 DEFINITIONS

A. Critical Fall Height: A critical fall height (CFH) is the maximum height of fall from play equipment to the ground. It is important to note that safety surfaces do not prevent injury but aim to lessen the severity of any injury that may occur on falls from height.

B. Fall Height: Fall height is a measurement defined as the “vertical distance between a designated play surface and the protective surfacing beneath it.

C. PIP: Poured-In-Place Playground Surfacing.

1.4 PERFORMANCE REQUIREMENTS

A. Impact Attenuation: According to ASTM F 1292.

B. Accessibility of Surface Systems: According to ASTM F 1951

1.5 SUBMITTALS

A. Product Data:

1. Submit manufacturer’s product data and installation instructions.

B. Samples for Initial Selection: For each type of playground surface system indicated.

1. Include similar Samples of playground surface system and accessories involving color selection.

C. Samples for Verification: For each type of playground surface system indicated.

1. Minimum 1-quart poured-in-place rubber graduals for each surface sealed in a container.

D. Quality Assurance/Control Submittals: Submit the following:

1. Certificate of qualifications of the playground surfacing installer.

E. Closeout Submittals: Submit the following:

1. Warranty documents specific herein.

1.6 QUALITY ASSURANCE

A. Qualifications: Utilize an installer approved and trained by the manufacturer of the playground surfacing system, having experience with other projects of the scope and scale of the work described in the section.

B. Certification: Certification by manufacturer that installer is an approved applicator of the playground surfacing system.

C. International Play Equipment Manufacturers Association (IPEMA) certified.

D. Source Limitations: Obtain playground surface system material through one source from a single manufacturer.

E. Design and Detailing

1. The Aromatic Urethane PIP system is utilized when an impact absorbing surface is required within the use zone of the playground equipment.

2. Substrate over which Perma Play 2-layer with Aromatic Urethane PIP system may be installed includes compacted stone base.

3. The installer shall verify that all proposed substrates meet the requirements for the installations of the Aromatic Urethane PIP system with regard to structural performance.

F. Performance Requirements: Provide a 2 layer aromatic-urethane playground surfacing system which has been designed, manufactured, and installed to meet the following criteria:

1. Shock Attenuation (ASTM F1292):

   a. Gmax: Less than 200.
   b. Head Injury Criteria: Less than 1000.

2. Tensile Strength (ASTM D412): 17.51 psi.
3. Tear Resistance (ASTM D624): 6.26 lbs/force/inch.
4. Water Permeability: (ASTM F1551-03) gal/min/yds = 363.5.
5. Accessibility: Comply with requirements of ASTM F1951.
6. Dry Static Coefficient of Friction (ASTM C1028) - 0.77
7. Wet Static Coefficient of Friction (ASTM C1028) - .56
8. Wet Skid Resistance (ASTM E303) - 51.
9. Flammability (ASTM D2859) - Pass.

1.7 PROJECT CONDITONS

A. Weather Limitations: Proceed with installation only when existing and forecasted weather conditions permit playground surface system installation to be performed according to manufacturers' written instructions and warranty requirements.

1.8 COORDINATION

A. Coordinate installation of playground surface systems with installation of playground equipment.

1.9 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of playground surface system that fail in materials or workmanship within the specified warranty period.

1. Failures include, but are not limited to, the following:

a. Reduction in impact attenuation.
b. Deterioration of surface and other materials beyond normal weathering.

2. Warranty Period:

a. Poured-in-place unitary rubber: Five years from date of Substantial Completion.

PART 2 - PRODUCTS

2.1 POURED-IN-PLACE PLAYGROUND SURFACING SYSTEM

A. Poured-In-Place playground surfacing system. Two-layer system with a buffering layer consisting of 100 percent post-consumer recycled 3/8-inch shredded styrene butadiene rubber (SBR) and high-grade aromatic polyurethane. The top surface consists of ethylene propylene diene monomer (EPDM) rubber, with the black EPDM being recycled post-industrial material, ranging in size from 1-3 mm, and high-grade aromatic or aliphatic polyurethane.

1. Basis-of-Design Product: Pro-Techs Surfacing LLC, 3840 Ridgewood Road, Unit 4343, Copley, OH 44321; P.O. Box 301, Sharon Center, OH 44274; Telephone: 330-576-6058; email: info@pro-techssurfacing.com; website: http://www.pro-techssurfacing.com

B. Applicable Standards:

1. ASTM D412 Standard Test Methods for Vulcanized Rubber and Thermoplastic Rubbers and Thermoplastic Elastomers-Tension.
2. ASTM D2047 Standard Test Method for Static Coefficient of Friction of Polish-Coated Floor Surfaces as Measured by the James Machine.
3. ASTM D2859 Standard Test Method for Flammability of Finished Textile Floor Covering Materials.
4. ASTM E303 Standard Test Method for Measuring Surface Frictional Properties Using the British Pendulum Tester.
5. ASTM F1292 Standard Specification for Impact Attenuation of Surface Systems Under and Around Playground Equipment.

B. Required Mix Proportions by Weight:

1. Buffering – 14% - 16% polyurethane, 100 lbs. rubber
2. Top course – 22% - 26% polyurethane, 100 lbs. to 110 lbs. rubber

C. Top surface color selected from manufacturer's standard color options by Architect.

PART 3 - EXECUTION

3.1 PREPARATION

A. General: Prepare substrates to receive surfacing products according to playground surface system manufacturer's written instructions. Verify that substrates are sound and without high spots, ridges, holes, and depressions.

3.2 INSTALLATION, GENERAL

A. General: Comply with playground surface system manufacturer's written installation instructions. Install playground system over areas indicated and in thicknesses required to meet performance requirements for respective critical heights related to the playground equipment and in complete compliance with the Handbook for Public Playground Safety.

3.3 INSTALLATION OF POURED-IN-PLACE SURFACING SYSTEM

A. Rubber Surfacing: Place playground surface system materials per manufacturer's standards to require depths after installation of substrate, playground equipment support posts, and foundations is completed and approved by surface system's manufacturer's representative.

1. Buffing Primer: Using a bristle brush, apply ample urethane primer to all curbing and or vertical substrates, which the rubber surfacing system will contact.
2. Buffing Installation: Using screed sticks and gauge polls, install the Buffing rubber materials to 1/8" - 1/4" higher than required thickness. Using pool trowels, pull the Buffing material together using consistent pressure throughout. Repeat the process until all areas, including fall zones, comply with the plans and specification requirements. Allow Buffing to cure for sufficient time (24 hours) so that indentations are not left in the Buffing material. Installation contractor must verify that the Buffing has cured sufficiently before applying the finished topcoat.
3. Topcoat Primer Application: Using a bristle brush apply urethane binder to any vertical structures within the installation areas, and also to the Buffering material at a minimum of 2" around the perimeter of the topcoat area.
4. Topcoat Installation: Screed the EPDM topcoat rubber granules to a nominal 5/8" thickness to allow for compaction. Using a pool trowel, pull together material using consistent pressure throughout to produce the end result of 1/2" thickness. Allow topcoat to cure for 48 hours to 72 hours contingent on humidity and temperature. Protect newly installed rubber safety surface from foot traffic or equipment usage until surface has fully cured.

3.4 CLEANUP

A. Remove all debris and excess material from site and dispose of properly.

END OF SECTION 321816.13

1 FLOOR PLAN - FIRST FLOOR - UNIT A

SCALE: 1/8" = 1'-0"

GENERAL NOTES

1. PROVIDE 6' - 0" HEIGHT CORNER GUARDS AT ALL OUTSIDE CORNERS WITH GYPSUM BOARD FINISH. FLOOR TO CEILING HEIGHT
2. PROVIDE BULL-NOTE FINISH ON ALL OUTSIDE CORNERS OF CMU WALLS
3. SEE ELEVATIONS FOR MASONRY TYPE AND SIZE
4. PROVIDE SOLID SURFACE WINDOW SILLS @ ALL STOREFRONT GLAZING SILLS ABOVE FINISHED FLOOR HEIGHT. WINDOW SILL TO EXTEND 1" PAST FINISHED WALL SURFACE, TYP. UNLESS OTHERWISE NOTED
5. SEE A111 & A112 FOR ENLARGED PLANS
6. VIF ALL DIMENSIONS FOR WINDOWS AND CASEWORK
7. INTERIOR DIMENSIONS ARE TAKEN TO THE FACE OF MASONRY OR STUDS
8. FOR ALL RESTROOM FACILITIES WIHT GYPSUM WALL FINISH REPLACE 5/8" TYPE "X" GYPSUM BOARD WIHT 5/8" MOISTURE RESISTANT GYPSUM BOARD, SEE SPECS FOR DETAILS
9. WHERE COLUMN IS NOT INDICATED TO BE WRAPPED, PAINT THEM P2
10. TYPICAL FLOOR PLAN ANGLE IS 15 DEGREES FROM CARDINAL DIRECTIONS
11. WALLS TO GO UP TO DECK UNLESS OTHERWISE NOTED

EXISTING BUILDING

PLAN NOTES - FLOOR PLAN

1	OWNER SUPPLIED, CONTRACTOR INSTALLED SOAP DISPENSER
2	TOILET PAPER DISPENSER. OWNER SUPPLIED, CONTRACTOR INSTALLED
3	ADA COMPLIANT GRAB-BAR(S)
4	WALL-MOUNTED FIRE EXTINGUISHER
5	18"w X 24"H MIRROR
6	ACCESS PANEL
7	PAPER TOWEL DISPENSER. OWNER SUPPLIED, CONTRACTOR INSTALLED
8	WASTE RECEPTACLE. OWNER SUPPLIED, CONTRACTOR INSTALLED
9	SANITARY NAPKIN DISPOSAL.
10	PAPER TOWEL DISPENSER, OWNER SUPPLIED, CONTRACTOR INSTALLED
11	ALIGN FACES OF WALLS
13	SEMI-RECESSED FIRE EXTINGUISHER
14	JANITOR MOP SINK
15	COPIER
16	CLINIC COTS AND PRIVACY SCREENS
17	SOLID ROUND STAINED CONCRETE OUTDOOR SEATING
18	STACKABLE PARTITION WALL
19	LINE OF ROOF ABOVE
20	KNOX BOX
21	8'-0" X 4'-0" TACKBOARD
22	10'-0" X 4'-0" MARKBERBOARD
23	HIGH PERFORMANCE PAINT ON EXPOSED COLUMN
24	TYPICAL MARKERBOARD
25	FACE OF BRICK BELOW METAL SILL
26	LINE OF ROOF ACCESS PLATFORM, ABOVE
27	ROOF ACCESS LADDER
28	WALL PADS

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
7710 W. REEVES RD,
BLOOMINGTON, IN 47404

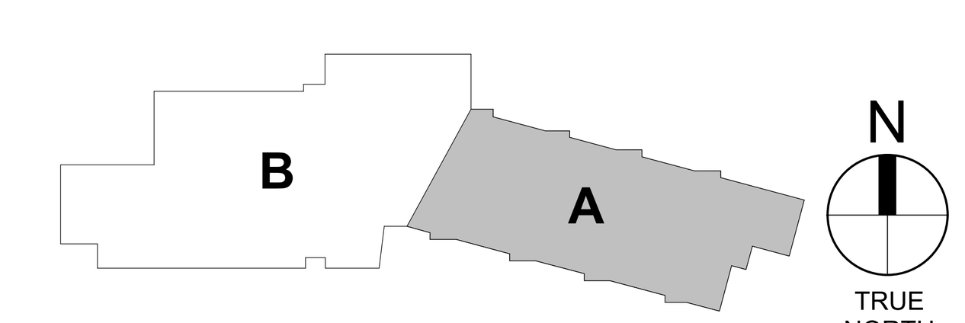
REVISIONS:

#	Date	Desc.
2	2-28-2024	addendum 2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JAN 31, 2024
DRAWN BY: Author

FLOOR PLAN - FIRST FLOOR - UNIT A



A101A

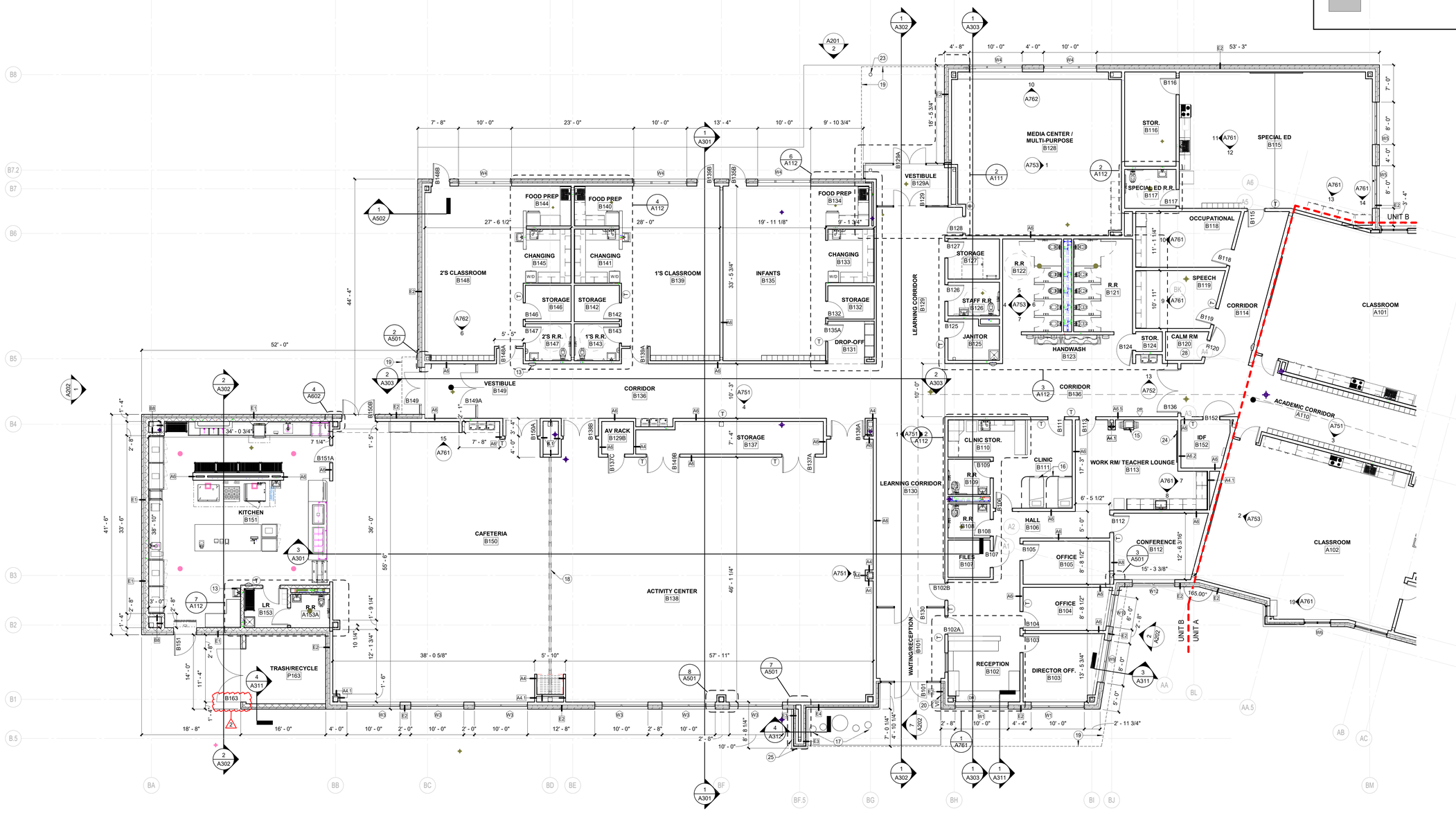
PLAN NOTES - FLOOR PLAN

1 OWNER SUPPLIED, CONTRACTOR INSTALLED SOAP DISPENSER
2 TOILET PAPER DISPENSER. OWNER SUPPLIED, CONTRACTOR INSTALLED
3 ADA COMPLIANT GRAB-BAR(S)
4 WALL-MOUNTED FIRE EXTINGUISHER
5 18"w X 24"H MIRROR
6 ACCESS PANEL
7 PAPER TOWEL DISPENSER. OWNER SUPPLIED, CONTRACTOR INSTALLED
8 WASTE RECEPTACLE. OWNER SUPPLIED, CONTRACTOR INSTALLED
9 SANITARY NAPKIN DISPOSAL
10 PAPER TOWEL DISPENSER, OWNER SUPPLIED, CONTRACTOR INSTALLED
11 ALIGN FACES OF WALLS
13 SEMI-RECESSED FIRE EXTINGUISHER
14 JANITOR MOP SINK
15 COPIER
16 CLINIC COTS AND PRIVACY SCREENS
17 SOLID ROUND STAINED CONCRETE OUTDOOR SEATING
18 STACKABLE PARTITION WALL
19 LINE OF ROOF ABOVE
20 KNOX BOX
21 8'-0" X 4'-0" TACKBOARD
22 10'-0" X 4'-0" MARKERBOARD
23 HIGH PERFORMANCE PAINT ON EXPOSED COLUMN
24 TYPICAL MARKERBOARD
25 FACE OF BRICK BELOW METAL SILL
26 LINE OF ROOF ACCESS PLATFORM, ABOVE
27 ROOF ACCESS LADDER
28 WALL PADS

GENERAL NOTES

1. PROVIDE 6' - 0" HEIGHT CORNER GUARDS AT ALL OUTSIDE CORNERS WITH GYPSUM BOARD FINISH. FLOOR TO CEILING HEIGHT
2. PROVIDE BULL-NOTE FINISH ON ALL OUTSIDE CORNERS OF CMU WALLS
3. SEE ELEVATIONS FOR MASONRY TYPE AND SIZE
4. PROVIDE SOLID SURFACE WINDOW SILLS @ ALL STOREFRONT GLAZING SILLS ABOVE FINISHED FLOOR HEIGHT. WINDOW SILL TO EXTEND 1" PAST FINISHED WALL SURFACE, TYP. UNLESS OTHERWISE NOTED
5. SEE A111 & A112 FOR ENLARGED PLANS
6. VIF ALL DIMENSIONS FOR WINDOWS AND CASEWORK
7. INTERIOR DIMENSIONS ARE TAKEN TO THE FACE OF MASONRY OR STUDS
8. FOR ALL RESTROOM FACILITIES WIHT GYPSUM WALL FINISH REPLACE 5/8" TYPE "X" GYPSUM BOARD WIHT 5/8" MOISTURE RESISTANT GYPSUM BOARD, SEE SPECS FOR DETAILS
9. WHERE COLUMN IS NOT INDICATED TO BE WRAPPED, PAINT THEM P2
10. TYPICAL FLOOR PLAN ANGLE IS 15 DEGREES FROM CARDINAL DIRECTIONS
11. WALLS TO GO UP TO DECK UNLESS OTHERWISE NOTED

EXISTING BUILDING



1 FLOOR PLAN - FIRST FLOOR - UNIT B
SCALE: 1/8" = 1'-0"

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
7710 W. REEVES RD.
BLOOMINGTON, IN 47404

REVISIONS:

#	Date	Desc.
2	2-28-2024	addendum 2

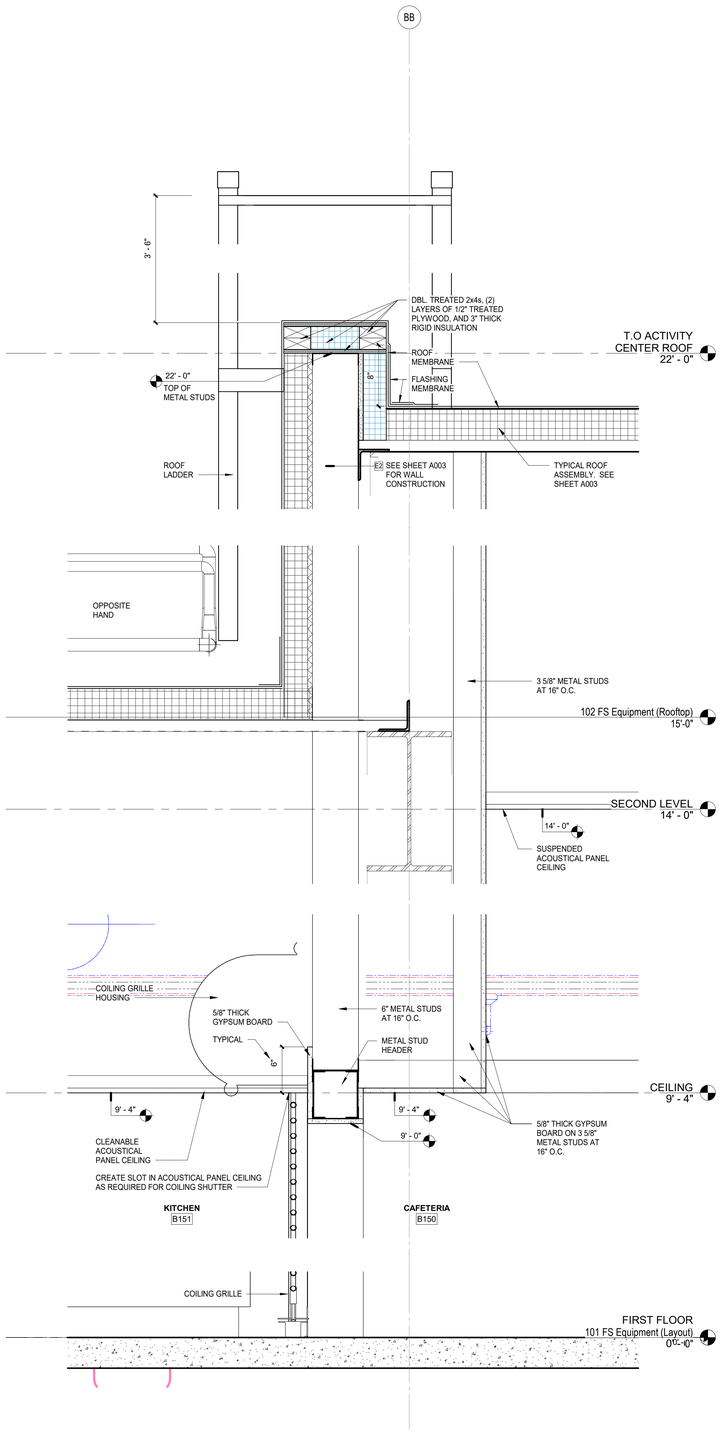
100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JAN 31, 2024
DRAWN BY: Author

FLOOR PLAN - FIRST FLOOR - UNIT B

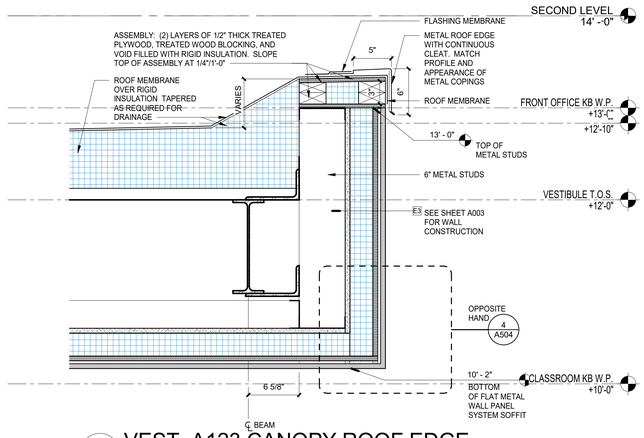
A101B

PLOT DATE/TIME: 2/28/2024 1:39:17 PM



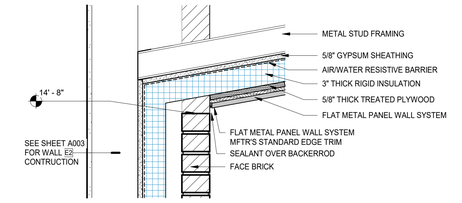
3 PARTIAL WALL SECTION ALONG GRID "BB"

SCALE: 1 1/2" = 1'-0" REF. 3 / A301



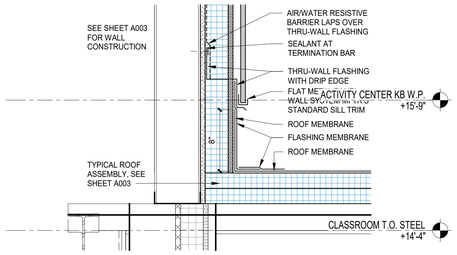
6 VEST. A123 CANOPY ROOF EDGE

SCALE: 1 1/2" = 1'-0" REF. 1 / A312



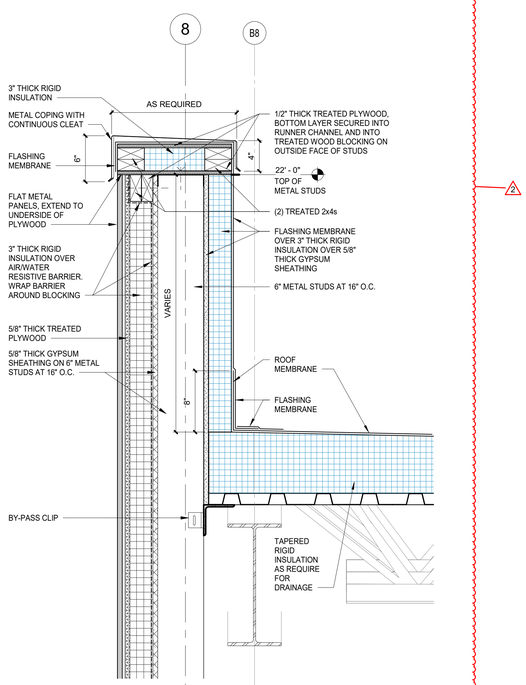
5 SLOPING SOFFIT AT RIBBED SIDING

SCALE: 1 1/2" = 1'-0" REF. 1 / A311



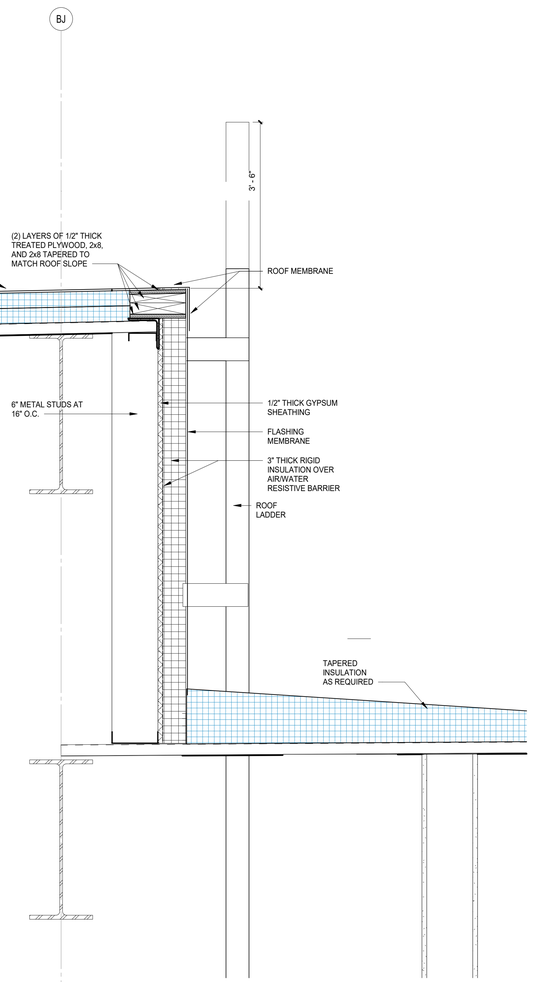
4 ROOF/WALL AT FLAT METAL PANELS

SCALE: 1 1/2" = 1'-0" REF. 2 / A303



2 PARAPET AT FLAT METAL PANEL

SCALE: 1 1/2" = 1'-0" REF. 5 / A202



1 HIGH ROOF EDGE AT FLASHING MEMBRANE

SCALE: 1 1/2" = 1'-0" REF. 1 / A121B

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EARLY CHILDHOOD CENTER
7710 W. REEVES RD,
BLOOMINGTON, IN 47404

REVISIONS:

#	Date	Desc.
2	2-28-2024	addendum 2

100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	JAN 31, 2024
DRAWN BY:	Author

SECTION DETAILS

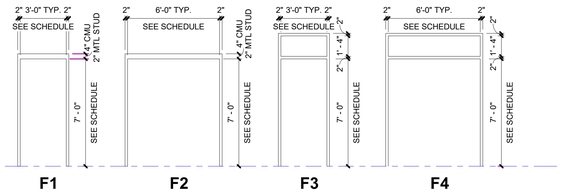
A503

PLOT DATE/TIME:2/26/2024 2:39:00 PM

DOOR SCHEDULE

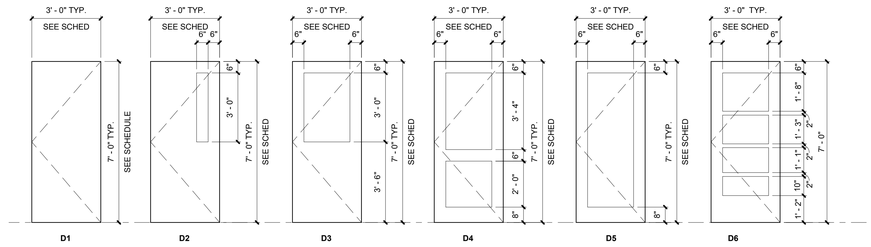
DR #	ROOM NAME	ROOM #	DOOR				FRAME				GLAZING	FIRE RATING	NOTES
			HEIGHT	WIDTH	ELEV	MATERIAL	ELEV	MATERIAL	HEAD	JAMB			
A101A	CLASSROOM	A101	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A101B	CLASSROOM	A101	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A102A	CLASSROOM	A102	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A102B	CLASSROOM	A102	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A103A	STORAGE	A103	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A103B	STORAGE	A103	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A104A	R.R	A104	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A104B	R.R	A104	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A105	GEN. STOR.	A105	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A106	STAFF R.R	A106	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A106A	STOR	A106A	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A106B	LR	B153	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A106C	KITCHEN	B151	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A107B	CLASSROOM	A102	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A108A	R.R	A107	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A108A	STOR.	A108	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A108B	STOR.	A108	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A109A	CLASSROOM	A109	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A109B	CLASSROOM	A109	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A110	VESTIBULE	A123	6' - 11 1/2"	6' - 0 3/4"	D6	ALUM	SF-A110	ALUM	1/A312	3&9/A612			CARD READER
A111A	CLASSROOM	A111	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A111B	CLASSROOM	A111	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A113A	CLASSROOM	A113	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A113B	CLASSROOM	A113	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A114A	CLASSROOM	A120	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A114B	CLASSROOM	A112	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A115A	CLASSROOM	A120	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A115B	R.R	A115	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A116	STAFF RR	A116	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A116A	CLASSROOM	A112	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A116B	CLASSROOM	A112	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A117	STORAGE	A117	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A118A	R.R	A118	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A118B	CLASSROOM	A113	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A119A	STORAGE	A119	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A119B	STORAGE	A119	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
A120A	CLASSROOM	A120	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A120B	CLASSROOM	A120	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A121A	CLASSROOM	A121	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A121B	CLASSROOM	A121	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
A122A	MECH.	A122	7' - 0"	6' - 0"	D1	HM	F2	HM	7/A602	5/A602			SILL: 1/A602, CARD READER
A122B	MECH.	A122	7' - 0"	3' - 0"	D1	WD	F1	HM	7/A602	5/A602			PROVIDE OVERHEAD DOOR STOP
A123	VESTIBULE	A123	7' - 0"	6' - 0 3/4"	D6	ALUM	SF-A123	ALUM	1/A312	2&6/A612			SILL: 1/A613, CARD READER
B101	WAITING/RECEPTION	B101	7' - 0 3/8"	6' - 0 3/4"	D6	ALUM	SF-B101	ALUM	4/A612 SIM.	5/A612 SIM. 8/A602			CARD READER, ADA OPERATOR
B102A	WAITING/RECEPTION	B101	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			CARD READER
B102B	LEARNING CORRIDOR	B130	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			CARD READER
B103	DIRECTOR OFF.	B103	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
B104	OFFICE	B104	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
B105	OFFICE	B105	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
B106	CLINIC	B111	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
B107	FILES	B107	7' - 0"	3' - 0"	D1	HM	F1	HM	3-B/A601	3-A/601			180 SWING
B108	R.R	B108	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B109	R.R	B109	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B111	CLINIC	B111	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			CARD READER
B112	CONFERENCE	B112	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
B113	WORK RM/ TEACHER LOUNGE	B113	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			CARD READER
B115	SPECIAL ED	B115	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
B116	STOR.	B116	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B117	SPECIAL ED R.R.	B117	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B118	OCCUPATIONAL	B118	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
B119	SPEECH	B119	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
B120	CALM RM	B120	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			180 SWING, CALM ROOM HARDWARE
B124	STOR.	B124	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B125	JANITOR	B125	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B126	STAFF R.R	B126	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B127	STORAGE	B127	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B128	MEDIA CENTER / MULTI-PURPOSE	B128	7' - 0"	3' - 0"	D3	WD	F1	HM	3-B/A601	3-A/601			
B129	VESTIBULE	B129A	7' - 0 5/8"	6' - 0 3/4"	D6	ALUM	SF-B129	ALUM	10/A602	2&3/A602			CARD READER
B129A	VESTIBULE	B129A	7' - 0"	6' - 0 3/4"	D6	ALUM	SF-B129A	ALUM	2/A504 SIM.	2&3/A602			SILL: 1/A613, CARD READER
B130	WAITING/RECEPTION	B101	7' - 0 3/8"	6' - 0 3/4"	D6	ALUM	SF-B130	ALUM	10/A602 SIM.	9/A602			CARD READER
B132	STORAGE	B132	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B135A	DROP-OFF	B131	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
B135B	INFANTS	B135	7' - 0"	3' - 0"	D4	HM	F1	HM	3-B/A601	3-A/601			CARD READER
B136	CORRIDOR	B114	7' - 0"	8' - 0"	D2	WD	F2	HM	3-B/A601	3-A/601			CARD READER
B137A	STORAGE	B137	7' - 0"	6' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B137C	AV RACK	B129B	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B138A	ACTIVITY CENTER	B138	7' - 0"	6' - 0"	D2	WD	F2	HM	3-B/A601	3-A/601			
B138B	ACTIVITY CENTER	B138	7' - 0"	6' - 0"	D2	WD	F2	HM	3-B/A601	3-A/601			
B139	STOR	A116A	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B139A	1'S CLASSROOM	B139	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
B139B	1'S CLASSROOM	B139	7' - 0"	3' - 0"	D4	HM	F1	HM	3-B/A601	3-A/601			CARD READER
B142	STORAGE	B142	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B143	1'S CLASSROOM	B139	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B146	STORAGE	B146	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B147	2'S R.R.	B147	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B148A	CORRIDOR	B136	7' - 0"	3' - 0"	D2	WD	F1	HM	3-B/A601	3-A/601			
B148B	2'S CLASSROOM	B148	7' - 0"	3' - 0"	D4	HM	F1	HM	3-B/A601	3-A/601			CARD READER
B149	VESTIBULE	B149	7' - 0"	6' - 0"	D6	ALUM	SF-B149	ALUM	1/A612 SIM.	2/A501 SIM. & 5/A612 SIM.			SILL: 1/A613, CARD READER
B149A	CORRIDOR	B136	7' - 0"	6' - 0"	D6	ALUM	SF-B136	ALUM	10/A602 SIM.	9/A602 SIM.			CARD READER
B149B	STORAGE	B137	7' - 0"	6' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B150	CAFETERIA	B150	9' - 0"	19' - 0"	4/A602	SS	4/A601	STL					
B150A	CAFETERIA	B150	7' - 0"	6' - 0"	D2	WD	F2	HM	3-B/A601	3-A/601			
B150B	CAFETERIA	B150	7' - 0"	6' - 0"	D1	HM	F2	HM	3-B/A601	3-A/601			CARD READER
B151	KITCHEN	B151	7' - 0"	4' - 0"	21	HM	F2	HM	3-B/A601	3-A/601			CARD READER
B151A	KITCHEN	B151	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			
B152	CORRIDOR	B114	7' - 0"	3' - 0"	D1	WD	F1	HM	3-B/A601	3-A/601			180 SWING, CARD READER
B163	TRASH/RECYCLE	P163	8' - 0"	10' - 0"	5/A601	ALUM	N/A	STEEL					DECORATIVE GATE

2



1 DOOR FRAME TYPE ELEVATION

SCALE: 1/4" = 1'-0" REF. 7 / A603

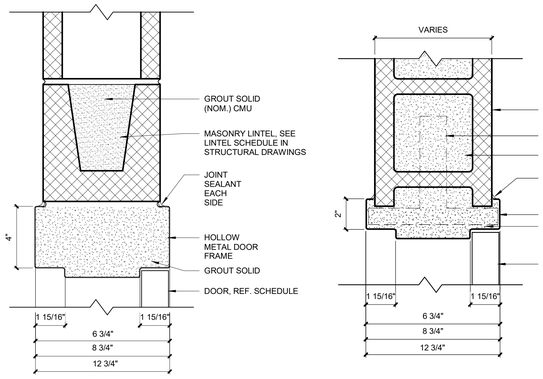


2 DOOR TYPE ELEVATIONS

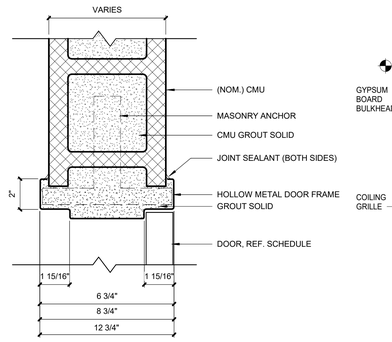
SCALE: 3/8" = 1'-0"

DOOR NOTES

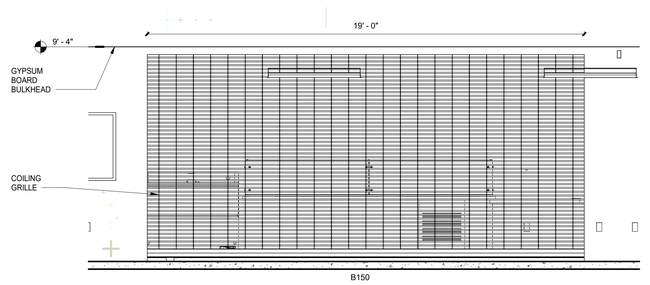
1. PROVIDE ADA DOOR ACTUATOR PUSH BUTTON. TIE INTO KEYFOB SECURITY SYSTEM TO PREVENT INTRUDERS.
2. PROVIDE CARD READER.
3. DOOR ALARM.
4. PROVIDE DOOR HOLD OPEN.
5. EMERGENCY EGRESS HARDWARE.
6. ADD DOOR ACCESS HARDWARE TO EXISTING DOORS PER SPECIFICATIONS.
7. PROVIDE SECURITY GLAZING, INCLUDE ALL EXTERIOR DOORS WITH GLASS.
8. PAINT ALL INTERIOR WINDOW AND DOOR FRAMES PT-7



D) HOLLOW METAL HEAD IN CMU

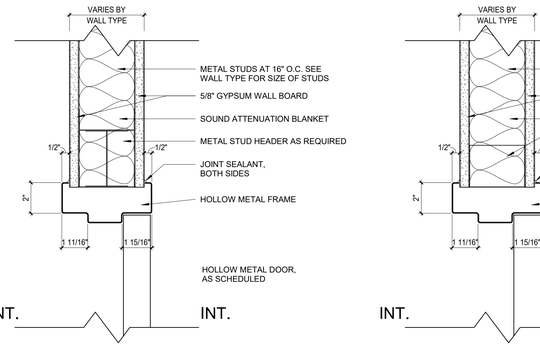


C) HOLLOW METAL JAMB IN CMU

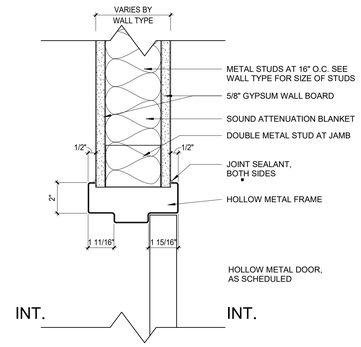


4 B150 - SERVING OVERHEAD DOOR

SCALE: 3/8" = 1'-0" REF. 1 / A012



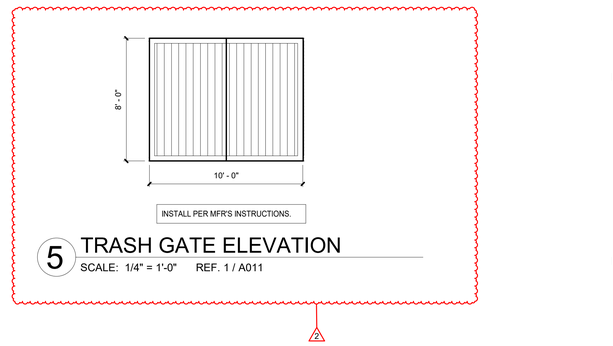
B) HOLLOW METAL HEAD IN MTL STUD/GYP



A) HOLLOW METAL JAMB IN MTL STUD/GYP

3 STANDARD DOOR DETAILS

SCALE: 3" = 1'-0"



5 TRASH GATE ELEVATION

SCALE: 1/4" = 1'-0" REF. 1 / A011

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
7710 W. REEVES RD,
BLOOMINGTON, IN 47404

REVISIONS:

#	Date	Desc.
2	2-28-2024	addendum 2

100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	JAN 31, 2024
DRAWN BY:	Author

DOOR SCHEDULE

A601

PLOT DATE/TIME:2/28/2024 1:55:19 PM

GENERAL CASEWORK NOTES

1. FABRICATE WOODWORK/ MILLWORK ITEMS TO ACTUAL FIELD DIMENSIONS. CONTRACTOR SHALL SUBMIT FOR DESIGNERS APPROVALS SHOP DRAWING SAMPLES OR MANUFACTURER'S LITERATURE FOR ALL ITEMS. SHOP DRAWINGS SHALL SHOW SUFFICIENT DETAIL TO DETERMINE COMPLIANCE WITH STANDARDS AND DESIGN INTENT.

2. PROVIDE ALL NECESSARY FURRING AND GROUNDS FOR WOODWORK AND FINISH ITEMS. COORDINATE LOCATION OF BLOCKING WITHIN FRAMED WALLS AS NECESSARY FOR ITMES TO BE SECURED TO SURFACE. ALL FASTENERS SHALL BE CONCEALED.

3. FINISH ALL SIDES AND BACK OF MILLWORK/ CASEWORK.

4. PROVIDE GROMMETS IN COUNTERTOPS ABOVE ALL ELECTRICAL RECPETICALS AND TELEPHONE DATA ROUTINGS.

5. ALL PULLS TO BE 4" SATIN NICKEL SOLID WIRE PULL

6. PROVIDE LOCKS FOR ALL STORAGE CASE CABINETS/ TALL STORAGE CABINETS, ALL DRAWERS AND DOORS, AND ALL UPPER WALL CABINETS.

7. ALL PLASTIC LAMINATE SURFACES ON EXTERIOR OF CABINETS SHALL BE A STANDARD COLOR AS LISTED ON THE FINISH SCHEDULE:
   - PLAM 2 - COUNTERTOPS AND WINDOW SILLS
   - PLAM 1 - ALL CABINETS AND CASEWORK

8. ALL INTERIORS BEHIND DOORS/ DRAWERS AND NOT VISIBLE SHALL BE WHITE. ALL COUNTERTOPS SHALL BE A STANDARD COLOR AS SELECTED BY DESIGNER.

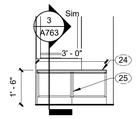
9. SEE ELEC. DWGS FOR ELECTRICAL DEVICES.

10. INCLUDE FILLERS AS NEEDED.

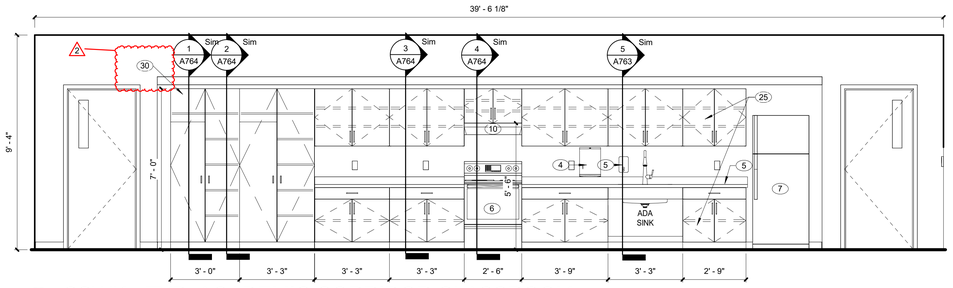
ALTERNATES

ELEVATION NOTES - INTERIOR

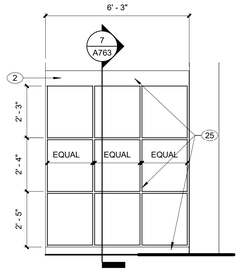
1 OWNER SUPPLIED, CONTRACTOR INSTALLED TOILET PAPER DISPENSER.
2 FILLER AS REQUIRED
3 CHANGING PAD TO BE INSTALLED ON TOP OF COUNTER.
4 OWNER SUPPLIED, CONTRACTOR INSTALLED PAPER TOWEL DISPENSER.
5 OWNER SUPPLIED, CONTRACTOR INSTALLED SOAP DISPENSER.
6 OWNER SUPPLIED STOVE.
7 OWNER SUPPLIED REFRIGERATOR.
8 BASE, RB-1. REFER TO FINISH LEGEND.
9 ACOUSTIC WALL PANEL, AWP-1. REFER TO FINISH LEGEND FOR SIZE AND COLOR.
10 OWNER SUPPLIED, CONTRACTOR INSTALLED EXHAUST HOOD.
11 CONTRACTOR PROVIDED AND INSTALLED TACKSTRIP.
12 OWNER SUPPLIED, CONTRACTOR INSTALLED MIRROR.
13 CONTRACTOR SUPPLIED, CONTRACTOR INSTALLED MARKERBOARD.
14 PROVIDE SPECIFIED ACCENT PAINT. REFER TO FINISH PLAN FOR COLOR.
15 ACOUSTIC WALL PANEL, AWP-2. REFER TO FINISH LEGEND FOR SIZE AND COLOR.
16 ACCENT PAINT, PT-3 AT THIS LOCATION. REFER TO FINISH LEGEND.
17 ACCENT PAINT, PT-4 AT THIS LOCATION. REFER TO FINISH LEGEND.
18 ACCENT PAINT, PT-5 AT THIS LOCATION. REFER TO FINISH LEGEND.
19 ACCENT PAINT, PT-3 TO BE APPLIED ON ALL WALLS OF LEARNING CORRIDOR B129/B130, 2'-6" FROM DECK CEILING TO ALIGN WITH BOTTOM OF BEAMS.
20 WALL TILE, WT-1 AT THIS LOCATION. 6'-0" A.F.F., FINISH WITH SCHLUTER JOLLY EDGE TRIM.
21 WALL TILE, WT-1 AT THIS LOCATION. REFER TO FINISH LEGEND.
22 ACCENT PAINT, PT-2 AT THIS LOCATION. REFER TO FINISH LEGEND.
23 WALL TILE, WT-2 AT THIS LOCATION. REFER TO FINISH LEGEND.
24 SOLID SURFACE, SS-1 AT THIS LOCATION. REFER TO FINISH LEGEND.
25 PLASTIC LAMINATE CASEWORK, PL-1. REFER TO FINISH LEGEND.
27 UNDER CABINET LIGHTING.
28 OWNER SUPPLIED STACKED WASHER AND DRYER.
29 TACKABLE SURFACE.
30 REPLACE WITH 30" W X 7' - 0" H TALL CABINET IN ROOMS A101, A112,A120 WHERE THERE IS A CHASE. SEE A101A



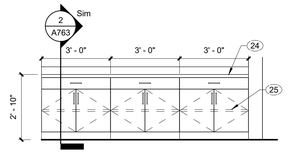
19 CSWK - TYP. BENCH W/ STORAGE
SCALE: 3/8" = 1'-0" REF. 1 / A101A



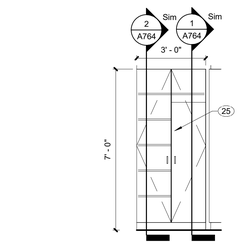
18 CSWK - TYP. ACADEMIC CORRIDOR CLASSROOM
SCALE: 3/8" = 1'-0" REF. 1 / A101A



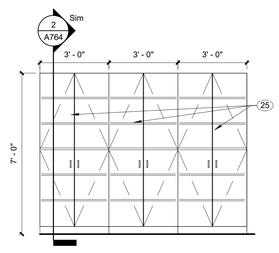
17 CSWK - DAYCARE CARSEAT EAST
SCALE: 3/8" = 1'-0" REF. 6 / A112



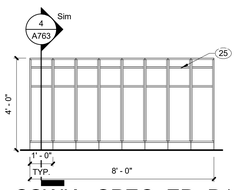
15 CSWK - CAFETERIA B150 NORTH
SCALE: 3/8" = 1'-0" REF. 1 / A101B



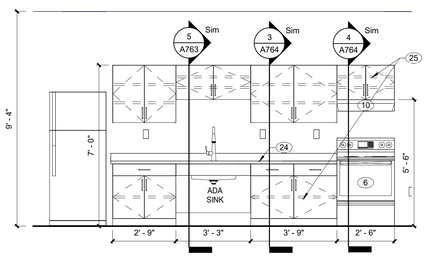
14 CSWK - SPEC. ED. B115 SOUTH 3
SCALE: 3/8" = 1'-0" REF. 1 / A101A



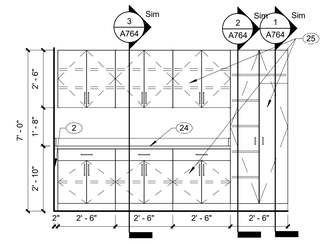
13 CSWK - SPEC. ED. B115 SOUTH 2
SCALE: 3/8" = 1'-0" REF. 1 / A101A



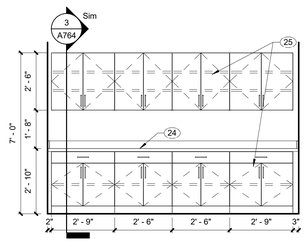
12 CSWK - SPEC. ED. B115 SOUTH
SCALE: 3/8" = 1'-0" REF. 1 / A101A



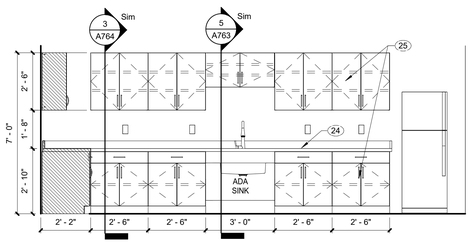
11 CSWK - SPEC. ED. B115 WEST
SCALE: 3/8" = 1'-0" REF. 1 / A101A



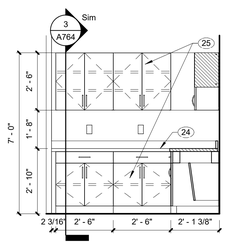
10 CSWK - OCCUP. B118 WEST
SCALE: 3/8" = 1'-0" REF. 1 / A101B



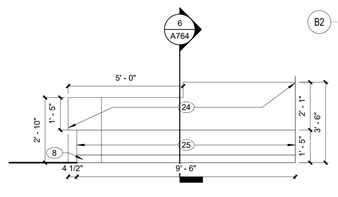
9 CSWK - SPEECH B119 WEST
SCALE: 3/8" = 1'-0" REF. 1 / A101B



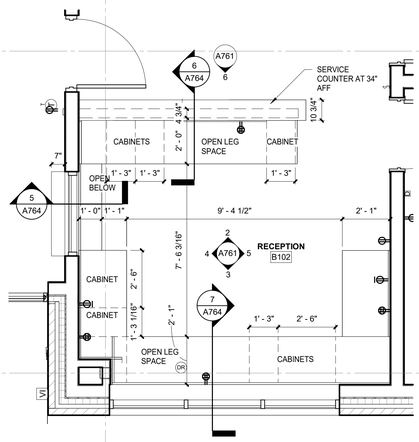
8 CSWK - WORK ROOM B113 SOUTH
SCALE: 3/8" = 1'-0" REF. 1 / A101A



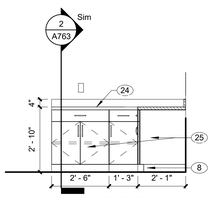
7 CSWK - WORK ROOM B113 EAST
SCALE: 3/8" = 1'-0" REF. 1 / A101B



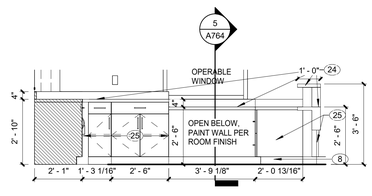
6 CSWK - RECEPTION B102 FRONT
SCALE: 3/8" = 1'-0" REF. 1 / A012



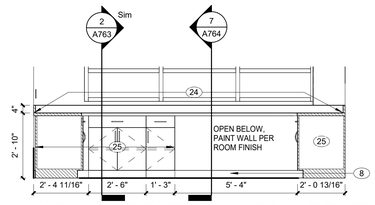
1 RECEPTION B102 DESK ENLARGED PLAN
SCALE: 3/8" = 1'-0" REF. 1 / A101B



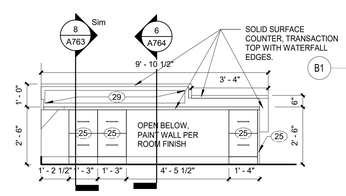
5 CSWK - RECEPTION B102 EAST
SCALE: 3/8" = 1'-0" REF. 1 / A721B



4 CSWK - RECEPTION B102 WEST
SCALE: 3/8" = 1'-0" REF. 1 / A721B



3 CSWK - RECEPTION B102 SOUTH
SCALE: 3/8" = 1'-0" REF. 1 / A721B

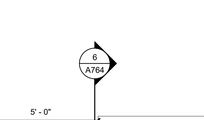


2 CSWK - RECEPTION B102 NORTH
SCALE: 3/8" = 1'-0" REF. 1 / A721B

BH

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
7710 W. REEVES RD,
BLOOMINGTON, IN 47404



REVISIONS:			
#	Date	Desc.	
1	2-15-2024	ADDENDUM 1	
2	2-28-2024	addendum 2	

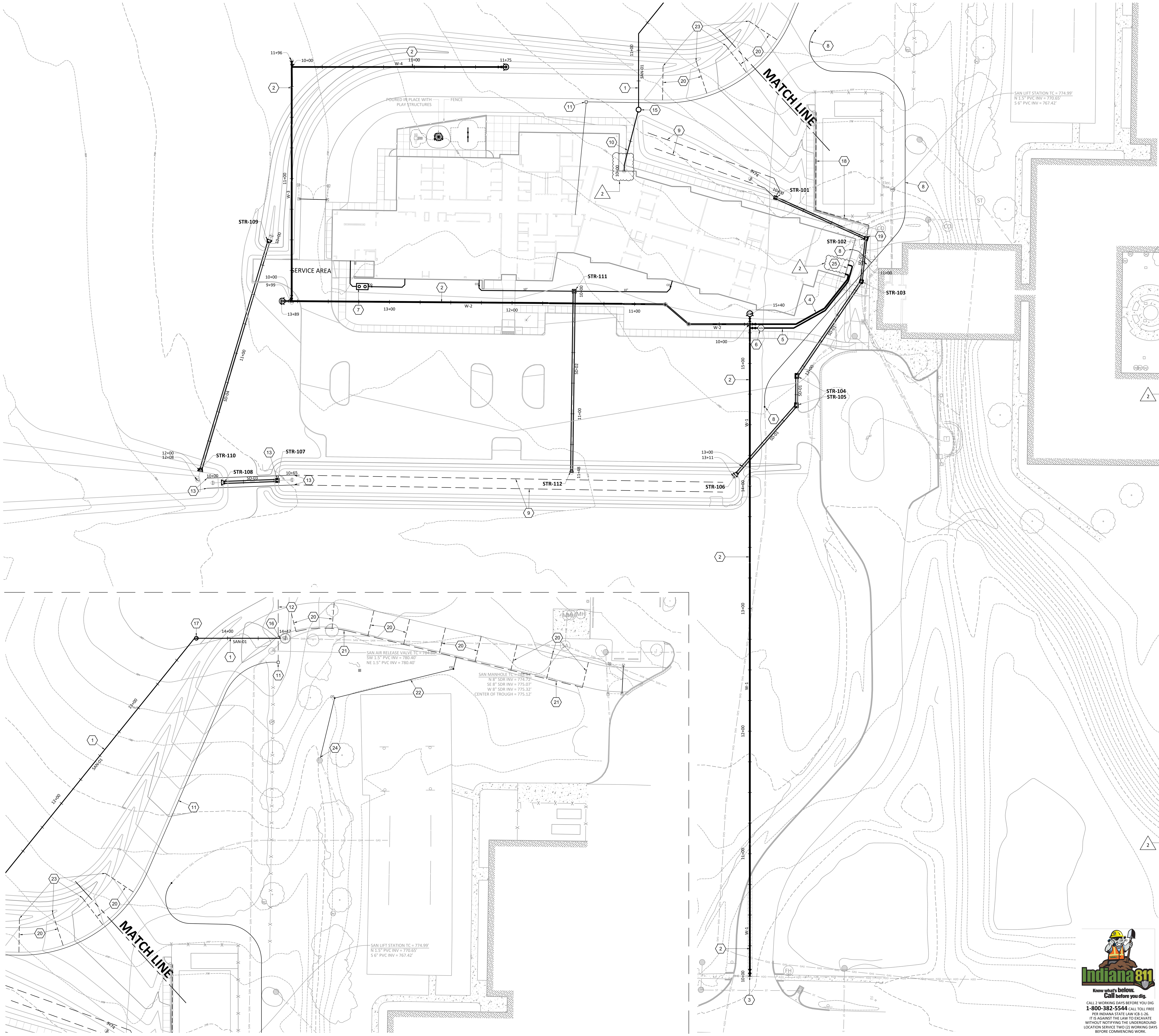
100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	JAN 31, 2024
DRAWN BY:	Author

CASEWORK PLANS AND ELEVATIONS

A761

PLOT DATE/TIME:2/28/2024 1:59:39 PM



GENERAL NOTES

A. REFER TO DEMOLITION PLANS FOR SEQUENCE OF UTILITY REPLACEMENT TO ENSURE CONTINUOUS SERVICE OF ALL UTILITIES.

B. CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING AS REQUIRED TO COMPLETELY INSTALL THE WORK INDICATED.

C. CONTRACTOR SHALL COORDINATE EXACT UTILITY LOCATIONS WITH THE OWNER AND LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY WORK. CONTACT THE INDIANA UNDERGROUND PLANT PROTECTION SERVICES INC, AT 1-800-382-5544 AND OTHER UTILITIES PRIOR TO ANY EXCAVATION ON THE SITE.

D. ALL WORK ASSOCIATED WITH WATER AND SEWER SYSTEMS SHALL COMPLY WITH THE STANDARDS & REQUIREMENTS OF THE INDIANA DEPT. OF ENVIRONMENTAL MANAGEMENT (IDEM), THE INDIANA STATE DEPARTMENT OF HEALTH (ISDH), THE AMERICAN WATER WORKS ASSOCIATION (AWWA), THE GREAT LAKES-UPPER MISSISSIPPI BOARD OF STATE PUBLIC HEALTH AND ENVIRONMENTAL MANAGERS (GLUMRB), THE INDIANA PLUMBING CODE, AND THE TOWN OF ELLETTSVILLE UTILITIES CONSTRUCTION SPECIFICATIONS.

E. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS AND NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.

F. CONTRACTOR SHALL SET ALL EXISTING AND PROPOSED CASTINGS AND CLEANOUT COVERS TO FINAL FINISHED GRADE.

G. A MINIMUM OF 18 INCHES VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER AND SANITARY/STORM SEWER UNLESS OTHERWISE INDICATED, OR UNLESS WRITTEN PERMISSION IS GIVEN BY THE ENGINEER. SEWERS CROSSING WATER MAINS SHALL BE LAID TO MAINTAIN A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND OUTSIDE OF THE SEWER MAIN. THIS SHALL BE THE CASE WHETHER THE WATER MAIN IS ABOVE OR BELOW THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE JOINTS IN THE SEWER MAIN WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE JOINTS IN THE WATER MAIN. THE CROSSING MUST BE AT A MINIMUM ANGLE OF 45° MEASURED FROM THE CENTERLINE OF THE SEWER AND WATER MAINS. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.

H. A MINIMUM OF 10 FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER AND SANITARY/STORM SEWER UNLESS OTHERWISE INDICATED, OR UNLESS WRITTEN PERMISSION IS GIVEN BY THE ENGINEER.

I. ALL STORM AND SANITARY MANHOLES AND STORM INLET STRUCTURES SHALL HAVE A MINIMUM SEPARATION OF 8’ FROM WATER MAINS.

J. ALL SANITARY LATERALS SHALL HAVE A MINIMUM COVER OF 30"- UNLESS NOTED OTHERWISE.

K. ALL STORM LATERALS SHALL HAVE A MINIMUM COVER OF 12"- UNLESS NOTED OTHERWISE.

L. ALL SANITARY AND STORM LATERALS SHALL HAVE A MINIMUM SLOPE OF 1/8" PER FOOT UNLESS NOTED OTHERWISE.

M. ALL WATER LINES SHALL HAVE A MINIMUM COVER OF 48". INSTALL LINES WITH NO ISOLATED HIGH POINTS.

N. WHERE DISSIMILAR PIPING MATERIALS ARE JOINED TOGETHER ALONG GRAVITY SANITARY AND STORM LATERALS, THE CONTRACTOR SHALL USE A NON-SHEAR COUPLING EQUAL TO FERNCO.

O. CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, TELECOMMUNICATION, AND LANDSCAPE PLANS FOR ADDITIONAL UTILITY MODIFICATIONS AND NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO START OF CONSTRUCTION.

P. CONTRACTOR TO EXTEND ALL FOUNDATION, SUBDRAIN, UNDERDRAIN, INTERNAL DRAIN, ROOF DRAIN AND RETAINING WALL DRAIN PIPING TO THE NEAREST PROPOSED STORM STRUCTURE WHILE MAINTAINING POSITIVE FLOW, UNLESS NOTED OTHERWISE. ALL CONNECTIONS SHALL BE WATERTIGHT.

Q. PRE-CONSTRUCTION MEETING: ALL PROJECTS WILL REQUIRE A PRE-CONSTRUCTION MEETING WITH THE TOWN OF ELLETTSVILLE UTILITIES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR AND/OR DEVELOPER MUST CONTACT THE UTILITIES TECHNICIAN AT (812) 876-2297 TO SCHEDULE THE MEETING.

R. UTILITIES INSPECTION: CONTRACTOR SHALL NOTIFY THE TOWN OF ELLETTSVILLE UTILITIES DEPARTMENT ONE (1) WORKING DAY PRIOR TO CONSTRUCTION OF ANY WATER, STORM OR SANITARY SEWER UTILITY WORK. A UTILITIES INSPECTOR MUST HAVE NOTICE SO WORK CAN BE INSPECTED, DOCUMENTED, AND PROPER AS-BUILT MADE. WHEN A CONTRACTOR WORKS ON WEEKENDS, A DESIGNATED HOLIDAY, OR BEYOND NORMAL WORKING HOURS, THE CONTRACTOR WILL PAY FOR THE INSPECTOR'S OVERTIME. FOR TOWN OF ELLETTSVILLE WORK HOURS AND HOLIDAY INFORMATION, PLEASE CONTACT THE TOWN OF ELLETTSVILLE UTILITIES DEPARTMENT AT (812) 876-2297.

S. ALL WATER MAINS AND SERVICE LINES SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE PRESSURE CLASS 350 INSTALLED WITH MECHANICAL JOINT RESTRAINTS AND POLYETHYLENE ENCASEMENT.

T. PROVIDE AND INSTALL INSULATED 12 AWG HIGH-STRENGTH COPPER-CLAD-STEEL (HS-CCS) LOCATE WIRE ON ALL WATER LINES, SANITARY AND STORM LATERALS, AND SANITARY FORCE MAIN PIPING.

2

PLAN NOTES 1

1. 1-1/2” SDR 21 PVC SANITARY FORCE MAIN.
2. 8” PUBLIC WATER MAIN. DUCTILE IRON PIPE AND FITTINGS. RESTRAIN JOINTS PER DETAIL 15/C801.
3. 12” WATER MAIN TAP. CONTRACTOR TO COORDINATE WITH TOWN OF ELLETTSVILLE UTILITIES AND APPLY FOR TAP AT LEAST 48 HOURS IN ADVANCE. CONTRACTOR TO EXPOSE WATER MAIN, INSTALL TAPPING SLEEVE AND VALVE, AND ALLOW TOWN OF ELLETTSVILLE UTILITIES TO TAP THE MAIN. CONTRACTOR TO PLACE VALVE BOX, BACKFILL, AND REPAIR EXISTING CONDITIONS. CONTRACTOR RESPONSIBLE FOR ALL EXPENSES ASSOCIATED WITH TAPPING THE MAIN.
4. 6” PRIVATE FIRE PROTECTION WATER SERVICE LINE. DUCTILE IRON PIPE AND FITTINGS. ALL JOINTS TO BE RESTRAINED. REFER TO PLUMBING DRAWINGS FOR CONTINUATION WITHIN BUILDING.
5. 4” PRIVATE DOMESTIC WATER SERVICE LINE. DUCTILE IRON PIPE AND FITTINGS. ALL JOINTS TO BE RESTRAINED. REFER TO PLUMBING DRAWINGS FOR CONTINUATION WITHIN BUILDING.
6. 2" DOMESTIC WATER METER AND PIT. COORDINATE INSTALLATION WITH TOWN OF ELLETTSVILLE UTILITIES.
7. GREASE INTERCEPTOR. REFER TO PLUMBING PLANS.
8. RELOCATE EXISTING GAS SERVICE - BY OTHERS – CONTRACTOR TO COORDINATE WITH CENTERPOINT ENERGY. CENTERPOINT TO PROVIDE NEW SERVICE INTO BUILDING AS INDICATED. OWNER RESPONSIBLE FOR ALL CENTERPOINT ENERGY EXPENSES.
9. 4" PERFORATED HDPE TYPE S DUAL WALL UNDERDRAIN. INSTALL AT MINIMUM DEPTH OF 6" WITH POSITIVE DRAINAGE TO OUTLET. REFER TO PROFILE FOR INVERT ELEVATION. PHASE INSTALLATION TO ENSURE NO COMPACTION OR HEAVY EQUIPMENT TRAFFIC OCCURS OVER INSTALLED UNDERDRAINS. REFER TO DETAIL 20/C801. PROVIDE CLEANOUTS AT 100' INTERVALS.
10. 6” SDR 35 PVC SANITARY SEWER LATERAL. REFER TO PLUMBING DRAWINGS FOR CONTINUATION INTO THE BUILDING.
11. TELECOMMUNICATIONS RUN. REFER TO SHEET T001.
12. TELECOMMUNICATIONS SERVICE - BY SMITHVILLE. REFER TO SHEET T001.
13. DETENTION OUTLET CONTROL STRUCTURE. REFER TO DETAIL 2/C802.
14. TRANSITION FROM 4" PERFORATED TO 4" SOLID WALL HDPE TYPE S DUAL WALL STORM PIPE AND EXTEND THROUGH EMBANKMENT TO DAYLIGHT AT ELEV. 766.25.
15. SANITARY SEWER LIFT STATION – REFER TO DETAIL 6/C802.
16. CORE DRILL AND BOOT MANHOLE AND MODIFY TABLE AND TROUGH TO ACCEPT NEW 1-1/2” FORCE MAIN.
17. WASTEWATER AIR RELIEF VALVE IN VAULT. WASTEWATER AIR RELIEF VALVE – VALVMATIC MODEL WM-48A WITH 2” INLET OR APPROVED EQUAL. LOCATE AT THE HIGHEST POINT IN THE LINE. REFER TO DETAIL 7/C802.
18. 4” DIA. PERFORATED SDR 35 PVC SEGMENTAL BLOCK WALL UNDERDRAIN – REFER TO DETAIL 10/C802.
19. CONNECT SEGMENTAL BLOCK WALL UNDERDRAIN INTO NEAREST STORM STRUCTURE. SEAL ANNULAR OPENING WATER-TIGHT WITH NON-SHRINK GROUT.
20. 4” PERFORATED HDPE TYPE S CROSS-SECTIONAL UNDERDRAIN, 30’ O.C. AS INDICATED. REFER TO DETAIL 5/C802.
21. 4” PERFORATED HDPE TYPE S COLLECTOR UNDERDRAIN. REFER TO DETAIL 5/C802.
22. 6” HDPE TYPE S PIPE – CONNECT UNDERDRAIN TO NEAREST STORM INLET AS INDICATED.
23. MITERED DRAIN END SECTIONS BY DRAINAGE SOLUTIONS OR APPROVED EQUAL. 4 EACH AS INDICATED.
24. MODIFY EXISTING INLET TO ACCEPT NEW SUBDRAIN PIPE. SEAL ANNULAR OPENING WATER-TIGHT WITH NON-SHRINK GROUT.
25. FIRE DEPARTMENT CONNECTION SIGN MOUNTED ON OUTSIDE OF BUILDING NEAR FDC – REFER TO DETAIL 11/C802 AND PLUMBING PLANS.

2

LEGEND

(hatch)	LIMITS OF ASPHALT PAVEMENT PATCH
GM	GAS METER
FH	FIRE HYDRANT - REFER TO DETAIL 18/C801
WM	WATER METER
	WATER VALVE - REFER TO DETAIL 17/C801
— — —	4" PERFORATED UNDERDRAIN
STR-100	PRECAST STORM STRUCTURE - REFER TO STRUCTURE DATA TABLE
CO	CLEANOUT - REFER TO DETAIL 14/C801

Know what's below. Call before you dig.
CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-382-5544 CALL TOLL FREE PER INDIANA STATE LAW IC8-1-26.
IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

30 0 30
SCALE: 1" = 30'

N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 N EAST STREET
INDIANAPOLIS, IN 46204

BRCJ #11363

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
7710 W. REEVES RD,
BLOOMINGTON, IN 47404

WILLIAM STUART BICKERT
REGISTERED
NO. 870231
STATE OF INDIANA
PROFESSIONAL ENGINEER
02-29-2024

REVISIONS:

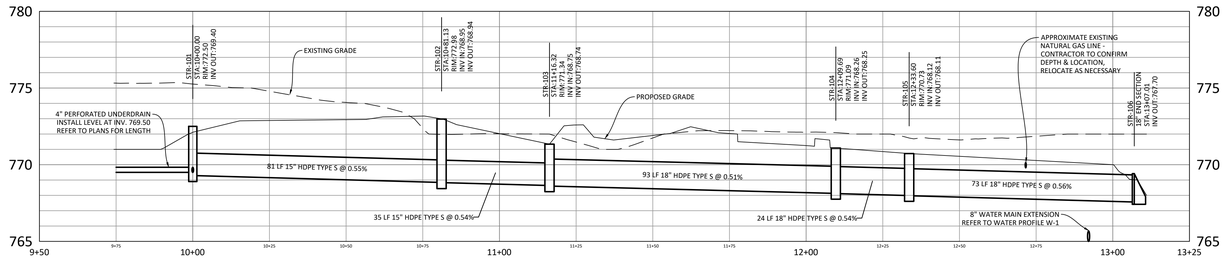
#	Date	Desc.
1	02-15-2024	ADDENDUM #1
2	02-29-2024	ADDENDUM #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JAN 31, 2024
DRAWN BY: KJP

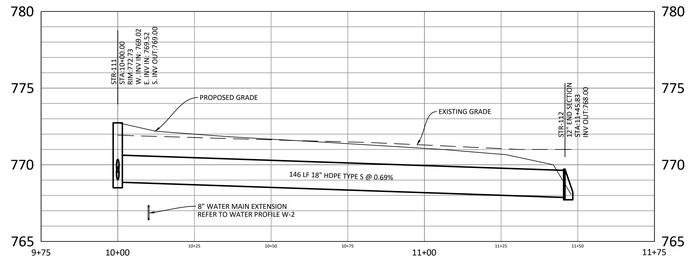
SITE UTILITY PLAN

C601



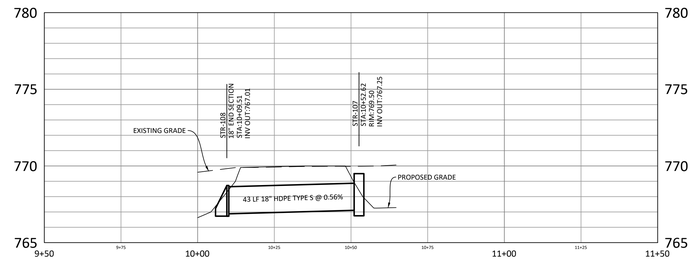
STORM DRAINAGE PROFILE SD-01

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'



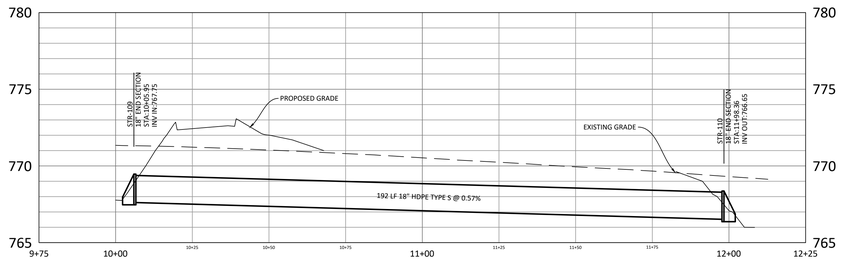
STORM DRAINAGE PROFILE SD-02

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'



STORM DRAINAGE PROFILE SD-03

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'



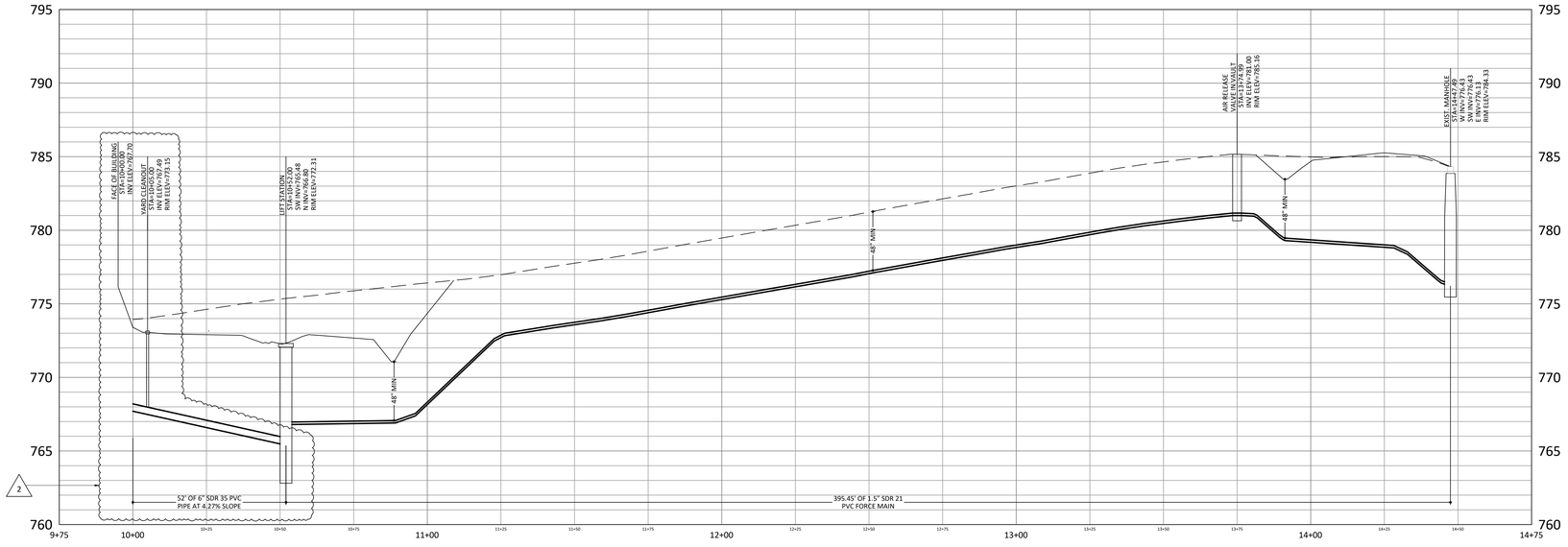
STORM DRAINAGE PROFILE SD-04

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

STORM STRUCTURE DATA TABLE

STR #	CASTING	STRUCTURE TYPE / DETAIL	REFERENCE PROFILE	NORTHING EASTING	RIM ELEV	PIPE SIZE	PIPE INV (OUT)	DOWN STR #	PIPE LENGTH	PIPE SLOPE %	NOTES
STR-101	EJIW 1020 W/DOMED GRATE	INLET TYPE A	SD-01	1451696.36 3077019.82	772.50	15"	769.40	STR-102	81	0.55%	
STR-102	EJIW 1020 W/SOLID LID	INLET TYPE A	SD-01	1451663.02 3077093.77	772.98	15"	768.94	STR-103	35	0.54%	3
STR-103	EJIW 1020 W/DOMED GRATE	INLET TYPE A	SD-01	1451628.04 3077089.87	771.34	18"	768.74	STR-104	93	0.51%	
STR-104	EJIW 7505 W/M3 GRATE T4 BACK	INLET TYPE J	SD-01	1451550.92 3077037.25	771.09	18"	768.25	STR-105	24	0.54%	
STR-105	EJIW 7505 W/M3 GRATE T4 BACK	INLET TYPE J	SD-01	1451527.00 3077036.88	770.73	18"	768.11	STR-106	73	0.56%	
STR-106	–	18" GALVANIZED END SECTION	SD-01	1451471.72 3076988.59	–	18"	767.70	–	–	–	1
STR-107	EJIW 6610 DITCH GRATE	INLET TYPE E	SD-03	1451465.68 3076613.22	769.50	18"	767.25	STR-108	43	0.56%	
STR-108	–	18" GALVANIZED END SECTION	SD-03	1451464.05 3076570.14	–	18"	767.01	–	–	–	2
STR-109	–	18" GALVANIZED END SECTION	SD-04	1451659.73 3076606.03	–	18"	767.75	–	–	–	
STR-110	–	18" GALVANIZED END SECTION	SD-04	1451475.34 3076551.06	–	18"	766.65	–	–	–	1
STR-111	EJIW 1020 W/SOLID LID	INLET TYPE A	SD-02	1451620.06 3076855.53	772.73	18"	769.00	STR-112	146	0.69%	
STR-112	–	18" GALVANIZED END SECTION	SD-02	1451474.24 3076853.46	–	18"	768.00	–	–	–	2

STORM STRUCTURE DATA TABLE NOTES:
1) RIPRAP OUTFALL – L=6' W=7.5' – REFER TO DETAIL 21/C801
2) RIPRAP OUTFALL – L=11' W=12.5' – REFER TO DETAIL 21/C801
3) CONNECT RETAINING WALL SUB-DRAIN INTO STRACUTRE – SEAL ANNULAR OPENING WATER-TIGHT WITH NON-SHRINK GROUT



SANITARY SEWER FORCE MAIN PROFILE

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

LANCER ASSOCIATES ARCHITECTURE
145 N EAST STREET
INDIANAPOLIS, IN 46204

BRCJ #11363
Bledsoe Riggert Cooper James
BRCJ LAND SURVEYING • CIVIL ENGINEERING • GIS
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-8277 www.brcjcivil.com

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
7710 W. REEVES RD,
BLOOMINGTON, IN 47404

WILLIAM STUART HIDDLESTON
REGISTERED
NO. 870231
STATE OF INDIANA
PROFESSIONAL ENGINEER
02-29-2024

REVISIONS:

#	Date	Desc.
1	02-15-2024	ADDENDUM #1
2	02-29-2024	ADDENDUM #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JAN 31, 2024
DRAWN BY: KJP

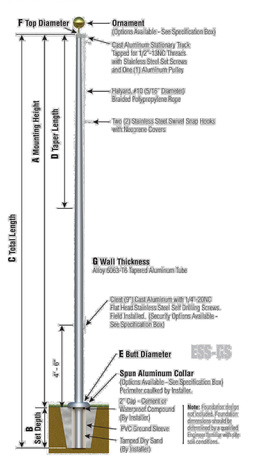
SITE UTILITIES
STORM PROFILES

C602

Courtyard Series - ESS
External Single Stationary
Rope Halyard
Ground Set Installation

AMERICAN FLAGPOLE — BUILT TO LAST. BUILT TO IMPRESS.

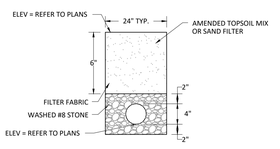
ESS30B41 - 02



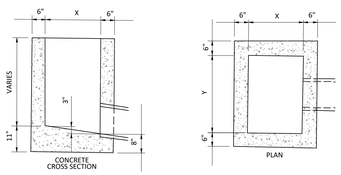
Accessory Specifications
Satin Aluminum (02), Clear Anodized Ball (90065-002), Standard Spun Collar (94508-002), Cleat Cover - Cylinder Lock (Lock and Keys included) with 9" HD Alum. Cleat (96016) with Halyard Cover - 1-1/2" x 5 feet (96153)

Specifications
A. Mounting Height: 30'
B. Set Depth: 3'-0"
C. Total Length: 33'-0"
D. Taper Length: 11'-0"
E. Butt Diameter: 4.000"
F. Top Diameter: 3.000"
G. Wall Thickness: 0.125"
Flagpole Sections: 1
Flagpole Weight: 106 lbs.
Max Flag Size: 6' x 10'
Max Wind Speed w/ Flag: 60 mph
Max Wind Speed No Flag: 80 mph

24 FLAGPOLE



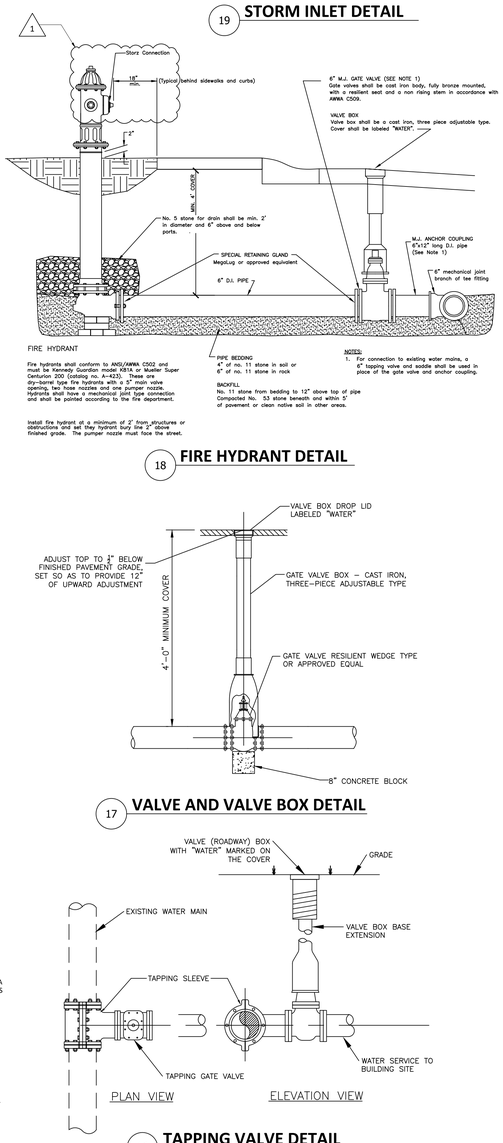
20 UNDERDRAIN DETAIL



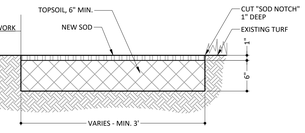
NOTE: BOX TO REST ON 4" OF COMPACTED NO. 11 STONE IF ON DIRT; 6" IF ON ROCK

TYPE	X	Y
A	24"	24"
B	20"	42"
C	30"	48"
E	30"	30"
J	24"	36"

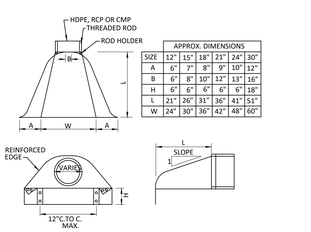
19 STORM INLET DETAIL



18 FIRE HYDRANT DETAIL

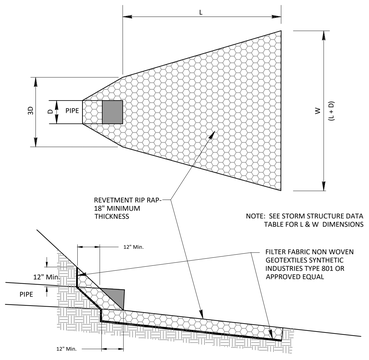


23 SOD NOTCH DETAIL



APPROX. DIMENSIONS						
SIZE	12"	15"	18"	21"	24"	30"
A	6"	7"	8"	9"	10"	12"
B	6"	8"	10"	12"	13"	16"
H	6"	6"	6"	6"	6"	18"
L	21"	26"	31"	36"	41"	51"
W	24"	30"	36"	42"	48"	60"

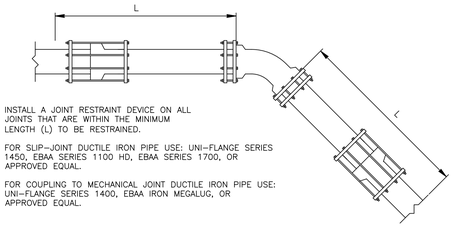
22 GALVANIZED METAL END SECTION



21 RIPRAP OUTFALL DETAIL

17 VALVE AND VALVE BOX DETAIL

16 TAPPING VALVE DETAIL



INSTALL A JOINT RESTRAINT DEVICE ON ALL JOINTS THAT ARE WITHIN THE MINIMUM LENGTH (L) TO BE RESTRAINED.

FOR SLIP-JOINT DUCTILE IRON PIPE USE: UNI-FLANGE SERIES 1450, EBAA SERIES 1100 HD, EBAA SERIES 1700, OR APPROVED EQUAL.

FOR COUPLING TO MECHANICAL JOINT DUCTILE IRON PIPE USE: UNI-FLANGE SERIES 1400, EBAA IRON MEGALUG, OR APPROVED EQUAL.

MINIMUM LENGTH IN FEET TO BE RESTRAINED ON EACH SIDE OF FITTING (L) UNLESS NOTED OTHERWISE

3' OF COVER ON PIPE					
PIPE SIZE	HORIZ. BENDS				DEAD END
	11¼	22½	45	90	
4	3	5	9	21	85
6	3	6	12	29	119
8	4	8	16	38	155
10	5	9	19	44	186
12	6	11	22	52	218

PIPE SIZE	VERTICAL OFFSET (UPPER/LOWER*)			
	11¼	22½	45	
4	9 / 3	17 / 6	35 / 13	
6	12 / 5	24 / 9	50 / 18	
8	16 / 6	31 / 11	65 / 22	
10	19 / 7	37 / 13	77 / 26	
12	22 / 8	44 / 15	91 / 30	

*LOWER RESTRAINT LENGTH CALCULATED FOR 2' VERTICAL OFFSET

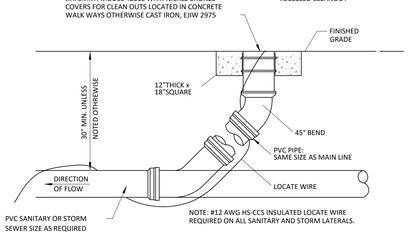
PIPE SIZE (BRANCH / RUN)	TEE-BRANCH LENGTH (RUN LENGTH=5')				
	4	6	8	10	12
4	23	77	123	160	197
6	5	56	107	148	187
8	5	35	92	135	176
10	5	13	75	121	165
12	5	5	57	108	154

PIPE SIZE (TO / FROM)	REDUCER LENGTH ON LARGER SIDE			
	4	6	8	10
6	62	–	–	–
8	112	65	–	–
10	151	114	63	–
12	189	159	116	64

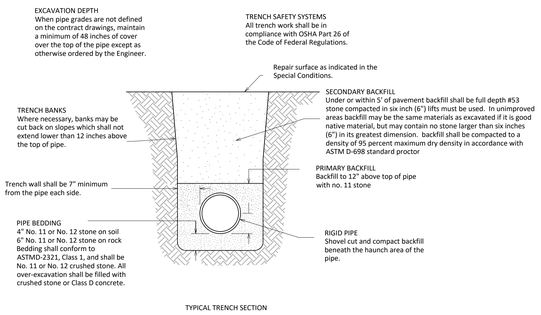
CHARTS REFLECT THE FOLLOWING TYPICAL PARAMETERS:
–ML SOIL CLASSIFICATION, SHEARING STRENGTH=450/300 PSF WORST CASE
–TRENCH TYPE 5 (AWWA)
–DEPTH OF COVER 3' MINIMUM
–DUCTILE IRON PIPE WITH POLY WRAP
–PIPE BEDDED IN GRANULAR
–BACKFILL COMPACTED GRANULAR OR SELECT MATERIAL
–TEST PRESSURE OF 150 PSI WITH 2:1 SAFETY FACTOR

15 MECHANICAL JOINT RESTRAINTS

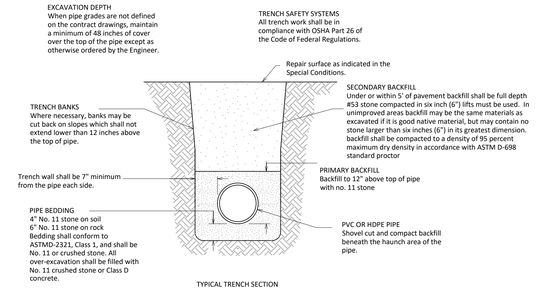
RECESSED CLEANOUT PLUG WITH COVER
J.R. SMITH MODEL 42515 WITH NICKLE BRONZE COVERS FOR CLEAN OUTS LOCATED IN CONCRETE WALK WAYS OTHERWISE CAST IRON, EJIW 2975



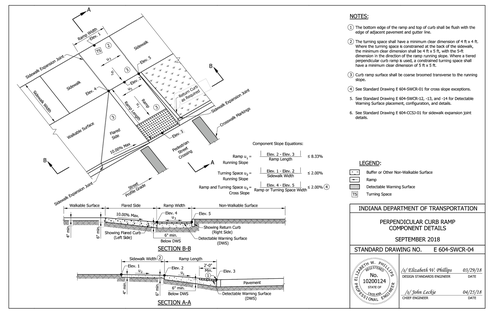
14 TYPICAL YARD CLEANOUT



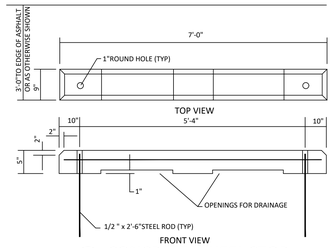
13 BEDDING AND BACKFILL FOR RIGID PIPE



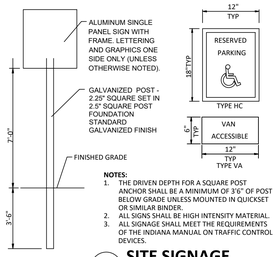
12 BEDDING AND BACKFILL FOR PVC AND HDPE PIPE



10 INDOT STANDARD CURB RAMP DETAILS

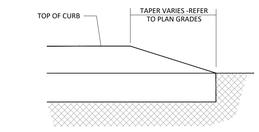


9 CONCRETE WHEEL STOP



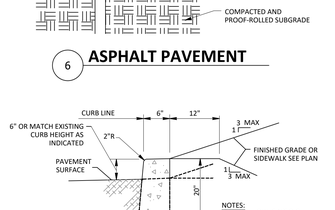
NOTES:
1. THE DRIVEN DEPTH FOR A SQUARE POST ANCHOR SHALL BE A MINIMUM OF 3'6" OF POST BELOW GRADE UNLESS MOUNTED IN QUICKSET OR SIMILAR BINDER.
2. ALL SIGNS SHALL BE HIGH INTENSITY MATERIAL.
3. ALL SIGNAGE SHALL MEET THE REQUIREMENTS OF THE INDIANA MANUAL ON TRAFFIC CONTROL DEVICES.

8 SITE SIGNAGE



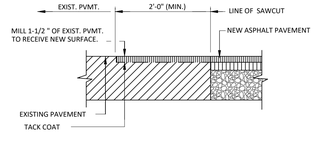
FROM STANDING OR ROLL TO DEPRESSED CURB AND AT END OF CURB LINE

7 CONCRETE CURB TRANSITION

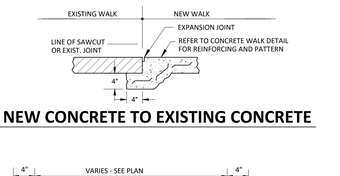


6 ASPHALT PAVEMENT

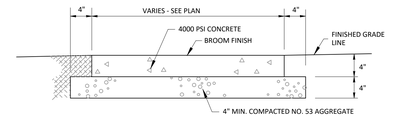
5 STANDING CONCRETE CURB



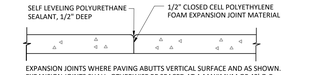
4 NEW PAVEMENT TO EXISTING PAVEMENT



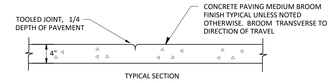
3 NEW CONCRETE TO EXISTING CONCRETE



CONCRETE PAVEMENT



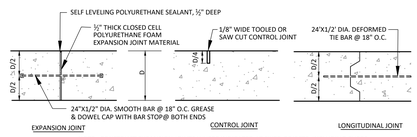
TYPICAL EXPANSION JOINT



TOOLED SCORE JOINTS SHALL BE SPACED 5' ON CENTER UNLESS OTHERWISE NOTED OR SHOWN.

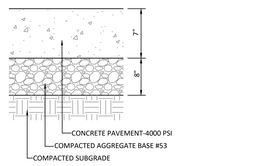
SIDEWALK LONGITUDINAL SECTION AND JOINT DETAIL

2 STANDARD DUTY CONCRETE PAVEMENT



NOTE: CONSTRUCT EXPANSION JOINTS WHERE INDICATED AT FIXED OBJECTS, INCLUDING CURBS, BUILDINGS AND LIGHT BASES AND CONTROL JOINTS AT 15' MAX. UNLESS OTHERWISE NOTED

CONCRETE JOINT DETAILS



1 HEAVY DUTY CONCRETE PAVEMENT

DETAILS ARE NOT TO SCALE

LANCER ASSOCIATES ARCHITECTURE
145 N EAST STREET
INDIANAPOLIS, IN 46204

BRCJ #11363
Richland Bean Blossom Community Schools
BRCJ LAND SURVEYING • CIVIL ENGINEERING • GIS
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-8277 www.brcjcivil.com

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
7710 W. REEVES RD,
BLOOMINGTON, IN 47404

REVISIONS:

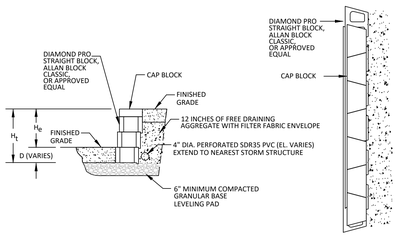
#	Date	Desc.
1	02-29-2024	ADDENDUM #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JAN 31, 2024
DRAWN BY: DLN/KJP

SITE DETAILS

C801



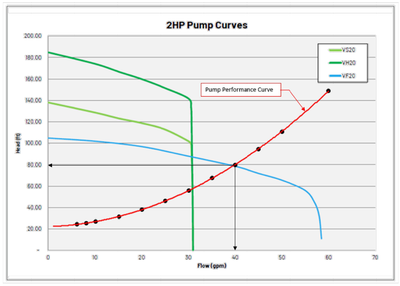
REFER TO MANUFACTURERS SPECIFICATIONS FOR DESIGN REQUIREMENTS.

10 SEGMENTAL BLOCK WALL

BRCJ 11363 – RBBCSC Edgewood Early Childhood Center

Lift Station and Force Main Calculations – Pump Determination

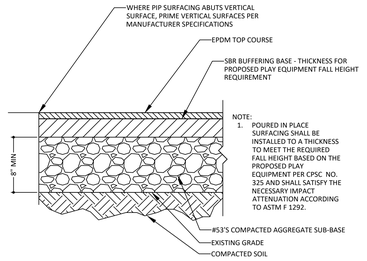
Design Basis - Pentair | Myers V2 Grinder Series Pumps



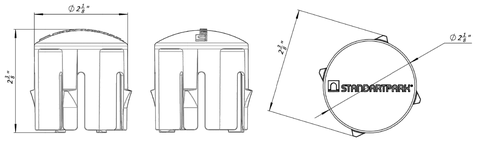
Select Myers VF20 – 2HP, 3450 RPM, 208V, 3 ph, 60 Hz Grinder Pump

Pumping 40 GPM at 79 Feet Total Dynamic Head

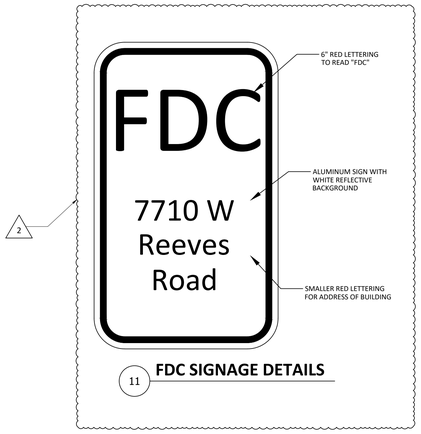
8 PUMP PERFORMANCE CURVE



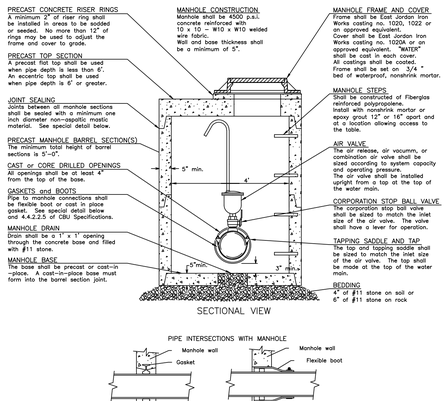
9 PLAYGROUND SURFACING

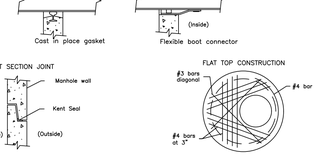


EASY SPOT MARKER

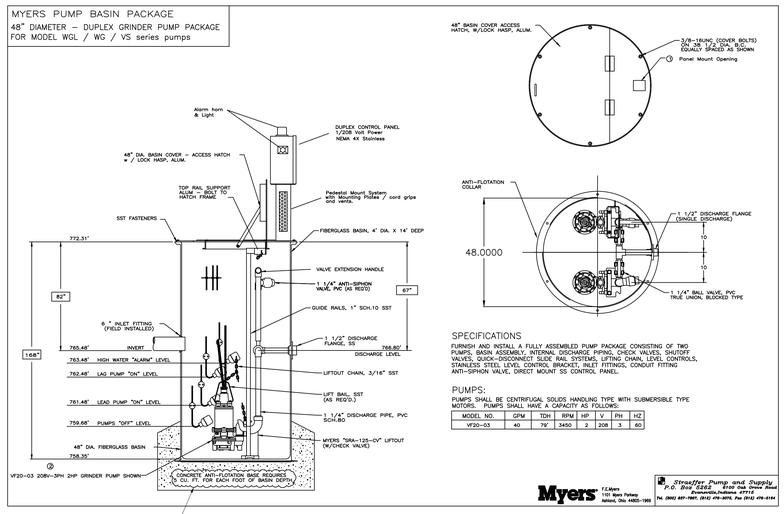


11 FDC SIGNAGE DETAILS

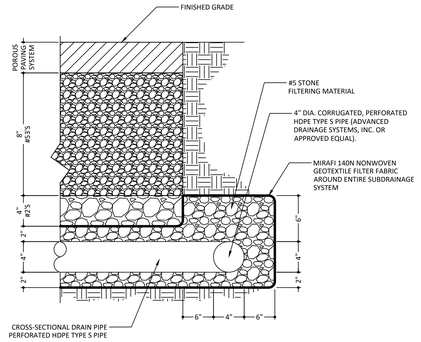




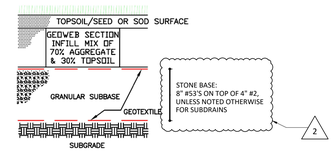
7 AIR RELEASE VALVE & VAULT



6 LIFT STATION DETAILS

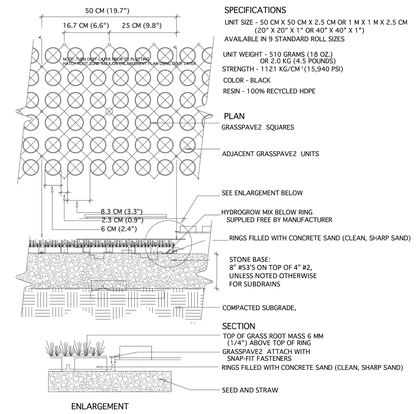


POROUS PAVING SYSTEM DRAINAGE DETAIL



GRASS PAVEMENT

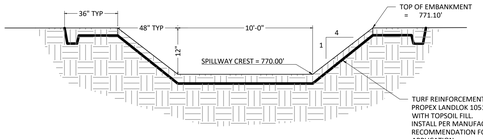
PRESTO GEOWEB SECTION DETAILS



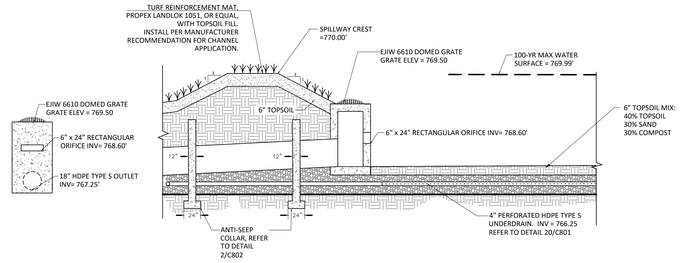
GRASSPAVE2 SECTION DETAILS

5 POROUS PAVING DETAILS

GRASSPAVE2, GEOWEB, OR APPROVED EQUAL

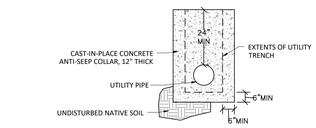


4 SPILLWAY DETAIL - SECTION

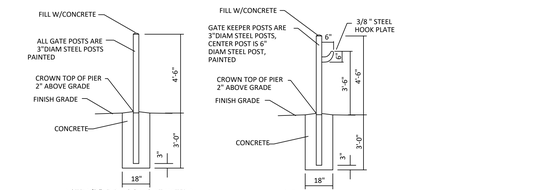


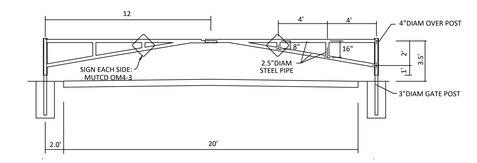
3 DETENTION OUTLET CONTROL STRUCTURE STR-107

NOTE: PERFORATED UNDERDRAIN AND AMENDED TOPSOIL MIX TO BE INSTALLED AT COMPLETION OF CONSTRUCTION AFTER SITE SOILS ARE STABILIZED AND TEMPORARY SEDIMENT RISER IS REMOVED.



2 ANTI-SEEP COLLAR





1 GATE DETAIL

LANCER ASSOCIATES ARCHITECTURE
145 N EAST STREET
INDIANAPOLIS, IN 46204

BRCJ #11363

Bledsoe Riggert Cooper James
BRCJ LAND SURVEYING • CIVIL ENGINEERING • GIS
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-8277 www.brcjcivil.com

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
7710 W. REEVES RD,
BLOOMINGTON, IN 47404

WILLIAM A. STUART REGISTERED PROFESSIONAL ENGINEER NO. 870231 STATE OF INDIANA
02-29-2024

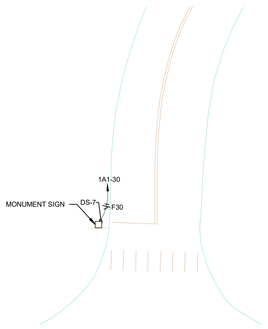
REVISIONS:			
#	Date	Desc.	
1	02-15-2024	ADDENDUM #1	
2	02-29-2024	ADDENDUM #2	

100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	JAN 31, 2024
DRAWN BY:	DLN/AEK/KJP

SITE DETAILS

C802



2 **SITE ELECTRICAL PLAN - ENTRANCE**
1" = 20'-0"

GENERAL SITE NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

B REFER TO LOCAL UTILITIES GUIDE FOR DETAILS AND REQUIREMENTS, INCLUDING, BUT NOT LIMITED TO, SERVICE REQUIREMENTS FOR UNDERGROUND PRIMARY, PROTECTIVE POLES FOR PAD-MOUNTED EQUIPMENT, UTILITY TRANSFORMER CONCRETE PAD DETAIL, ETC. INCLUDE ALL UTILITY FEES REQUIRED IN BID.

SITE PLAN NOTES

1 ROUTE BRANCH CIRCUIT THROUGH LIGHTING CONTACTOR "LC-1" LOCATED IN MECH. A122. REFER TO LIGHTING CONTACTOR SCHEDULE ON SHEET E601 AND EXTERIOR LIGHTING CONTROL SYSTEM SCHEMATIC ON SHEET E502 FOR ADDITIONAL DETAILS.

2 UTILITY SECONDARY TO NEW SERVICE. SEE SHEET E503 AND RISER DIAGRAM FOR ADDITIONAL INFORMATION.

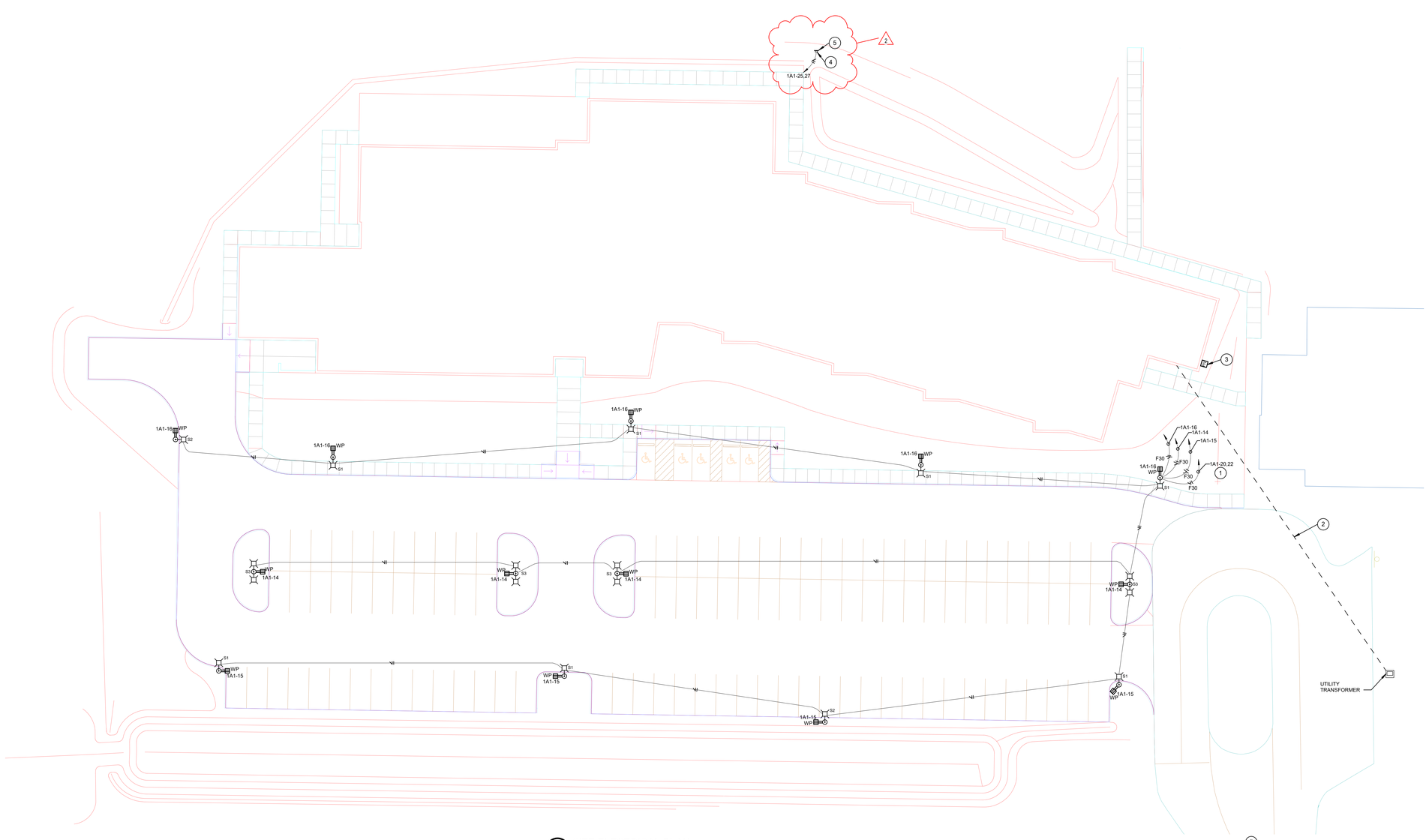
3 POST INDICATOR VALVE. PROVIDE FIRE ALARM CONNECTION TO FACP IN 1*C.

4 LIFT STATION CONTROL PANEL. SEE CIVIL DRAWINGS FOR ADDITIONAL DETAILS.

5 PROVIDE UNISTRUT FRAME FOR CONTROL PANEL MOUNTING.

6 PROVIDE UNISTRUT FRAME FOR EQUIPMENT MOUNTING. MAINTAIN NEC REQUIRED 6.5' CLERANCE ABOVE EQUIPMENT.

7 SEE VIEW 2/ES102 FOR CONTINUATION OF DRIVE.



1 **SITE ELECTRICAL PLAN**
1" = 20'-0"

LANCER ASSOCIATES ARCHITECTURE
427 S. COLLEGE AVE. SUITE 130
INDIANAPOLIS, IN 462023

creative engineering solutions
mechanical - electrical - plumbing
201 S Rural St., Suite 210
Indianapolis, IN 46201 • 463.777.4182
www.creativeeng.com

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
ECC - EARLY ELECTRICAL PAKAGE
7620 EDGEWOOD AVE,
INDIANAPOLIS, IN 46239

DAVID L. JONES II
REGISTERED
NO. PE12100175
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	02/28/24	Addendum #2

100% CONSTRUCTION DOCUMENTS

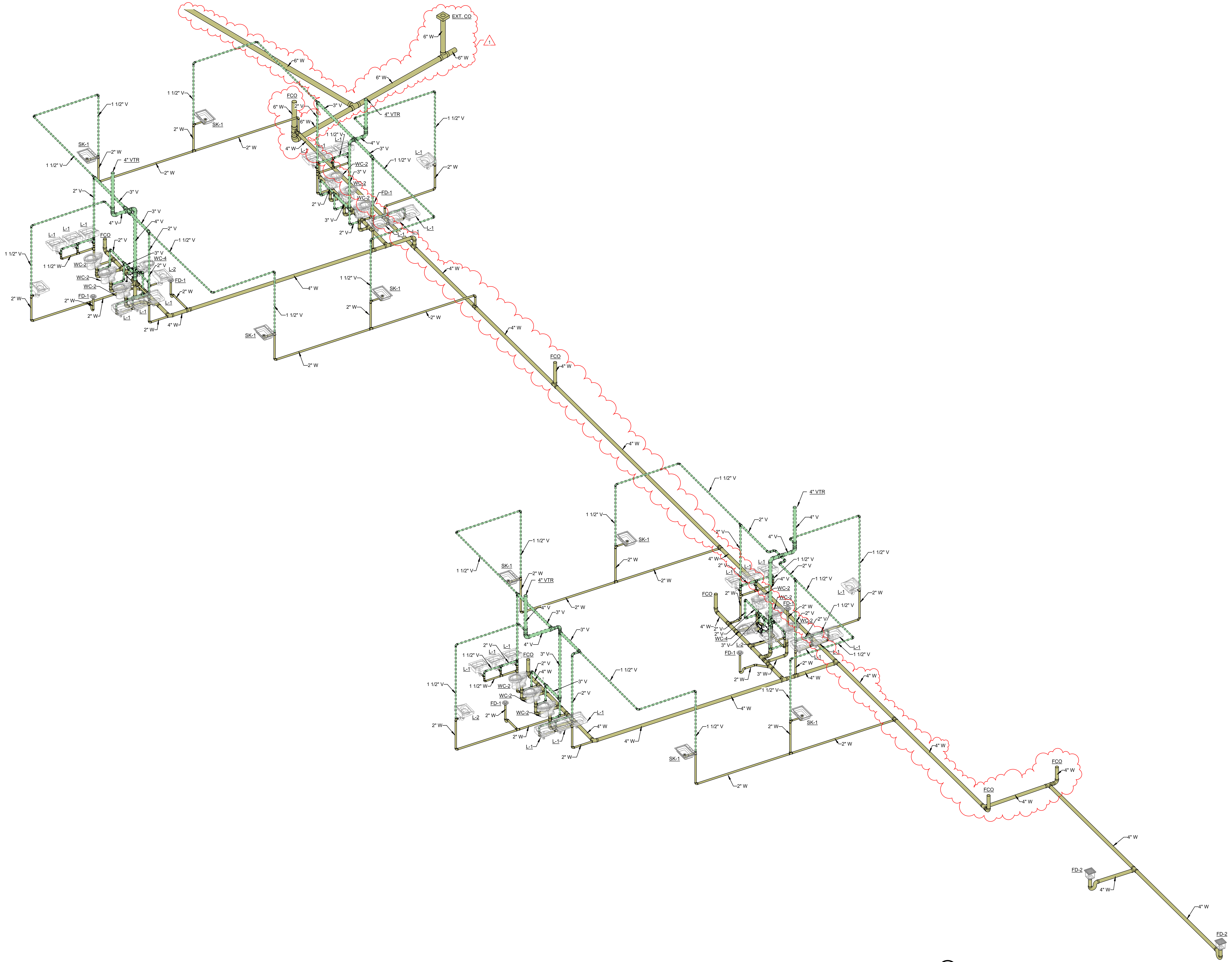
PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: DLJ / MGM

SITE ELECTRICAL PLAN

N
TRUE NORTH

ES102

PLOT DATE/TIME:2/28/2024 2:11:31 PM



1 SANITARY WASTE AND VENT ISOMETRIC -UNIT A
NOT TO SCALE

N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE

427 S. COLLEGE AVE. SUITE 130
INDIANAPOLIS, IN 462023

creative engineering solutions

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
W REEVES RD,
ELLETTSVILLE, IN 47404

GABRIEL S. CURRIER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

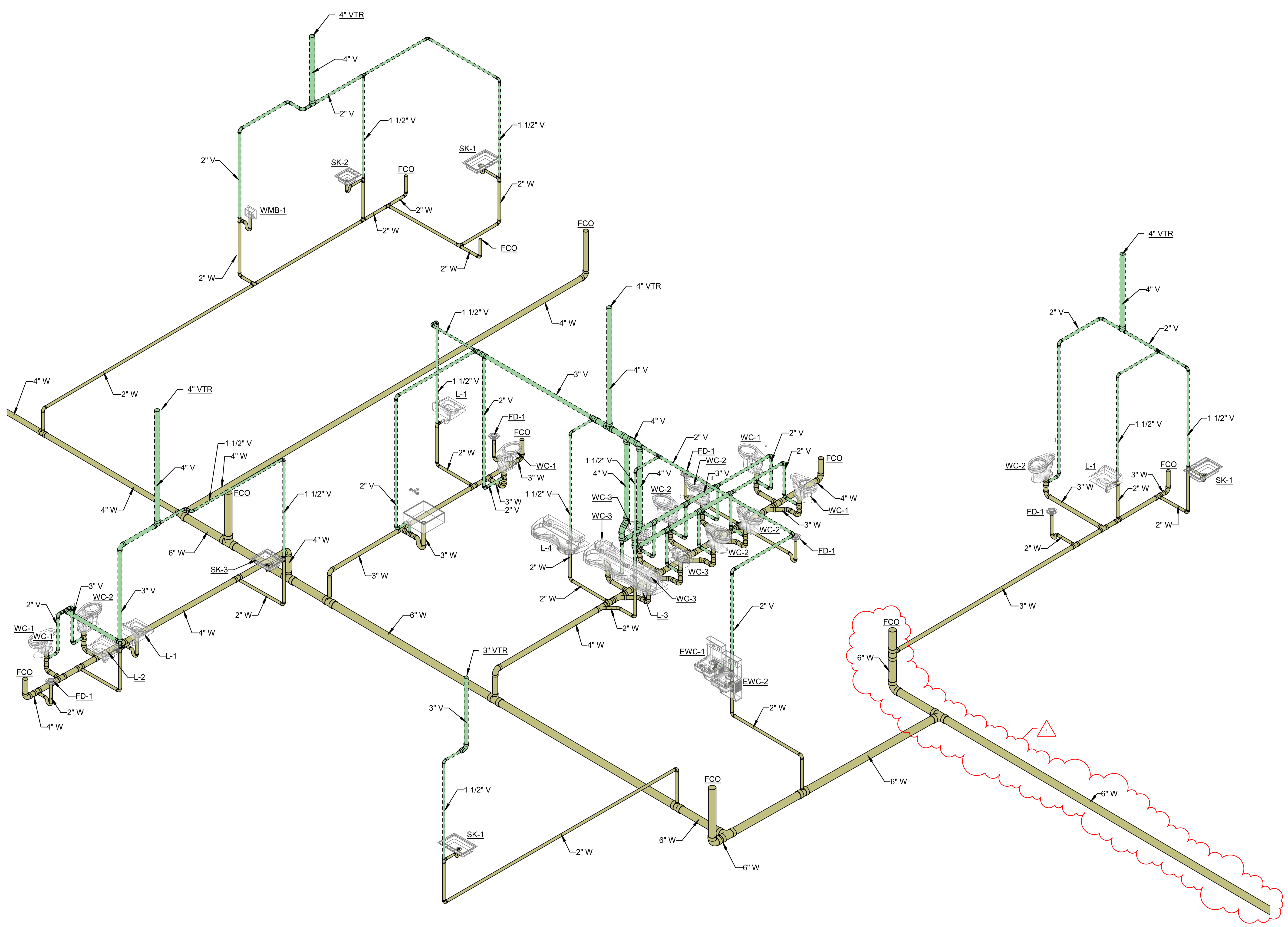
#	Date	Desc.
1	02/28/2024	Addendum #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: CCW / IOP

SANITARY WASTE AND VENT ISOMETRIC - UNIT A

P904



1 **SANITARY WASTE AND VENT ISOMETRIC - PARTIAL UNIT B1**
NOT TO SCALE

LANCER ASSOCIATES ARCHITECTURE
427 S. COLLEGE AVE. SUITE 130
INDIANAPOLIS, IN 462023

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
W REEVES RD,
ELLETTSVILLE, IN 47404

GABRIEL S. CURRIER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	02/28/2024	Addendum #2

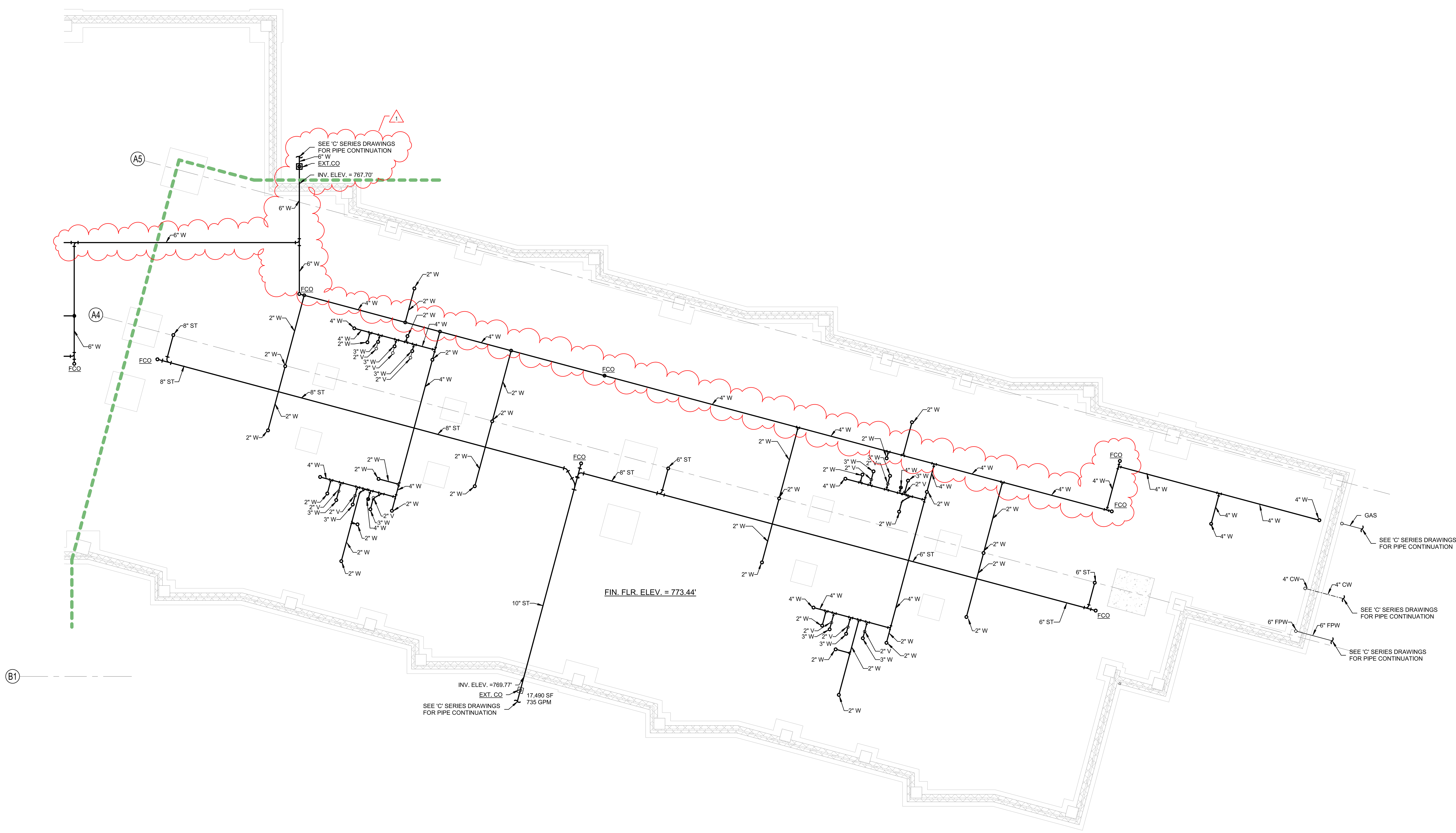
100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: CCW / IOP

SANITARY WASTE AND VENT ISOMETRIC - PARTIAL UNIT B1

N
TRUE NORTH

P905



1 FOUNDATION PLUMBING PLAN - UNIT A
1/8" = 1'-0"

N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
427 S. COLLEGE AVE, SUITE 130
INDIANAPOLIS, IN 462023

creative engineering solutions

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC EARLY CHILDHOOD CENTER

W REEVES RD,
ELLETTSVILLE, IN 47404

GABRIEL S. CURRIER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	02/28/2024	Addendum #2

100% CONSTRUCTION DOCUMENTS

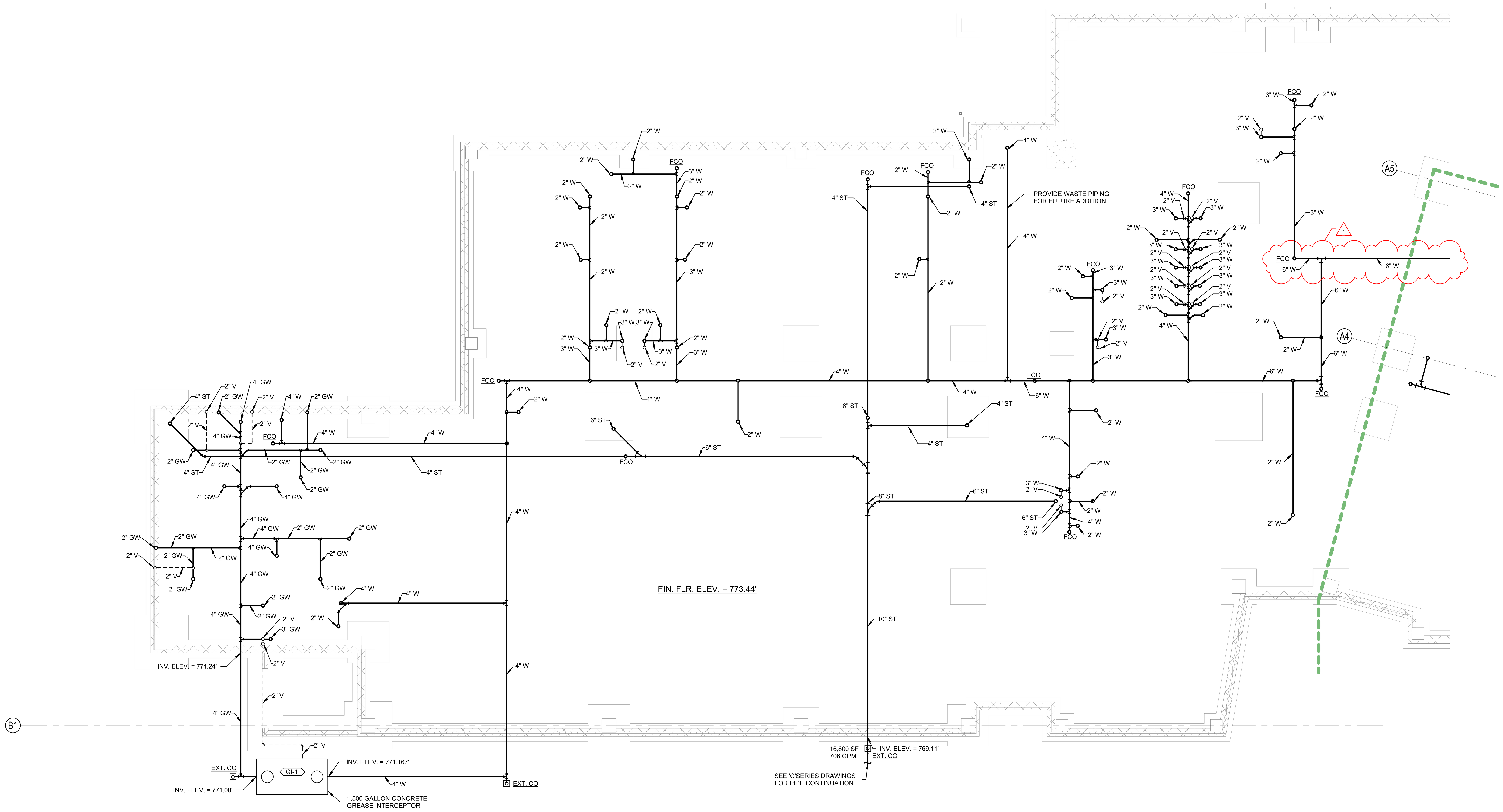
PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: CCW / IOP

FOUNDATION PLUMBING PLAN - UNIT A

PF1A

LANCER ASSOCIATES ARCHITECTURE
427 S. COLLEGE AVE. SUITE 130
INDIANAPOLIS, IN 462023

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
W REEVES RD,
ELLETTSVILLE, IN 47404



1 FOUNDATION PLUMBING PLAN - UNIT B
1/8" = 1'-0"

TRUE NORTH

GABRIEL S. CURRIER
REGISTERED No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	02/28/2024	Addendum #2

100% CONSTRUCTION DOCUMENTS

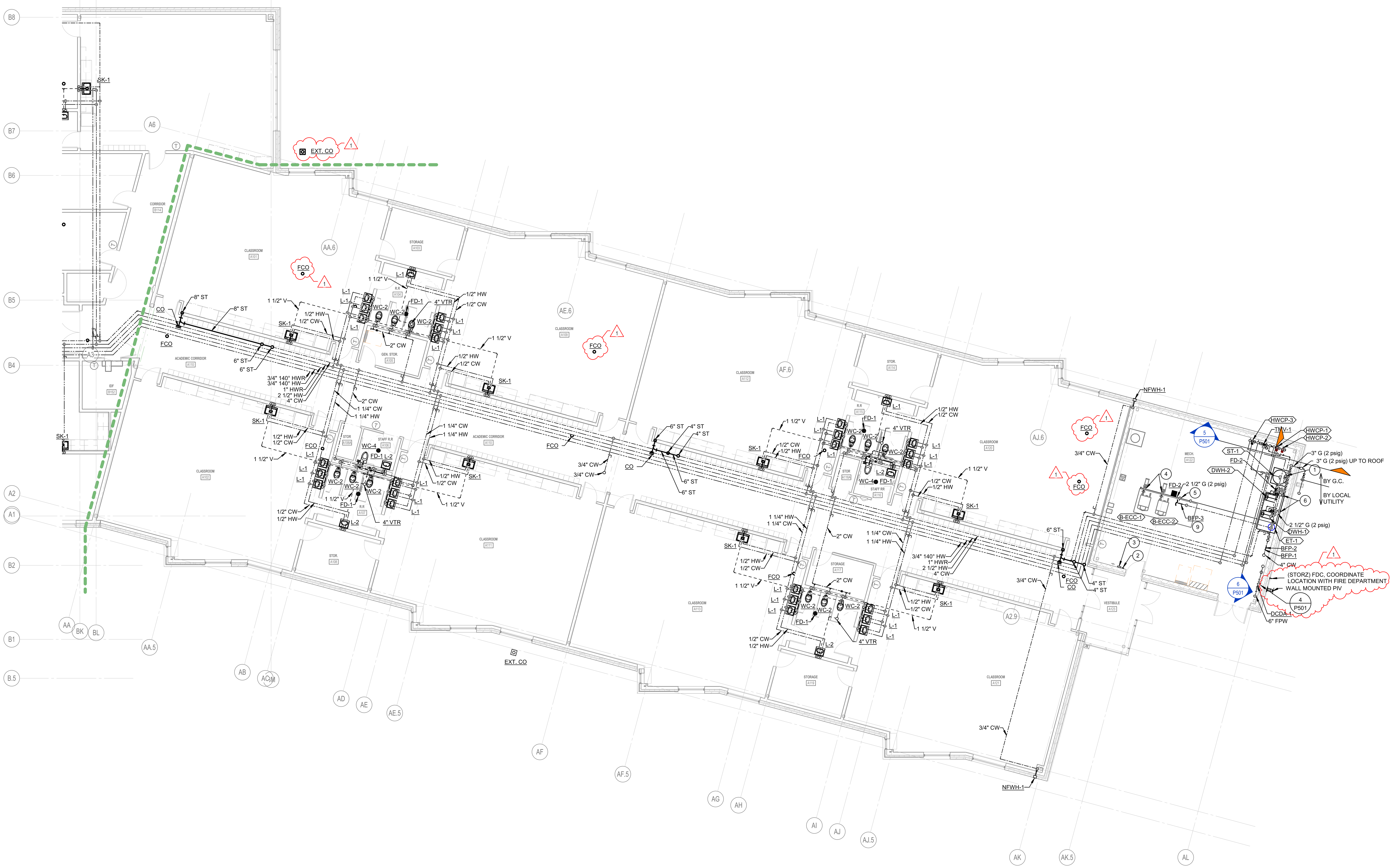
PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: CCW / IOP

FOUNDATION PLUMBING PLAN - UNIT B

PF1B

PLUMBING PLAN NOTES

1. EMERGENCY GAS SHUT-OFF SOLENOID VALVE-3". (AGS; MERLIN 1080)
2. EMERGENCY GAS SHUT-OFF PANIC BUTTON. (AGS-EGOTW)
3. EMERGENCY GAS SHUT-OFF MASTER CONTROL PANEL. (AGS; AGSCH4CO)
4. 1 1/2" G PIPE. GAS REGULATOR - 2 PSIG TO 10" W.C. @ 500 CFH CAPICITY. SEE DETAIL 2/P501 FOR MORE INFORMATION.
5. 1 1/2" G, VALVED AND CAPPED FOR FUTURE CONNECTION.
6. 1 1/4" G PIPE. GAS REGULATOR - 2 PSIG TO 10" W.C. @ 201 CFH CAPICITY. SEE DETAIL 2/P501 FOR MORE INFORMATION.
7. CONTROL VALVE BY KEC, INSTALLED BY MECHANICAL CONTRACTOR. GAS REGULATOR - 2 PSIG TO 10" W.C. @ 215 CFH CAPACITY. SEE DETAIL 2/P501 FOR MORE INFORMATION.
8. DOMESTIC WATER VALVED AND CAPPED FOR FUTURE CONNECTION.
9. SEE 'M' SERIES DRAWINGS FOR MORE INFORMATION.
10. PROVIDE CONCEALED TYPE SPRINKLER HEAD.



1 FIRST FLOOR PLUMBING PLAN - UNIT A
1/8" = 1'-0"

N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
427 S. COLLEGE AVE. SUITE 130
INDIANAPOLIS, IN 462023

creative engineering solutions

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
W REEVES RD,
ELLETTSVILLE, IN 47404

GABRIEL S. CURRIER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS: #	Date	Desc.
1	02/28/2024	Addendum #2

100% CONSTRUCTION DOCUMENTS

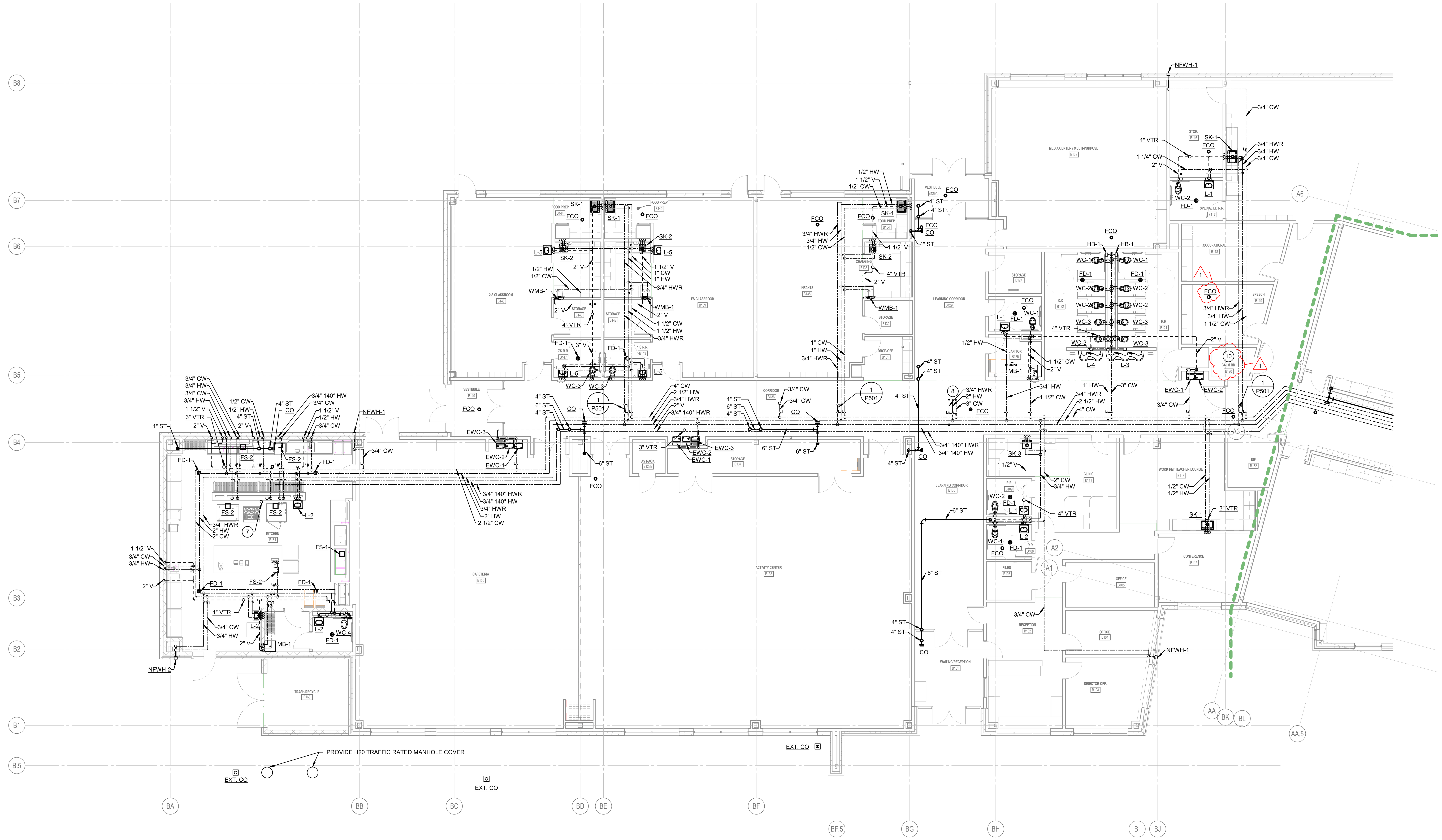
PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: CCW / IOP

FIRST FLOOR PLUMBING PLAN - UNIT A

PP1A

PLUMBING PLAN NOTES

1 EMERGENCY GAS SHUT-OFF SOLENOID VALVE-3". (AGS; MERLIN 1080)
2 EMERGENCY GAS SHUT-OFF PANIC BUTTON. (AGS-EGOTW)
3 EMERGENCY GAS SHUT-OFF MASTER CONTROL PANEL. (AGS; AGSCH4CO)
4 1 1/2" G PIPE. GAS REGULATOR - 2 PSIG TO 10" W.C. @ 500 CFH CAPICITY. SEE DETAIL 2/P501 FOR MORE INFORMATION.
5 1 1/2" G, VALVED AND CAPPED FOR FUTURE CONNECTION.
6 1 1/4" G PIPE. GAS REGULATOR - 2 PSIG TO 10" W.C. @ 201 CFH CAPICITY. SEE DETAIL 2/P501 FOR MORE INFORMATION.
7 CONTROL VALVE BY KEC, INSTALLED BY MECHANICAL CONTRACTOR. GAS REGULATOR - 2 PSIG TO 10" W.C. @ 215 CFH CAPACITY. SEE DETAIL 2/P501 FOR MORE INFORMATION.
8 DOMESTIC WATER VALVED AND CAPPED FOR FUTURE CONNECTION.
9 SEE 'M' SERIES DRAWINGS FOR MORE INFORMATION.
10 PROVIDE CONCEALED TYPE SPRINKLER HEAD.



1 FIRST FLOOR PLUMBING PLAN - UNIT B
1/8" = 1'-0"

N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
427 S. COLLEGE AVE. SUITE 130
INDIANAPOLIS, IN 462023

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
W REEVES RD,
ELLETTSVILLE, IN 47404

GABRIEL S. CURRIER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	02/28/2024	Addendum #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: CCW / IOP

FIRST FLOOR PLUMBING PLAN - UNIT B

PP1B

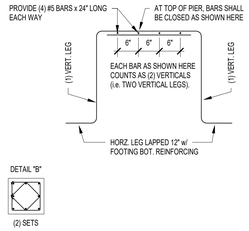
FOUNDATION - KEYED NOTES

1. PROVIDE PIER VERTICAL REINF. PER CONFIGURATION SHOWN IN NOTE 5 OF PIER SCHEDULE. ANCHOR RODS IN PIERS TO HAVE #4 TIES @ 4" o.c. AROUND ANCHOR RODS. THESE TIES ARE IN ADDITION TO THE PIER TIES.

CONCRETE PIER SCHEDULE

PIER MARK	LENGTH	WIDTH	VERTICALS	TIES - SIZE & SPA.	DETAIL
P24A	24"	24"	(8)#6	#4 @ 12" o.c.	B
P28A	28"	28"	(8)#7	#4 @ 12" o.c.	B

1. PROVIDE MIN. 1 ½" CLEAR TO PIER TIES.
2. REF. "TYPICAL CONCRETE PIER REINFORCING" ON FOUNDATION DETAIL SHEET FOR FURTHER INFORMATION ON TIE SPACING.
3. VERTICAL DOWELS ARE TO FUNCTION AS PIER VERTICALS FOR PIERS LESS THAN OR EQUAL TO 5' - 0" HIGH. PROVIDE SEPARATE DOWELS & VERTICALS FOR PIERS GREATER THAN OR EQUAL TO 5' - 0" HIGH, UNLESS APPROVED.
4. CONTACT THE STRUCTURAL ENGINEER FOR DIRECTION IF COLUMN ANCHOR RODS FOUL WITH PIER TIES OR VERTICALS.
5. PIER VERTICAL REINFORCING CONFIGURATION PER KEYED PLAN NOTE 1.



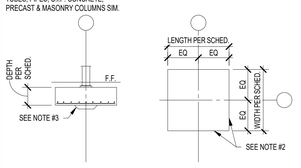
COLUMN FOOTING SCHEDULE

FOOTING MARK	LENGTH	WIDTH	THICK	REINFORCING EACH WAY
F4.0	4' - 0"	4' - 0"	1' - 2"	(4) #5 x 3'-6"
F5.0	5' - 0"	5' - 0"	1' - 2"	(5) #5 x 4'-6"
F6.0	6' - 0"	6' - 0"	1' - 2"	(7) #5 x 5'-6" TOP & BOTTOM
F7.0	7' - 0"	7' - 0"	1' - 4"	(6) #6 x 6'-6" TOP & BOTTOM
F8.0	8' - 0"	8' - 0"	1' - 6"	(8) #6 x 7'-6" TOP & BOTTOM
F9.0	9' - 0"	9' - 0"	1' - 8"	(8) #7 x 8'-6" TOP & BOTTOM
F10.0	10' - 0"	10' - 0"	1' - 10"	(9) #7 x 9'-6" TOP & BOTTOM

NOTES:

1. CENTER FOOTINGS BENEATH COLUMNS, U.N.O.
2. ALL FOOTINGS MUST BE BOARD-FORMED, UNLESS APPROVED.
3. INCREASE FOOTING DEPTH WHERE REQ'D TO ENCASE COLUMN ANCHOR RODS

NOTE: WF STEEL COLUMN SHOWN, TUBES, PIPES, C.I.P. CONCRETE, PRECAST & MASONRY COLUMNS SIM.



WALL FOOTING SCHEDULE

FOOTING MARK	WIDTH	THICK	LONGITUDINAL REINF.	TRANSVERSE REINF.
WF36	36"	14"	CONTINUOUS (4) #5	#4 x 2'-6" @ 32" o.c.
WF72	72"	18"	CONTINUOUS (7) #5 TOP AND BOTTOM	#6 x 5'-6" @ 12" o.c. TOP AND BOTTOM

NOTES:

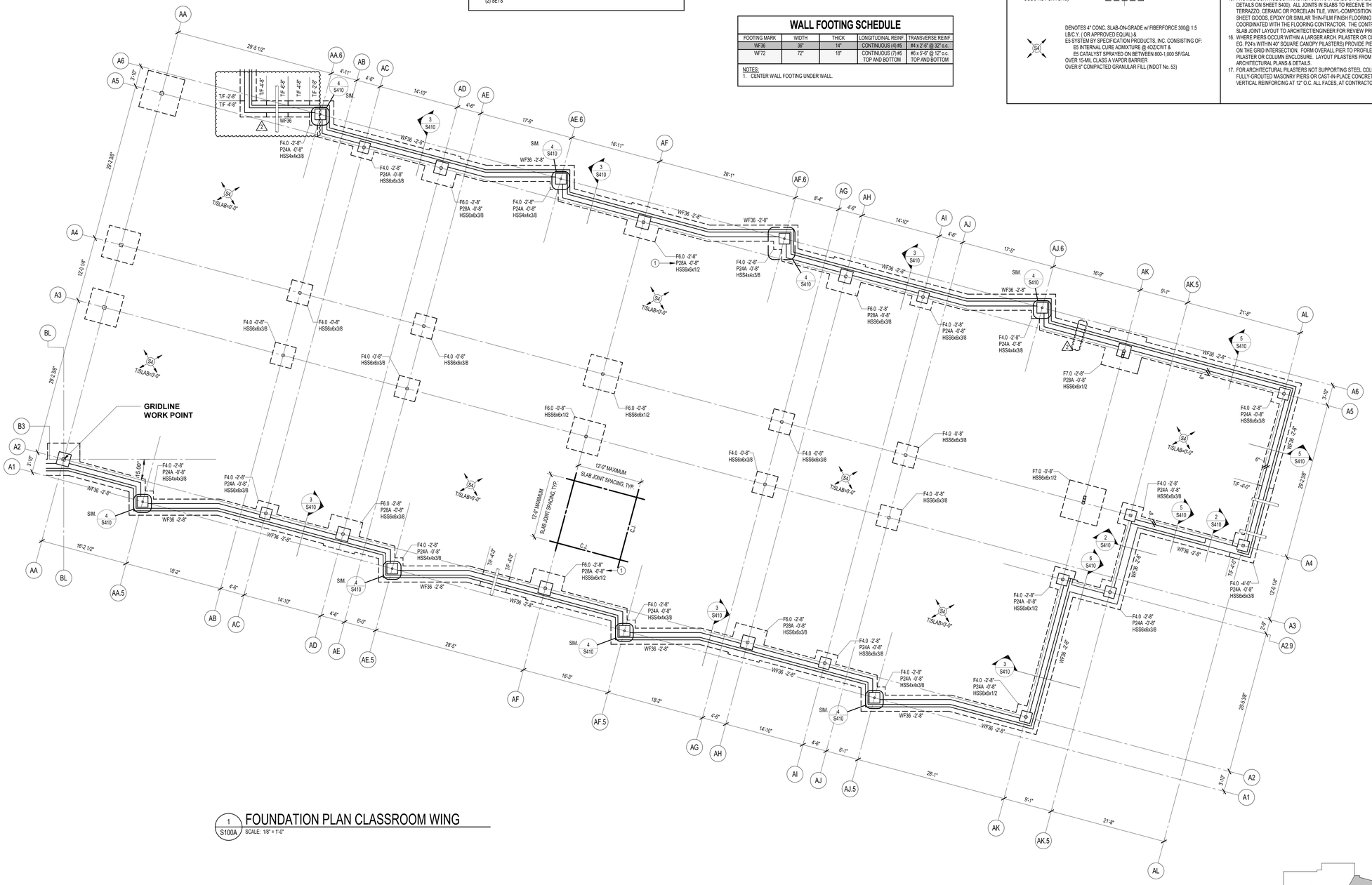
1. CENTER WALL FOOTING UNDER WALL.

FOUNDATION PLAN NOTES

PLAN LEGEND:

- F.F. — DENOTES FINISH FLOOR
- T/'X' — DENOTES TOP OF FTG., GRADE BEAM, SLAB, PIER, ETC.
- B/'X' — DENOTES BOTTOM OF FTG., GRADE BEAM, ETC.
- C.J. — DENOTES SLAB ON GRADE CONTROL/CONTRACTION JOINT
- WF30 -20'-0" — DENOTES WALL FOOTING MARK & TOP OF FOOTING ELEVATION (SEE WALL FOOTING SCHEDULE)
- DENOTES UNDERGROUND UTILITY TO PASS OVER FOOTING. COORDINATE WITH APPROPRIATE TRADE. NOT ALL UTILITIES MAY BE SHOWN.
- DENOTES WALL FOOTING WITH STEPS, REF. TYP. DETAIL ON S400
- DENOTES COLUMN FOOTING MARK & TOP OF FTG. ELEVATION (SEE FTG. SCHED.)
- DENOTES COLUMN SIZE (REF. FRAMING PLANS FOR STUB COL'S NOT ON FDNS)
- F5.0 -4'-8" / P24 -0'-8" / HSS6x6x3/8 — DENOTES PIER MARK & TOP OF PIER ELEVATION (SEE PIER SCHED.)
- COLUMN FOOTING
- CONCRETE PIER
- STEEL COLUMN
- S1 — DENOTES 4" CONC. SLAB-ON-GRADE w/ FIBERFORCE 300@ 1.5 LB/C.Y. (OR APPROVED EQUAL) & ES SYSTEM BY SPECIFICATION PRODUCTS, INC. CONSISTING OF: ES INTERNAL CURE ADMIXTURE @ 4OZ/CWT & ES CATALYST SPRAYED ON BETWEEN 800-1,000 SF/GAL OVER 15-MIL CLASS A VAPOR BARRIER OVER 6" COMPACTED GRANULAR FILL (INDOT No. 53)

1. REF. S001 FOR STRUCTURAL NOTES, DESIGN DATA & SCHEDULES.
2. ALL CONTRACTORS ARE REQUIRED TO COORDINATE THEIR WORK WITH ALL DISCIPLINES TO AVOID CONFLICTS. THE MECHANICAL, ELECTRICAL, AND PLUMBING ASPECTS ARE NOT IN THE SCOPE OF THESE DRAWINGS. THEREFORE, ALL REQUIRED MATERIALS AND WORK MAY NOT BE INDICATED.
3. COORDINATE EXACT SIZE & LOCATION OF ALL MECHANICAL OPENINGS IN FOUNDATION WALLS WITH THE MECHANICAL, ELECTRICAL & PLUMBING CONTRACTORS.
4. ALL ELEVATIONS ARE REFERENCED FROM THE FIRST FLOOR FINISH FLOOR ELEVATION 0'-0". REF. CIVIL DWGS FOR USGS ELEVATION.
5. REF. ARCH. DRAWINGS FOR ALL DIMENSIONS NOT SHOWN. CONTRACTOR SHALL VERIFY ALL DIMENSIONS PRIOR TO CONSTRUCTION AND IMMEDIATELY NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES.
6. REF. S400 & S410 FOR TYPICAL FOUNDATION DETAILS AND SECTIONS.
7. WALL AND COLUMN FOOTINGS SHALL BE LOWERED TO PASS BELOW UTILITY LINES (I.E. SANITARY & STORM SEWERS, WATER LINES, ELECTRICAL CONDUIT, ETC.) SHOWN ON THE MEPT DRAWINGS. PROVIDE FOOTING STEPS AS REQUIRED PER THE TYPICAL DETAILS ON S400. NOT ALL STEPS ON PLAN MAY BE SHOWN AND IT IS THE CONTRACTOR'S RESPONSIBILITY TO COORDINATE THESE STEPS.
8. ALL SLAB RECESSES SHALL BE LOCATED PER THE ARCHITECTURAL DRAWINGS. COORDINATE DEPTHS OF ALL SLAB RECESSES WITH THE ARCHITECTURAL DRAWINGS AND/OR THE FLOORING SUPPLIER.
9. COORDINATE REINFORCING DOWELS FOR CMU VERTICAL REINFORCING WITH REINF. NOTED ON PLANS & SECTIONS.
10. GROUT ALL CORES OF CMU BELOW FINISH FLOOR SOLID.
11. COLUMN FOOTINGS, TRENCH FOOTINGS AND WALL FOOTINGS SHALL BEAR ON APPROVED SOIL. UNDERCUT AS REQ'D TO SUITABLE BEARING MATERIAL AS DETERMINED BY THE GEOTECHNICAL TESTING AGENCY. REF. TYPICAL FOOTING UNDERCUT DETAIL 2/S400.
12. COLUMN FOOTINGS SUPPORTING MORE THAN ONE COLUMN SHALL BE CENTERED AT THE MIDPOINT BETWEEN THE COLUMNS, UNLESS NOTED OTHERWISE ON PLAN.
13. ALL EX. CONSTRUCTION SHOWN IN PLAN AND/OR SECTION WAS DERIVED FROM EXISTING DRAWINGS AND MUST BE FIELD VERIFIED. IF ANY DISCREPANCIES ARE DISCOVERED BETWEEN INFO. SHOWN ON THE DRAWINGS AND ACTUAL CONDITIONS IMMEDIATELY CONTACT ARCHITECT/ENGINEER FOR DIRECTION BEFORE PROCEEDING WITH THE WORK.
14. PROVIDE THICKENED SLAB UNDER ALL INTERIOR CMU WALLS WITHOUT FOOTINGS. SEE 5/S400 FOR THICKENED SLAB DETAIL. LAYOUT THICKENED SLABS FROM DIMENSIONS ON THE ARCHITECT FLOOR PLANS.
15. PROVIDE CONTROL/CONTRACTION JOINTS IN SLABS ON GRADE (REF. THE TYPICAL DETAILS ON SHEET S400). ALL JOINTS IN SLABS TO RECEIVE THIN OR THICK-SET TERRAZZO, CERAMIC OR PORCELAIN TILE, VINYL-COMPOSITION TILE (VCT) OR VINYL SHEET GOODS, EPOXY OR SIMILAR THIN-FILM FINISH FLOORING SHALL BE CAREFULLY COORDINATED WITH THE FLOORING CONTRACTOR. THE CONTRACTOR SHALL SUBMIT SLAB JOINT LAYOUT TO ARCHITECT/ENGINEER FOR REVIEW PRIOR TO PLACING SLABS.
16. WHERE PIERS OCCUR WITHIN A LARGER ARCH. PILASTER OR COLUMN ENCLOSURE (FOR EG. P24's WITHIN 40" SQUARE CANOPY PILASTERS) PROVIDE PIER REINF. CAGE CENTERED ON THE GRID INTERSECTION. FORM OVERALL PIER TO PROFILE OF THE ARCHITECTURAL PILASTER OR COLUMN ENCLOSURE. LAYOUT PILASTERS FROM DIMENSIONS ON THE ARCHITECTURAL PLANS & DETAILS.
17. FOR ARCHITECTURAL PILASTERS NOT SUPPORTING STEEL COLUMNS, CONSTRUCT AS FULLY-GROUTED MASONRY PIERS OR CAST-IN-PLACE CONCRETE PIERS REINF'D W/ #5 VERTICAL REINFORCING AT 12" O.C. ALL FACES, AT CONTRACTOR'S OPTION.



1 S100A FOUNDATION PLAN CLASSROOM WING
SCALE: 1/8" = 1'-0"

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204
Lynch, Harrison & Brumleve, Inc.

RICHLAND-BEAN BLOSSOM CSC
EARLY CHILDHOOD CENTER
W REEVES RD,
ELLETTSVILLE, IN 47404

SCOTT A. CLORE — REGISTERED — PE10606154 — STATE OF INDIANA — PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1.	2/15/2024	Addendum 1
2.	2/26/2024	Addendum 2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JAN 31, 2024
DRAWN BY: JDO

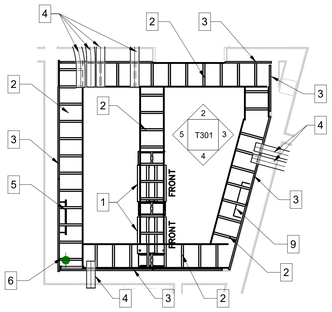
FOUNDATION PLAN - UNIT A

S100A

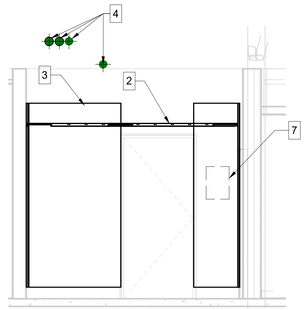
PLOT DATE/TIME:2/27/2024 11:28:37 AM

SHEET NOTES

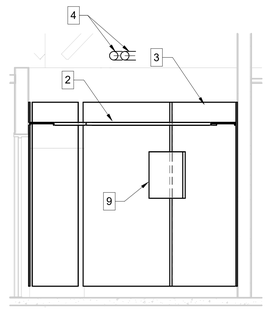
1. 2-POST TELECOM RACK
2. 12" TR LADDER TRAY
3. TR PLYWOOD MOUNTED VERTICALLY FROM 0-6" A.F.F TO 8'-6" A.F.F.
4. HORIZONTAL CONDUIT
5. TELECOM MAIN GROUND BUSBAR
6. UNDERGROUND ENTERANCE CONDUIT
7. WALL SPACE ALLOCATED FOR NETWORK CLOCK REPEATER
8. VERTICAL 12" TR LADDER TRAY
9. O.F.O.I. ACCESS CONTROL ENCLOSURE



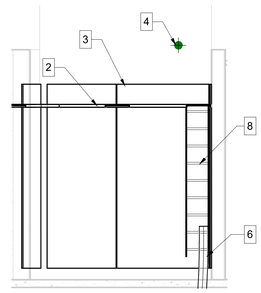
1 MDF B152 (00) - ENLARGED LAYOUT
3/8" = 1'-0"



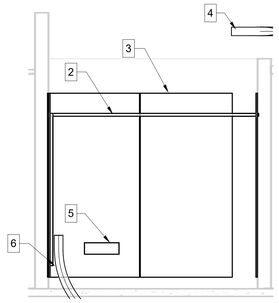
2 MDF B152 (00) - NORTH ELEVATION
3/8" = 1'-0"



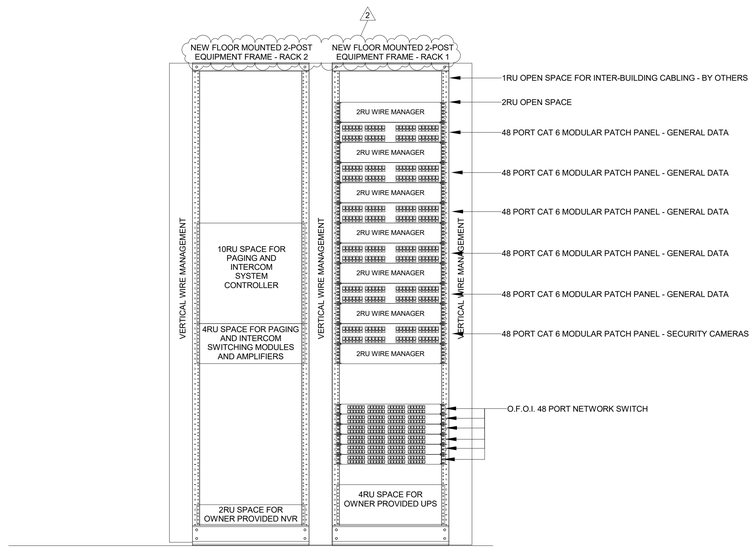
3 MDF B152 (00) - EAST ELEVATION
3/8" = 1'-0"



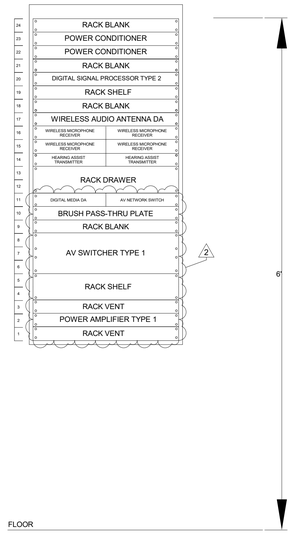
4 MDF B152 (00) - SOUTH ELEVATION
3/8" = 1'-0"



5 MDF B152 (00) - WEST ELEVATION
3/8" = 1'-0"



6 MDF B152 (00) RACK ELEVATION
N.T.S.



7 ACTIVITY CENTER & CAFETERIA AV RACK ELEVATION
N.T.S.

LANCER ASSOCIATES ARCHITECTURE
427 S. COLLEGE AVE. SUITE 130
INDIANAPOLIS, IN 46203

DESIGN 27 TECHNOLOGY + ACOUSTICS
1650 E. 49TH STREET
INDIANAPOLIS, IN 46205
317.536.8000
WWW.DESIGN27.COM

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
7620 EDGEWOOD AVE,
INDIANAPOLIS, IN 46239

BICSI DESIGNED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI Matthew Connolly
BICSI ID # 212593
EXPIRES 12-31-24
RCDD

REVISIONS:

#	Date	Desc.
1	02/15/24	Addendum 1
2	02/29/24	Addendum 2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: JEG

TR ENLARGED LAYOUTS / RACK ELEVATIONS

T301

PLOT DATE/TIME: 2/29/2024 9:15:02 PM

MDF B152 TECHNOLOGY SCHEDULE

ROOM NUMBER	TELECOM ROOM	LABEL	DATA PORTS	COMMENTS
A101	B152	00-1-A-01	1	WIRELESS ACCESS POINT - CEILING MOUNTED
A101	B152	00-1-A-02/03	2	DATA VOICE LOCATION
A101	B152	00-1-A-04/05	2	DATA VOICE LOCATION
A101	B152	00-1-A-06/07	2	DATA VOICE LOCATION
A102	B152	00-1-A-08	1	WIRELESS ACCESS POINT - CEILING MOUNTED
A102	B152	00-1-A-09/10	2	DATA VOICE LOCATION
A102	B152	00-1-A-11/12	2	DATA VOICE LOCATION
A102	B152	00-1-A-13/14	2	DATA VOICE LOCATION
A109	B152	00-1-A-15	1	WIRELESS ACCESS POINT - CEILING MOUNTED
A109	B152	00-1-A-16/17	2	DATA VOICE LOCATION
A109	B152	00-1-A-18/19	2	DATA VOICE LOCATION
A109	B152	00-1-A-20/21	2	DATA VOICE LOCATION
A111	B152	00-1-A-22	1	WIRELESS ACCESS POINT - CEILING MOUNTED
A111	B152	00-1-A-23/24	2	DATA VOICE LOCATION
A111	B152	00-1-A-25/26	2	DATA VOICE LOCATION
A111	B152	00-1-A-27/28	2	DATA VOICE LOCATION
A112	B152	00-1-A-29	1	WIRELESS ACCESS POINT - CEILING MOUNTED
A112	B152	00-1-A-30/31	2	DATA VOICE LOCATION
A112	B152	00-1-A-32/33	2	DATA VOICE LOCATION
A112	B152	00-1-A-34/35	2	DATA VOICE LOCATION
A113	B152	00-1-A-36	1	WIRELESS ACCESS POINT - CEILING MOUNTED
A113	B152	00-1-A-37/38	2	DATA VOICE LOCATION
A113	B152	00-1-A-39/40	2	DATA VOICE LOCATION
A113	B152	00-1-A-41/42	2	DATA VOICE LOCATION
A120	B152	00-1-A-43	1	WIRELESS ACCESS POINT - CEILING MOUNTED
A120	B152	00-1-A-44/45	2	DATA VOICE LOCATION
A120	B152	00-1-A-46/47	2	DATA VOICE LOCATION
A120	B152	00-1-A-48; 00-1-B-01	2	DATA VOICE LOCATION
A121	B152	00-1-B-02	1	WIRELESS ACCESS POINT - CEILING MOUNTED
A121	B152	00-1-B-03/04	2	DATA VOICE LOCATION
A121	B152	00-1-B-05/06	2	DATA VOICE LOCATION
A121	B152	00-1-B-07/08	2	DATA VOICE LOCATION
A122	B152	00-1-B-09/10	2	DATA VOICE LOCATION
B101	B152	00-1-B-11/12	2	DATA VOICE LOCATION
B102	B152	00-1-B-13/14	2	DIGITAL SIGNAGE LOCATION
B102	B152	00-1-B-15/16/17/18	4	DATA VOICE LOCATION
B102	B152	00-1-B-19/20/21/22	4	DATA VOICE LOCATION
B102	B152	00-1-B-23	1	WIRELESS ACCESS POINT - CEILING MOUNTED
B103	B152	00-1-B-24/25	2	DATA VOICE LOCATION
B103	B152	00-1-B-26/27	2	DATA VOICE LOCATION
B103	B152	00-1-B-28/29	2	DATA VOICE LOCATION
B103	B152	00-1-B-30/31	2	DATA VOICE LOCATION
B104	B152	00-1-B-32/33	2	DATA VOICE LOCATION
B104	B152	00-1-B-34/35	2	DATA VOICE LOCATION
B104	B152	00-1-B-36/37	2	DATA VOICE LOCATION
B105	B152	00-1-B-38/39	2	DATA VOICE LOCATION
B105	B152	00-1-B-40/41	2	DATA VOICE LOCATION
B105	B152	00-1-B-42/43	2	DATA VOICE LOCATION
B111	B152	00-1-B-44	1	WIRELESS ACCESS POINT - CEILING MOUNTED
B111	B152	00-1-B-45/46/47/48	4	DATA VOICE LOCATION
B112	B152	00-1-C-01/02	2	AV INPUT LOCATION TYPE 1
B112	B152	00-1-C-03/04	2	MONITOR LOCATION
B112	B152	00-1-C-05/06	2	DATA VOICE LOCATION
B112	B152	00-1-C-07/08	2	DATA VOICE LOCATION
B112	B152	00-1-C-09/10	2	DATA VOICE LOCATION
B113	B152	00-1-C-11/12	2	MONITOR LOCATION
B113	B152	00-1-C-13	1	WIRELESS ACCESS POINT - CEILING MOUNTED
B113	B152	00-1-C-14/15	2	DATA VOICE LOCATION
B113	B152	00-1-C-16/17	2	DATA VOICE LOCATION
B115	B152	00-1-C-18	1	WIRELESS ACCESS POINT - CEILING MOUNTED
B115	B152	00-1-C-19/20	2	DATA VOICE LOCATION
B115	B152	00-1-C-21/22	2	DATA VOICE LOCATION
B115	B152	00-1-C-23/24	2	DATA VOICE LOCATION
B118	B152	00-1-C-25	1	WIRELESS ACCESS POINT - CEILING MOUNTED
B118	B152	00-1-C-26/27	2	DATA VOICE LOCATION
B118	B152	00-1-C-28/29	2	DATA VOICE LOCATION
B118	B152	00-1-C-30/31	2	DATA VOICE LOCATION
B119	B152	00-1-C-32	1	WIRELESS ACCESS POINT - CEILING MOUNTED
B119	B152	00-1-C-33/34	2	DATA VOICE LOCATION
B119	B152	00-1-C-35/36	2	DATA VOICE LOCATION
B119	B152	00-1-C-37/38	2	DATA VOICE LOCATION
B128	B152	00-1-C-39	1	WIRELESS ACCESS POINT - CEILING MOUNTED
B128	B152	00-1-C-40/41	2	DATA VOICE LOCATION
B128	B152	00-1-C-42/43	2	DATA VOICE LOCATION
B128	B152	00-1-C-44/45	2	DATA VOICE LOCATION
B129B	B152	00-1-C-46/47	2	DATA VOICE LOCATION
B133	B152	00-1-C-48; 00-1-D-01	2	DATA VOICE LOCATION
B135	B152	00-1-D-02/03	2	WIRELESS ACCESS POINT - CEILING MOUNTED
B135	B152	00-1-D-04/05	2	DATA VOICE LOCATION
B135	B152	00-1-D-06/07	2	DATA VOICE LOCATION
B138	B152	00-1-D-08/09	2	DATA VOICE LOCATION
B138	B152	00-1-D-10	1	WIRELESS ACCESS POINT - CEILING MOUNTED
B138	B152	00-1-D-11/12	2	DATA VOICE LOCATION
B138	B152	00-1-D-13/14	2	AV INPUT LOCATION TYPE 2
B138	B152	00-1-D-15/16	2	PROJECTOR LOCATION
B139	B152	00-1-D-17/18	2	WIRELESS ACCESS POINT - CEILING MOUNTED
B139	B152	00-1-D-19/20	2	DATA VOICE LOCATION
B139	B152	00-1-D-21/22	2	DATA VOICE LOCATION
B139	B152	00-1-D-23/24	2	MONITOR LOCATION
B141	B152	00-1-D-25/26	2	DATA VOICE LOCATION
B145	B152	00-1-D-27/28	2	DATA VOICE LOCATION
B148	B152	00-1-D-29/30	2	WIRELESS ACCESS POINT - CEILING MOUNTED
B148	B152	00-1-D-31/32	2	MONITOR LOCATION
B150	B152	00-1-D-33/34	2	MONITOR LOCATION
B150	B152	00-1-D-35/36	2	MONITOR LOCATION
B150	B152	00-1-D-37	1	WIRELESS ACCESS POINT - CEILING MOUNTED
B151	B152	00-1-D-38	1	WIRELESS ACCESS POINT - CEILING MOUNTED
B150	B152	00-1-D-39/40	2	AV INPUT LOCATION TYPE 2
B150	B152	00-1-D-41/42	2	MOBILE CART CONNCETION LOCATION
B150	B152	00-1-D-43/44	2	MOBILE CART CONNCETION LOCATION
B151	B152	00-1-D-45/46	2	DATA VOICE LOCATION
B151	B152	00-1-D-47/48	2	DATA VOICE LOCATION
B151	B152	00-1-E-01	1	WALL PHONE LOCATION
B152	B152	00-1-E-02/03	2	DATA VOICE LOCATION
B152	B152	00-1-E-04/05	2	DATA VOICE LOCATION
A122	B152	00-1-E-06/07	2	DATA VOICE LOCATION
Grand total			199	

MDF B152 VIDEO SECURITY SCHEDULE

ROOM NUMBER	TELECOM ROOM	LABEL	DATA PORTS	COMMENTS
A110	B152	00-1-E-08	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
A110	B152	00-1-E-09	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
A110	B152	00-1-E-10	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
A123	B152	00-1-E-11	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B101	B152	00-1-E-12	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B102	B152	00-1-E-13	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B106	B152	00-1-E-14	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B114	B152	00-1-E-15	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B129A	B152	00-1-E-16	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B135	B152	00-1-E-17	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B136	B152	00-1-E-18	1	SECURITY CAMERA WALL MOUNTED ROUGH-IN
B136	B152	00-1-E-19	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B136	B152	00-1-E-20	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B138	B152	00-1-E-21	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B139	B152	00-1-E-22	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B148	B152	00-1-E-23	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B150	B152	00-1-E-24	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B150	B152	00-1-E-25	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
B150	B152	00-1-E-26	1	SECURITY CAMERA CEILING MOUNTED ROUGH-IN
EXT	B152	00-1-E-27	1	SECURITY CAMERA WALL MOUNTED ROUGH-IN
EXT	B152	00-1-E-28	1	SECURITY CAMERA WALL MOUNTED ROUGH-IN
EXT	B152	00-1-E-29	1	SECURITY CAMERA WALL MOUNTED ROUGH-IN
EXT	B152	00-1-E-30	1	SECURITY CAMERA WALL MOUNTED ROUGH-IN
EXT	B152	00-1-E-31	1	SECURITY CAMERA WALL MOUNTED ROUGH-IN
EXT	B152	00-1-E-32	1	SECURITY CAMERA WALL MOUNTED ROUGH-IN
EXT	B152	00-1-E-33	1	SECURITY CAMERA WALL MOUNTED ROUGH-IN
EXT	B152	00-1-E-34	1	SECURITY CAMERA WALL MOUNTED ROUGH-IN
EXT	B152	00-1-E-35	1	VIDEO INTERCOM DOOR STATION ROUGH-IN
Grand total			28	

MDF B152 ACCESS CONTROL SCHEDULE

DOOR NUMBER	PANEL LOCATION	LABEL	DOOR TYPE / DESCRIPTION
A110	B152	A110-CR	EAC DOOR TYPE D2RI
A122A	B152	A122A-CR	EAC DOOR TYPE D2RI
A123	B152	A123-CR	EAC DOOR TYPE D2RI
B101	B152	B101-CR	EAC DOOR TYPE D3RI
B102A	B152	B102A-CR	EAC DOOR TYPE D3RI
B102B	B152	B102B-CR	EAC DOOR TYPE S1RI
B106	B152	B106-CR	EAC DOOR TYPE S3RI
B111	B152	B111-CR	EAC DOOR TYPE S1RI
B113.2	B152	B113-CR	EAC DOOR TYPE S1RI
B129	B152	B129-CR	EAC DOOR TYPE D2RI
B129A	B152	B129A-CR	EAC DOOR TYPE D2RI
B130	B152	B130-CR	EAC DOOR TYPE S1RI
B135B	B152	B135B-CR	EAC DOOR TYPE S1RI
B136	B152	B136-CR	EAC DOOR TYPE D2RI
B139B	B152	B139B-CR	EAC DOOR TYPE S1RI
B148B	B152	B148B-CR	EAC DOOR TYPE S1RI
B149	B152	B149-CR	EAC DOOR TYPE D2RI
B149.1	B152	B149.1-CR	EAC DOOR TYPE D2RI
B150B	B152	B150B-CR	EAC DOOR TYPE D2RI
B151	B152	B151-CR	EAC DOOR TYPE D2RI
B152	B152	B152-CR	EAC DOOR TYPE S1RI
Grand total: 21			

2

PULL BACK ALL EXISTING TELECOM CABLING ABOVE CEILING AND RE-LOCATE ALL EXISTING DATA VOICE LOCATIONS SERVING THE CIRCULATION DESKS IN PRIMARY SCHOOL LIBRARY D244 AND INTERMEDIATE SCHOOL LIBRARY 200. REFER TO THE A-SERIES AND E-SERIES PRIMARY SCHOOL AND INTERMEDIATE SCHOOL DRAWINGS FOR MORE INFORMATION. CONTRACTOR SHALL DETERMINE IN THE FIELD IF THE EXISTING DATA LOCATIONS NEED TO BE RE-CABLED BACK TO ITS POINT OF TERMINATION OR IF THE EXISTING TELECOM CABLING CAN BE RE-USED. RE-LOCATE, TERMINATE, AND LABEL THE EXISTING OR NEW TELECOM CABLING WITHIN THE NEW CIRCULATION DESKS. COORDINATE WITH THE FURNITURE AND ELECTRICAL CONTRACTORS TO DETERMINE THE FINAL INFORMATION OUTLET LOCATIONS.

LANCER ASSOCIATES ARCHITECTURE
427 S. COLLEGE AVE. SUITE 130
INDIANAPOLIS, IN 46203

DESIGN 27 TECHNOLOGY + ACOUSTICS
1650 E. 49TH STREET
INDIANAPOLIS, IN 46205
317.536.8000
WWW.DESIGN27.COM

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD SC
EARLY CHILDHOOD CENTER
7620 EDGEWOOD AVE,
INDIANAPOLIS, IN 46239

BICSI REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Matthew Connolly
BICSI ID # 212593
EXPIRES 12-31-24
RCDD

REVISIONS:

#	Date	Desc.
1	02/15/24	Addendum 1
2	02/26/24	Addendum 2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: JEG

TECHNOLOGY/ SECURITY SCHEDULES

T500

PLOT DATE/TIME: 2/26/2024 3:15:54 PM

1 FLOOR PLAN - FIRST FLOOR - UNIT B

SCALE: 1/8" = 1'-0"

GENERAL NOTES

▨ OUT OF SCOPE

1. VIF ALL DIMENSIONS FOR WINDOWS AND CASEWORK
2. INTERIOR DIMENSIONS ARE TAKEN TO THE FACE OF MASONRY OR STUDS
3. FOR ALL RESTROOM FACILITIES WIHT GYPSUM WALL FINISH REPLACE 5/8" TYPE "X" GYPSUM BOARD WIHT 5/8" MOISTURE RESISTANT GYPSUM BOARD, SEE SPECS FOR DETAILS
4. WALLS TO GO UP TO DECK UNLESS OTHERWISE NOTED
5. REINSTALL ALL THE VISUAL DISPLAY BOARDS THAT WERE REMOVED DURING DEMOLITION
6. PATCH ANY DAMAGE DONE TO THE BUILDING DURING DEMOLITION AND NEW WORK

○ PLAN NOTES - FLOOR PLAN

1 NEW FLOORING, NEW PAINT, NEW TYPICAL CLASSROOM CASEWORK. SEE SHEET
2 NEW FLOORING, NEW PAINT, NEW CASEWORK ONLY WHERE INDICATED. SEE SHEET
3 RESTROOM RENOVATION: NEW FLOORING. NEW WALL TILES. NEW PARTITIONS. NEW FIXTURES. NEW WALL TILES AT DF. NEW DRINKING FOUNTAINS.
4 RESTROOM RENOVATION: NEW WALL TILES. NEW PARTITIONS. NEW FIXTURES. NEW WALL TILES AT DF. RECONNECT DRINKING FOUNTAINS.
5 NEW CARPET. NEW CIRCULATION DESK CASEWORK.SEE FINISH SCHEDULE
6 NEW FLOORING. NEW PAINT. SEE FINISH SCHEDULE
7 NEW PAINT. SEE FINISH SCHEDULE.
8 NEW ADA COMPLIANT RESTROOM. NEW FLOORING. NEW FIXTURES. NEW R.R ACCESSORIES. NEW CHANGING STATION.
9 NEW DOOR. SEE DOOR SCHEDULE.
10 TYPICAL CLASSROOM, SEE PLAN ON SHEET A111
11 TYPICAL KINDERGARTEN CLASSROOM, SEE TYPICAL KINDERGARTEN PLAN 5/A111
12 ALIGN FACE OF NEW CMU WALL WITH FACE OF EXISTING WALL
13 TOILET PAPER DISPENSER. OWNER SUPPLIED, CONTRACTOR INSTALLED
14 ADA COMPLIANT GRAB-BAR(S)
16 TOILET STALL PARTITIONS
17 18"w X 24"H MIRROR., CONTRACTOR INSTALLED
18 FLOOR-BRACE URINAL SCREEN
19 PAPER TOWEL DISPENSER. OWNER SUPPLIED, CONTRACTOR INSTALLED
21 SANITARY NAPKIN DISPOSAL. CONTRACTOR INSTALLED
22 CLINIC PRIVACY CURTAINS TO BE REPLACED. REFER TO SPECS FOR DETAILS.

N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD PRIMARY SCHOOL RENOVATIONS
7700 W REEVES RD,
ELLETTSVILLE, IN 47404

JERRY L. CRIPPS
No. 880133

REVISIONS:

#	Date	Desc.
2	2-28-2024	Addendum 2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JANUARY 31, 2024
DRAWN BY: Author

FLOOR PLAN - FIRST FLOOR - UNIT B

A101B

PLOT DATE/TIME:2/28/2024 5:07:29 PM

FLOOR FINISH HATCH LEGEND

- CPT-2
- CPT-3
- CPT-4
- LVT-1
- WT-1

GENERAL NOTES

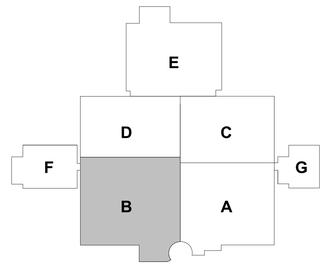
1. CONTRACTOR TO VERIFY EXISITING CONDITIONS AND REPAIR ALL EXISTING WALLS, SLAB, AND CEILINGS TO A CONDITION SUITABLE FOR ACCEPTING NEW FINISHES AS PER MANUFACTURER'S RECOMMENDED INSTALLATION METHODS. MINIMUM LEVEL 4 FINISH ON EXISTING AND NEW WALLS, UNLESS NOTED OTHERWISE.
2. ALL FLOORING TRANSITIONS TO COMPLY WITH ADA GUIDELINES AND TO OCCUR UNDER CENTER OF DOORWAYS AND OR AT CENTERLINE OF WALL, UNLESS INDICATED DIFFERENTLY ON FINISH PLANS. PROVIDE REDUCER STRIPS WHEREVER CARPET AND LVT MEET CONCRETE.
3. CONTRACTOR TO PROVIDE PROTECTION AS NEEDED DURING CONSTRUCTION. IF, ANY, TO PERSERVE NEW FINISHES WHILE COMPLETING CONSTRUCTION.
4. CONTRACTOR WILL BE RESPONSIBLE FOR VERIFICATION OF DIMENSIONS AND JOB CONDITIONS. ANY DEVIATION FROM WHAT IS INDICATED ON THE FINISH PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECTS AND DESIGNERS. ALL DIMENSIONS SHOWN ARE TO FACE OF FINISH MATERIAL, UNLESS NOTED OTHERWISE.
5. WHERE WALLS ARE INDICATED TO RECEIVE PAINT FINISH, PRIME AND PAINT GRILLES, FIRE EXTINGUISHER CABINETS, AND OTHER ITEMS EMBEDDED IN WALL CONSTRUCTION TO MATCH SURFACE ON WHICH THEY OCCUR.
6. CONTRACTOR TO PROVIDE DRYWALL REVEAL JOINT WHERE DRYWALL MEETS DISSIMILAR MATERIALS.
7. CONTRACTOR TO PROVIDE SCHLUTER EDGE WHERE TILE MEETS DISSIMILAR MATERIALS. REFER TO INTERIOR ELEVATIONS FOR FURTHER DETAILS.
8. DO NOT INSTALL GYPSUM BOARD BEHIND TILE BACKER BOARD LOCATIONS.
9. IF ONLY PAINT IS INDICATED AS THE FINISH, REFER TO ARCHITECTURAL FLOOR PLANS FOR SUBSTRATE INFORMATION.
10. ALL MECHANICAL CLOSETS TO HAVE A SEALED CONCRETE FLOOR FINISH. PROVIDE RESILIENT TRANSITION STRIP TO MATCH RB-1.
11. ALL WALLS, CEILINGS, AND COLUMNS TO BE PAINTED PT-1, UNLESS NOTED OTHERWISE.
12. ALL NEW HM DOORS AND HM DOOR FRAMES ARE TO BE PAINTED PT-3, UNLESS NOTED OTHERWISE.
13. WHERE FLOORING PATTERN GRAIN CHANGES AT CORRIDORS AND CLASSROOMS, INSTALLER MUST HAVE DESIGNER PRESENT TO REVIEW PRIOR TO INSTALLATION OF ANY FLOORING.

PLAN NOTES - FINISH PLAN

1. MURALS ARE NOT TO BE PAINTED OVER. NEW WALL PAINT ABOVE MURALS TO BE FEATHERED INTO EXISTING MURAL PAINT. VERIFY EXACT MURAL DIMENSIONS IN FIELD.
2. ACCENT PAINT, PT-2 AT THIS LOCATION.
3. PORCELAIN WALL TILE, WT-1 AT THIS LOCATION. REFER TO INTERIOR ELEVATIONS.
4. CLASSROOM BULKHEADS TO RECEIVE ACCENT PAINT, PT-2.
5. NEW LIBRARY CIRCULATION DESK CASEWORK. REFER TO ENLARGED PLAN AND INTERIOR ELEVATIONS. COORDINATE WITH MEP TO PROVIDE POWER. VERIFY PLACEMENT IN FIELD.
6. ALL RESTROOM WALLS TO RECEIVE WALL TILE, FULL HEIGHT STARTING FROM TOP OF WALL BASE. REFER TO INTERIOR ELEVATIONS FOR WALL TILE DESIGN.
7. CORRIDOR CARPET PLANKS ARE TO BE MITER CUT AT 45 DEGREES AT WALL'S CORNER.
8. PORCELAIN TILE, WT-1 TO TRANSITION TO CARPET AT THIS AREA. REFER TO INTERIOR FINISH DETAILS A730.
9. ALL WALLS OF KINDERGARTEN STORAGE AREAS AND RESTROOMS TO RECEIVE NEW PAINT. REFER TO ROOM FINISH.

1 INTERIOR FINISH PLAN - FIRST FLOOR - UNIT B

SCALE: 1/8" = 1'-0"



N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD PRIMARY SCHOOL RENOVATIONS
7700 W REEVES RD,
ELLETTSVILLE, IN 47404

TERYL L. CRIPE REGISTERED No 8800133 STATE OF INDIANA

REVISIONS:

#	Date	Desc.
1	2-16-2024	Addendum 1
2	2-26-2024	Addendum 2

100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	JANUARY 31, 2024
DRAWN BY:	Author

INTERIOR FINISH PLAN - FIRST FLOOR - UNIT B

A721B

PLOT DATE/TIME:2/26/2024 5:07:21 PM

GENERAL CASEWORK NOTES

1. FABRICATE WOODWORK/ MILLWORK ITEMS TO ACTUAL FIELD DIMENSIONS. CONTRACTOR SHALL SUBMIT FOR DESIGNERS APPROVALS SHOP DRAWING SAMPLES OR MANUFACTURER'S LITERATURE FOR ALL ITEMS. SHOP DRAWINGS SHALL SHOW SUFFICIENT DETAIL TO DETERMINE COMPLIANCE WITH STANDARDS AND DESIGN INTENT.

2. PROVIDE ALL NECESSARY FURRING AND GROUNDS FOR WOODWORK AND FINISH ITEMS. COORDINATE LOCATION OF BLOCKING WITHIN FRAMED WALLS AS NECESSARY FOR ITEMS TO BE SECURED TO SURFACE. ALL FASTENERS SHALL BE CONCEALED.

3. FINISH ALL SIDES AND BACK OF MILLWORK/ CASEWORK.

4. PROVIDE GROMMETS IN COUNTERTOPS ABOVE ALL ELECTRICAL RECPETICALS AND TELEPHONE DATA ROUTINGS.

5. ALL PULLS TO BE 4" SATIN NICKEL SOLID WIRE PULL

6. PROVIDE LOCKS FOR ALL STORAGE CASE CABINETS/ TALL STORAGE CABINETS, ALL DRAWERS AND DOORS, AND ALL UPPER WALL CABINETS.

7. ALL PLASTIC LAMINATE SURFACES ON EXTERIOR OF CABINETS SHALL BE A STANDARD COLOR AS LISTED ON THE FINISH SCHEDULE:
   - PLAM 1 - ALL CABINETS

8. ALL INTERIORS BEHIND DOORS/ DRAWERS AND NOT VISIBLE SHALL BE WHITE. ALL SOLID SURFACE COUNTERTOPS SHALL BE A STANDARD COLOR AS SELECTED BY DESIGNER.

9. SEE ELEC. DWGS FOR ELECTRICAL DEVICES.

ALTERNATES

GENERAL NOTES

1. CONTRACTOR TO PROVIDE SCHLUTER TRIM WHERE TILE MEETS DISSIMILAR MATERIALS. REFER TO INTERIOR ELEVATIONS FOR FURTHER DETAILS.

2. DO NOT INSTALL GYPSUM BOARD BEHIND BACKER BOARD WHERE TILE FINISH IS INDICATED.

3. CONTRACTOR TO PROVIDE DRYWALL REVEAL JOINT WHERE DRYWALL MEETS DISSIMILAR MATERIALS.

4. IF ONLY PAINT IS INDICATED AS THE FINISH, REFER TO ARCHITECTURAL FLOOR PLANS FOR SUBSTRATE INFORMATION.

5. CONTRACTOR SHALL BE RESPONSIBLE FOR VERIFICATION OF DIMENSIONS AND JOB CONDITIONS. ANY DEVIATION FROM WHAT IS INDICATED ON THE FINISH PLANS SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECTS AND DESIGNERS.

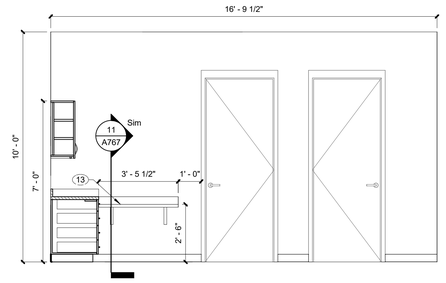
6. ALL DIMENSIONS SHOWN ARE TO FACE OF FINISH MATERIAL, UNLESS NOTED OTHERWISE.

7. ALL EXPOSED METAL SURFACES, SUCH AS GRILLES, FIRE EXTINGUISHER CABINETS, ETC., ARE TO BE PRIMED AND PAINTED TO MATCH THE SURFACE ON WHICH THEY OCCUR.

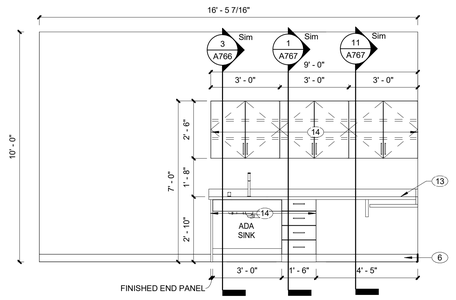
8. ALL WALLS, CEILINGS, AND COLUMNS TO BE PAINTED PT-1, UNLESS NOTED OTHERWISE.

ELEVATION NOTES - INTERIOR

2 OWNER SUPPLIED REFRIGERATOR.
3 OWNER SUPPLIED STOVE.
5 OWNER SUPPLIED, CONTRACTOR INSTALLED TOILET PAPER DISPENSER.
6 BASE, RB-1. REFER TO FINISH LEGEND.
7 OWNER SUPPLIED, CONTRACTOR INSTALLED STOVE HOOD.
8 FILLER AS REQUIRED
9 WALL TILE, WT-1 AT THIS LOCATION. REFER TO FINISH LEGEND.
10 WALL TILE, WT-2 AT THIS LOCATION. REFER TO FINISH LEGEND.
11 WALL TILE, WT-3 AT THIS LOCATION. REFER TO FINISH LEGEND.
12 WALL TILE, WT-1 AT THIS LOCATION. 6'-0" A.F.F.. FINISH WITH SCHLUTER JOLLY EDGE TRIM.
13 SOLID SURFACE, SS-1 AT THIS LOCATION. REFER TO FINISH LEGEND.
14 PLASTIC LAMINATE CASEWORK, PL-1 AT THIS LOCATION. REFER TO FINISH LEGEND.
15 RUN OF CASEWORK TO BE 30" DEEP TO ACCOMODATE 48"W POSTER BOARD CABINET.
16 OWNER SUPPLIED, CONTRACTOR INSTALLED PAPER TOWEL DISPENSER.
17 OWNER SUPPLIED, CONTRACTOR INSTALLED MIRROR.
18 OWNER SUPPLIED, CONTRACTOR INSTALLED SOAP DISPENSER.



2 INT. ELEV. - B158 CLINIC NORTH
SCALE: 3/8" = 1'-0" REF. 1 / A101B



1 INT. ELEV. - B158 CLINIC WEST
SCALE: 3/8" = 1'-0" REF. 1 / A101B

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD PRIMARY SCHOOL RENOVATIONS
7700 W REEVES RD,
ELLETTSVILLE, IN 47404

TERRY L. CRITES
REGISTERED
NO. 8800139
STATE OF
INDIANA

REVISIONS:

#	Date	Desc.
2.	2-28-2024	Addendum 2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JANUARY 31, 2024
DRAWN BY: Author

CASEWORK ELEVATIONS

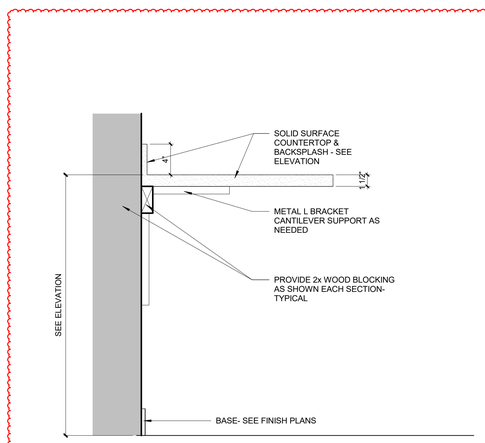
A760

PLOT DATE/TIME: 2/28/2024 1:37:32 PM

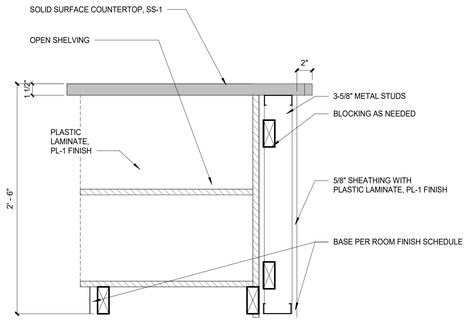
GENERAL CASEWORK NOTES

1. FABRICATE WOODWORK/ MILLWORK ITEMS TO ACTUAL FIELD DIMENSIONS. CONTRACTOR SHALL SUBMIT FOR DESIGNERS APPROVALS SHOP DRAWING SAMPLES OR MANUFACTURER'S LITERATURE FOR ALL ITEMS. SHOP DRAWINGS SHALL SHOW SUFFICIENT DETAIL TO DETERMINE COMPLIANCE WITH STANDARDS AND DESIGN INTENT.
2. PROVIDE ALL NECESSARY FURRING AND GROUNDS FOR WOODWORK AND FINISH ITEMS. COORDINATE LOCATION OF BLOCKING WITHIN FRAMED WALLS AS NECESSARY FOR ITEMS TO BE SECURED TO SURFACE. ALL FASTENERS SHALL BE CONCEALED.
3. FINISH ALL SIDES AND BACK OF MILLWORK/ CASEWORK.
4. PROVIDE GROMMETS IN COUNTERTOPS ABOVE ALL ELECTRICAL RECPETICALS AND TELEPHONE DATA ROUTINGS.
5. ALL PULLS TO BE 4" SATIN NICKEL SOLID WIRE PULL
6. PROVIDE LOCKS FOR ALL STORAGE CASE CABINETS/ TALL STORAGE CABINETS, ALL DRAWERS AND DOORS, AND ALL UPPER WALL CABINETS.
7. ALL PLASTIC LAMINATE SURFACES ON EXTERIOR OF CABINETS SHALL BE A STANDARD COLOR AS LISTED ON THE FINISH SCHEDULE:
   - PLAM 1 - ALL CABINETS
8. ALL INTERIORS BEHIND DOORS/ DRAWERS AND NOT VISIBLE SHALL BE WHITE. ALL SOLID SURFACE COUNTERTOPS SHALL BE A STANDARD COLOR AS SELECTED BY DESIGNER.
9. SEE ELEC. DWGS FOR ELECTRICAL DEVICES.

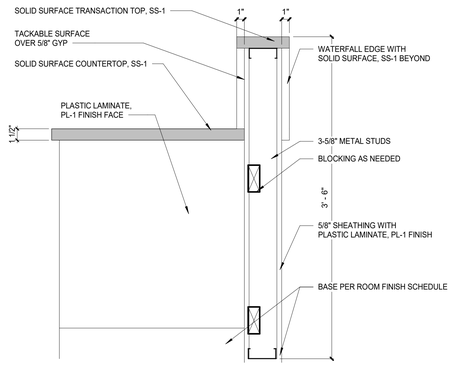
ALTERNATES



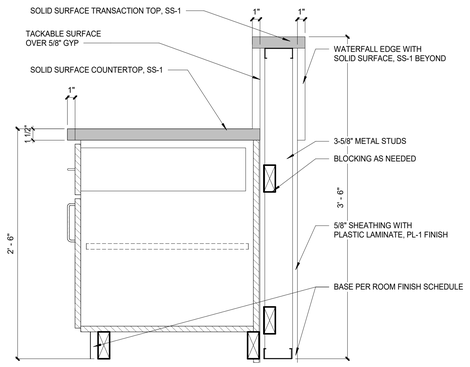
11 CSWK - TYP. COUNTERTOP SECTION
SCALE: 1 1/2" = 1'-0" REF. 1 / A760



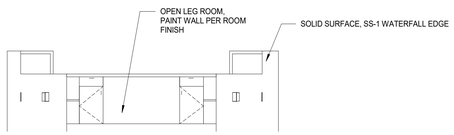
10 CSWK - CIRC. DESK SECTION C
SCALE: 1 1/2" = 1'-0" REF. 1 / A101B



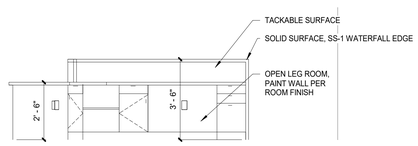
9 CSWK - CIRC. DESK SECTION B
SCALE: 1 1/2" = 1'-0" REF. 1 / A101B



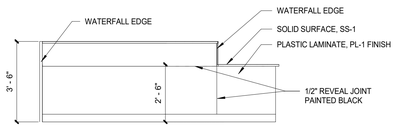
8 CSWK - CIRC. DESK SECTION A
SCALE: 1 1/2" = 1'-0" REF. 1 / A101B



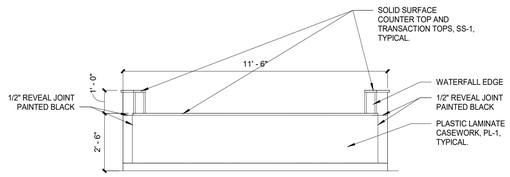
7 CSWK - CIRC. DESK BACK ELEV.
SCALE: 3/8" = 1'-0" REF. 1 / A101B



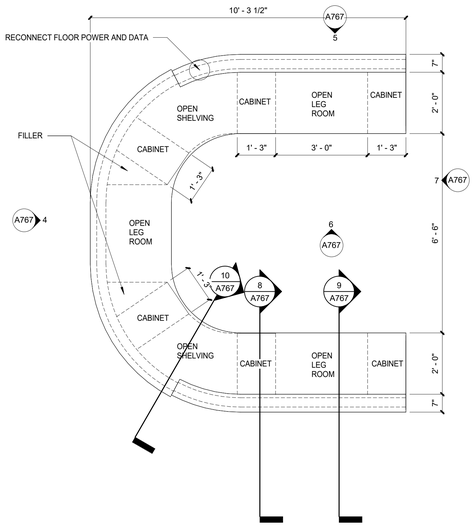
6 CSWK - CIRC. DESK INSIDE ELEV.
SCALE: 3/8" = 1'-0" REF. 1 / A101B



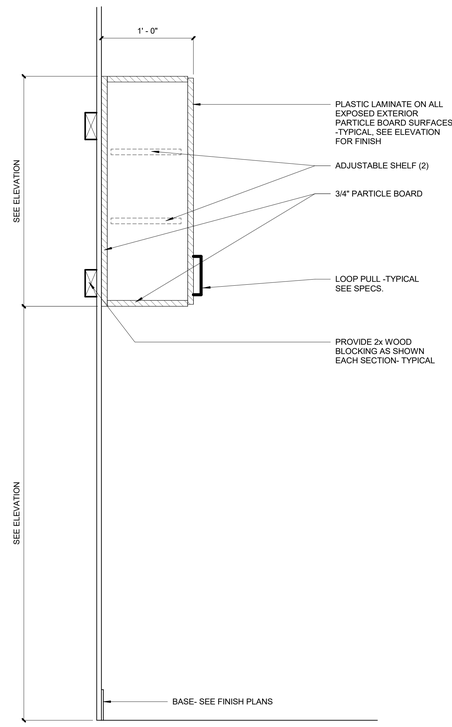
5 CSWK - CIRC. DESK SIDE ELEV.
SCALE: 3/8" = 1'-0" REF. 1 / A101B



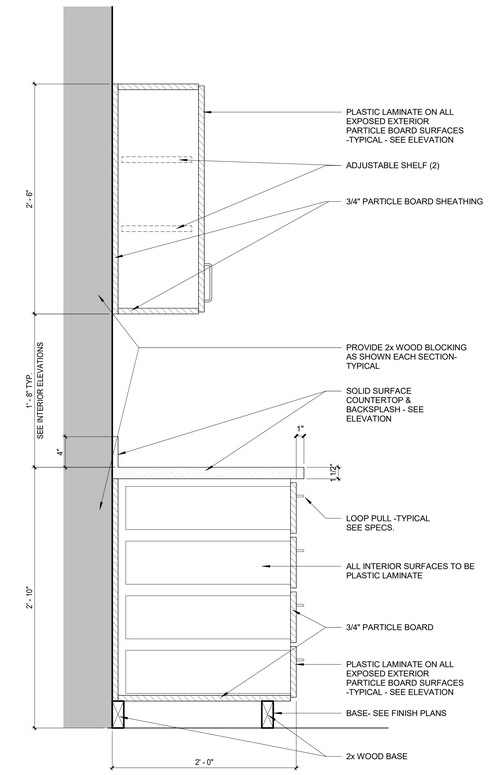
4 CSWK - CIRC. DESK FRONT ELEV.
SCALE: 3/8" = 1'-0" REF. 1 / A101B



3 CSWK - CIRCULATION DESK ENLARGED PLAN
SCALE: 1/2" = 1'-0" REF. 1 / A101B



2 CSWK - TYP. UPPERS SECTION
SCALE: 1 1/2" = 1'-0" REF. 15 / A762



1 CSWK - 4 DRAWER BASE W/UPPER SECTION
SCALE: 1 1/2" = 1'-0" REF. 1 / A760

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD PRIMARY SCHOOL RENOVATIONS
7700 W REEVES RD,
ELLETTSVILLE, IN 47404

REVISIONS:

#	Date	Desc.
2	2-28-2024	Addendum 2

100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	JANUARY 31, 2024
DRAWN BY:	Author

CASEWORK SECTIONS

A767

PLOT DATE/TIME:2/28/2024 9:07:32 PM

1 DEMOLITION PLAN - FIRST FLOOR - UNIT A

SCALE: 1/8" = 1'-0"

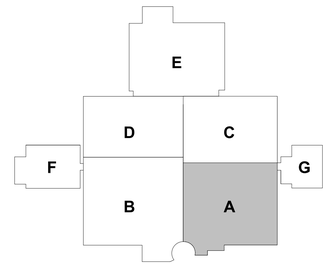
GENERAL NOTES

1. COORDINATE DEMO WORK WITH NEW WORK
2. COORDINATE DEMO WORK WITH MEP WORK
3. CLEAN/PATCH AND PREP SURFACES FOR NEW WORK.
4. DEMO WALL BASE WHERE FLOORING IS TO BE REMOVED

OUT OF SCOPE.

PLAN NOTES - DEMOLITION

1 REMOVE FLOORING.REMOVE ALL WHITEBOARDS AND TACKBOARDS. SAVE AND REUSE. REMOVE CASEWORK COMPLETE. PATCH AND PREP WALLS FOR NEW WORK.
2 REMOVE CARPET, AND WALL BASE. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK.
3 REMOVE WALL TILES. REMOVE FIXTURES. REMOVE TOILET PARTITIONS. PATCH AND PREP SURFACES FOR NEW WORK.
4 REMOVE EXISTING FLOORING TILES.REMOVE WALL TILES. REMOVE FIXTURES. REMOVE TOILET PARTITIONS. PATCH AND PREP SURFACES FOR NEW WORK.
5 PATCH AND PREP WALLS FOR NEW PAINT.
6 REMOVE DRINKING FOUNTAINS.REMOVE WALL TILES. PATCH AND PREP WALLS FOR NEW WORK.
7 REMOVE FLOORING. PREP AREA FOR NEW ADA RESTROOM.
8 DEMO WALL TO THE EXTENT SHOWN FOR NEW DOOR.
9 DEMO CASEWORK CASEWORK. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
10 PERSERVE PAINTED MURALS.
11 DEMO DOOR AND FRAME. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
12 DEMO DOOR AND FRAME. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
13 DEMO CHASE WALL
14 DEMO MARKERBOARD. PATCH/REPLACE DRYWALL TO ACCOMMODATE NEW WORK



N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD PRIMARY SCHOOL RENOVATIONS
7700 W REEVES RD,
ELLETTSVILLE, IN 47404

JERRY L CRIPE REGISTERED No. 880133 STATE OF INDIANA

REVISIONS:

#	Date	Desc.
2	2-28-2024	Addendum 2

100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	JANUARY 31, 2024
DRAWN BY:	Author

DEMOLITION PLAN - FIRST FLOOR - UNIT A

AD101A

PLOT DATE/TIME:2/28/2024 6:10:31 PM

1 DEMOLITION PLAN - FIRST FLOOR - UNIT B

SCALE: 1/8" = 1'-0"

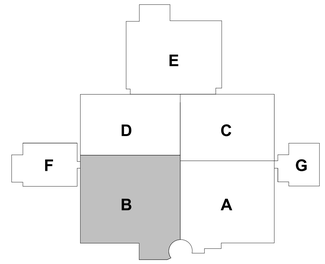
GENERAL NOTES

1. COORDINATE DEMO WORK WITH NEW WORK
2. COORDINATE DEMO WORK WITH MEP WORK
3. CLEAN/PATCH AND PREP SURFACES FOR NEW WORK.
4. DEMO WALL BASE WHERE FLOORING IS TO BE REMOVED

OUT OF SCOPE.

PLAN NOTES - DEMOLITION

1 REMOVE FLOORING.REMOVE ALL WHITEBOARDS AND TACKBOARDS. SAVE AND REUSE. REMOVE CASEWORK COMPLETE. PATCH AND PREP WALLS FOR NEW WORK.
2 REMOVE CARPET, AND WALL BASE. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
3 REMOVE WALL TILES. REMOVE FIXTURES. REMOVE TOILET PARTITIONS. PATCH AND PREP SURFACES FOR NEW WORK.
4 REMOVE EXISTING FLOORING TILES.REMOVE WALL TILES. REMOVE FIXTURES. REMOVE TOILET PARTITIONS. PATCH AND PREP SURFACES FOR NEW WORK.
5 PATCH AND PREP WALLS FOR NEW PAINT.
6 REMOVE DRINKING FOUNTAINS.REMOVE WALL TILES. PATCH AND PREP WALLS FOR NEW WORK.
7 REMOVE FLOORING. PREP AREA FOR NEW ADA RESTROOM.
8 DEMO WALL TO THE EXTENT SHOWN FOR NEW DOOR.
9 DEMO CASEWORK CASEWORK. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
10 PERSERVE PAINTED MURALS.
11 DEMO DOOR AND FRAME. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
12 DEMO DOOR AND FRAME. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
13 DEMO CHASE WALL
14 DEMO MARKERBOARD. PATCH/REPLACE DRYWALL TO ACCOMMODATE NEW WORK



N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD PRIMARY SCHOOL RENOVATIONS
7700 W REEVES RD,
ELLETTSVILLE, IN 47404

REVISIONS:

#	Date	Desc.
2	2-28-2024	Addendum 2

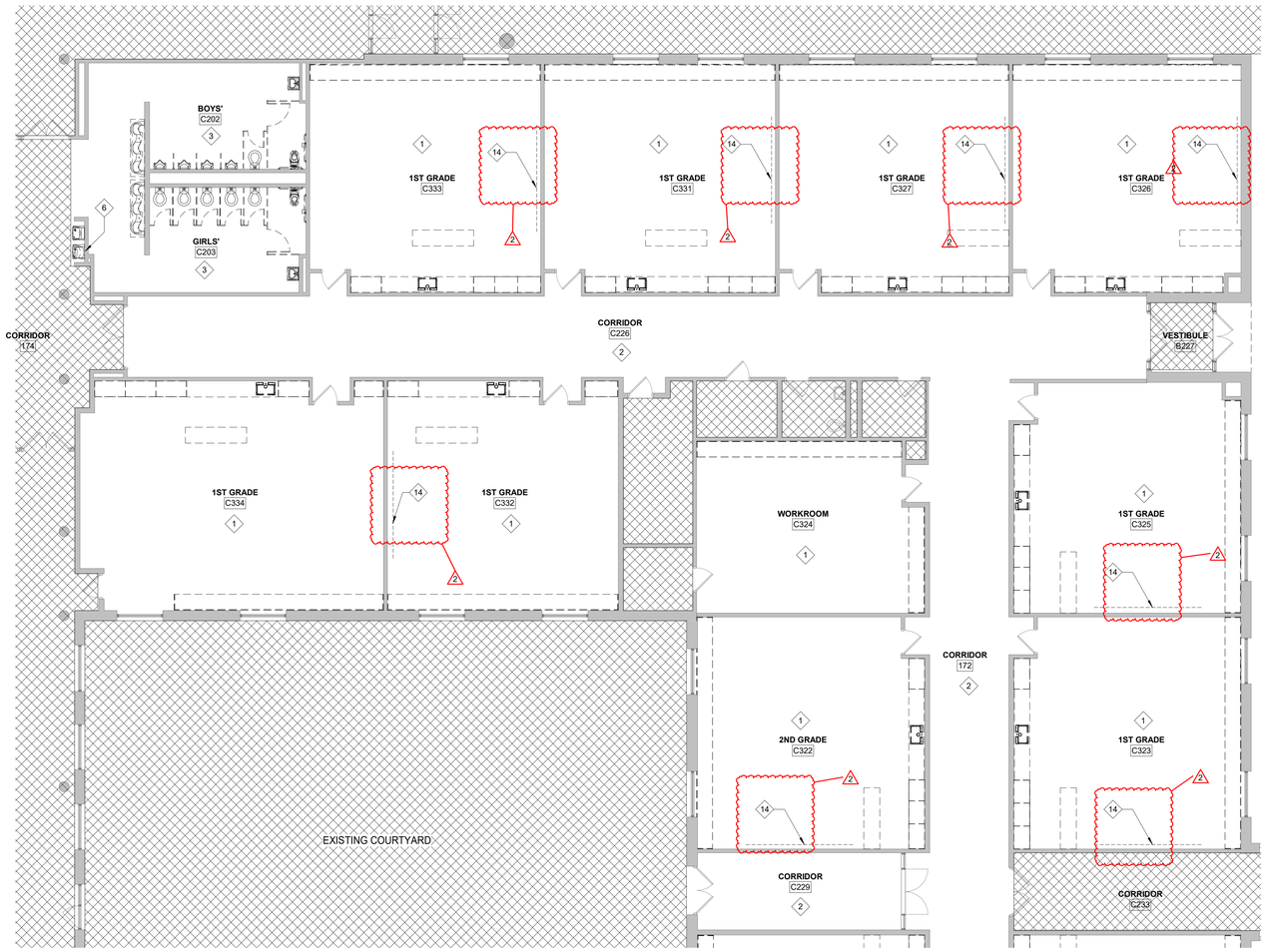
100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JANUARY 31, 2024
DRAWN BY: Author

DEMOLITION PLAN - FIRST FLOOR - UNIT B

AD101B

PLOT DATE/TIME: 2/28/2024 4:10:32 PM



1 DEMOLITION PLAN - FIRST FLOOR - UNIT C

SCALE: 1/8" = 1'-0"

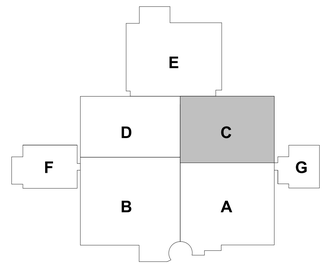
GENERAL NOTES

1. COORDINATE DEMO WORK WITH NEW WORK
2. COORDINATE DEMO WORK WITH MEP WORK
3. CLEAN/PATCH AND PREP SURFACES FOR NEW WORK.
4. DEMO WALL BASE WHERE FLOORING IS TO BE REMOVED

OUT OF SCOPE.

PLAN NOTES - DEMOLITION

1 REMOVE FLOORING.REMOVE ALL WHITEBOARDS AND TACKBOARDS. SAVE AND REUSE. REMOVE CASEWORK COMPLETE. PATCH AND PREP WALLS FOR NEW WORK.
2 REMOVE CARPET, AND WALL BASE. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK.
3 REMOVE WALL TILES. REMOVE FIXTURES. REMOVE TOILET PARTITIONS. PATCH AND PREP SURFACES FOR NEW WORK.
4 REMOVE EXISTING FLOORING TILES.REMOVE WALL TILES. REMOVE FIXTURES. REMOVE TOILET PARTITIONS. PATCH AND PREP SURFACES FOR NEW WORK.
5 PATCH AND PREP WALLS FOR NEW PAINT.
6 REMOVE DRINKING FOUNTAINS.REMOVE WALL TILES. PATCH AND PREP WALLS FOR NEW WORK.
7 REMOVE FLOORING. PREP AREA FOR NEW ADA RESTROOM.
8 DEMO WALL TO THE EXTENT SHOWN FOR NEW DOOR.
9 DEMO CASEWORK CASEWORK. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
10 PERSERVE PAINTED MURALS.
11 DEMO DOOR AND FRAME. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
12 DEMO DOOR AND FRAME. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
13 DEMO CHASE WALL
14 DEMO MARKERBOARD. PATCH/REPLACE DRYWALL TO ACCOMMODATE NEW WORK



N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD PRIMARY SCHOOL RENOVATIONS
7700 W REEVES RD,
ELLETTSVILLE, IN 47404

REVISIONS:

#	Date	Desc.
2.	2-29-2024	Addendum 2

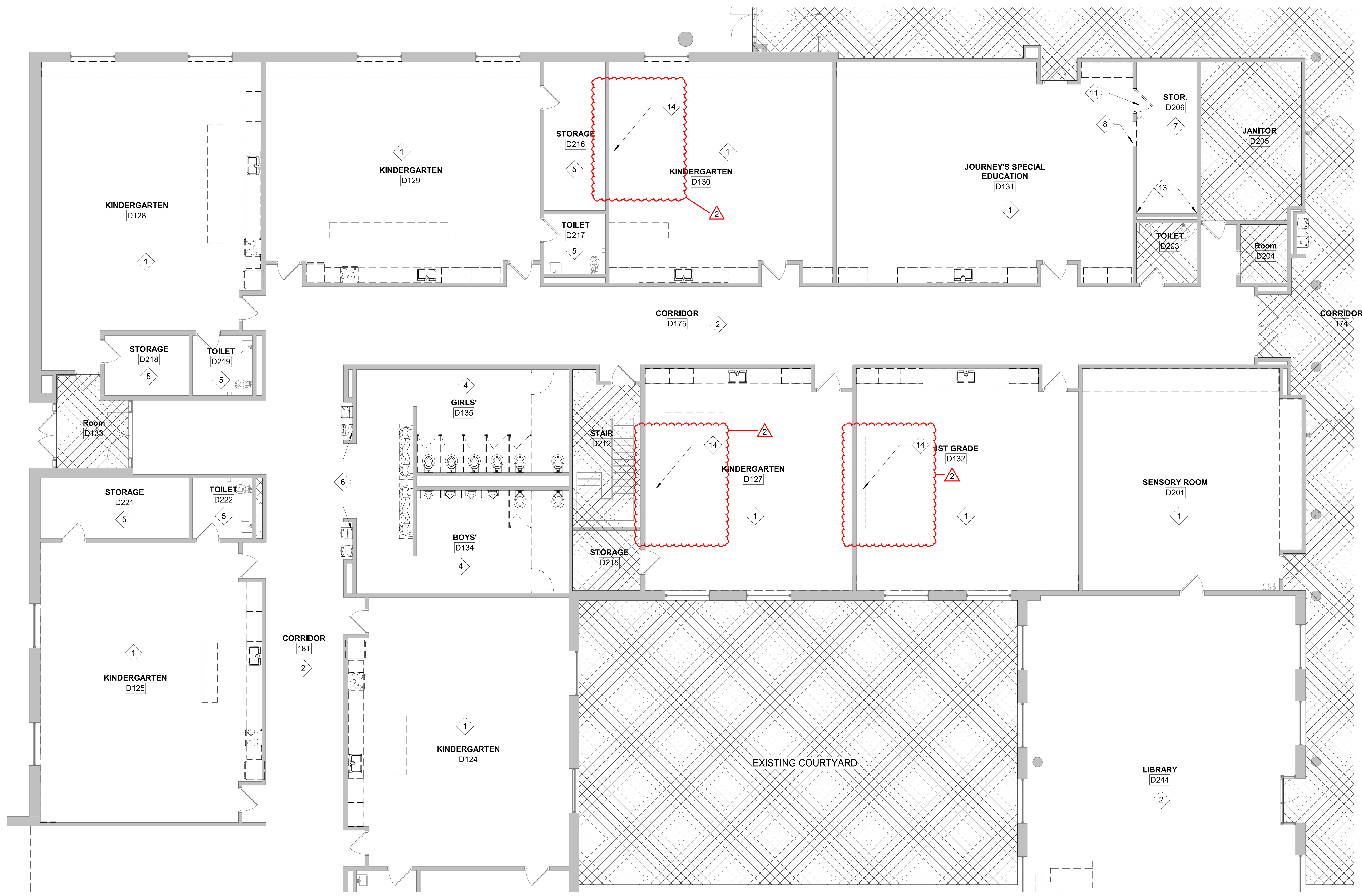
100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	JANUARY 31, 2024
DRAWN BY:	Author

DEMOLITION PLAN - FIRST FLOOR - UNIT C

AD101C

PLOT DATE/TIME:2/29/2024 6:10:34 PM



1 DEMOLITION PLAN - FIRST FLOOR - UNIT D

SCALE: 1/8" = 1'-0"

GENERAL NOTES

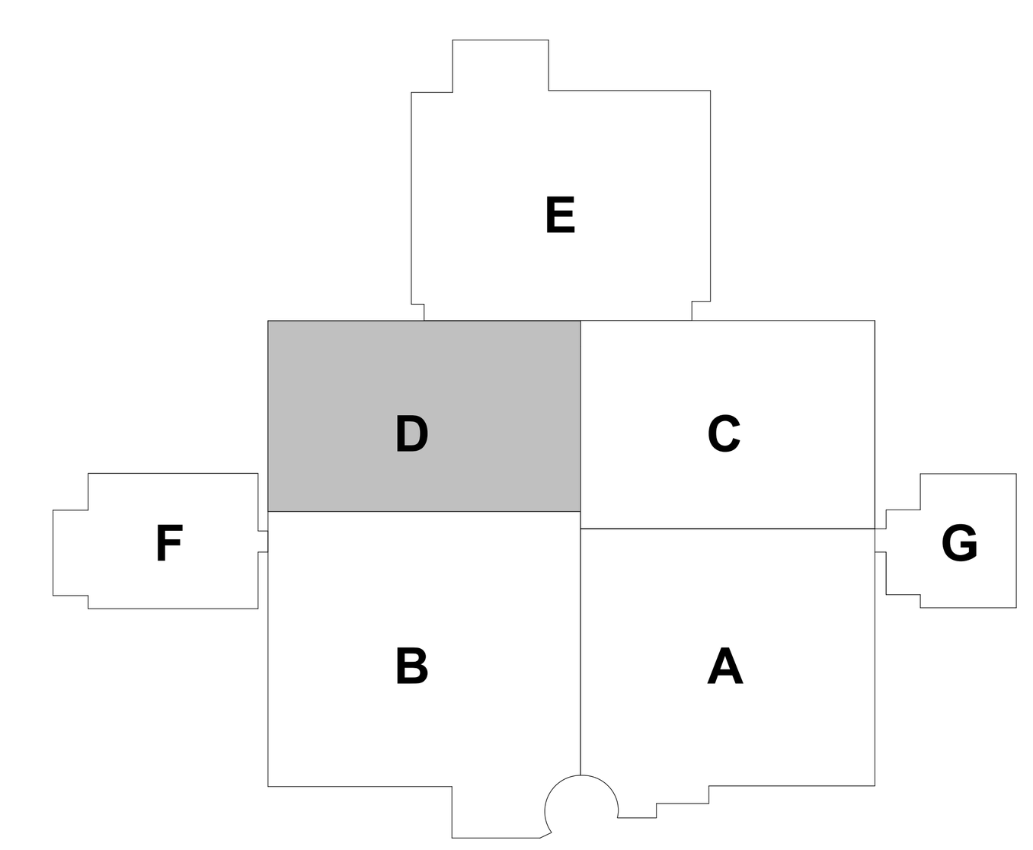
1. COORDINATE DEMO WORK WITH NEW WORK
2. COORDINATE DEMO WORK WITH MEP WORK
3. CLEAN/PATCH AND PREP SURFACES FOR NEW WORK
4. DEMO WALL BASE WHERE FLOORING IS TO BE REMOVED

OUT OF SCOPE.

PLAN NOTES - DEMOLITION

1 REMOVE FLOORING.REMOVE ALL WHITEBOARDS AND TACKBOARDS. SAVE AND REUSE. REMOVE CASEWORK COMPLETE. PATCH AND PREP WALLS FOR NEW WORK.
2 REMOVE CARPET, AND WALL BASE. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
3 REMOVE WALL TILES. REMOVE FIXTURES. REMOVE TOILET PARTITIONS. PATCH AND PREP SURFACES FOR NEW WORK.
4 REMOVE EXISTING FLOORING TILES.REMOVE WALL TILES. REMOVE FIXTURES. REMOVE TOILET PARTITIONS. PATCH AND PREP SURFACES FOR NEW WORK.
5 PATCH AND PREP WALLS FOR NEW PAINT.
6 REMOVE DRINKING FOUNTAINS.REMOVE WALL TILES. PATCH AND PREP WALLS FOR NEW WORK.
7 REMOVE FLOORING. PREP AREA FOR NEW ADA RESTROOM.
8 DEMO WALL TO THE EXTENT SHOWN FOR NEW DOOR.
9 DEMO CASEWORK CASEWORK. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
10 PERSERVE PAINTED MURALS.
11 DEMO DOOR AND FRAME. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
12 DEMO DOOR AND FRAME. CLEAN, PATCH AND PREP SURFACES FOR NEW WORK
13 DEMO CHASE WALL
14 DEMO MARKERBOARD. PATCH/REPLACE DRYWALL TO ACCOMMODATE NEW WORK

2



N TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 NORTH EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC EDGEWOOD PRIMARY SCHOOL RENOVATIONS

7700 W REEVES RD,
ELLETTSVILLE, IN 47404

REVISIONS:

#	Date	Desc.
2	2-28-2024	Addendum 2

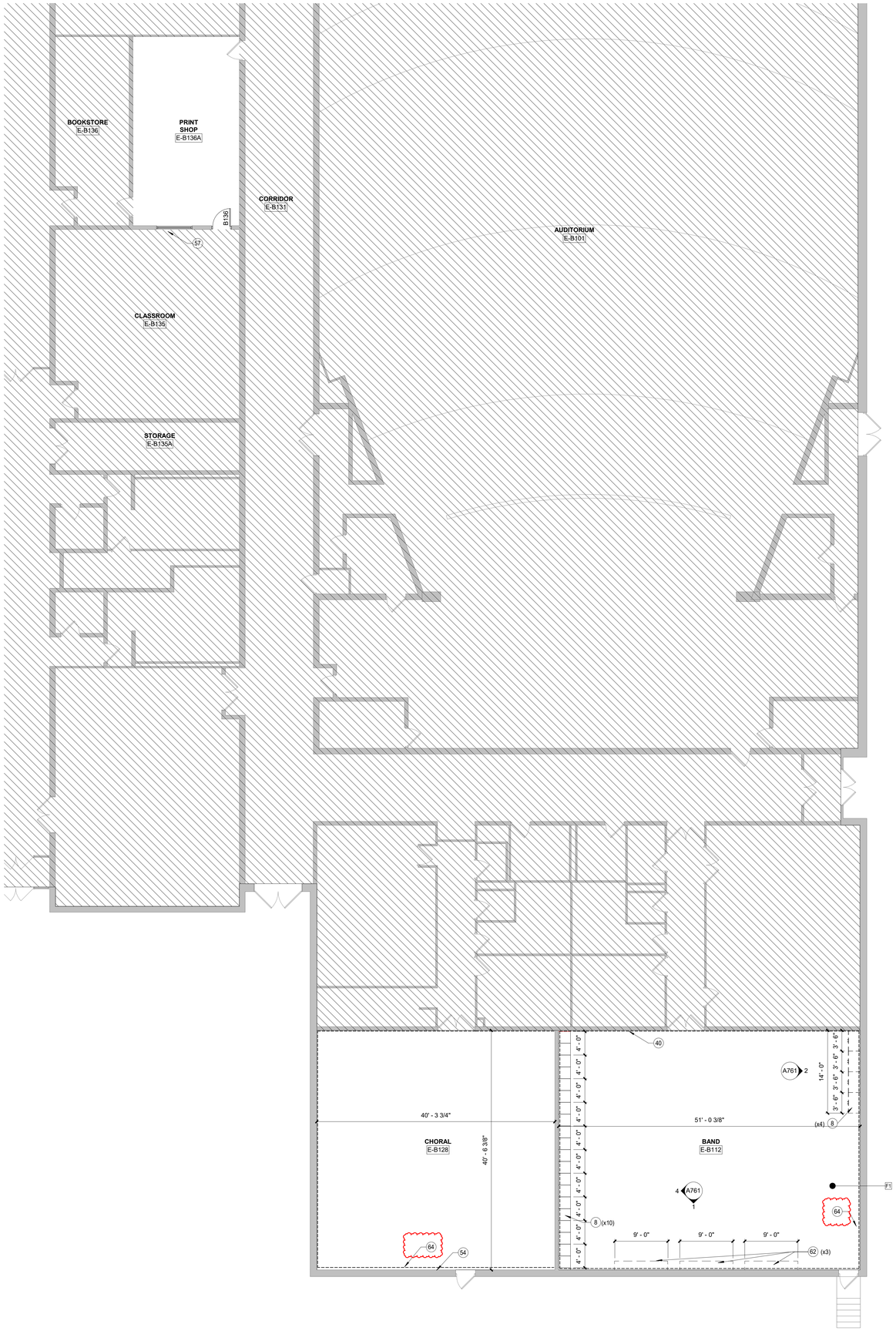
100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JANUARY 31, 2024
DRAWN BY: Author

DEMOLITION PLAN - FIRST FLOOR - UNIT D

AD101D

PLOT DATE/TIME 2/28/2024 6:10:35 PM



1 FLOOR PLAN - FIRST FLOOR UNIT B2

SCALE: 1/8" = 1'-0" REF. 1 / A201

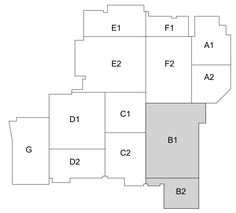
OUT OF SCOPE

GENERAL NOTES

1. PROVIDE FULL HEIGHT CORNER GUARDS AT ALL OUTSIDE CORNERS WITH GYPSUM BOARD FINISH. FLOOR TO CEILING HEIGHT
2. PROVIDE BULL-NOTE FINISH ON ALL OUTSIDE CORNERS OF CMU WALLS
3. SEE ELEVATIONS FOR MASONRY TYPE AND SIZE
4. PROVIDE SOLID SURFACE WINDOW SILLS @ ALL STOREFRONT GLAZING SILLS ABOVE FINISHED FLOOR HEIGHT. WINDOW SILL TO EXTEND 1" PAST FINISHED WALL SURFACE, TYP. UNLESS OTHERWISE NOTED
5. SEE A110 FOR ENLARGED PLANS
6. VIF ALL DIMENSIONS FOR WINDOWS AND CASEWORK
7. INTERIOR DIMENSIONS ARE TAKEN TO THE FACE OF MASONRY OR STUDS
8. FOR ALL RESTROOM FACILITIES WIHT GYPSUM WALL FINISH REPLACE 5/8" TYPE "X" GYPSUM BOARD WIHT 5/8" MOISTURE RESISTANT GYPSUM BOARD, SEE SPECS FOR DETAILS
9. SEE A112 FOR CORNER WINDOW COLUMN TREATMENT
10. WHERE COLUMN IS NOT INDICATED TO BE WRAPPED, PAINT IT P2
11. WALLS TO GO UP TO DECK UNLESS OTHERWISE NOTED
12. TOP OF SINGLE WALL OPENINGS AT 7'-4" UNLESS OTHERWISE NOTED

PLAN NOTES - FLOOR PLAN

1 BULKHEAD
2 RECONFIGURED CONCRETE STEPS
3 NEW INSULATED HOLLOW METAL DOOR IN HM FRAME
4 INFILL FORMER DOOR OPENING WITH CONSTRUCTION TO MATCH EXISTING
5 CASEWORK: UPPER CABINET(S).
6 RESTROOM ACCESSORIES: SOAP DISPENSER, OFCI.
7 NEW CONCRETE FLOOR SLAB THIS ROOM
8 CASEWORK: TALL CABINET
9 CASEWORK: NEW CABINET FILLER, 1"
10 CASEWORK: 2'-0" x 2'-0" x 7'-0" TALL CUBBIES WITH ADJUSTABLE SHELVES
11 PLUMBING FIXTURE: WALL-HUNG TOILET
12 TOILET PARTITION
14 PLUMBING FIXTURE: HAND SINK
15 ADA GRAB BARS
16 PLUMBING FIXTURE: URINAL
18 PLUMBING FIXTURE: DOUBLE DRINKING FOUNTAIN WITH BOTTLE FILLER
20 COUNTERTOP & BACKSPLASH
21 PLUMBING FIXTURE: MOP SINK
22 GYMNASIUM EQUIPMENT: TELESCOPIC BLEACHERS, 260-SEATING CAPACITY
23 CEILING-HUNG BASKETBALL BACKSTOP, FORWARD-FOLDING.
24 BASKETBALL, VOLLEYBALL FLOOR STRIPING. SEE FINISH PLANS FOR COLORS.
25 VOLLEYBALL, TENNIS FLOOR GROMETS
28 12' x 12' x 70' MOTORIZED BATTING CAGES (OVERHEAD) MOUNTED TO ROOF STRUCTURE. COORDINATE LOCATION W/ ALL TRADES PRIOR TO INSTALLATION.
29 PLUMBING CHASE ACCESS PANEL, 2'-0" x 2'-0"
30 RESTROOM ACCESSORIES: SANITARY NAPKIN DISPOSAL, CFCI.
32 RESTROOM ACCESSORIES: TOILET PAPER DISPENSER, OFCI.
33 RESTROOM ACCESSORIES: MIRROR, 24" x 36"
35 GYMNASIUM EQUIPMENT: DIVIDER CURTAIN
36 RESTROOM ACCESSORIES: PAPER TOWEL DISPENSER, OFCI.
37 RESTROOM ACCESSORIES: BABY CHANGING STATION
38 RELOCATED MARKERBOARD AND/OR TACKBOARD.
40 CLASSROOM EQUIPMENT: 12'-0" MARKERBOARD
41 CLASSROOM EQUIPMENT: 3'-0"W x 4'-0"H TACKBOARD
43 OVERHEAD COILING SHUTTER WITH COUNTER
46 ROOF ACCESS (2) PIECE LADDER WITH PLATFORM
47 CEILING-HUNG VOLLEYBALL SYSTEM.
48 INTERNAL ROOF DRAIN, REF. TO P-SERIES.
49 EXTERIOR EXPANSION JOINT FILLER
50 GYMNASIUME EQUIPMENT: SCOREBOARD
51 RECESSED CONCRETE SLAB. REF. S-SERIES.
52 EXPANSION JOINT COVER
53 ROOF ACCESS ABOVE
54 4'-0"X4'-0" MARKERBOARD
55 10'-0"X4'-0" MARKERBOARD
56 HM WINDOW 4'-0" TALL, 3'-4" WIDE
57 HOLLOW METAL WINDOW 4'-0" TALL, 6'-0" WIDE
58 SEMI-RECESSED FIRE EXTINGUISHER
59 WALL-MOUNTED FIRE EXTINGUISHER
60 NEW FABRIC WRAPPED TACK PANEL IN INFILL. ATTACH TO WINDOW.
61 FABRIC WRAPPED TACK PANEL
62 CASEWORK: 18"D SHELF
63 CAP OFF EXISTING FLOOR OUTLETS. COORDINATE WORK WITH MEP.
64 DASHED LINE: LAMIANTE DRYWALL OVER EXISTING MASONRY. REINSTALL ANY EXISTING MARKERBOARDS, TACKBORADS, SHELVING ETC



N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REVISIONS:

#	Date	Desc.
2	02/28/202 4	Addendum #2

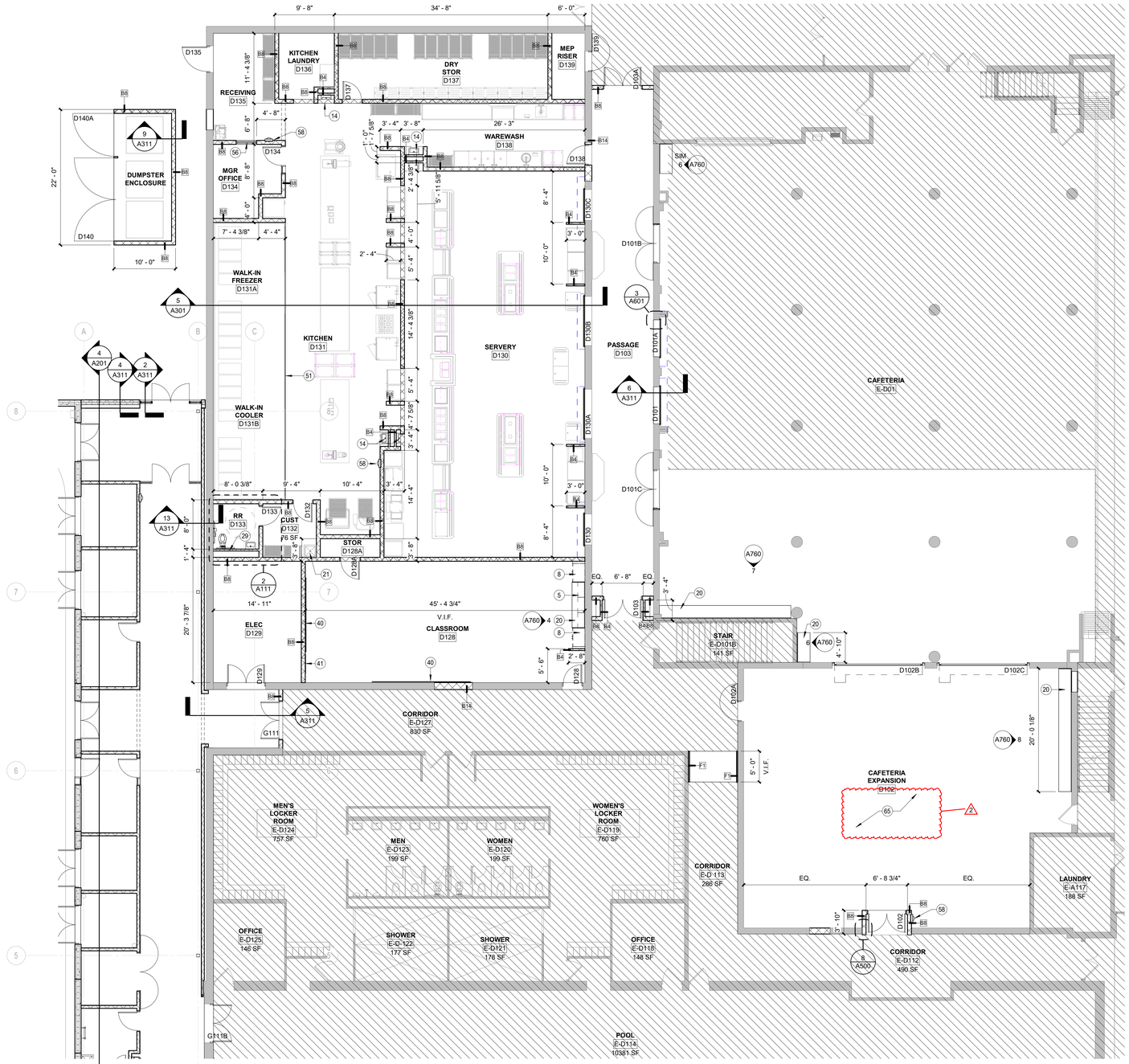
100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	01/31/2024
DRAWN BY:	Author

FIRST FLOOR PLAN - UNIT B

A101B

PLOT DATE/TIME 2/28/2024 5:03:00 PM



1 FLOOR PLAN - FIRST FLOOR UNIT D1

SCALE: 1/8" = 1'-0" REF. 1 / A201

OUT OF SCOPE

GENERAL NOTES

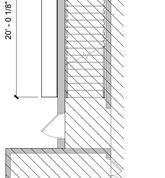
1. PROVIDE FULL HEIGHT CORNER GUARDS AT ALL OUTSIDE CORNERS WITH GYPSUM BOARD FINISH. FLOOR TO CEILING HEIGHT
2. PROVIDE BULL-NOTE FINISH ON ALL OUTSIDE CORNERS OF CMU WALLS
3. SEE ELEVATIONS FOR MASONRY TYPE AND SIZE
4. PROVIDE SOLID SURFACE WINDOW SILLS @ ALL STOREFRONT GLAZING SILLS ABOVE FINISHED FLOOR HEIGHT. WINDOW SILL TO EXTEND 1" PAST FINISHED WALL SURFACE, TYP. UNLESS OTHERWISE NOTED
5. SEE A110 FOR ENLARGED PLANS
6. VIF ALL DIMENSIONS FOR WINDOWS AND CASEWORK
7. INTERIOR DIMENSIONS ARE TAKEN TO THE FACE OF MASONRY OR STUDS
8. FOR ALL RESTROOM FACILITIES WIHT GYPSUM WALL FINISH REPLACE 5/8" TYPE "X" GYPSUM BOARD WIHT 5/8" MOISTURE RESISTANT GYPSUM BOARD, SEE SPECS FOR DETAILS
9. SEE A112 FOR CORNER WINDOW COLUMN TREATMENT
10. WHERE COLUMN IS NOT INDICATED TO BE WRAPPED, PAINT IT P2
11. WALLS TO GO UP TO DECK UNLESS OTHERWISE NOTED
12. TOP OF SINGLE WALL OPENINGS AT 7'-4" UNLESS OTHERWISE NOTED

PLAN NOTES - FLOOR PLAN

1 BULKHEAD
2 RECONFIGURED CONCRETE STEPS
3 NEW INSULATED HOLLOW METAL DOOR IN HM FRAME
4 INFILL FORMER DOOR OPENING WITH CONSTRUCTION TO MATCH EXISTING
5 CASEWORK: UPPER CABINET(S).
6 RESTROOM ACCESSORIES: SOAP DISPENSER, OFCI.
7 NEW CONCRETE FLOOR SLAB THIS ROOM
8 CASEWORK: TALL CABINET
9 CASEWORK: NEW CABINET FILLER, 1"
10 CASEWORK: 2'-0" x 2'-0" x 7'-0" TALL CUBBIES WITH ADJUSTABLE SHELVES
11 PLUMBING FIXTURE: WALL-HUNG TOILET
12 TOILET PARTITION
14 PLUMBING FIXTURE: HAND SINK
15 ADA GRAB BARS
16 PLUMBING FIXTURE: URINAL
18 PLUMBING FIXTURE: DOUBLE DRINKING FOUNTAIN WITH BOTTLE FILLER
20 COUNTERTOP & BACKSPLASH
21 PLUMBING FIXTURE: MOP SINK
22 GYMNASIUM EQUIPMENT: TELESCOPIC BLEACHERS, 260-SEATING CAPACITY
23 CEILING-HUNG BASKETBALL BACKSTOP, FORWARD-FOLDING.
24 BASKETBALL, VOLLEYBALL FLOOR STRIPING. SEE FINISH PLANS FOR COLORS.
25 VOLLEYBALL, TENNIS FLOOR GROMETS
28 12' x 12' x 70' MOTORIZED BATTING CAGES (OVERHEAD) MOUNTED TO ROOF STRUCTURE. COORDINATE LOCATION W/ ALL TRADES PRIOR TO INSTALLATION.
29 PLUMBING CHASE ACCESS PANEL. 2'-0" x 2'-0"
30 RESTROOM ACCESSORIES: SANITARY NAPKIN DISPOSAL, CFCI.
32 RESTROOM ACCESSORIES: TOILET PAPER DISPENSER, OFCI.
33 RESTROOM ACCESSORIES: MIRROR, 24" x 36"
35 GYMNASIUM EQUIPMENT: DIVIDER CURTAIN
36 RESTROOM ACCESSORIES: PAPER TOWEL DISPENSER, OFCI.
37 RESTROOM ACCESSORIES: BABY CHANGING STATION
38 RELOCATED MARKERBOARD AND/OR TACKBOARD.
40 CLASSROOM EQUIPMENT: 12'-0" MARKERBOARD
41 CLASSROOM EQUIPMENT: 3'-0"W x 4'-0"H TACKBOARD
43 OVERHEAD COILING SHUTTER WITH COUNTER
46 ROOF ACCESS (2) PIECE LADDER WITH PLATFORM
47 CEILING-HUNG VOLLEYBALL SYSTEM.
48 INTERNAL ROOF DRAIN, REF. TO P-SERIES.
49 EXTERIOR EXPANSION JOINT FILLER
50 GYMNASIUME EQUIPMENT: SCOREBOARD
51 RECESSED CONCRETE SLAB. REF. S-SERIES.
52 EXPANSION JOINT COVER
53 ROOF ACCESS ABOVE
54 4'-0"X4'-0" MARKERBOARD
55 10'-0"X4'-0" MARKERBOARD
56 HM WINDOW 4'-0" TALL, 3'-4" WIDE
57 HOLLOW METAL WINDOW 4'-0" TALL, 6'-0" WIDE
58 SEMI-RECESSED FIRE EXTINGUISHER
59 WALL-MOUNTED FIRE EXTINGUISHER
60 NEW FABRIC WRAPPED TACK PANEL IN INFILL. ATTACH TO WINDOW.
61 FABRIC WRAPPED TACK PANEL
62 CASEWORK: 18"D SHELF
63 CAP OFF EXISTING FLOOR OUTLETS, COORDINATE WORK WITH MEP.
64 DASHED LINE: LAMIANTE DRYWALL OVER EXISTING MASONRY. REINSTALL ANY EXISTING MARKERBOARDS, TACKBOARDS, SHELVING ETC.
65 PROVIDE FLOOR TOPPING SLAB TO MATCH ADJACENT FLOOR LEVEL

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429



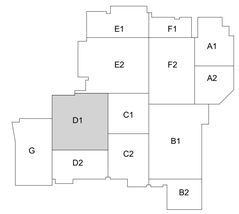
REVISIONS:

#	Date	Desc.
2	02/28/202 4	Addendum #2

100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	01/31/2024
DRAWN BY:	Author

FIRST FLOOR PLAN - UNIT D1



N
TRUE NORTH

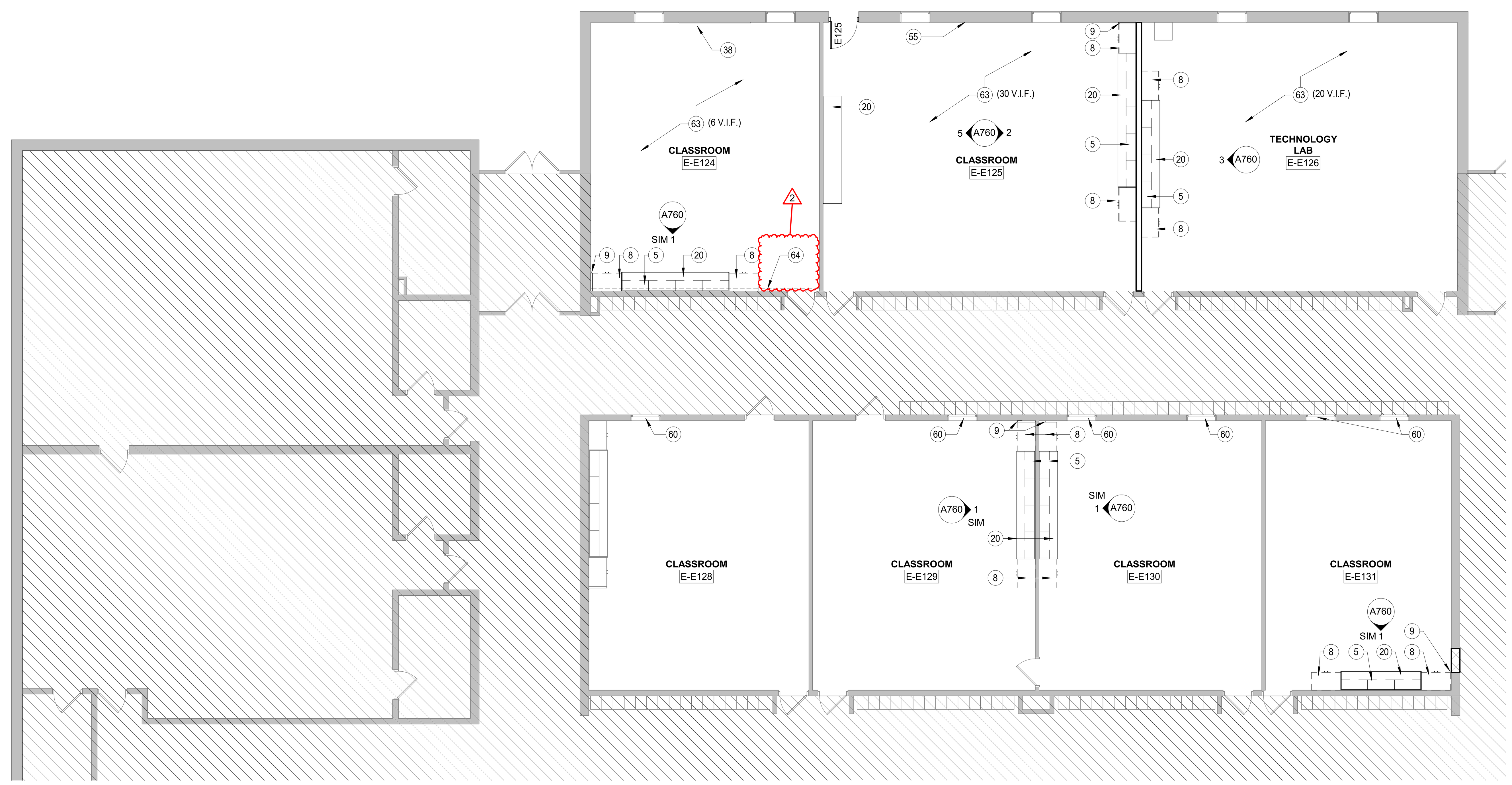
A101D

PLOT DATE/TIME: 2/28/2024 4:26:56 PM

OUT OF SCOPE

GENERAL NOTES

1. PROVIDE FULL HEIGHT CORNER GUARDS AT ALL OUTSIDE CORNERS WITH GYPSUM BOARD FINISH. FLOOR TO CEILING HEIGHT
2. PROVIDE BULL-NOTE FINISH ON ALL OUTSIDE CORNERS OF CMU WALLS
3. SEE ELEVATIONS FOR MASONRY TYPE AND SIZE
4. PROVIDE SOLID SURFACE WINDOW SILLS @ ALL STOREFRONT GLAZING SILLS ABOVE FINISHED FLOOR HEIGHT. WINDOW SILL TO EXTEND 1" PAST FINISHED WALL SURFACE, TYP. UNLESS OTHERWISE NOTED
5. SEE A110 FOR ENLARGED PLANS
6. VIF ALL DIMENSIONS FOR WINDOWS AND CASEWORK
7. INTERIOR DIMENSIONS ARE TAKEN TO THE FACE OF MASONRY OR STUDS
8. FOR ALL RESTROOM FACILITIES WIHT GYPSUM WALL FINISH REPLACE 5/8" TYPE "X" GYPSUM BOARD WIHT 5/8" MOISTURE RESISTANT GYPSUM BOARD, SEE SPECS FOR DETAILS
9. SEE A112 FOR CORNER WINDOW COLUMN TREATMENT
10. WHERE COLUMN IS NOT INDICATED TO BE WRAPPED, PAINT IT P2
11. WALLS TO GO UP TO DECK UNLESS OTHERWISE NOTED
12. TOP OF SINGLE WALL OPENINGS AT 7'-4" UNLESS OTHERWISE NOTED

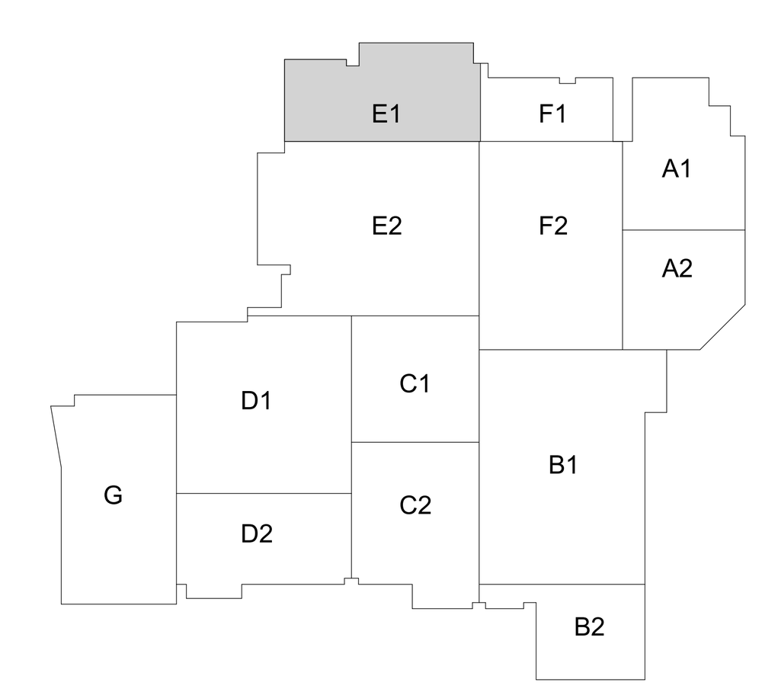


1 FLOOR PLAN - FIRST FLOOR UNIT E1

SCALE: 1/8" = 1'-0" REF. 1 / A201

PLAN NOTES - FLOOR PLAN

1	BULKHEAD
2	RECONFIGURED CONCRETE STEPS
3	NEW INSULATED HOLLOW METAL DOOR IN HM FRAME
4	INFILL FORMER DOOR OPENING WITH CONSTRUCTION TO MATCH EXISTING
5	CASEWORK: UPPER CABINET(S).
6	RESTROOM ACCESSORIES: SOAP DISPENSER, OFCI.
7	NEW CONCRETE FLOOR SLAB THIS ROOM
8	CASEWORK: TALL CABINET
9	CASEWORK: NEW CABINET FILLER, 1">
10	CASEWORK: 2'-0" x 2'-0" x 7'-0" TALL CUBBIES WITH ADJUSTABLE SHELVES
11	PLUMBING FIXTURE: WALL-HUNG TOILET
12	TOILET PARTITION
14	PLUMBING FIXTURE: HAND SINK
15	ADA GRAB BARS
16	PLUMBING FIXTURE: URINAL
18	PLUMBING FIXTURE: DOUBLE DRINKING FOUNTAIN WITH BOTTLE FILLER
20	COUNTERTOP & BACKSPLASH
21	PLUMBING FIXTURE: MOP SINK
22	GYMNASIUM EQUIPMENT: TELESCOPIC BLEACHERS, 260-SEATING CAPACITY
23	CEILING-HUNG BASKETBALL BACKSTOP, FORWARD-FOLDING.
24	BASKETBALL, VOLLEYBALL FLOOR STRIPING. SEE FINISH PLANS FOR COLORS.
25	VOLLEYBALL, TENNIS FLOOR GROMETS
28	12' x 12' x 70' MOTORIZED BATTING CAGES (OVERHEAD) MOUNTED TO ROOF STRUCTURE. COORDINATE LOCATION W/ ALL TRADES PRIOR TO INSTALLATION.
29	PLUMBING CHASE ACCESS PANEL. 2'-0" x 2'-0"
30	RESTROOM ACCESSORIES: SANITARY NAPKIN DISPOSAL, CFCI.
32	RESTROOM ACCESSORIES: TOILET PAPER DISPENSER, OFCI.
33	RESTROOM ACCESSORIES: MIRROR, 24" x 36"
35	GYMNASIUM EQUIPMENT: DIVIDER CURTAIN
36	RESTROOM ACCESSORIES: PAPER TOWEL DISPENSER, OFCI.
37	RESTROOM ACCESSORIES: BABY CHANGING STATION
38	RELOCATED MARKERBOARD AND/OR TACKBOARD.
40	CLASSROOM EQUIPMENT: 12'-0" MARKERBOARD
41	CLASSROOM EQUIPMENT: 3'-0"W x 4'-0"H TACKBOARD
43	OVERHEAD COILING SHUTTER WITH COUNTER
46	ROOF ACCESS (2) PIECE LADDER WITH PLATFORM
47	CEILING-HUNG VOLLEYBALL SYSTEM.
48	INTERNAL ROOF DRAIN, REF. TO P-SERIES.
49	EXTERIOR EXPANSION JOINT FILLER
50	GYMNASIUME EQUIPMENT: SCOREBOARD
51	RECESSED CONCRETE SLAB. REF. S-SERIES.
52	EXPANSION JOINT COVER
53	ROOF ACCESS ABOVE
54	4'-0"X4'-0" MARKERBOARD
55	10'-0"X4'-0" MARKERBOARD
56	HM WINDOW 4'-0" TALL, 3'-4" WIDE
57	HOLLOW METAL WINDOW 4'-0" TALL, 6'-0" WIDE
58	SEMI-RECESSED FIRE EXTINGUISHER
59	WALL-MOUNTED FIRE EXTINGUISHER
60	NEW FABRIC WRAPPED TACK PANEL IN INFILL. ATTACH TO WINDOW.
61	FABRIC WRAPPED TACK PANEL
62	CASEWORK: 18"D SHELF
63	CAP OFF EXISTING FLOOR OUTLETS, COORDINATE WORK WITH MEP
64	DASHED LINE: LAMIANTE DRYWALL OVER EXISTING MASONRY. REINSTALL ANY EXISTING MARKERBOARDS, TACKBORADS, SHELVING ETC



N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

JERRY L. CRIPPS REGISTERED NO. 8800133 STATE OF ARCHITECT

REVISIONS:

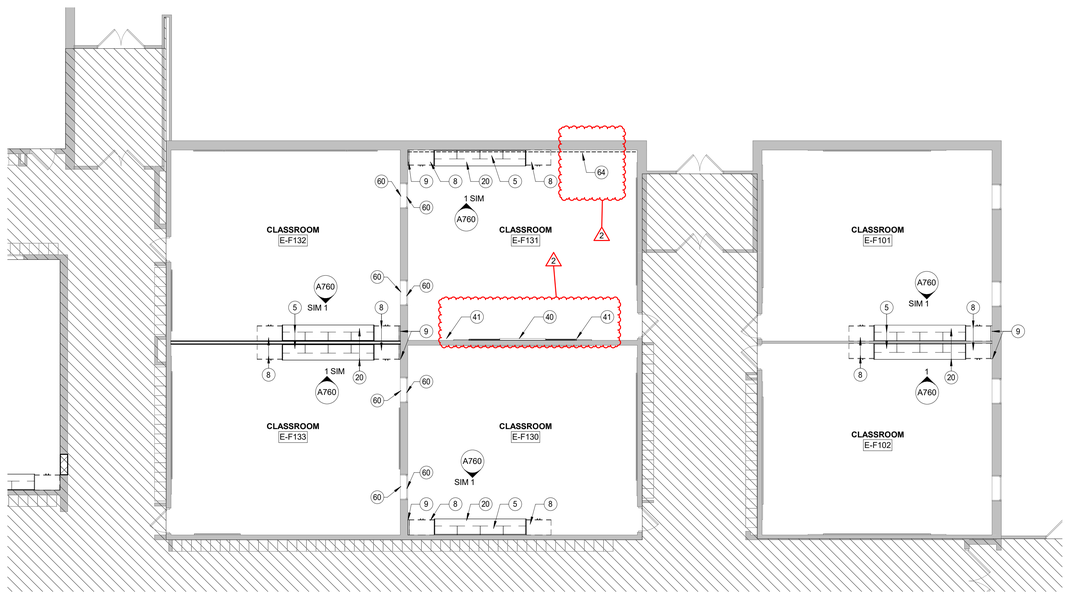
#	Date	Desc.
2	02/28/2024	Addendum #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: Author

FIRST FLOOR PLAN - UNIT E1

A101E1



1 FLOOR PLAN - FIRST FLOOR UNIT F

SCALE: 1/8" = 1'-0" REF. 1 / A201

OUT OF SCOPE

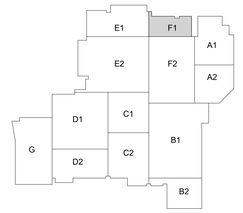
GENERAL NOTES

1. PROVIDE FULL HEIGHT CORNER GUARDS AT ALL OUTSIDE CORNERS WITH GYPSUM BOARD FINISH. FLOOR TO CEILING HEIGHT
2. PROVIDE BULL-NOTE FINISH ON ALL OUTSIDE CORNERS OF CMU WALLS
3. SEE ELEVATIONS FOR MASONRY TYPE AND SIZE
4. PROVIDE SOLID SURFACE WINDOW SILLS @ ALL STOREFRONT GLAZING SILLS ABOVE FINISHED FLOOR HEIGHT. WINDOW SILL TO EXTEND 1" PAST FINISHED WALL SURFACE, TYP. UNLESS OTHERWISE NOTED
5. SEE A110 FOR ENLARGED PLANS
6. VIF ALL DIMENSIONS FOR WINDOWS AND CASEWORK
7. INTERIOR DIMENSIONS ARE TAKEN TO THE FACE OF MASONRY OR STUDS
8. FOR ALL RESTROOM FACILITIES WIHT GYPSUM WALL FINISH REPLACE 5/8" TYPE 'X' GYPSUM BOARD WIHT 5/8" MOISTURE RESISTANT GYPSUM BOARD, SEE SPECS FOR DETAILS
9. SEE A112 FOR CORNER WINDOW COLUMN TREATMENT
10. WHERE COLUMN IS NOT INDICATED TO BE WRAPPED, PAINT IT P2
11. WALLS TO GO UP TO DECK UNLESS OTHERWISE NOTED
12. TOP OF SINGLE WALL OPENINGS AT 7'-4" UNLESS OTHERWISE NOTED

PLAN NOTES - FLOOR PLAN

1 BULKHEAD
2 RECONFIGURED CONCRETE STEPS
3 NEW INSULATED HOLLOW METAL DOOR IN HM FRAME
4 INFILL FORMER DOOR OPENING WITH CONSTRUCTION TO MATCH EXISTING
5 CASEWORK: UPPER CABINET(S).
6 RESTROOM ACCESSORIES: SOAP DISPENSER, OFCI.
7 NEW CONCRETE FLOOR SLAB THIS ROOM
8 CASEWORK: TALL CABINET
9 CASEWORK: NEW CABINET FILLER, 1"
10 CASEWORK: 2'-0" x 2'-0" x 7'-0" TALL CUBBIES WITH ADJUSTABLE SHELVES
11 PLUMBING FIXTURE: WALL-HUNG TOILET
12 TOILET PARTITION
14 PLUMBING FIXTURE: HAND SINK
15 ADA GRAB BARS
16 PLUMBING FIXTURE: URINAL
18 PLUMBING FIXTURE: DOUBLE DRINKING FOUNTAIN WITH BOTTLE FILLER
20 COUNTERTOP & BACKSPLASH
21 PLUMBING FIXTURE: MOP SINK
22 GYMNASIUM EQUIPMENT: TELESCOPIC BLEACHERS, 260-SEATING CAPACITY
23 CEILING-HUNG BASKETBALL BACKSTOP, FORWARD-FOLDING.
24 BASKETBALL, VOLLEYBALL FLOOR STRIPING. SEE FINISH PLANS FOR COLORS.
25 VOLLEYBALL, TENNIS FLOOR GROMETS
28 12' x 12' x 70' MOTORIZED BATTING CAGES (OVERHEAD) MOUNTED TO ROOF STRUCTURE. COORDINATE LOCATION W/ ALL TRADES PRIOR TO INSTALLATION.
29 PLUMBING CHASE ACCESS PANEL. 2'-0" x 2'-0"
30 RESTROOM ACCESSORIES: SANITARY NAPKIN DISPOSAL, CFCI.
32 RESTROOM ACCESSORIES: TOILET PAPER DISPENSER, OFCI.
33 RESTROOM ACCESSORIES: MIRROR, 24" x 36"
35 GYMNASIUM EQUIPMENT: DIVIDER CURTAIN
36 RESTROOM ACCESSORIES: PAPER TOWEL DISPENSER, OFCI.
37 RESTROOM ACCESSORIES: BABY CHANGING STATION
38 RELOCATED MARKERBOARD AND/OR TACKBOARD.
40 CLASSROOM EQUIPMENT: 12'-0" MARKERBOARD
41 CLASSROOM EQUIPMENT: 3'-0"W x 4'-0"H TACKBOARD
43 OVERHEAD COILING SHUTTER WITH COUNTER
46 ROOF ACCESS (2) PIECE LADDER WITH PLATFORM
47 CEILING-HUNG VOLLEYBALL SYSTEM.
48 INTERNAL ROOF DRAIN, REF. TO P-SERIES.
49 EXTERIOR EXPANSION JOINT FILLER
50 GYMNASIUME EQUIPMENT: SCOREBOARD
51 RECESSED CONCRETE SLAB. REF. S-SERIES.
52 EXPANSION JOINT COVER
53 ROOF ACCESS ABOVE
54 4'-0"X4'-0" MARKERBOARD
55 10'-0"X4'-0" MARKERBOARD
56 HM WINDOW 4'-0" TALL, 3'-4" WIDE
57 HOLLOW METAL WINDOW 4'-0" TALL, 6'-0" WIDE
58 SEMI-RECESSED FIRE EXTINGUISHER
59 WALL-MOUNTED FIRE EXTINGUISHER
60 NEW FABRIC WRAPPED TACK PANEL IN INFILL. ATTACH TO WINDOW.
61 FABRIC WRAPPED TACK PANEL
62 CASEWORK: 18"D SHELF
63 CAP OFF EXISTING FLOOR OUTLETS. COORDINATE WORK WITH MEP.
64 DASHED LINE: LAMIANTE DRYWALL OVER EXISTING MASONRY. REINSTALL ANY EXISTING MARKERBOARDS, TACKBOARDS, SHELVING ETC

2



N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REVISIONS:

#	Date	
2	02/29/202 4	AddendUm #2
		Desc.

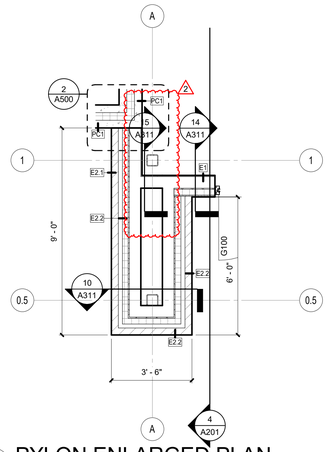
100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	01/31/2024
DRAWN BY:	Author

FIRST FLOOR PLAN - UNIT F1

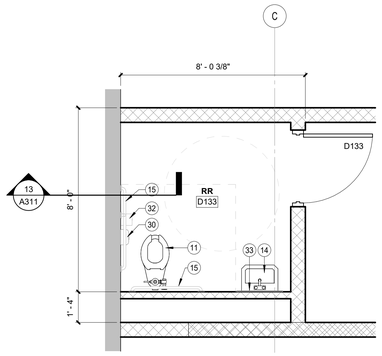
A101F1

PLOT DATE/TIME: 2/29/2024 3:03:09 PM



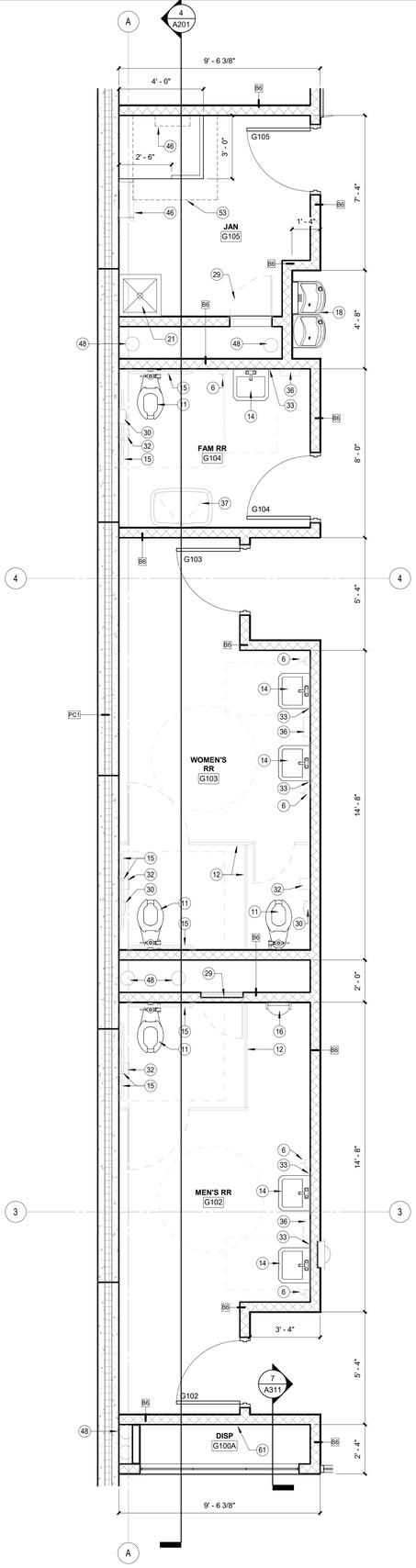
3 PYLON ENLARGED PLAN

SCALE: 3/8" = 1'-0" REF. 1 / A101G



2 ENLARGED PLAN - KITCHEN RR

SCALE: 3/8" = 1'-0" REF. 1 / A101D



1 ENLARGED PLAN - UNIT GG RESTROOMS

SCALE: 3/8" = 1'-0" REF. 1 / A101G

GENERAL NOTES

1. PROVIDE HOOKS ON ALL PARTITION DOORS
2. PROVIDE HOOKS ON ALL DOORS INTO SINGLE OCCUPANCY RESTROOMS
3. MOUNT HOOKS AT 48" AFF MAX IN ALL ACCESSIBLE RESTROOMS

PLAN NOTES - FLOOR PLAN

1 BULKHEAD
2 RECONFIGURED CONCRETE STEPS.
3 NEW INSULATED HOLLOW METAL DOOR IN HM FRAME
4 INFILL FORMER DOOR OPENING WITH CONSTRUCTION TO MATCH EXISTING
5 CASEWORK: UPPER CABINET(S).
6 RESTROOM ACCESSORIES: SOAP DISPENSER, OFCI.
7 NEW CONCRETE FLOOR SLAB THIS ROOM
8 CASEWORK: TALL CABINET
9 CASEWORK: NEW CABINET FILLER, 1">
10 CASEWORK: 2'-0" x 2'-0" x 7'-0" TALL CUBBIES WITH ADJUSTABLE SHELVES
11 PLUMBING FIXTURE: WALL-HUNG TOILET
12 TOILET PARTITION
14 PLUMBING FIXTURE: HAND SINK
15 ADA GRAB BARS
16 PLUMBING FIXTURE: URINAL
18 PLUMBING FIXTURE: DOUBLE DRINKING FOUNTAIN WITH BOTTLE FILLER
20 COUNTERTOP & BACKSPLASH
21 PLUMBING FIXTURE: MOP SINK
22 GYMNASIUM EQUIPMENT: TELESCOPIC BLEACHERS, 260-SEATING CAPACITY
23 CEILING-HUNG BASKETBALL BACKSTOP, FORWARD-FOLDING.
24 BASKETBALL, VOLLEYBALL FLOOR STRIPING. SEE FINISH PLANS FOR COLORS.
25 VOLLEYBALL, TENNIS FLOOR GROMETS
28 12' x 12' x 70' MOTORIZED BATTING CAGES (OVERHEAD) MOUNTED TO ROOF STRUCTURE. COORDINATE LOCATION W/ ALL TRADES PRIOR TO INSTALLATION.
29 PLUMBING CHASE ACCESS PANEL. 2'-0" x 2'-0"
30 RESTROOM ACCESSORIES: SANITARY NAPKIN DISPOSAL, CFCI.
32 RESTROOM ACCESSORIES: TOILET PAPER DISPENSER, OFCI.
33 RESTROOM ACCESSORIES: MIRROR, 24" x 36"
35 GYMNASIUM EQUIPMENT: DIVIDER CURTAIN
36 RESTROOM ACCESSORIES: PAPER TOWEL DISPENSER, OFCI.
37 RESTROOM ACCESSORIES: BABY CHANGING STATION
38 RELOCATED MARKERBOARD AND/OR TACKBOARD.
40 CLASSROOM EQUIPMENT: 12'-0" MARKERBOARD
41 CLASSROOM EQUIPMENT: 3'-0"W x 4'-0"H TACKBOARD
43 OVERHEAD COILING SHUTTER WITH COUNTER
46 ROOF ACCESS (2) PIECE LADDER WITH PLATFORM
47 CEILING-HUNG VOLLEYBALL SYSTEM.
48 INTERNAL ROOF DRAIN, REF. TO P-SERIES.
49 EXTERIOR EXPANSION JOINT FILLER
50 GYMNASIUME EQUIPMENT: SCOREBOARD
51 RECESSED CONCRETE SLAB. REF. S-SERIES.
52 EXPANSION JOINT COVER
53 ROOF ACCESS ABOVE
54 4'-0"X4'-0" MARKERBOARD
55 10'-0"X4'-0" MARKERBOARD
56 HM WINDOW 4'-0" TALL, 3'-4" WIDE
57 HOLLOW METAL WINDOW 4'-0" TALL, 6'-0" WIDE
58 SEMI-RECESSED FIRE EXTINGUISHER
59 WALL-MOUNTED FIRE EXTINGUISHER
60 NEW FABRIC WRAPPED TACK PANEL IN INFILL. ATTACH TO WINDOW.
61 FABRIC WRAPPED TACK PANEL
62 CASEWORK: 18"D SHELF
63 CAP OFF EXISTING FLOOR OUTLETS, COORDINATE WORK WITH MEP.

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REVISIONS:

#	Date	Desc.
2	02/29/2024	Addendum #2

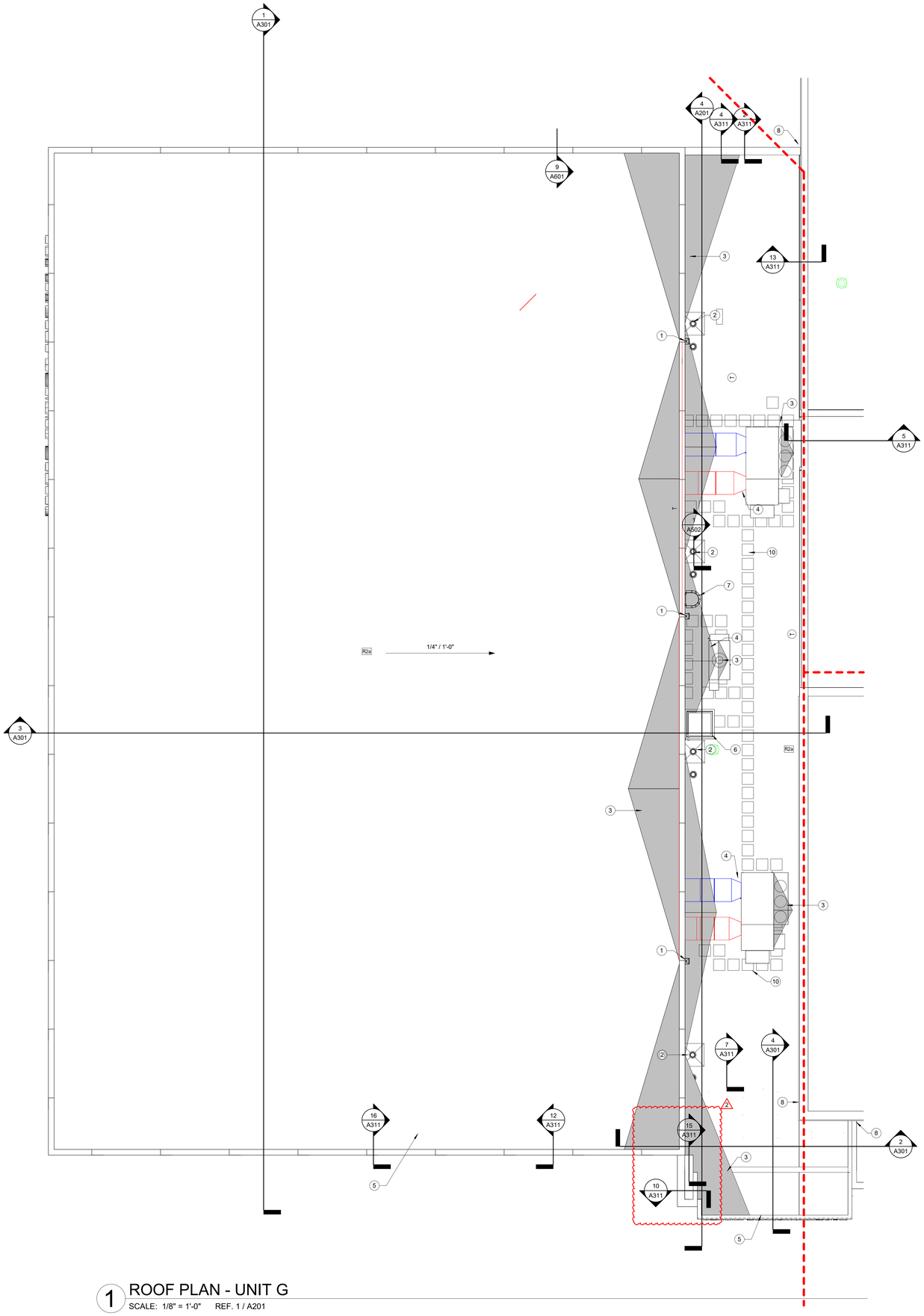
100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	01/31/2024
DRAWN BY:	Author

ENLARGED PLANS

A111

PLOT DATE/TIME: 2/29/2024 3:02:48 PM



1 ROOF PLAN - UNIT G

SCALE: 1/8" = 1'-0" REF. 1 / A201

GENERAL NOTES

1. PROVIDE SPLASH BLOCKS WWHERE DOWNSPOUTS OR EXTENDERS COME INTO ROOF SURFACE
2. PROVIDE 2X2 PROTECTIVE ROOF PADS OUTSIDE EVERY ROOF ACCESS POINT, ON TOP AND BOTTOM OF ROOF LADDERS, AROUND ALL ROOF MEP EQUIPMENT

PLAN NOTES - ROOF PLAN

1 PARAPET WALL SCUPPER & 5"x5" METAL DOWNSPOUT WITH SPLASHBLOCK AT BASE.
2 ROOF DRAIN WITH OVERFLOW TO UNDERGROUND STORM DRAIN, REF. C-SERIES.
3 TAPERED INSULATION AS REQUIRED FOR PROPER DRAINAGE.
4 MECHANICAL UNIT, REF. M-SERIES.
5 MEMBRANE ROOFING
6 ROOF HATCH, 48"x48"
7 ROOF LADDER WITH CAGE TO HIGHER ROOF SECURED TO WALL.
8 EXPANSION JOINT.
9 NEW COOLING UNIT. REF. M-SERIES.
10 ROOF WALKWAY PADS, TYP. AROUND MECHANICAL UNITS.

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

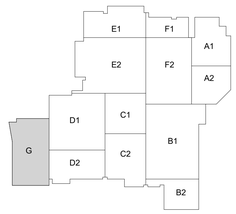
REVISIONS:

#	Date	Desc.
2	02/29/202 4	Addendum #2

100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	01/31/2024
DRAWN BY:	Author

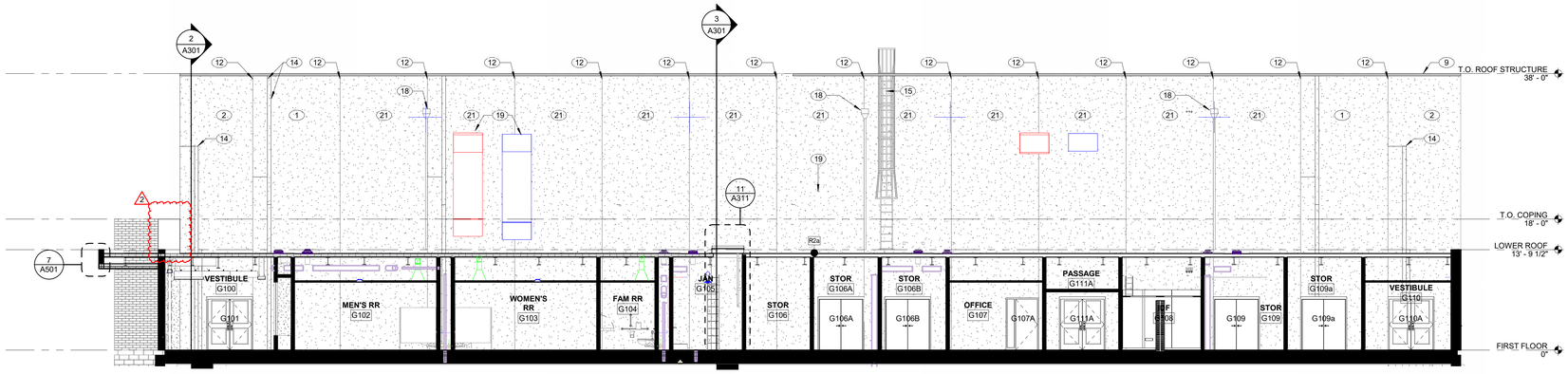
UNIT G - ROOF PLAN



N
TRUE NORTH

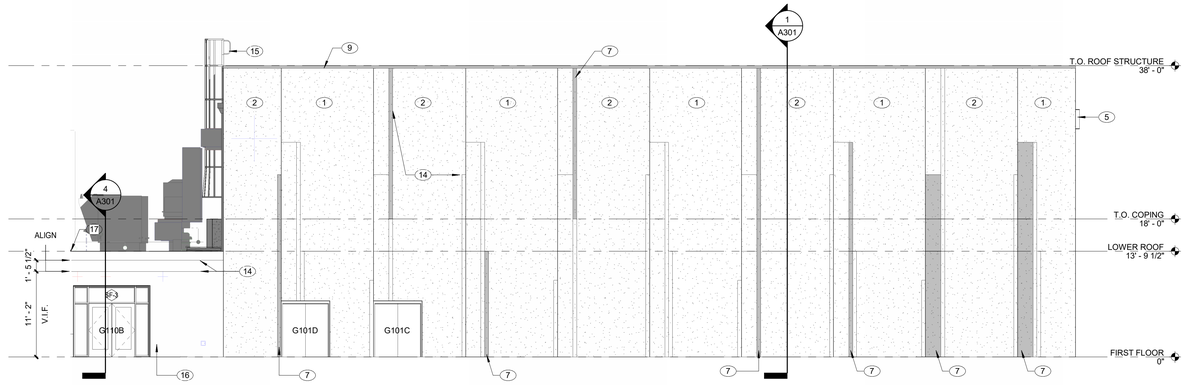
A141G

PLOT DATE/TIME: 2/29/2024 3:10:48 PM



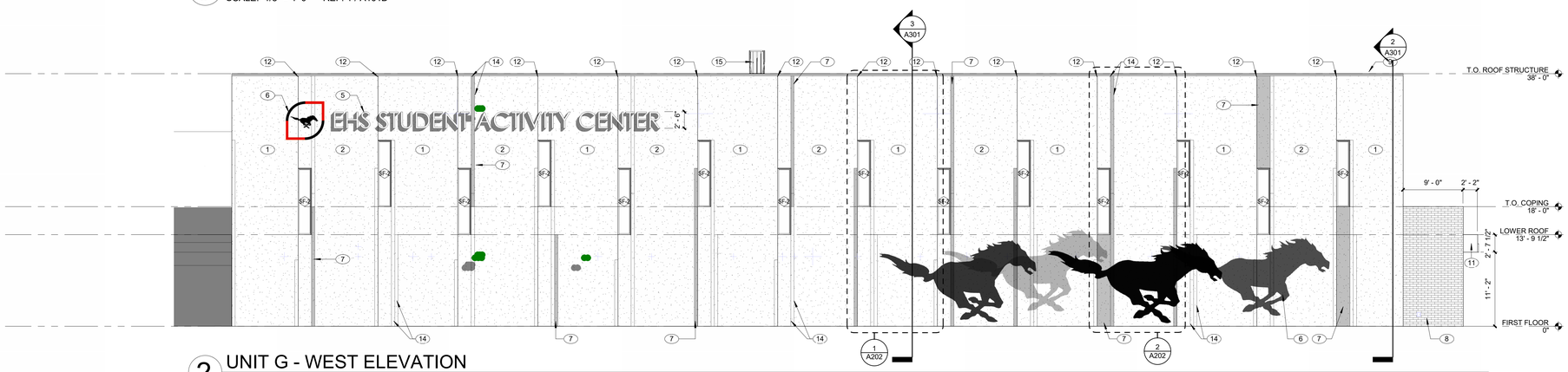
4 UNIT G - EAST SECTION ELEVATION

SCALE: 1/8" = 1'-0" REF. 1 / A101D



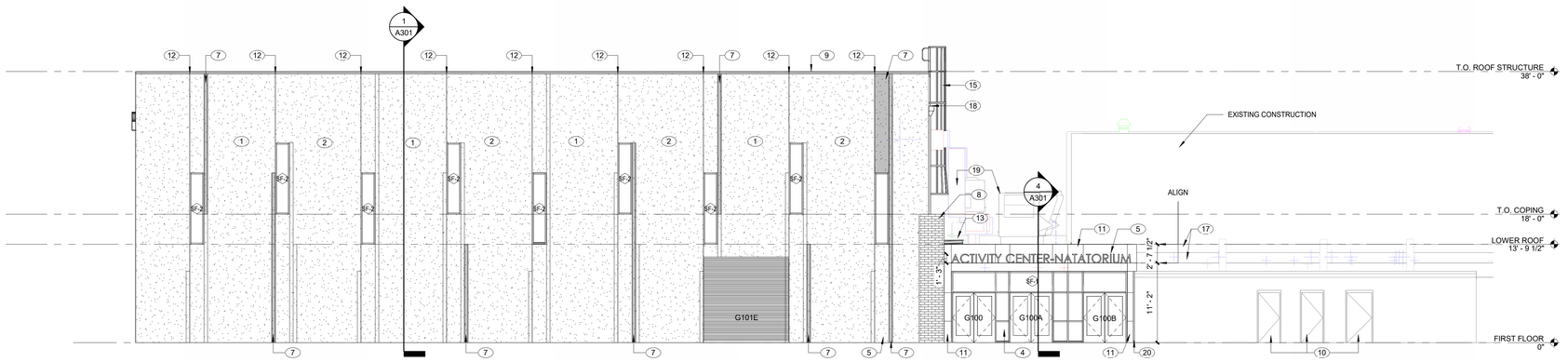
3 UNIT G - NORTH ELEVATION

SCALE: 1/8" = 1'-0" REF. 1 / A101D



2 UNIT G - WEST ELEVATION

SCALE: 1/8" = 1'-0" REF. 1 / A101G



1 UNIT G - SOUTH ELEVATION

SCALE: 1/8" = 1'-0" REF. 1 / A101G

ELEVATION NOTES - EXTERIOR

1 THROUGH-COLOR PRECAST PANEL 'A'; MIX 20 (LIMESTONE SIM.)
2 THROUGH-COLOR PRECAST PANEL 'A'; MIX 20 (LIMESTONE SIM.)
4 ALUMINUM STOREFRONT SYSTEM
5 EXTRUDED METAL SIGNAGE. EXACT TEXT TO BE COORDINATED WITH OWNER & ARCHITECT.
6 EXTRUDED METAL SIGNAGE: SCHOOL MASCOT/LOGO
7 EXTERIOR GRADE PAINT IN THIS AREA (PT-4)
8 GLAZED BLOCK
9 CONTINOUS METAL COPING.
10 PAINT EXISTING DOOR(S) TO MATCH LIMESTONE OR SIMILAR.
11 FLAT METAL PANEL WALL SYSTEM
12 PRECAST PANEL JOINT.
13 ROOF HATCH BEYOND.
14 REVEAL JOINT, TYP.
15 ROOF LADDER WITH CAGE BEYOND.
16 ACRYLIC COATING OVER CMU, REF. TO WALL SECTIONS AND SPECS.
17 EXISTING LIMESTONE CORBELLING
18 METAL ROOF SCUPPER WITH DOWNSPOUT
19 MECHANICAL EQUIPMENT/UNITS. COORDINATE WALL LOCATIONS & PENETRATIONS WITH MEP.
20 2" WALL EXPANSION JOINT WITH COVER
21 THROUGH-COLOR PRECAST PANEL, MIX 20 (LIMESTONE SIM.), SMOOTH SURFACE - NO REVEAL JOINTS

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

TERRY L. KRIPS REGISTERED No 8800139 STATE OF INDIANA PROFESSIONAL ENGINEER

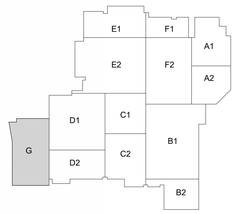
REVISIONS:

#	Date	Desc.
1	02/15/202 4	Addendum #1
2	02/29/202 4	Addendum #2

100% CONSTRUCTION DOCUMENTS

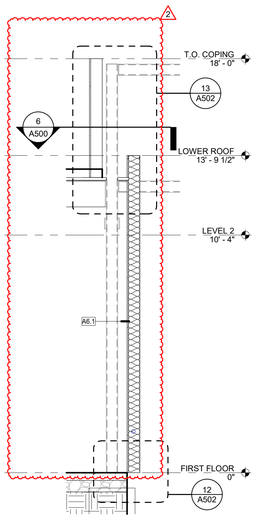
PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: A.O.

EXTERIOR ELEVATIONS

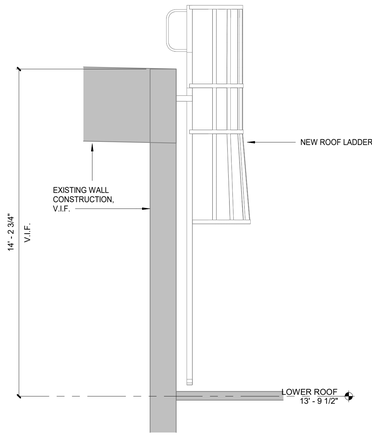


A201

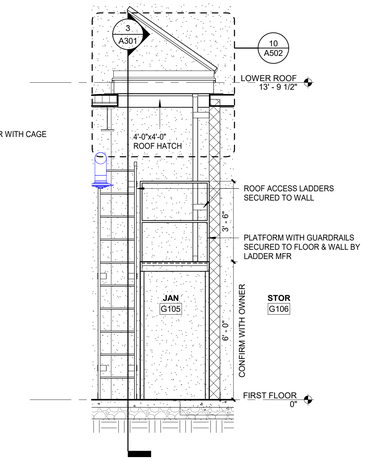
PLOT DATE/TIME:2/29/2024 9:42:59 PM



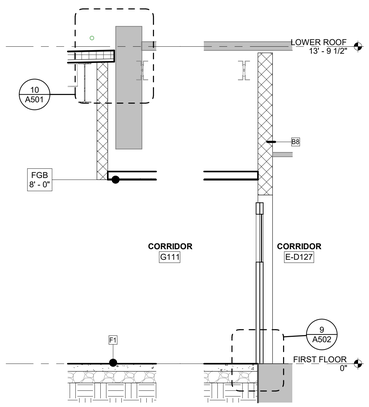
15 WALL SECTION
SCALE: 3/8" = 1'-0" REF. 3 / A111



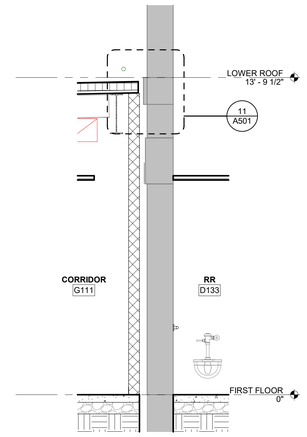
3 ROOF LADDER SECTION
SCALE: 3/8" = 1'-0" REF. 1 / A141D



11 ROOF ACCESS WALL SECTION
SCALE: 3/8" = 1'-0" REF. 4 / A201



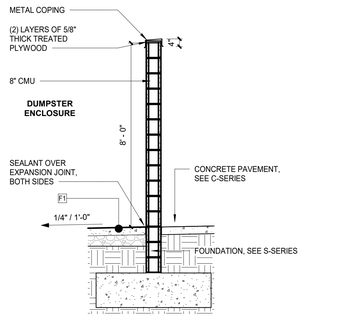
5 WALL SECTION
SCALE: 3/8" = 1'-0" REF. 1 / A101D



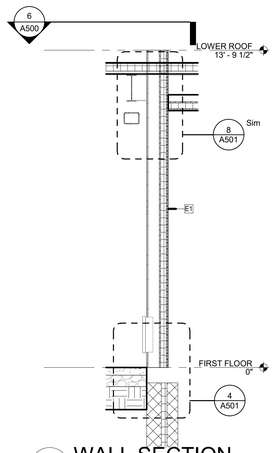
13 WALL SECTION
SCALE: 3/8" = 1'-0" REF. 1 / A101D

GENERAL NOTES

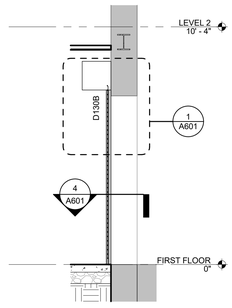
1. REFER TO SHEET A003 FOR CONSTRUCTION TYPES (FLOOR, WALL, ROOF, ETC.).
2. SEE ELEVATIONS FOR MASONRY TYPE AND SIZE
3. PROVIDE SOLID SURFACE WINDOW SILLS @ ALL STOREFRONT GLAZING SILLS ABOVE FINISHED FLOOR HEIGHT. WINDOW SILL TO EXTEND 1" PAST FINISHED WALL SURFACE, TYP. UNLESS OTHERWISE NOTED



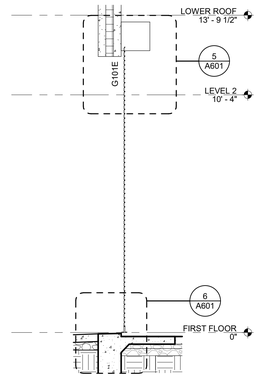
9 DUMPSTER WALL SECTION
SCALE: 3/8" = 1'-0" REF. 1 / A101D



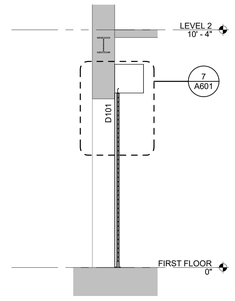
14 WALL SECTION
SCALE: 3/8" = 1'-0" REF. 3 / A111



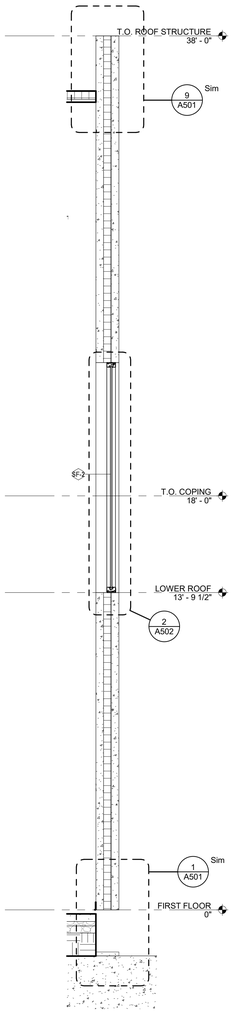
8 COILING DOOR WALL SECTION
SCALE: 3/8" = 1'-0" REF. 5 / A301



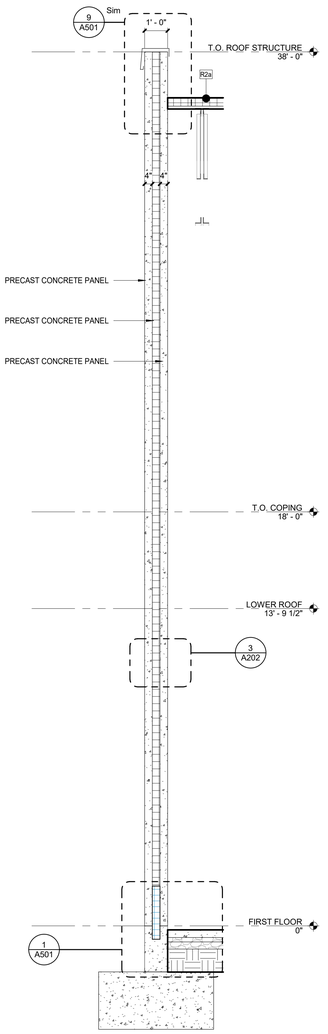
12 O.H. DOOR WALL SECTION
SCALE: 3/8" = 1'-0" REF. 1 / A101G



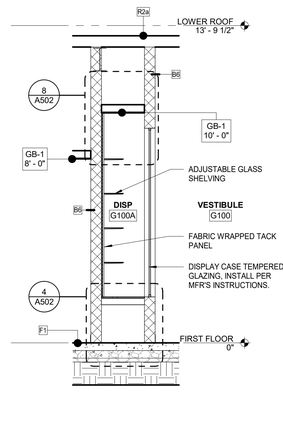
6 WALL SECTION
SCALE: 3/8" = 1'-0" REF. 1 / A101D



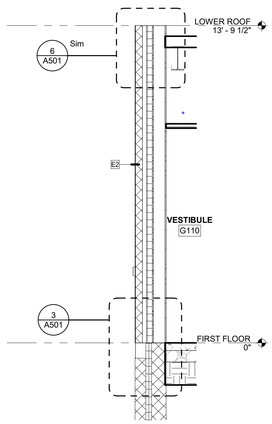
16 PRECAST WALL SECTION
SCALE: 3/8" = 1'-0" REF. 1 / A101G



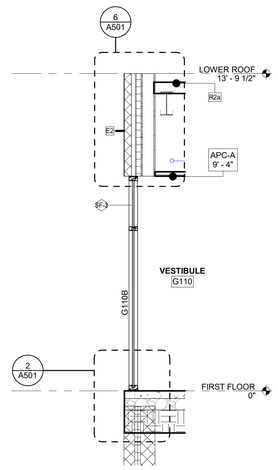
1 PRECAST WALL SECTION
SCALE: 3/8" = 1'-0" REF. 1 / A301



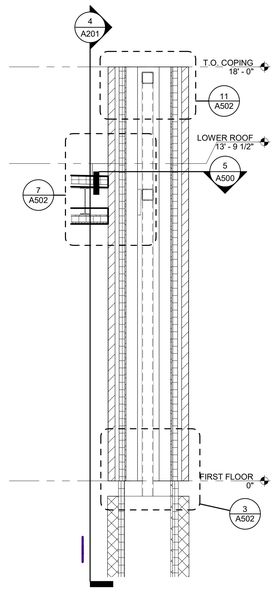
7 WALL SECTION
SCALE: 3/8" = 1'-0" REF. 1 / A101G



4 WALL SECTION
SCALE: 3/8" = 1'-0" REF. 1 / A101D



2 WALL SECTION
SCALE: 3/8" = 1'-0" REF. 1 / A101D



10 PYLON WALL SECTION
SCALE: 3/8" = 1'-0" REF. 3 / A111

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REVISIONS:

#	Date	Desc.
2	02/28/202 4	Addendum #2

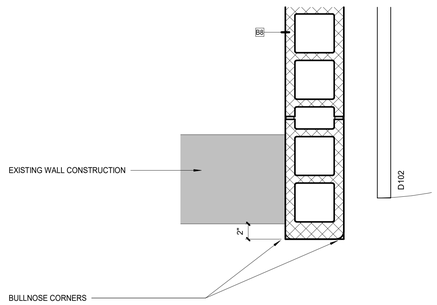
100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: Author

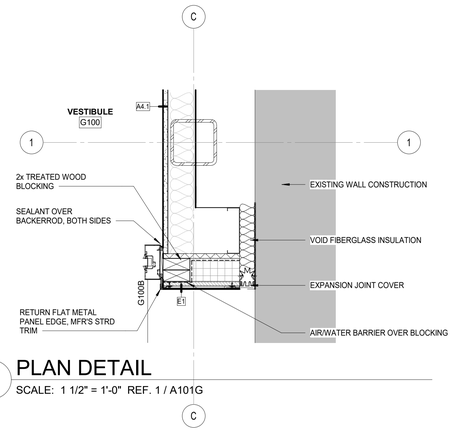
WALL SECTIONS

A311

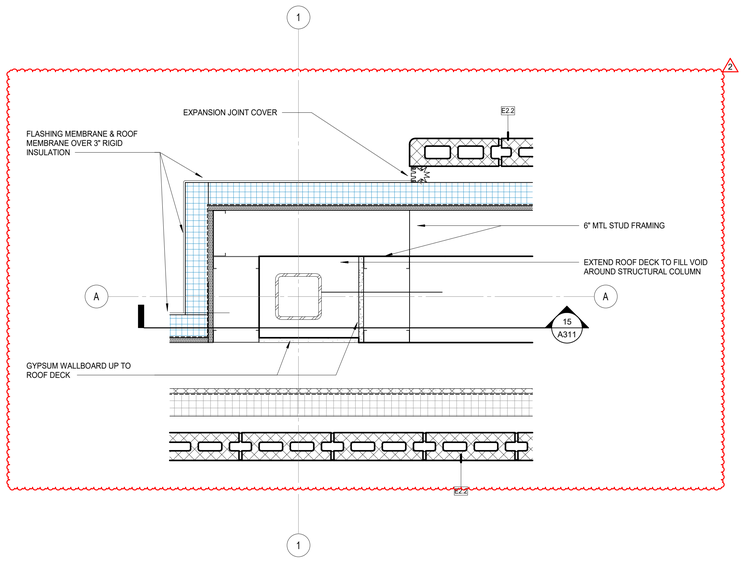
PLOT DATE/TIME:2/28/2024 5:03:02 PM



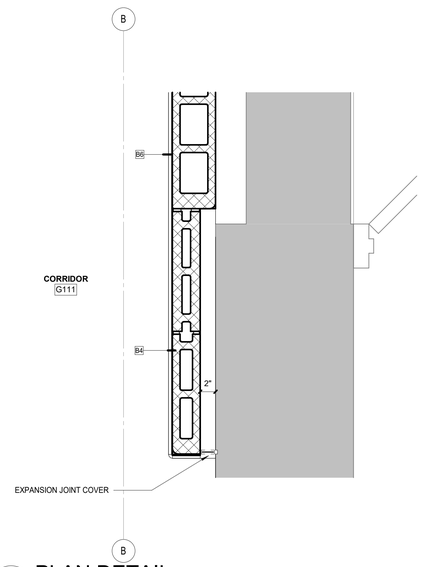
8 PLAN DETAIL
SCALE: 1 1/2" = 1'-0" REF. 1 / A101D



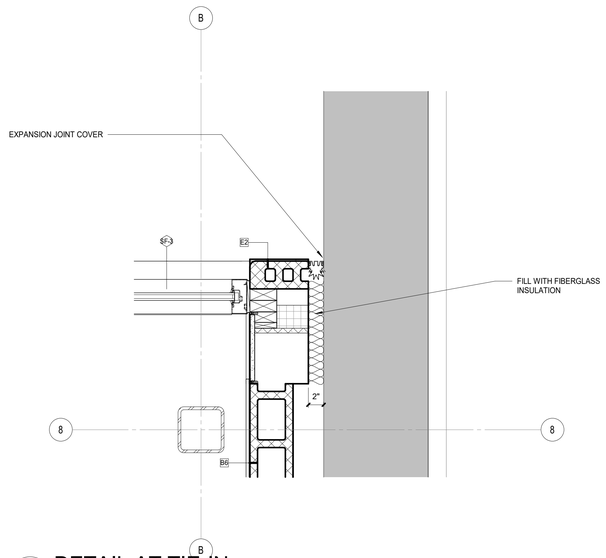
7 PLAN DETAIL
SCALE: 1 1/2" = 1'-0" REF. 1 / A101G



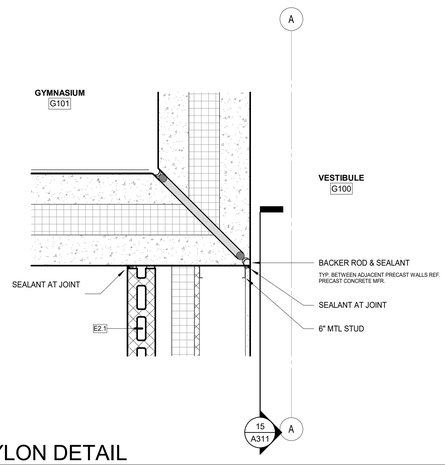
6 PLAN DETAIL
SCALE: 1 1/2" = 1'-0" REF. 14 / A311



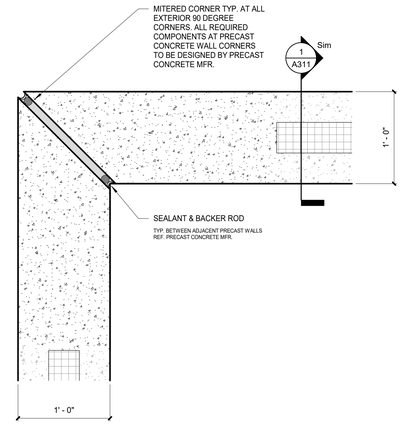
4 PLAN DETAIL
SCALE: 1 1/2" = 1'-0" REF. 1 / A101G



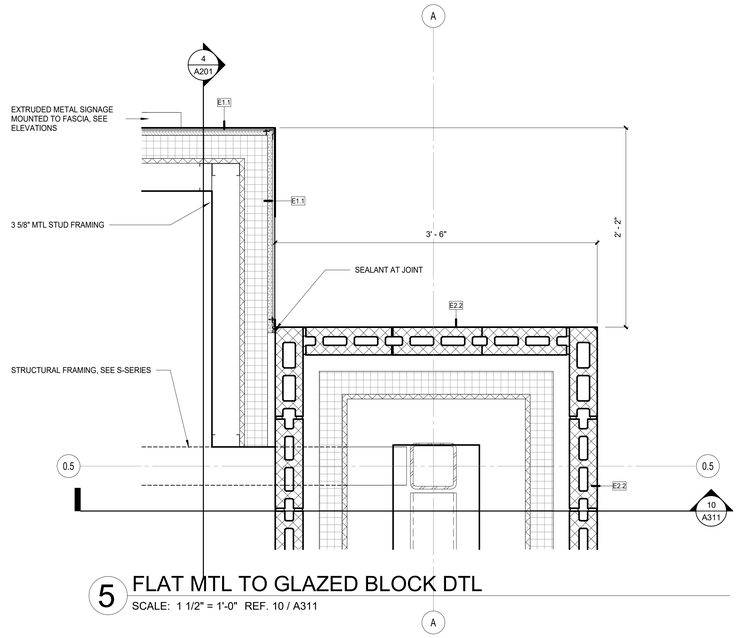
3 DETAIL AT TIE-IN
SCALE: 1 1/2" = 1'-0" REF. 1 / A101G



2 PYLON DETAIL
SCALE: 1 1/2" = 1'-0" REF. 3 / A111



1 PRECAST CONCRETE CORNER DETAIL
SCALE: 1 1/2" = 1'-0" REF. 1 / A101G



5 FLAT MTL TO GLAZED BLOCK DTL
SCALE: 1 1/2" = 1'-0" REF. 10 / A311

PLOT DATE/TIME: 2/26/2024 5:00:03 PM

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REVISIONS:

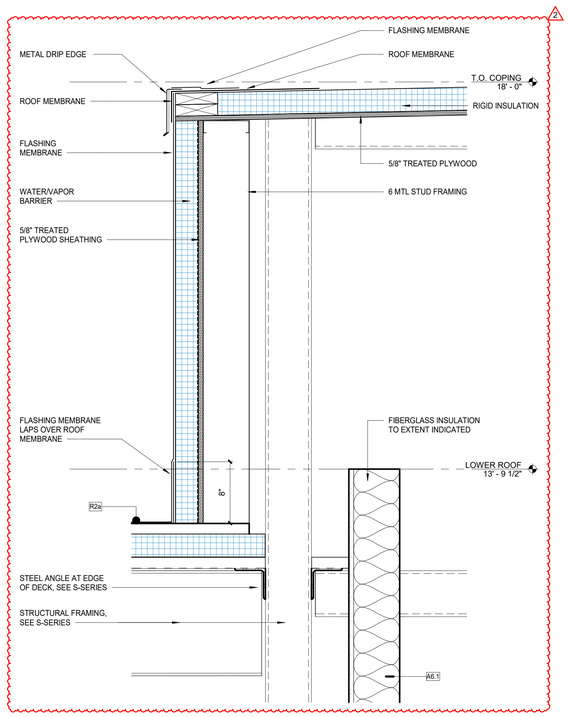
#	Date	Desc.
2	02/29/202 4	Addendum #2

100% CONSTRUCTION DOCUMENTS

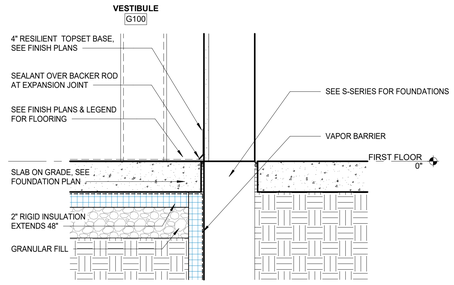
PROJECT:	#23117
DATE:	01/31/2024
DRAWN BY:	Author

PLAN DETAILS

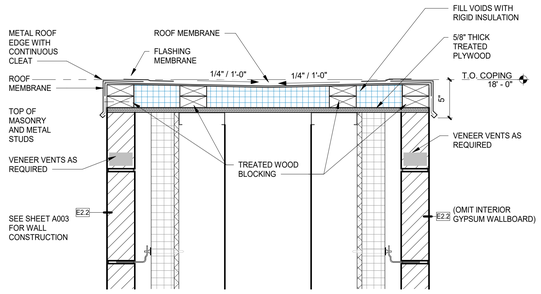
A500



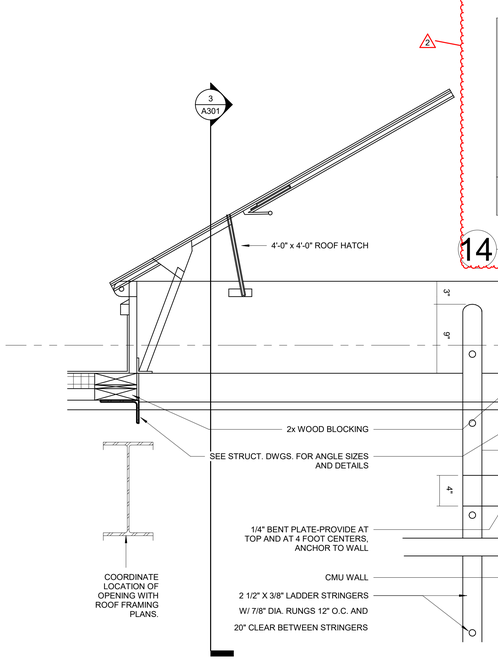
13 SECTION DETAIL
SCALE: 1 1/2" = 1'-0" REF. 15 / A311



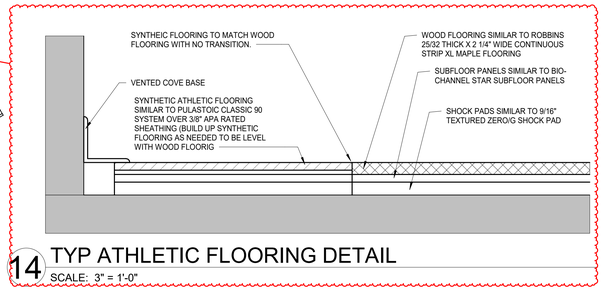
12 DETAIL AT FOUNDATION
SCALE: 1 1/2" = 1'-0" REF. 15 / A311



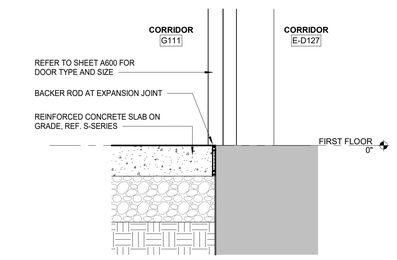
11 PYLON COPING DETAIL
SCALE: 1 1/2" = 1'-0" REF. 10 / A311



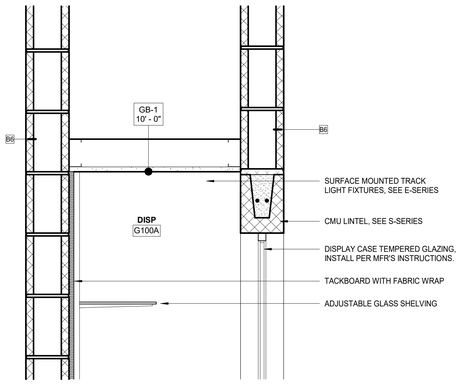
10 ROOF HATCH DETAIL
SCALE: 1 1/2" = 1'-0" REF. 11 / A311



14 TYP ATHLETIC FLOORING DETAIL
SCALE: 3" = 1'-0"

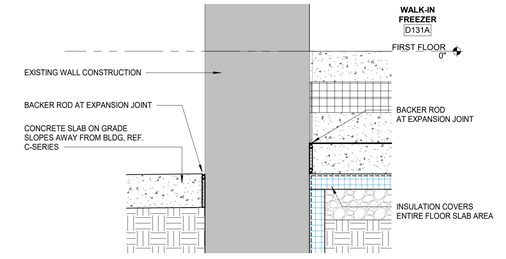


9 CONCRETE SLAB DETAIL
SCALE: 1 1/2" = 1'-0" REF. 5 / A311



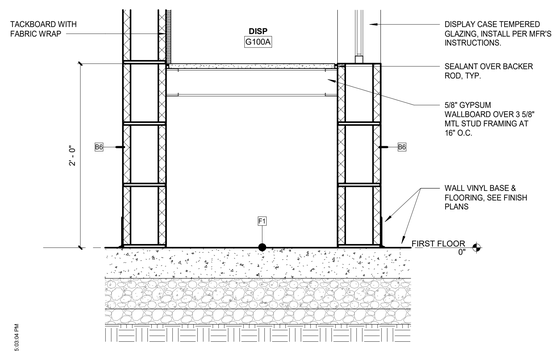
8 DISP CASE CEILING DETAIL
SCALE: 1 1/2" = 1'-0" REF. 7 / A311

7 CANOPY-PYLON DETAIL
SCALE: 1 1/2" = 1'-0" REF. 10 / A311

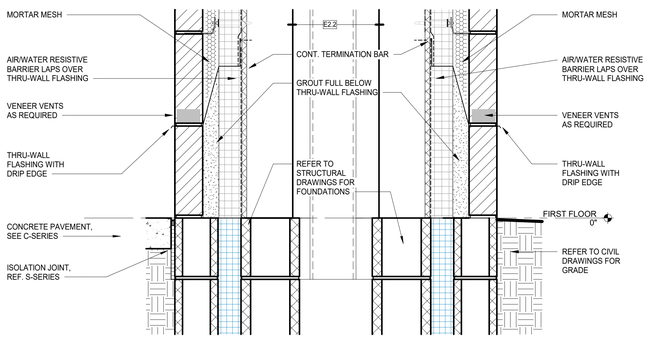


6 RECESSED SLAB IN KITCHEN - SECTION DTL
SCALE: 1 1/2" = 1'-0" REF. 5 / A301

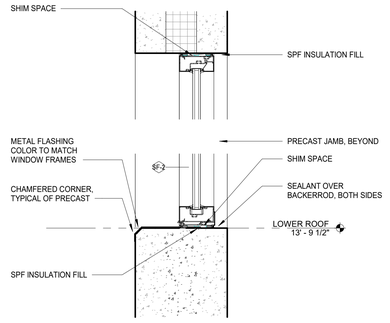
5 VENT DETAIL
SCALE: 12" = 1'-0"



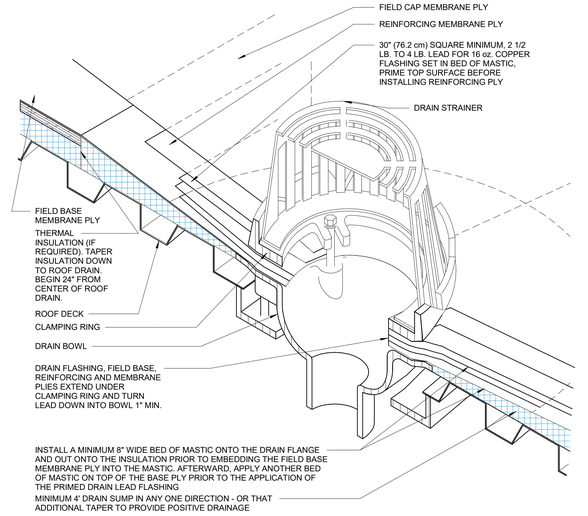
4 DISPLAY CASE FLOOR DETAIL
SCALE: 1 1/2" = 1'-0" REF. 7 / A311



3 PYLON FLOOR DETAIL
SCALE: 1 1/2" = 1'-0" REF. 10 / A311



2 TYP. SF DTL IN PRECAST CON.
SCALE: 1 1/2" = 1'-0" REF. 16 / A311



1 ROOF DRAIN DETAIL
SCALE: 3" = 1'-0" REF. 1 / A141G

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REVISIONS:

#	Date	Desc.
2	02/28/202 4	Addendum #2

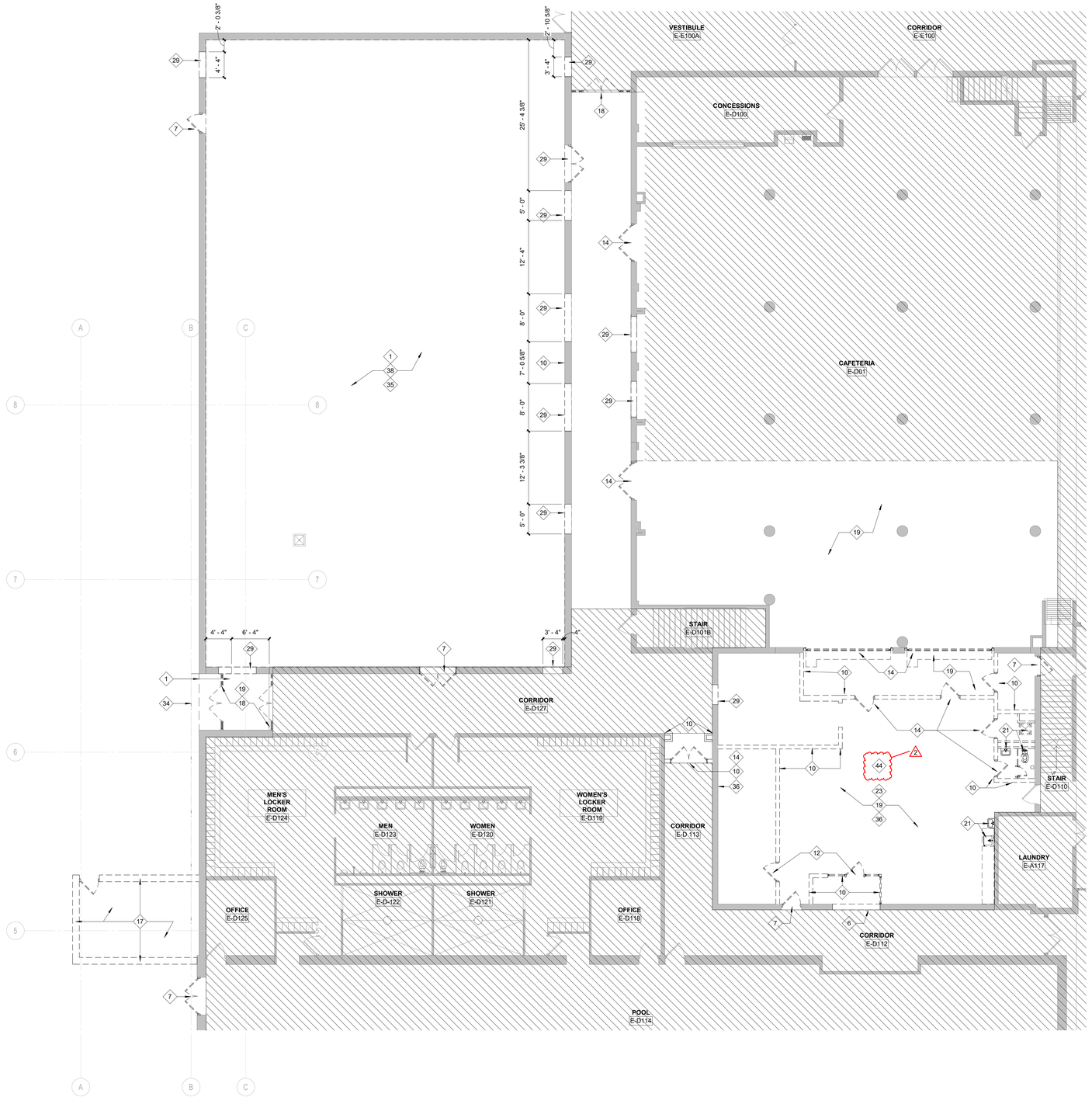
100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	01/31/2024
DRAWN BY:	Author

SECTION DETAILS

A502

PLOT DATE/TIME: 2/29/2024 8:59:04 PM



1 DEMOLITION PLAN - FIRST FLOOR - UNIT D

SCALE: 1/8" = 1'-0" REF. 1 / A201

GENERAL NOTES - DEMOLITION

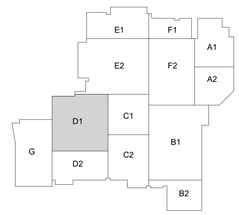
1. COORDINATE DEMOLITION WITH NEW WORK, INCLUDING MEP.
2. REMOVE ALL MISCELLANEOUS OBJECTS AS NEEDED FOR NEW WORK.
3. CLEAN, PATCH AND PREPARE SURFACES FOR NEW WORK.
4. PROTECT SURFACES AND EQUIPMENT THAT ARE TO REMAIN.

OUT OF SCOPE

PLAN NOTES - DEMOLITION

1 DEMO CONCRETE SLAB FLOOR ENTIRELY
2 REMOVE RAILING(S)
3 FLOORING DEMOLITION BY OWNER.
4 REMOVE STEPS. EXCAVATE UNDER EXISTING RISERS AS REQUIRED FOR NEW FLOOR.
5 REMOVE ALL CEILING-HUNG ACCESSORIES AND GYM EQUIPMENT.
6 REMOVE WALL(S) TO THE EXTENT INDICATED. PREPARE FLOOR & REMAINING EXISTING WALLS ON BOTH SIDES FOR NEW WORK.
7 REMOVE DOOR AND FRAME. PREPARE OPENING TO RECEIVE INFILL CONSTRUCTION TO MATCH EXISTING WALL
9 EXISTING FLOORING TO REMAIN TO EXTENT INDICATED. PREPARE SURFACES FOR NEW WORK.
10 REMOVE WALL(S) COMPLETE. CLEAN, PATCH AND PREPARE SURFACES FOR NEW WORK
12 REMOVE DOOR AND FRAME. PREPARE CMU JAMBS TO RECEIVE NEW FINISH
14 REMOVE DOOR AND FRAME.
16 REMOVE WALL AND BASE CASEWORK AND COUNTER TO THE EXTEND INDICATED
17 REMOVE ENTIRE STRUCTURE INDICATED - FOUNDATIONS, WALLS, FLOOR, AND ROOF
18 REMOVE STOREFRONT DOORS, SIDE LITES AND FRAMING. CLEAN, PATCH AND PREPARE SURFACE FOR NEW WORK.
19 REMOVE FLOORING & WALL BASE TO INDICATED LINE. CLEAN & PREPARE SURFACE FOR NEW WORK.
20 REMOVE CEILING IN THIS AREA AS REQUIRED FOR NEW CONSTRUCTION
21 REMOVE PLUMBING FIXTURES AND ACCESSORIES, PREPARE SURFACE FOR NEW WORK.
22 DEMO CONCRETE EXTERIOR CONCRETE SLAB & CHAIN LINK FENCE. PREPARE SURFACES FOR NEW WORK.
23 REMOVE KITCHEN EQUIPMENT AND ACCESSORIES.
24 REMOVE & SALVAGE MARKERBOARD AND/OR TACKBOARD FOR RELOCATION.
25 DEMO CASEWORK UNIT, PREPARE SURFACE FOR NEW WORK.
26 DEMO WINDOW AND PREPARE TO INFILL OPENING WITH WALL SYSTEM TO MATCH ADJACENT SURFACE.
27 REMOVE LOCKERS, RAISED SLAB AND BULKHEAD UP TO EXTENT INDICATED. CLEAN, PATCH AND PREPARE SURFACEAS NEEDED FOR NEW WORK.
28 REMOVE MARKERBOARDS, TACKBOARDS, AND OTHER WALL-MOUNTED EQUIPMENT AS NEEDED FOR NEW WORK. OWNER TO HAVE FIRST RIGHT OF REFUSAL.
29 CUT OPENING FOR NEW DOOR/WINDOW, COORDINATE WITH NEW WORK.
30 REMOVE FOLDING PARTITION ENTIRELY. CLEAN AND PREPARE SURFACE FOR NEW WORK.
31 DEMO BULKHEAD &CEILING EQUIPMENT. PREPARE SURFACE FOR NEW WORK.
32 DEMO CEILING ENTIRELY AS SHOWN.
33 POWER WASH LIMESTONE MASONRY.
34 DEMO CANOPY FASCIA AND SOFFIT, INCLUDING STRUCTURE. CLEAN AND PREPARE SURFACE FOR NEW WORK.
35 REMOVE ALL WALL-HUNG ACCESSORIES AND GYM EQUIPMENT.
36 REMOVE TILE COVE BASE. CLEAN, PATCH AND PREPARE SURFACE FOR NEW WORK.
37 DEMO RAMP ENTIRELY. CLEAN AND PREPARE SURFACE FOR NEW WORK.
38 REMOVE WOOD FLOORING ENTIRELY. NOTIFY OWNER FOUR WEEKS PRIOR TO DEMOLITION.
39 REMOVE VISUAL DISPLAY BOARD. OWNER TO HAVE FIRST RIGHT OF REFUSAL. CLEAN ALL ADHESIVE/RESIDUE FROM THE WALLS. PATCH AND PREP SURFACES FOR NEW WORK
40 EXISTING CASEWORK TO REMAIN
41 REMOVE FLOORING & RISERS.
42 CAP OFF EXISTING FLOOR OUTLETS AFTER DEMOLITION. COORDINATE WORK WITH MEP.
43 PATCH/REMOVE AND PATCH DRYWALL AS NEEDED. PREP SURFACES FOR NEW WORK
44 IF THE CMU WALL SITS ON THE FOUNDATION WALL, REMOVE ONE BLOCK BELOW THE SLAB. INFILL THE SLAB

2



N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REVISIONS:

#	Date	Desc.
2	02/28/202 4	Addendum #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: Author

DEMOLITION PLAN - FIRST FLOOR UNIT D

AD101D

PLOT DATE/TIME: 2/28/2024 4:24:38 PM

1 DEMOLITION PLAN - FIRST FLOOR - UNIT F2

SCALE: 1/8" = 1'-0" REF. 1 / A201

GENERAL NOTES - DEMOLITION

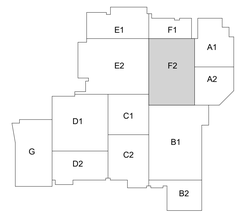
1. COORDINATE DEMOLITION WITH NEW WORK, INCLUDING MEP.
2. REMOVE ALL MISCELLANEOUS OBJECTS AS NEEDED FOR NEW WORK.
3. CLEAN, PATCH AND PREPARE SURFACES FOR NEW WORK.
4. PROTECT SURFACES AND EQUIPMENT THAT ARE TO REMAIN.

OUT OF SCOPE

PLAN NOTES - DEMOLITION

1 DEMO CONCRETE SLAB FLOOR ENTIRELY
2 REMOVE RAILING(S)
3 FLOORING DEMOLITION BY OWNER.
4 REMOVE STEPS. EXCAVATE UNDER EXISTING RISERS AS REQUIRED FOR NEW FLOOR.
5 REMOVE ALL CEILING-HUNG ACCESSORIES AND GYM EQUIPMENT.
6 REMOVE WALL(S) TO THE EXTENT INDICATED. PREPARE FLOOR & REMAINING EXISTING WALLS ON BOTH SIDES FOR NEW WORK.
7 REMOVE DOOR AND FRAME. PREPARE OPENING TO RECEIVE INFILL CONSTRUCTION TO MATCH EXISTING WALL
9 EXISTING FLOORING TO REMAIN TO EXTENT INDICATED. PREPARE SURFACES FOR NEW WORK.
10 REMOVE WALL(S) COMPLETE. CLEAN, PATCH AND PREPARE SURFACES FOR NEW WORK
12 REMOVE DOOR AND FRAME. PREPARE CMU JAMBS TO RECEIVE NEW FINISH
14 REMOVE DOOR AND FRAME.
16 REMOVE WALL AND BASE CASEWORK AND COUNTER TO THE EXTEND INDICATED
17 REMOVE ENTIRE STRUCTURE INDICATED - FOUNDATIONS, WALLS, FLOOR, AND ROOF
18 REMOVE STOREFRONT DOORS, SIDE LITES AND FRAMING. CLEAN, PATCH AND PREPARE SURFACE FOR NEW WORK.
19 REMOVE FLOORING & WALL BASE TO INDICATED LINE. CLEAN & PREPARE SURFACE FOR NEW WORK.
20 REMOVE CEILING IN THIS AREA AS REQUIRED FOR NEW CONSTRUCTION
21 REMOVE PLUMBING FIXTURES AND ACCESSORIES, PREPARE SURFACE FOR NEW WORK.
22 DEMO CONCRETE EXTERIOR CONCRETE SLAB & CHAIN LINK FENCE. PREPARE SURFACES FOR NEW WORK.
23 REMOVE KITCHEN EQUIPMENT AND ACCESSORIES.
24 REMOVE & SALVAGE MARKERBOARD AND/OR TACKBOARD FOR RELOCATION.
25 DEMO CASEWORK UNIT, PREPARE SURFACE FOR NEW WORK.
26 DEMO WINDOW AND PREPARE TO INFILL OPENING WITH WALL SYSTEM TO MATCH ADJACENT SURFACE.
27 REMOVE LOCKERS, RAISED SLAB AND BULKHEAD UP TO EXTENT INDICATED. CLEAN, PATCH AND PREPARE SURFACEAS NEEDED FOR NEW WORK.
28 REMOVE MARKERBOARDS, TACKBOARDS, AND OTHER WALL-MOUNTED EQUIPMENT AS NEEDED FOR NEW WORK. OWNER TO HAVE FIRST RIGHT OF REFUSAL.
29 CUT OPENING FOR NEW DOOR/WINDOW, COORDINATE WITH NEW WORK.
30 REMOVE FOLDING PARTITION ENTIRELY. CLEAN AND PREPARE SURFACE FOR NEW WORK.
31 DEMO BULKHEAD &CEILING EQUIPMENT. PREPARE SURFACE FOR NEW WORK.
32 DEMO CEILING ENTIRELY AS SHOWN.
33 POWER WASH LIMESTONE MASONRY.
34 DEMO CANOPY FASCIA AND SOFFIT, INCLUDING STRUCTURE. CLEAN AND PREPARE SURFACE FOR NEW WORK.
35 REMOVE ALL WALL-HUNG ACCESSORIES AND GYM EQUIPMENT.
36 REMOVE TILE COVE BASE. CLEAN, PATCH AND PREPARE SURFACE FOR NEW WORK.
37 DEMO RAMP ENTIRELY. CLEAN AND PREPARE SURFACE FOR NEW WORK.
38 REMOVE WOOD FLOORING ENTIRELY. NOTIFY OWNER FOUR WEEKS PRIOR TO DEMOLITION.
39 REMOVE VISUAL DISPLAY BOARD. OWNER TO HAVE FIRST RIGHT OF REFUSAL. CLEAN ALL ADHESIVE/RESIDUE FROM THE WALLS. PATCH AND PREP SURFACES FOR NEW WORK
40 EXISTING CASEWORK TO REMAIN
41 REMOVE FLOORING & RISERS.
42 CAP OFF EXISTING FLOOR OUTLETS AFTER DEMOLITION. COORDINATE WORK WITH MEP.
43 PATCH/REMOVE AND PATCH DRYWALL AS NEEDED. PREP SURFACES FOR NEW WORK

2



N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REVISIONS:

#	Date	Desc.
2	02/28/202 4	Addendum #2

100% CONSTRUCTION DOCUMENTS

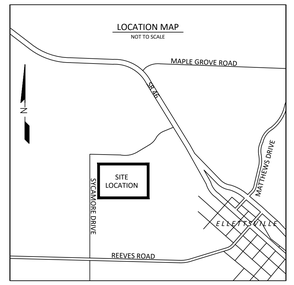
PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: Author

DEMOLITION PLAN - FIRST FLOOR UNIT F2

AD101F2

PLOT DATE/TIME: 2/28/2024 11:52:47 PM

TOPOGRAPHIC SURVEY
A PART OF SECTIONS 8 & 9, T9N, R2W, MONROE COUNTY, INDIANA.



SURVEY NOTES

1. FIELD WORK PERFORMED JUNE 6 - 21, AUGUST 8, AND SEPTEMBER 12, 2023.
2. CONTOURS REPRESENT 1-FOOT INTERVALS.
3. UTILITIES SHOWN HEREON ARE PER OBSERVED ABOVE GROUND EVIDENCE AND FROM UTILITY MARKINGS PLACED ON THE GROUND BY INDIANA811 MEMBER UTILITIES (SEE TICKETS BELOW). MEMBER UTILITIES DO NOT LOCATE PRIVATE LINES OR FACILITIES. MEMBER UTILITIES DO NOT LOCATE SERVICE LINES NOR ALL UTILITIES WHEN A SURVEY IS THE PURPOSE OF THE TICKET. OVERHEAD UTILITIES ARE IDENTIFIED AS OVERHEAD WITHOUT SPECIAL INVESTIGATION AS TO THE TYPE OR NATURE. STORM AND SANITARY INVERT ELEVATIONS, PIPE SIZES, AND MATERIALS ARE ALL APPROXIMATE BASED ON LIMITED INFORMATION AVAILABLE FROM THE SURFACE. NO STRUCTURES WERE ENTERED TO ACCURATELY MEASURE PIPE SIZES OR TO VERIFY PIPE TYPE AND MATERIAL. STRUCTURE GRATES AND COVERS SHOWN SHOULD NOT BE ASSUMED TO BE THE CENTER OF THE BELOW GROUND STRUCTURE. ALL UTILITIES INCLUDING LOCATIONS AND SIZES NEED TO BE VERIFIED PRIOR TO CONSTRUCTION EFFORTS.
4. THE FOLLOWING IS THE INDIANA 811 TICKET NUMBER FOR THIS PROJECT: 2307051997, 2308570
5. THE FOLLOWING ARE THE MEMBER UTILITIES NOTIFIED BY INDIANA 811:

DUKE ENERGY	*ELECTRIC*
COMCAST CABLE (SOUTH)	*CABLE TV*
CENTERPOINT ENERGY (SOUTH) (FORMERLY VECTREN)	*GAS*
ELLETTSVILLE UTILITIES	*SEWER, WATER*
SMITHVILLE TELEPHONE COMPANY, INC.	*TELEPHONE*

6. The utilities shown on this survey represent Quality Level B standard of care.

The American Society of Civil Engineers (ASCE) has developed an important standard of care guideline, Standard Guideline for the Collection and Depiction of Existing Subsurface Utility Data, CI/ASCE 38-02.

This standard guideline describes four quality levels of utility depiction:

Quality Level D - Information derived from existing records or oral recollections.

Quality Level C - Information obtained by surveying and plotting visible above-ground utility features and by using professional judgment in correlating this information to Quality Level D.

Quality Level B - Information obtained through the application of appropriate surface geophysical methods to determine the existence and approximate horizontal position of subsurface utilities.

Quality Level A - Precise horizontal and vertical location of utilities obtained by the actual exposure and subsequent measurement of subsurface utilities, usually at a specific point.

To order a copy of ASCE Standard 38-02, please go to the ASCE Bookstore: http://www.pubs.asce.org/ or call 1-800-548-2723.

CONTROL POINTS

HORIZONTAL DATUM: Reference Frame NAD 83 (2011) Epoch 2010.0000, Indiana State Plane Coordinates West Zone, U.S. Survey Feet.

VERTICAL DATUM: NAVD88 (Computed using Geoid 12A), U.S. Survey Feet.

CONTROL POINTS

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
1	1451975.56	3078297.05	808.26	5/8" REBAR W/ CAP
11	1452619.58	3079529.16	780.99	NAIL SET
12	1452886.65	3079588.43	777.83	NAIL SET
2512	1452656.06	3079677.95	774.89	MAG NAIL
2513	1452888.13	3079681.48	774.80	MAG NAIL

BORING TABLE

POINT #	NORTHING	EASTING	ELEVATION	DESCRIPTION
3910	1452682.2371	3079415.4686	779.86	P-01
3911	1452604.4733	3079415.4458	780.65	P-02
3912	1452675.0282	3079556.3896	780.71	P-03
3913	1452607.4999	3079556.8920	781.38	P-04
3914	1452494.7357	3079665.8894	775.94	B-10
3915	1452493.3781	3079754.2165	774.21	B-11
3916	1452522.0075	3079704.2538	774.72	B-09
3917	1452546.6506	3079671.0527	775.51	B-07
3918	1452570.3592	3079705.1048	774.36	B-06
3919	1452601.5007	3079750.5337	774.49	B-05
3920	1452669.0394	3079750.3679	773.64	B-02
3921	1452637.6544	3079703.7322	774.13	B-03
3922	1452660.8776	3079681.0977	774.84	B-01
3923	1452600.3808	3079669.9155	775.32	B-04
3924	1452775.1789	3079762.2939	771.90	P-07
3925	1452854.4059	3079765.7415	772.40	P-06
3926	1452964.4155	3079768.1352	772.41	P-05

LEGEND

YARD LIGHT	FENCE	FD AXEL	
LIGHT POLE	GUARDRAIL	FD BRASS DISK	
SIGNAL POLE	OHW — OVERHEAD WIRES	FD COT GIN SPDLE	
UTILITY POLE	UGE — UNDER ELEC.	FD CHISELED X	
GUY WIRE	GAS — GAS LINE	SET CHISELED X	
CATCH BASIN	SAN — SAN SEWER LINE	SET DRILL HOLE	
CURB INLET	ST — STORM SEWER LINE	FD HARRISON MON.	
ELECTRIC MH	UT — UNDER TELEPHONE	SET HARISON MON.	
MANHOLE	H2O — EXISTING WATER LINE	SET HUB/TACK	
PHONE MH	CHLWAT — CHILLED WATER LINE	FD REBAR	
SANITARY MH	SIGN	SET REBAR	
SIGNAL MH	BOLLARD	R.O.W. MON.	
STEAM MH	BORE HOLE	FD MAG NAIL	
STORM MH	DOWNSPOUT	MONITORING WELL	SET MAG NAIL
WATER MH	GATE POST	FD NAIL	
ELEC. METER	POLE	SET NAIL	
CLEANOUT	PARKING METER	FD PIPE	
GAS METER	SPIGOT	FD RR SPIKE	
GAS VALVE	T-POST	SET RR SPIKE	
WATER VALVE	WOOD POST	FD STONE	
FIRE HYDRANT	PARKING SPACES	RECORDED B&D	
SPR. HOOKUP	TRANSFORMER	MEASURED B&D	
SPRINKLER	ELEC. VAULT	CALCULATED B&D	
	PHONE VAULT	PROPORTIONAL DIST.	
	STEAM VAULT	ABOVE GROUND	
	VALVE VAULT	BELOW GROUND	
	AC UNIT	CONIF. TREE	
	PHONE BOOTH	DECID. TREE	
	BIRD FEEDER	SHRUB	
	MAILBOX	PHONE RISER-BOX	
	PROP. TANK	TV RISER-BOX	
	PARKING BLOCK	ELEC. RISER-BOX	
		GAS RISER-BOX	

SCALE: 1" = 20'

LANCER ASSOCIATES ARCHITECTURE
145 N EAST STREET
INDIANAPOLIS, IN 46204

BRCJ #11364
Bledsoe Riggert Cooper James
BRCJ
LAND SURVEYING • CIVIL ENGINEERING • GIS
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-8277
www.brcjcivil.com

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETTSVILLE, IN 47429

WILLIAM STUART RIGGERT
REGISTERED
NO. 870231
STATE OF INDIANA
PROFESSIONAL ENGINEER
02-29-2024

REVISIONS:

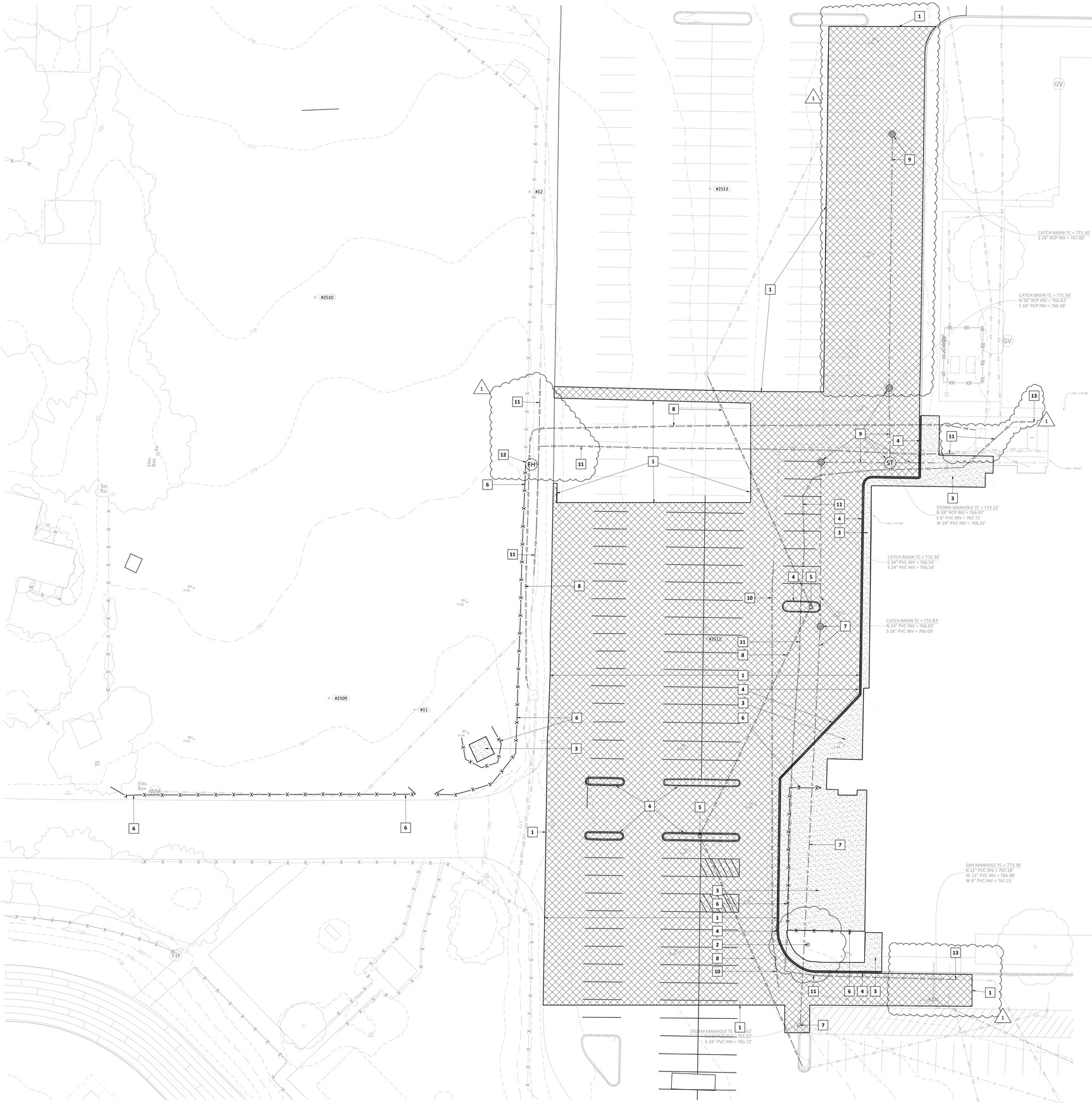
#	Date	Desc.
1	2/29/24	ADDENDUM #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JAN 31, 2024
DRAWN BY: KJP

EXISTING SITE CONDITION PLAN

C101



GENERAL NOTES

A. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS AND NOTIFY ENGINEER OF ANY DISCREPANCIES PRIOR TO START OF WORK.

B. THE LOCATION OF UTILITIES SHOWN ARE APPROXIMATE. CONTRACTOR SHALL COORDINATE EXACT UTILITY LOCATIONS WITH THE LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY WORK. CONTACT THE INDIANA UNDERGROUND PLANT PROTECTION SERVICES, INC. AT 1-800-382-5544.

C. CONTRACTOR SHALL INSTALL TEMPORARY EROSION CONTROL MEASURES PRIOR TO START OF WORK TO ENSURE SEDIMENT DOES NOT LEAVE THE SITE.

D. THIS PLAN SHOWS THE OVERALL AREAS OF DEMOLITION TO ALLOW CONSTRUCTION OF IMPROVEMENTS. THE EXACT AREAS OF DEMOLITION SHALL BE ESTABLISHED AND RESTORED BY THE CONTRACTOR. CONTRACTOR SHALL REMOVE ALL DEMOLISHED MATERIAL FROM THE SITE UNLESS NOTED OTHERWISE.

E. REMOVE EXISTING STRUCTURES, ASPHALT, CONCRETE, GRAVEL, SOIL, LANDSCAPING AND OTHER MATERIALS AS REQUIRED TO CONSTRUCT DESIGNED IMPROVEMENTS UNLESS NOTED OTHERWISE.

F. CONTRACTOR SHALL SAW CUT ALONG PAVEMENTS AND OTHER ADJOINING SURFACES TO REMAIN. SIDEWALKS AND CURBS SHALL BE REMOVED TO THE NEXT CLOSEST JOINT BEYOND.

G. AREAS DISTURBED DURING DEMOLITION, CONSTRUCTION, AND GRADING ACTIVITIES SHALL BE RESTORED TO PRE-EXISTING CONDITIONS OR BETTER, UNLESS NOTED OTHERWISE.

H. THE CONTRACTOR SHALL BE RESPONSIBLE FOR ALL DEMOLITION WORK NECESSARY IN ORDER TO COMPLETE THE PROJECT AS DESIGNED.

I. CONTRACTOR TO PROTECT ALL EXISTING VEGETATION NOT SCHEDULED FOR REMOVAL.

J. ANY REQUIRED DRIVEWAY/ACCESS CLOSURES SHALL BE SCHEDULED WITH THE OWNER A MINIMUM OF 7 DAYS IN ADVANCE.

PLAN NOTES 1

1. REMOVE EXISTING ASPHALT PAVING. SAW CUT REMAINING PAVEMENT AT EDGE TO CREATE A CLEAN FLUSH EDGE TO INSTALL NEW PAVEMENT AGAINST. IF PAVEMENT REMOVAL LIMITS ARE ADJACENT TO CONCRETE CURB OR AT THE EDGE OF PAVEMENT, REMOVE ALL PAVEMENT UP TO CHANGE IN SURFACE INTERFACE.
2. REMOVE EXISTING TREE.
3. REMOVE EXISTING CONCRETE PAVEMENT.
4. REMOVE EXISTING CONCRETE CURB.
5. REMOVE EXISTING LIGHT AND BASE.
6. REMOVE EXISTING FENCE.
7. EXISTING 24" STORM TO REMAIN UNTIL PARKING LOT IS COMPLETELY VACATED BY OWNER. REFER TO PROJECT PHASING PLAN. REMOVE STORM PIPING PRIOR TO BUILDING CONSTRUCTION.
8. ABONDON-IN-PLACE EXISTING UNDEGROUND ELECTRIC LINE OR REMOVE WHERE IN CONFLICT WITH PROPOSED IMPROVEMENTS. CONTRACTOR TO COORDINATE WITH DUKE ENERGY FOR RELOCATION OF ELECTRIC LINE.
9. REMOVE EXISTING STORM PIPES AND STRUCTURES.
10. PURGE AND REMOVE EXISTING NATURAL GAS LINE.
11. ABANDON-IN-PLACE EXISTING WATER LINE OR REMOVE WHERE IN CONFLICT WITH PROPOSED IMPROVEMENTS. COORDINATE ANY OUTAGES WITH OWNER. REFER TO SITE UTILITIES PLAN SHEET C601 FOR INSTALLATION OF NEW WATER SERVICES. CAP ALL ENDS OF LINES ABANDONED IN PLACE.
12. REMOVE EXISTING HYDRANT AND VALVE AND STORE FOR REINSTALLATION.
13. COORDINATE WATER LINE REMOVAL WITH PLUMBING PLANS.

LEGEND

YARD LIGHT	FENCE	FD AXEL
LIGHT POLE	GUARDRAIL	FD BRASS DISK
SIGNAL POLE	OHW OVERHEAD WIRES	FD COT GIN SPDLE
UTILITY POLE	UGE UNDER ELEC.	FD CHISELED X
GUY WIRE	GAS GAS LINE	SET CHISELED X
CATCH BASIN	SAN SAN SEWER LINE	SET DRILL HOLE
CURB INLET	ST STORM SEWER LINE	FD HARRISON MON.
ELECTRIC MH	UT UNDER TELEPHONE	SET HARISON MON.
MANHOLE	H2O EXISTING WATER LINE	SET HUB/TACK
PHONE MH	CHW CHILLED WATER LINE	FD REBAR
SANITARY MH	SIGN	SET REBAR
SIGNAL MH	R/W Mon. R.O.W. MON.	FD MAG NAIL
STEAM MH	MONITORING WELL	SET MAG NAIL
STORM MH	BOLLARD	FD NAIL
WATER MH	BORE HOLE	SET NAIL
ELEC. METER	DOWNSPOUT	FD PIPE
CLEANOUT	GATE POST	FD RR SPIKE
GAS METER	POLE	SET RR SPIKE
GAS VALVE	PARKING METER	FD STONE
WATER VALVE	SPIGOT	RECORDED B&D
FIRE HYDRANT	T-POST	MEASUIRED B&D
SPR. HOOKUP	WOOD POST	CALCULATED B&D
SPRINKLER	PARKING SPACES	PROPORTIONAL DIST.
	TRANSFORMER	ABOVE GROUND
	ELEC. VAULT	BELOW GROUND
	PHONE VAULT	CONIF. TREE
	STEAM VAULT	DECID. TREE
	VALVE VAULT	
	AC UNIT	SHRUB
	PHONE BOOTH	PHONE RISER-BOX
	BIRD FEEDER	
	MAILBOX	TV RISER-BOX
	PROP. TANK	ELEC. RISER-BOX
	PARKING BLOCK	GAS RISER-BOX

LIMITS OF CONCRETE PAVEMENT REMOVAL

LIMITS OF ASPHALT PAVEMENT REMOVAL

UTILITY CONTACTS

AT&T
Zach Deckard - (812) 955-9437

DUKE ENERGY
Rob Sanders - (812) 668-0490

TOWN OF ELLETTSVILLE UTILITIES
Mike Farmer - (812) 876-2297

CENTERPOINT ENERGY
Jon Eastham - (765) 287-2119

SMITHVILLE
Chad Hawkins - (812) 935-2377

Indiana 811
Know what's below. Call before you dig.
CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-382-5544 (ALL TOLL FREE
PER INDIANA STATE LAW IC8-1-26,
IT IS AGAINST THE LAW TO EXCAVATE
WITHOUT NOTIFYING THE UNDERGROUND
LOCATION SERVICE TWO (2) WORKING DAYS
BEFORE COMMENCING WORK.

SCALE: 1" = 20'

N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 N EAST STREET
INDIANAPOLIS, IN 46204

BRCJ #11364
Bledsoe Riggert Cooper James
BRCJ
LAND SURVEYING • CIVIL ENGINEERING • GIS
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-6277
www.brcjcivil.com

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETTSVILLE, IN 47429

WILLIAM STUART RIGGERT
REGISTERED
NO. 870231
STATE OF INDIANA
PROFESSIONAL ENGINEER
02-29-2024

REVISIONS:

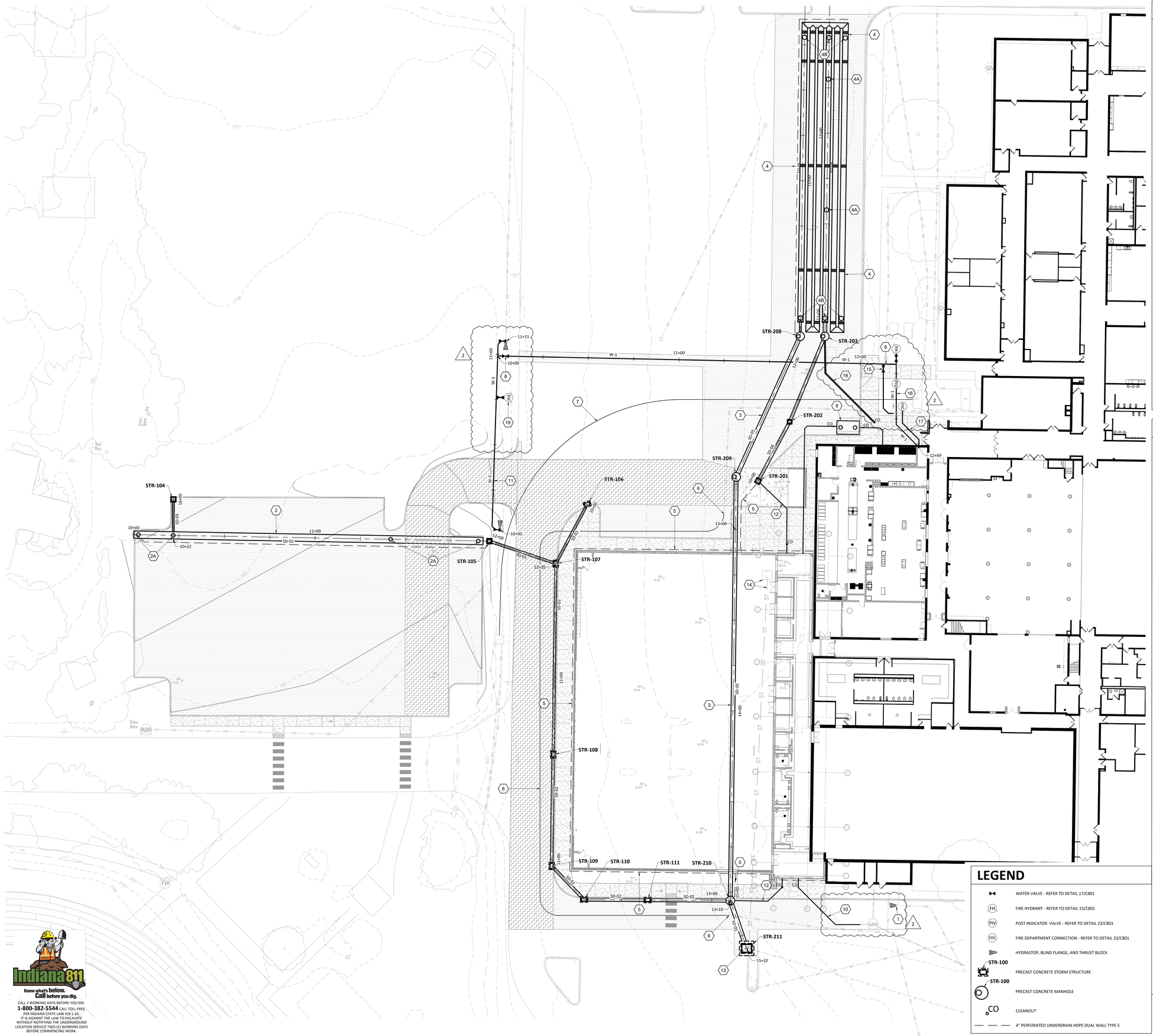
	Date	Desc.
1	2/29/24	ADDENDUM #2

100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	JAN 31, 2024
DRAWN BY:	DLN/KJP

SELECTIVE SITE DEMOLITION PLAN

C301



GENERAL NOTES

A. REFER TO DEMOLITION PLANS FOR SEQUENCE OF UTILITY REPLACEMENT TO ENSURE CONTINUOUS SERVICE OF ALL UTILITIES.

B. CONTRACTOR SHALL BE RESPONSIBLE FOR CUTTING AND PATCHING AS REQUIRED TO COMPLETELY INSTALL THE WORK INDICATED.

C. CONTRACTOR SHALL COORDINATE EXACT UTILITY LOCATIONS WITH THE OWNER AND LOCAL UTILITY COMPANIES PRIOR TO COMMENCING ANY WORK. CONTACT THE INDIANA UNDERGROUND PLANT PROTECTION SERVICES INC. AT 1-800-382-5544 AND OTHER UTILITIES PRIOR TO ANY EXCAVATION ON THE SITE.

D. ALL WORK ASSOCIATED WITH WATER AND SEWER SYSTEMS SHALL COMPLY WITH THE STANDARDS & REQUIREMENTS OF THE INDIANA DEPT. OF ENVIRONMENTAL MANAGEMENT (IDEM), THE INDIANA STATE DEPARTMENT OF HEALTH (ISDH), THE AMERICAN WATER WORKS ASSOCIATION (AWWA), THE GREAT LAKES-UPPER MISSISSIPPI BOARD OF STATE PUBLIC HEALTH AND ENVIRONMENTAL MANAGERS (GLUMRB), THE INDIANA PLUMBING CODE AND THE TOWN OF ELLETTSVILLE UTILITIES CONSTRUCTION SPECIFICATIONS.

E. CONTRACTOR IS REQUIRED TO VERIFY FIELD CONDITIONS AND NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO BEGINNING WORK.

F. CONTRACTOR SHALL SET ALL EXISTING AND PROPOSED CASTINGS AND CLEANOUT COVERS TO FINAL FINISHED GRADE.

G. A MINIMUM OF 18 INCHES VERTICAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER AND SANITARY/STORM SEWER UNLESS OTHERWISE INDICATED, OR UNLESS WRITTEN PERMISSION IS GIVEN BY THE ENGINEER. SEWERS CROSSING WATER MAINS SHALL BE LAID TO MAINTAIN A MINIMUM VERTICAL DISTANCE OF 18 INCHES BETWEEN THE OUTSIDE OF THE WATER MAIN AND OUTSIDE OF THE SEWER MAIN. THIS SHALL BE THE CASE WHETHER THE WATER MAIN IS ABOVE OR BELOW THE SEWER. THE CROSSING SHALL BE ARRANGED SO THAT THE JOINTS IN THE SEWER MAIN WILL BE EQUIDISTANT AND AS FAR AS POSSIBLE FROM THE JOINTS IN THE WATER MAIN. THE CROSSING MUST BE AT A MINIMUM ANGLE OF 45° MEASURED FROM THE CENTERLINE OF THE SEWER AND WATER MAINS. WHERE A WATER MAIN CROSSES UNDER A SEWER, ADEQUATE STRUCTURAL SUPPORT SHALL BE PROVIDED FOR THE SEWER TO MAINTAIN LINE AND GRADE.

H. A MINIMUM OF 10 FEET HORIZONTAL SEPARATION SHALL BE MAINTAINED BETWEEN WATER AND SANITARY/STORM SEWER UNLESS OTHERWISE INDICATED, OR UNLESS WRITTEN PERMISSION IS GIVEN BY THE ENGINEER.

I. ALL STORM AND SANITARY MANHOLES AND STORM INLET STRUCTURES SHALL HAVE A MINIMUM SEPARATION OF 9' FROM WATER MAINS.

J. ALL SANITARY LATERALS SHALL HAVE A MINIMUM COVER OF 30"- UNLESS NOTED OTHERWISE.

K. ALL STORM LATERALS SHALL HAVE A MINIMUM COVER OF 12"- UNLESS NOTED OTHERWISE.

L. ALL SANITARY AND STORM LATERALS SHALL HAVE A MINIMUM SLOPE OF 1/8" PER FOOT UNLESS NOTED OTHERWISE.

M. ALL WATER LINES SHALL HAVE A MINIMUM COVER OF 48". INSTALL LINES WITH NO ISOLATED HIGH POINTS.

N. WHERE DISSIMILAR PIPING MATERIALS ARE JOINED TOGETHER ALONG GRAVITY SANITARY AND STORM LATERALS, THE CONTRACTOR SHALL USE A NON-SHEAR COUPLING EQUAL TO FERNCO.

O. CONTRACTOR SHALL REFER TO ARCHITECTURAL, MECHANICAL, ELECTRICAL, PLUMBING, AND LANDSCAPE PLANS FOR ADDITIONAL UTILITY MODIFICATIONS AND NOTIFY ARCHITECT/ENGINEER OF ANY DISCREPANCIES PRIOR TO START OF CONSTRUCTION.

P. CONTRACTOR TO EXTEND ALL FOUNDATION, SUBDRAIN, UNDERDRAIN, INTERNAL DRAIN, ROOF DRAIN AND RETAINING WALL DRAIN PIPING TO THE NEAREST PROPOSED STORM STRUCTURE WHILE MAINTAINING POSITIVE FLOW, UNLESS NOTED OTHERWISE. ALL CONNECTIONS SHALL BE WATER TIGHT.

Q. PRE-CONSTRUCTION MEETING: ALL PROJECTS WILL REQUIRE A PRE-CONSTRUCTION MEETING WITH THE TOWN OF ELLETTSVILLE UTILITIES PRIOR TO THE START OF CONSTRUCTION. THE CONTRACTOR AND/OR DEVELOPER MUST CONTACT THE UTILITIES TECHNICIAN AT (812) 876-2297 TO SCHEDULE THE MEETING.

R. UTILITIES INSPECTION: CONTRACTOR SHALL NOTIFY THE TOWN OF ELLETTSVILLE UTILITIES DEPARTMENT FIVE (5) WORKING DAYS PRIOR TO CONSTRUCTION OF ANY WATER, STORM OR SANITARY SEWER UTILITY WORK. A UTILITIES INSPECTOR MUST HAVE NOTICE SO WORK CAN BE INSPECTED, DOCUMENTED, AND A PROPER AS-BUILT MADE. WHEN A CONTRACTOR WORKS ON WEEKENDS, A DESIGNATED HOLIDAY, OR BEYOND NORMAL WORKING HOURS, THE CONTRACTOR WILL PAY FOR THE INSPECTOR'S OVERTIME. FOR TOWN OF ELLETTSVILLE WORK HOURS AND HOLIDAY INFORMATION, PLEASE CONTACT THE TOWN OF ELLETTSVILLE UTILITIES DEPARTMENT AT (812) 876-2297.

S. ALL WATER MAINS AND SERVICE LINES SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE AND FITTINGS CONFORMING TO AWWA C151 AND AWWA C110 OR C153, RESPECTIVELY. ALL DUCTILE IRON PIPE AND FITTINGS SHALL BE PRESURE CLASS 350, LINED WITH AN APPROVED PORTLAND CEMENT SPUN LINING AND A BITUMINOUS SEAL, AND INSTALLED WITH MECHANICAL JOINT RESTRAINTS AND POLYETHYLENE ENCASEMENT.

T. PROVIDE AND INSTALL INSULATED 12 AWG HIGH-STRENGTH COPPER-CLAD-STEEL (HS-CCS) LOCATE WIRE ON ALL WATER LINES AND SANITARY AND STORM LATERALS.

PLAN NOTES (1)

1. CUT AND CAP EXISTING PRIVATE WATER SERVICE AT TEE AND INSTALL THRUST BLOCK. CONTRACTOR TO CONFIRM LOCATION OF TEE AND REMOVE/ABANDON EXISTING PIPING BENEATH PROPOSED ADDITION. COORDINATE WITH PLUMBING PLANS WITH REGARD TO INSTALLATION OF SERVICE THROUGH SCHOOL BUILDING TO ENSURE CONTINUED WATER SERVICE TO SERVICE BUILDING. COORDINATE WITH OWNER TO SCHEDULE ANY REQUIRED WATER SERVICE OUTAGES. ALL WORK SHALL BE OBSERVED BY RBBCSC MAINTENANCE.
2. UNDERGROUND STORM DETENTION SYSTEM - ONE (1) 192-FOOT, 48" DIA. ALUMINIZED CORRUGATED METAL PIPE WITH INTERNAL WATER QUALITY BAFFLES AT DROP INLET RISERS. BACKFILL WITH CLEAN STONE BACKFILL AND GEOTEXTILE FABRIC LINING THE SIDES AND BOTTOM OF THE EXCAVATION. PROVIDE 30" DIA. MAINTENANCE AND INSPECTION RISERS.
   2A. 30" DIA CMP INLET RISER WITH EJIW 1020 FRAME AND PEDESTRIAN SAFE GRATED COVER. REFER TO GRADING PLAN FOR GRATE ELEVATION. SEE DETAILS 4/C802 AND 5/C802.
3. STORM DRAINAGE CONVEYANCE PIPE 24" DIA. SCH. 40 PVC, SLEEVED THROUGH BUILDING FOOTINGS PER STRUCTURAL DRAWINGS.
4. UNDERGROUND STORM DETENTION SYSTEM - SIX (6) 160-FOOT, 36" DIA. ALUMINIZED CORRUGATED METAL PIPES WITH INTERNAL WATER QUALITY BAFFLES AT DROP INLET RISERS. BACKFILL WITH CLEAN STONE BACKFILL AND GEOTEXTILE FABRIC LINING THE SIDES AND BOTTOM OF THE EXCAVATION. PROVIDE 30" DIAMETER MAINTENANCE AND INSPECTION RISERS.
   4A. 30" DIA CMP INLET RISER WITH EJIW 1020 FRAME AND PEDESTRIAN SAFE GRATED COVER. REFER TO GRADING PLAN FOR GRATE ELEVATION. SEE DETAILS 4/C802 AND 5/C802.
   4B. 30" DIA CMP ACCESS RISER WITH EJIW 1020 FRAME AND SOLID COVER. REFER TO GRADING PLAN FOR RIM ELEVATION. SEE DETAILS 4/C802 AND 5/C802.
5. SUBSURFACE FOOTING DRAIN - 6" PERFORATED A-2000 PVC, TYPE S HDPE, OR SCHEDULE 40 PVC PIPE, REFER TO ARCHITECTURAL DRAWINGS FOR LOCATION. CONNECT TO SITE STORM AS INDICATED.
6. RELOCATE EXISTING PRIVATE GAS SERVICE LINE WITH 4" PE, ASTM D2513, SDR-11 PIPE. ABANDON EXISTING PIPE BENEATH BUILDING, PURGE AND CAP ENDS.
7. NEW ELECTRICAL SERVICE FEED - CONTRACTOR TO COORDINATE WITH DUKE ENERGY. OWNER RESPONSIBLE FOR ALL DUKE ENERGY EXPENSES. (2)
8. 6" PRIVATE COMBINED FIRE & DOMESTIC SERVICE LINE. 6" DUCTILE IRON PIPE AND FITTINGS, RESTRAINED WITH MECHANICAL RESTRAINTS PER DETAIL 14/C801. CONNECT TO RELOCATED PUBLIC WATER MAIN WITH TEE AND 6" GATE VALVE. INSTALL WITH POLYWRAP AND TRACER WIRE AT MINIMUM 48" DEPTH. ALL WORK SHALL BE OBSERVED BY ELLETTSVILLE UTILITIES.
9. GREASE INTERCEPTOR - REFER TO PLUMBING DRAWINGS. (2)
10. 6" DIA. SDR-35 PVC SANITARY SEWER LATERAL WITH COPPER TRACER WIRE. CONTRACTOR TO CONFIRM DEPTH AND LOCATION OF EXISTING 8" SANITARY STUB PRIOR TO CONNECTING NEW LINE AT 1.0% MINIMUM SLOPE FROM BUILDING. REFER TO PLUMBING PLANS FOR CONTINUATION.
11. RELOCATE PUBLIC WATER MAIN UNDER PROPOSED DRIVEWAY TO MAINTAIN MINIMUM 48" DEPTH OF COVER. 6" DUCTILE IRON PIPE AND FITTINGS RESTRAINED WITH MECHANICAL JOINT RESTRAINTS PER DETAIL 14/C801. INSTALL WITH POLYWRAP AND TRACER WIRE AT MINIMUM 48" DEPTH. INSTALL HOT TAP CONNECTIONS TO EXISTING 6" PUBLIC MAIN. INSTALL HYDRASTOP VALVES WITH BLIND FLANGE AND THRUST BLOCKS AS NECESSARY TO STOP FLOW IN LINE TO BE REMOVED. ALL WORK TO BE OVERSEEN BY ELLETTSVILLE UTILITIES.
12. 10" DIA. SCH. 40 PVC ROOF DRAINAGE LATERAL. INSTALL WITH COPPER TRACER AT MINIMUM 1.0% SLOPE. CONNECT TO SITE STORM AS INDICATED. REFER TO PLUMBING PLANS FOR CONTINUATION INTO BUILDING.
13. REMOVE EXISTING STORM MANHOLE AND REPLACE WITH NEW STRUCTURE STR-211. TO ACCOMODATE CONNECTIONS TO EXISTING AND NEW 24" STORM DRAINS PIPING. REFER TO STRUCTURE DATA TABLE FOR ADDITIONAL DETAIL.
14. EXISTING INLET AND 24" STORM PIPE TO REMAIN UNTIL ALL STORM FLOWS ARE REDIRECTED INTO NEW SCH.40 PVC 24" STORM PIPE TO REMAIN BENEATH BUILDING STRUCTURE. (2)
15. 4" DOMESTIC WATER SERVICE WITH TEE AND 4" GATE VALVE AT CONNECTION TO NEW COMBINED SERVICE LINE. PRESSURE CLASS 350 DUCTILE IRON PIPE WITH POLYWRAP AND MECHANICALLY RESTRAINED JOINTS PER DETAIL 14/C801. RECONNECT TO EXISTING 4" DIP DOMESTIC SERVICE AS INDICATED.
16. 6" FIRE SERVICE. PRESSURE CLASS 350 DUCTILE IRON PIPE WITH POLYWRAP AND MECHANICALLY RESTRAINED JOINTS PER DETAIL 14/C801. REFER TO PLUMBING PLAN FOR CONTINUATION WITHIN BUILDING.
17. 4" FIRE DEPARTMENT CONNECTION SERVICE LINE. PRESSURE CLASS 350 DUCTILE IRON PIPE WITH POLYWRAP AND MECHANICALLY RESTRAINED JOINTS PER DETAIL 14/C801. REFER TO PLUMBING PLAN FOR CONTINUATION WITHIN BUILDING.
18. INTERCEPT EXISTING 6" PVC ROOF DRAIN PIPING. INSTALL CLEANOUT AT POINT OF CONNECTION AND EXTEND NEW 6" SDR 35 PVC TO CONNECT WITH STR-203. INSTALL WITH COPPER TRACER WIRE, SLOPE TO DRAIN.
19. REINSTALL VALVE AND FIRE HYDRANT.

LEGEND

- WATER VALVE - REFER TO DETAIL 17/C801
- FH — FIRE HYDRANT - REFER TO DETAIL 15/C801
- PIV — POST INDICATOR VALVE - REFER TO DETAIL 23/C801
- FDC — FIRE DEPARTMENT CONNECTION - REFER TO DETAIL 22/C801
- HYDRASTOP, BLIND FLANGE, AND THRUST BLOCK
- STR-100 — PRECAST CONCRETE STORM STRUCTURE
- STR-100 — PRECAST CONCRETE MANHOLE
- CO — CLEANOUT
- 4" PERFORATED UNDERDRAIN HDPE DUAL WALL TYPE S

SCALE: 1" = 20'

N — TRUE NORTH

Indiana 811
Know what's below. Call before you dig.
CALL 2 WORKING DAYS BEFORE YOU DIG
1-800-382-5544 CALL TOLL FREE
PER INDIANA STATE LAW IC8-1-26,
IT IS AGAINST THE LAW TO EXCAVATE WITHOUT NOTIFYING THE UNDERGROUND LOCATION SERVICE TWO (2) WORKING DAYS BEFORE COMMENCING WORK.

LANCER ASSOCIATES ARCHITECTURE
145 N EAST STREET
INDIANAPOLIS, IN 46204

BRCJ #11364
Bledsoe Riggert Cooper James
BRCJ
LAND SURVEYING • CIVIL ENGINEERING • GIS
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-8277 www.brcjcivil.com

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETTSVILLE, IN 47429

WILLIAM STUART RIGGERT — NO. 870231 — STATE OF INDIANA — REGISTERED PROFESSIONAL ENGINEER
02-29-2024

REVISIONS:

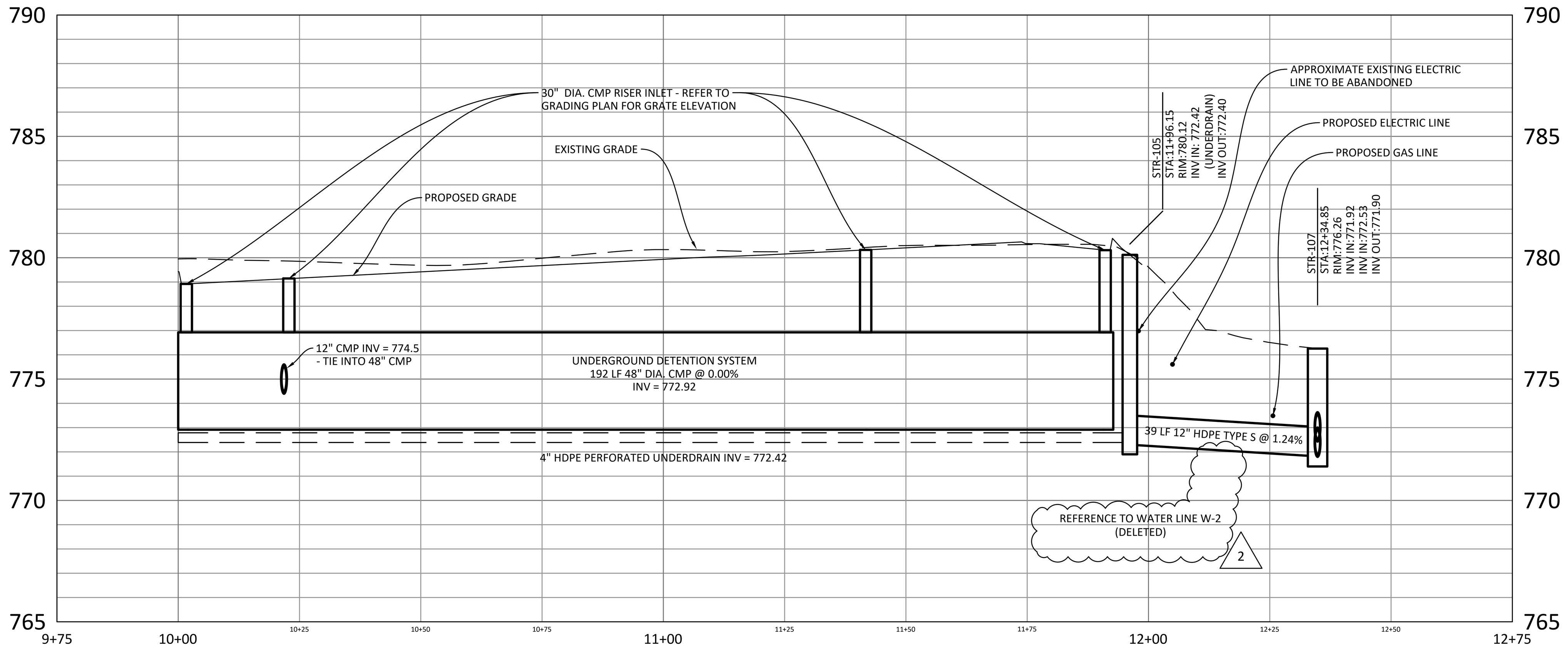
#	Date	Desc.
1	2/15/24	ADDENDUM #1
2	2/29/24	ADDENDUM #2

100% CONSTRUCTION DOCUMENTS

PROJECT:	#23117
DATE:	JAN 31, 2024
DRAWN BY:	KJP

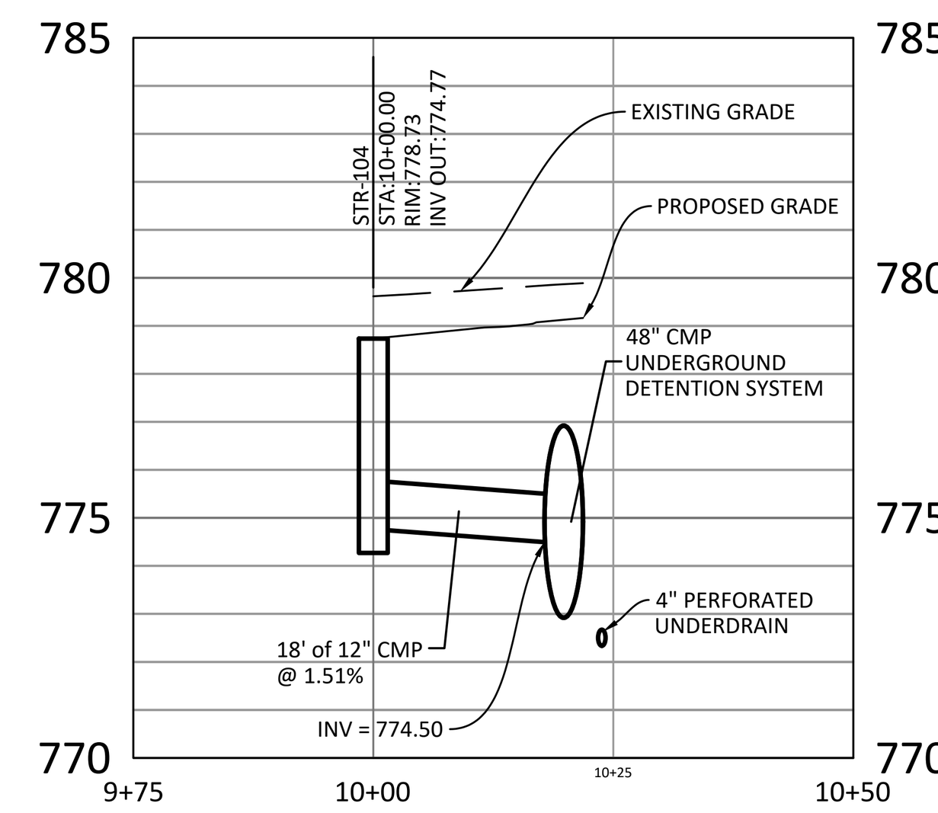
SITE UTILITIES PLAN

C601



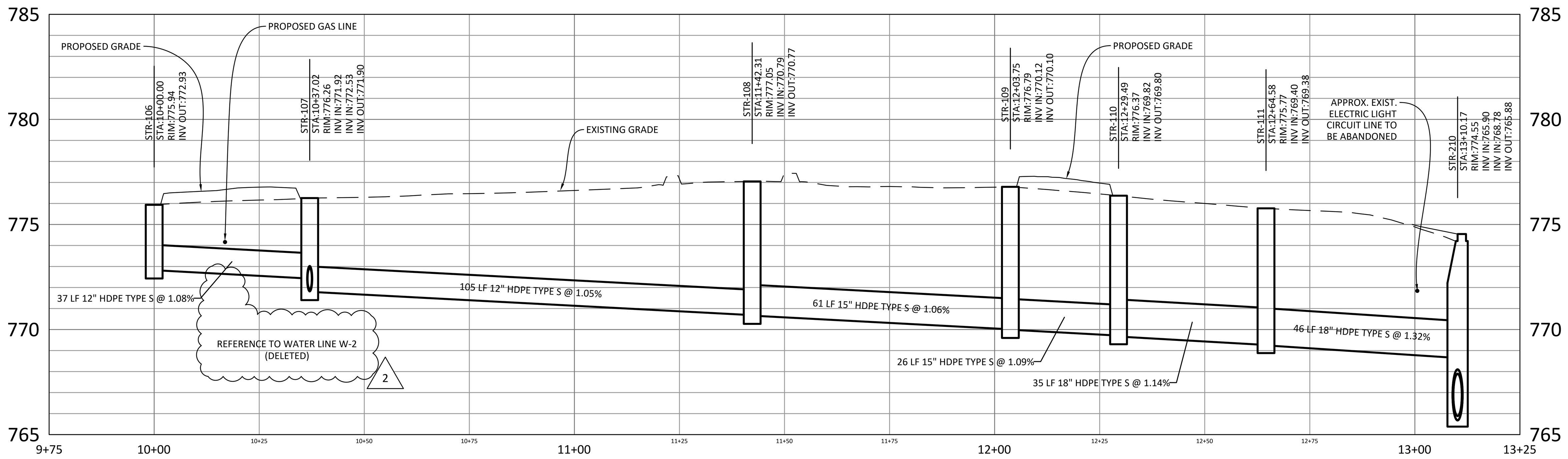
STORM DRAINAGE PROFILE SD-01

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'



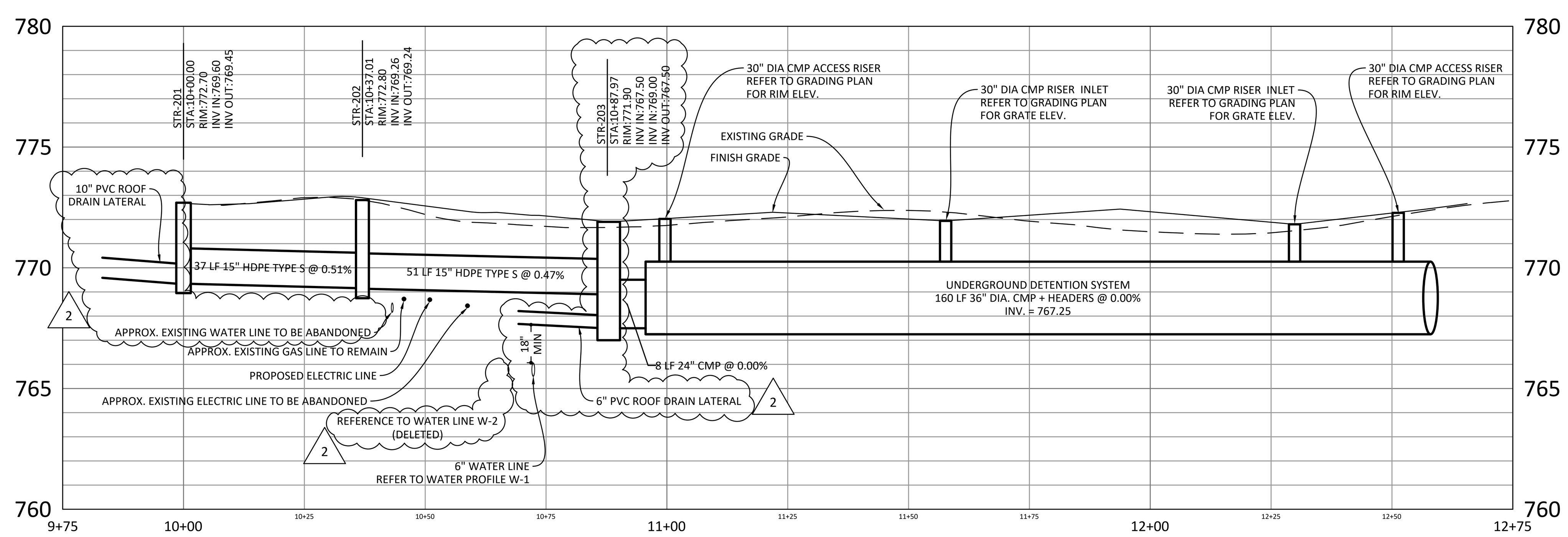
STORM DRAINAGE PROFILE SD-03

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'



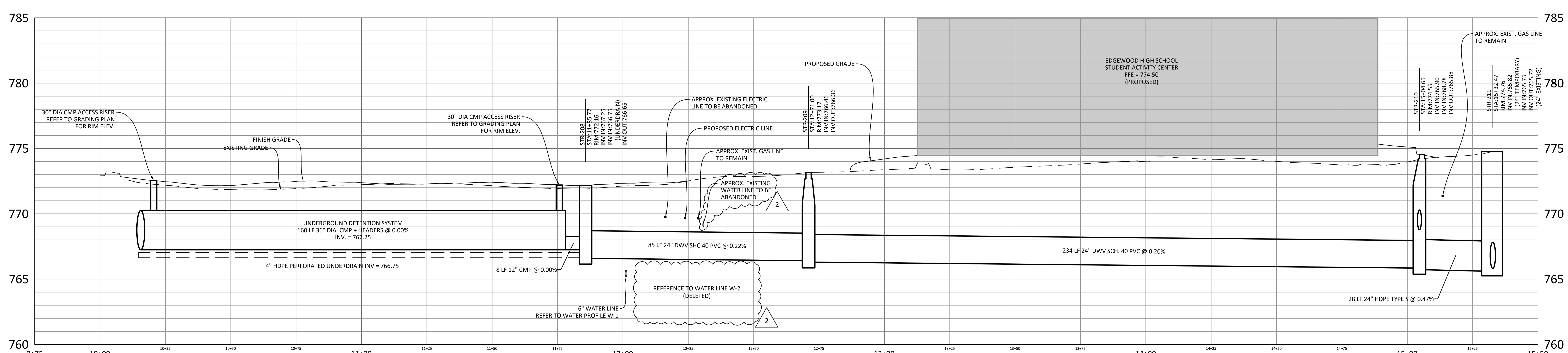
STORM DRAINAGE PROFILE SD-02

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'



STORM DRAINAGE PROFILE SD-04

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'



STORM DRAINAGE PROFILE SD-05

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

STORM STRUCTURE DATA TABLE

STR #	CASTING	STRUCTURE TYPE / DETAIL	REFERENCE PROFILE	NORTHING EASTING	RIM ELEV	PIPE SIZE	PIPE INV (OUT)	DOWN STR #	PIPE LENGTH	PIPE SLOPE %	NOTES
STR–104	EJIW V5622 GRATE INLET	INLET TYPE A	SD–03	1452704.42 3079410.67	778.73	12"	774.77	UG DETN	18	1.51%	1
STR–105	EJIW 1020 W/SOLID LID	INLET TYPE A	SD–01	1452681.39 3079584.92	780.12	12"	772.40	STR–107	39	1.24%	4
STR–106	EJIW 7505 W/M3 GRATE T4 BACK	INLET TYPE J	SD–02	1452701.72 3079638.90	775.94	12"	772.93	STR–107	37	1.08%	
STR–107	EJIW 7505 W/M3 GRATE T4 BACK	INLET TYPE J	SD–02	1452669.00 3079621.58	776.26	12"	771.90	STR–108	105	1.05%	
STR–108	EJIW 7505 W/M3 GRATE T4 BACK	INLET TYPE J	SD–02	1452563.72 3079620.13	777.05	15"	770.77	STR–109	61	1.06%	
STR–109	EJIW 7505 W/M3 GRATE T4 BACK	INLET TYPE J	SD–02	1452502.29 3079619.28	776.79	15"	770.10	STR–110	26	1.09%	
STR–110	EJIW 7505 W/M3 GRATE T4 BACK	INLET TYPE J	SD–02	1452483.74 3079637.13	776.37	18"	769.80	STR–111	35	1.14%	
STR–111	EJIW 7505 W/M3 GRATE T4 BACK	INLET TYPE J	SD–02	1452483.49 3079672.22	775.77	18"	769.38	STR–210	46	1.32%	
STR–201	EJIW V5622 GRATE INLET	INLET TYPE A	SD–04	1452714.53 3079733.13	772.70	15"	769.45	STR–202	37	0.51%	5
STR–202	EJIW V5622 GRATE INLET	INLET TYPE A	SD–04	1452747.19 3079750.55	772.80	15"	769.24	STR–203	51	0.47%	
STR–203	EJIW 1020 W/PEDESTRIAN SAFE GRATE	48" MANHOLE	SD–04	1452794.30 3079769.95	771.90	24"	767.50	UG DETN	8	0.00%	1
STR–208	EJIW 1020 W/SOLID LID	48" MANHOLE	SD–05	1452794.35 3079756.36	772.16	24"	766.65	STR–209	85	0.22%	3
STR–209	EJIW 1020 W/SOLID LID	48" MANHOLE	SD–05	1452716.77 3079721.05	773.17	24"	766.36	STR–210	234	0.20%	
STR–210	EJIW 1020 W/SOLID LID	48" MANHOLE	SD–05	1452483.15 3079717.81	774.55	24"	765.88	STR–211	28	0.47%	5
STR–211	EJIW 1020 W/SOLID LID	7' x 7' I.D. RECT. JUNCTION STR.	SD–05	1452456.82 3079726.81	774.76	24"	765.72	EXIST.	–	–	2

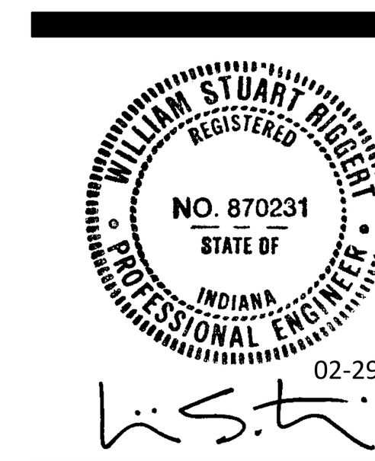
STORM STRUCTURE DATA TABLE NOTES:

1. OUTLET PIPE CONNECTS TO UNDERGROUND DETENTION SYSTEM VIA PREFABRICATED CMP TEE FITTING.
2. INSTALL STRUCTURE STR–211 IN PLACE OF EXISTING STORM MANHOLE DURING FIRST PHASE OF CONSTRUCTION. PROVIDE CONNECTIONS FOR TWO EXISTING 24 STORM PIPES, AND ONE NEW 24" STORM PIPE. EXISTING 24" STORM FROM THE NORTH SHALL BE REMOVED AND THE OPENING SEALED UP AFTER OWNER HAS VACATED THE PARKING LOT AND ALL STORM FLOWS ARE REDIRECTED INTO THE NEW 24" SCH.40 PVC STORM TO REMAIN IN PLACE BENEATH THE BUILDING.
3. PROVIDE CONNECTION POINT FOR 4" DUAL WALL HDPE TYPE S UNDERDRAIN AT INV = 766.75
4. PROVIDE CONNECTION POINT FOR 4" DUAL WALL HDPE TYPE S UNDERDRAIN AT INV = 772.42
5. PROVIDE CONNECTION POINT FOR 6" FOOTING DRAIN. REFER TO C601 UTILITY PLAN.

LANCER ASSOCIATES ARCHITECTURE
145 N EAST STREET
INDIANAPOLIS, IN 46204

BRCJ #11364
Bledsoe Riggert Cooper James

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETTSVILLE, IN 47429



REVISIONS:

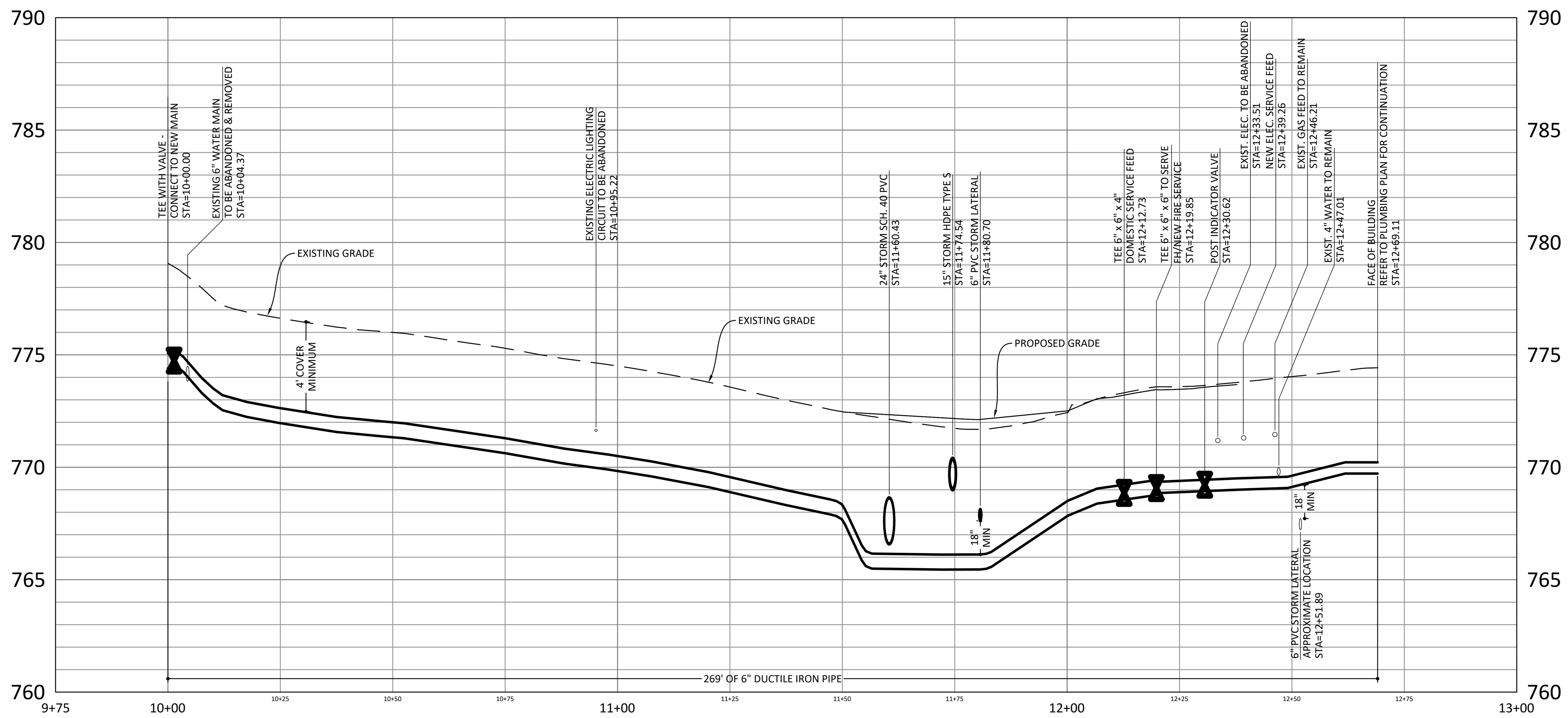
#	Date	Desc.
1	2/15/24	ADDENDUM #1
2	2/29/24	ADDENDUM #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JAN 31, 2024
DRAWN BY: KJP

SITE UTILITIES
STORM PROFILES

C602



WATER PROFILE W-1

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

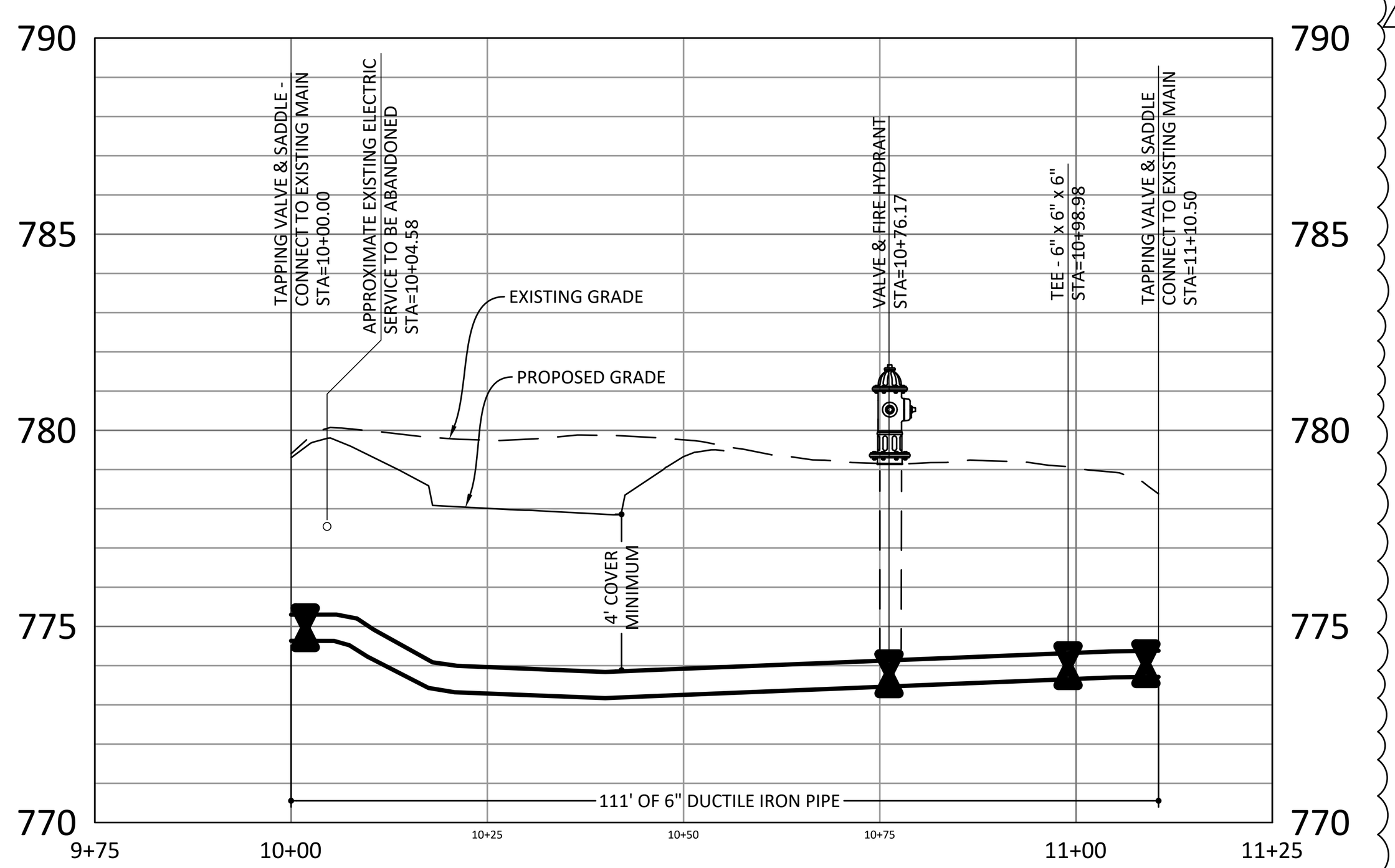
PROFILE NOTES

1. ALL WATER LINES SHALL BE CONSTRUCTED OF DUCTILE IRON PIPE (DIP), JOINTS, AND FITTINGS. DUCTILE IRON PIPE SHALL BE AWWA C151, PRESSURE CLASS 350. PIPE SHALL BE LINED WITH A THIN PORTLAND CEMENT SPUN LINING AND A BITUMINOUS SEAL PER AWWA C104/A21.
2. THRUST RESTRAINT SHALL BE PROVIDED BY MECHANICAL JOINT RESTRAINTS PER DETAIL 14/C801.
3. MAINTAIN A MINIMUM OF FOUR (4) FEET OF COVER OVER PIPE WITH RESPECT TO FINISH GRADES.
4. BEND ANGLES OF VERTICAL OFFSETS ALONG NEW WATER LINES SHALL NOT EXCEED 45°.
5. CONTRACTOR TO VACUUM EXCAVATE AND CONFIRM ELEVATIONS OF EXISTING UTILITIES AND NOTIFY ENGINEER OF ANY POTENTIAL CONFLICTS.

1

WATER PROFILE W-2
(DELETED)

1



WATER PROFILE W-3

HORIZONTAL SCALE: 1" = 20'
VERTICAL SCALE: 1" = 4'

LANCER ASSOCIATES ARCHITECTURE
145 N EAST STREET
INDIANAPOLIS, IN 46204

BRCJ #11364
Bledsoe Riggert Cooper James
LAND SURVEYING • CIVIL ENGINEERING • GIS
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-8277 www.brcjcivil.com

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETTSVILLE, IN 47429

WILLIAM STUART RIGGERT
REGISTERED
NO. 870231
STATE OF INDIANA
PROFESSIONAL ENGINEER
02-29-2024

REVISIONS:

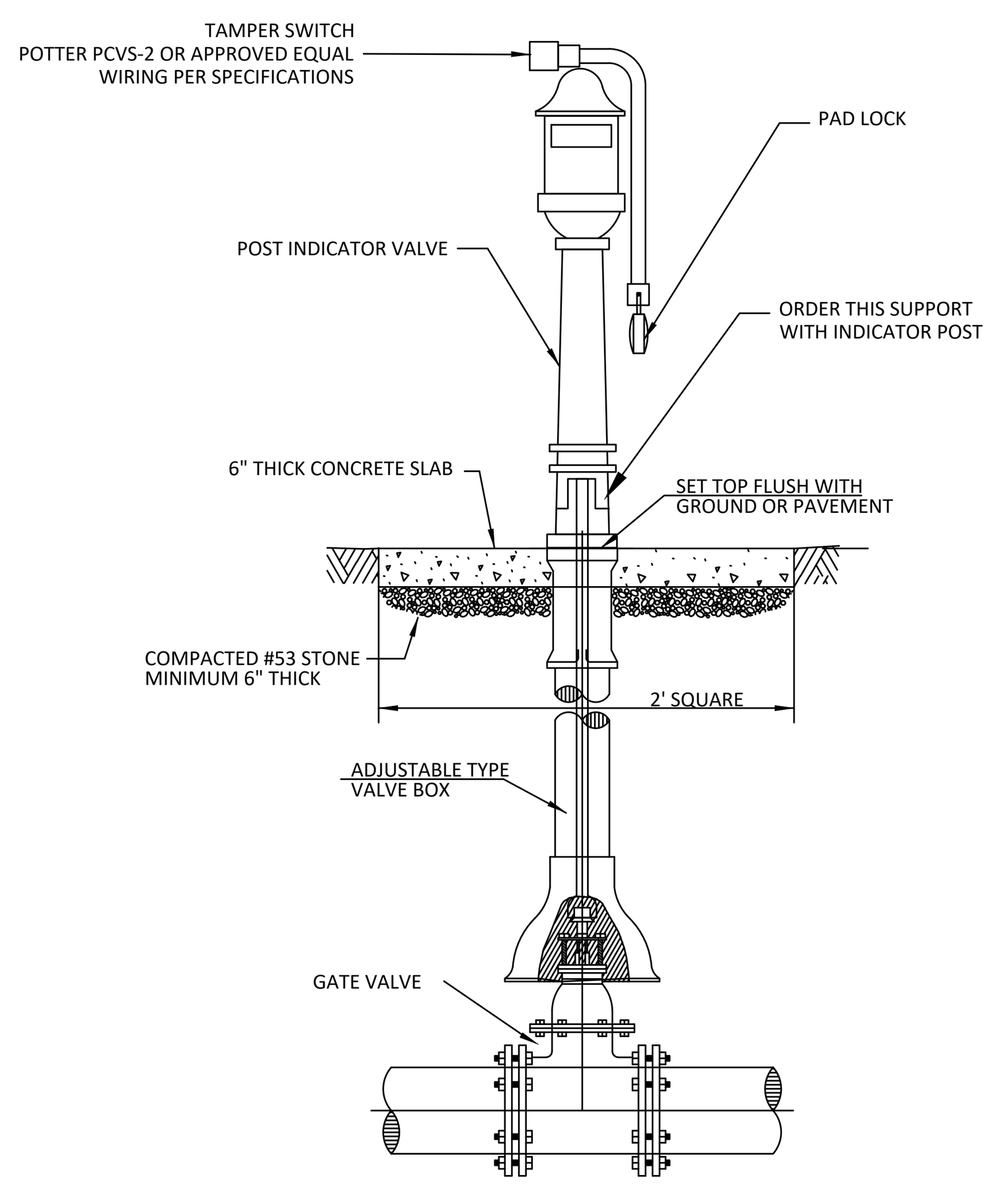
#	Date	Desc.
1	2/29/24	ADDENDUM #2

100% CONSTRUCTION DOCUMENTS

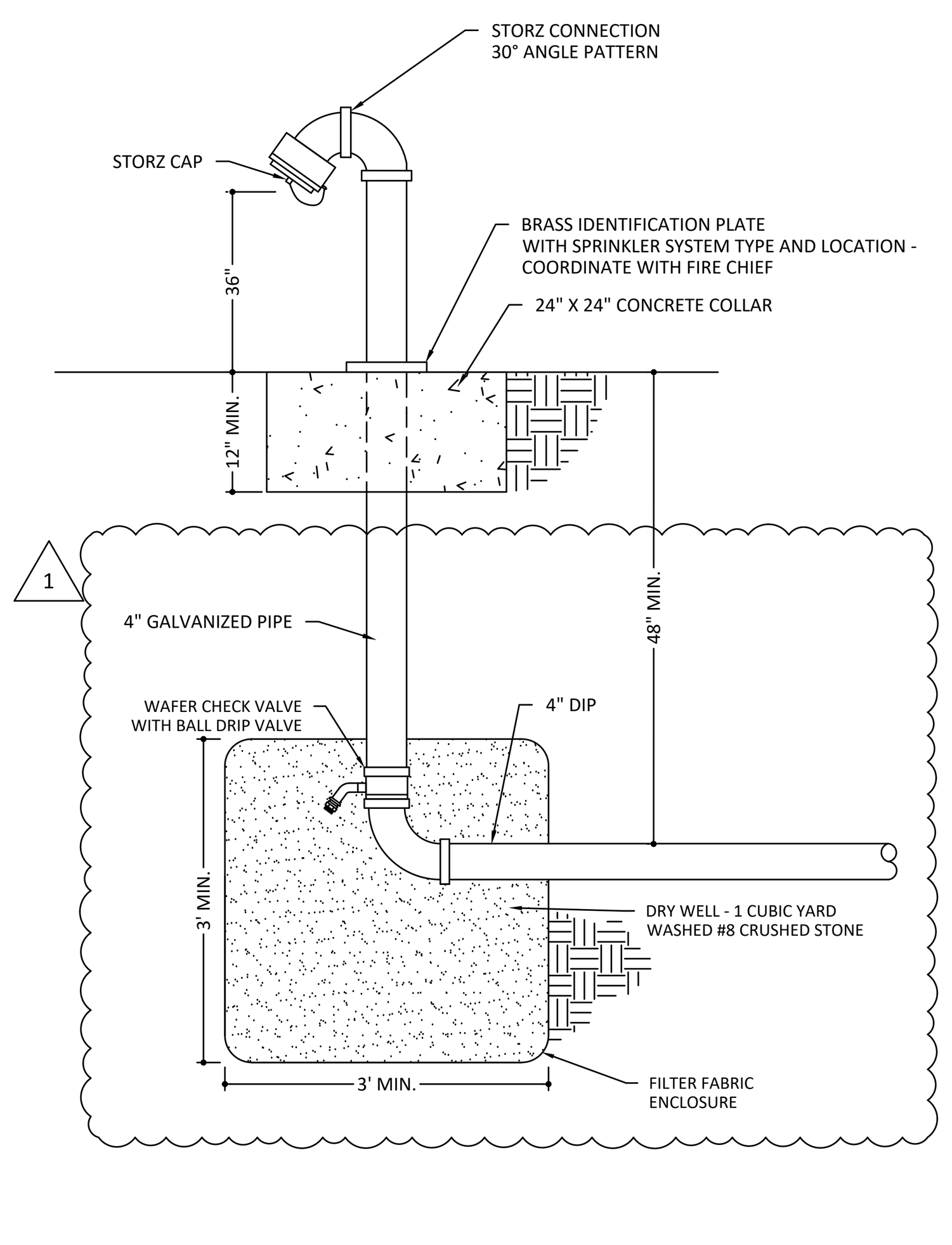
PROJECT: #23117
DATE: JAN 31, 2024
DRAWN BY: KJP

SITE UTILITIES
WATER PROFILES

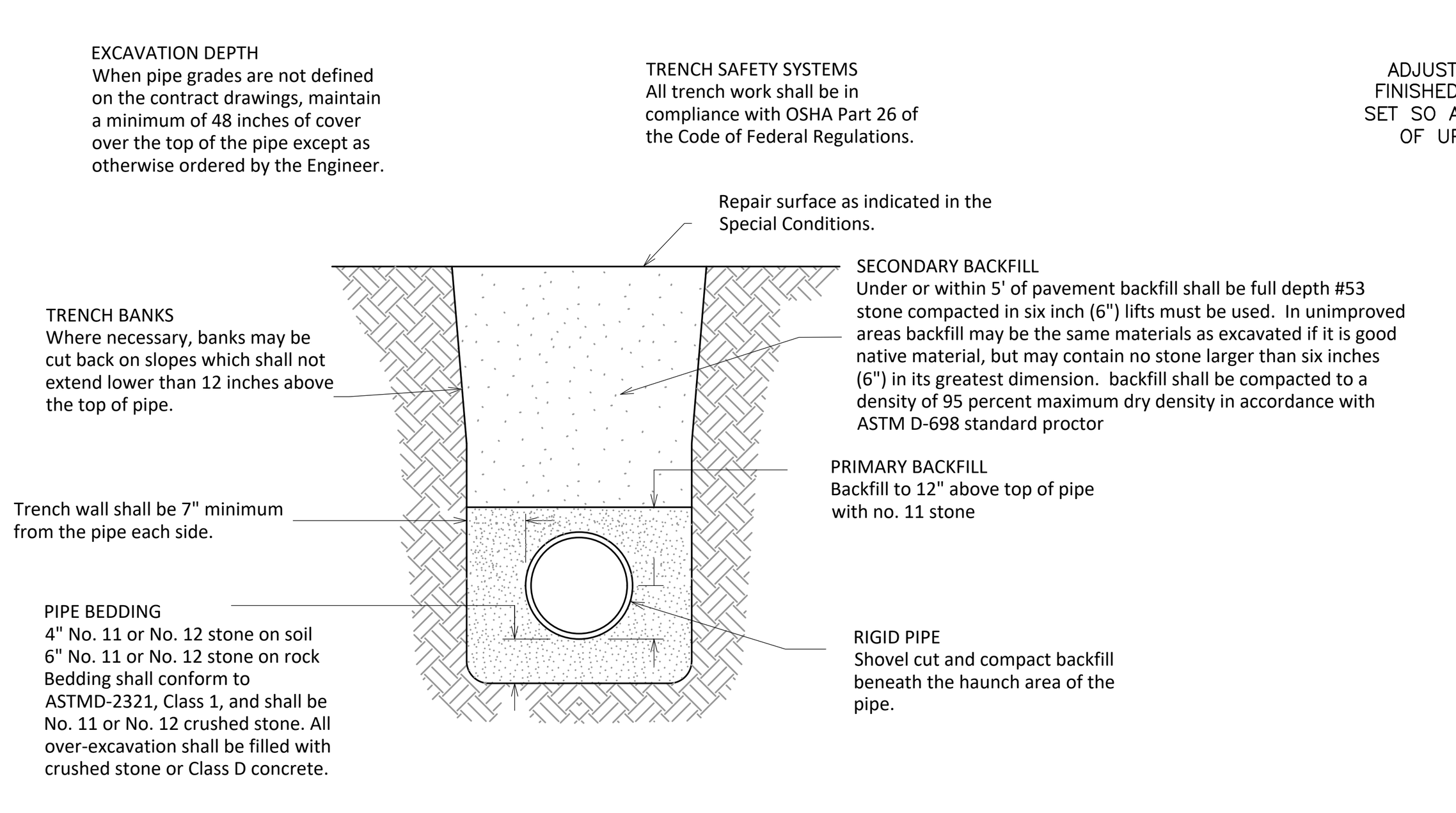
C603



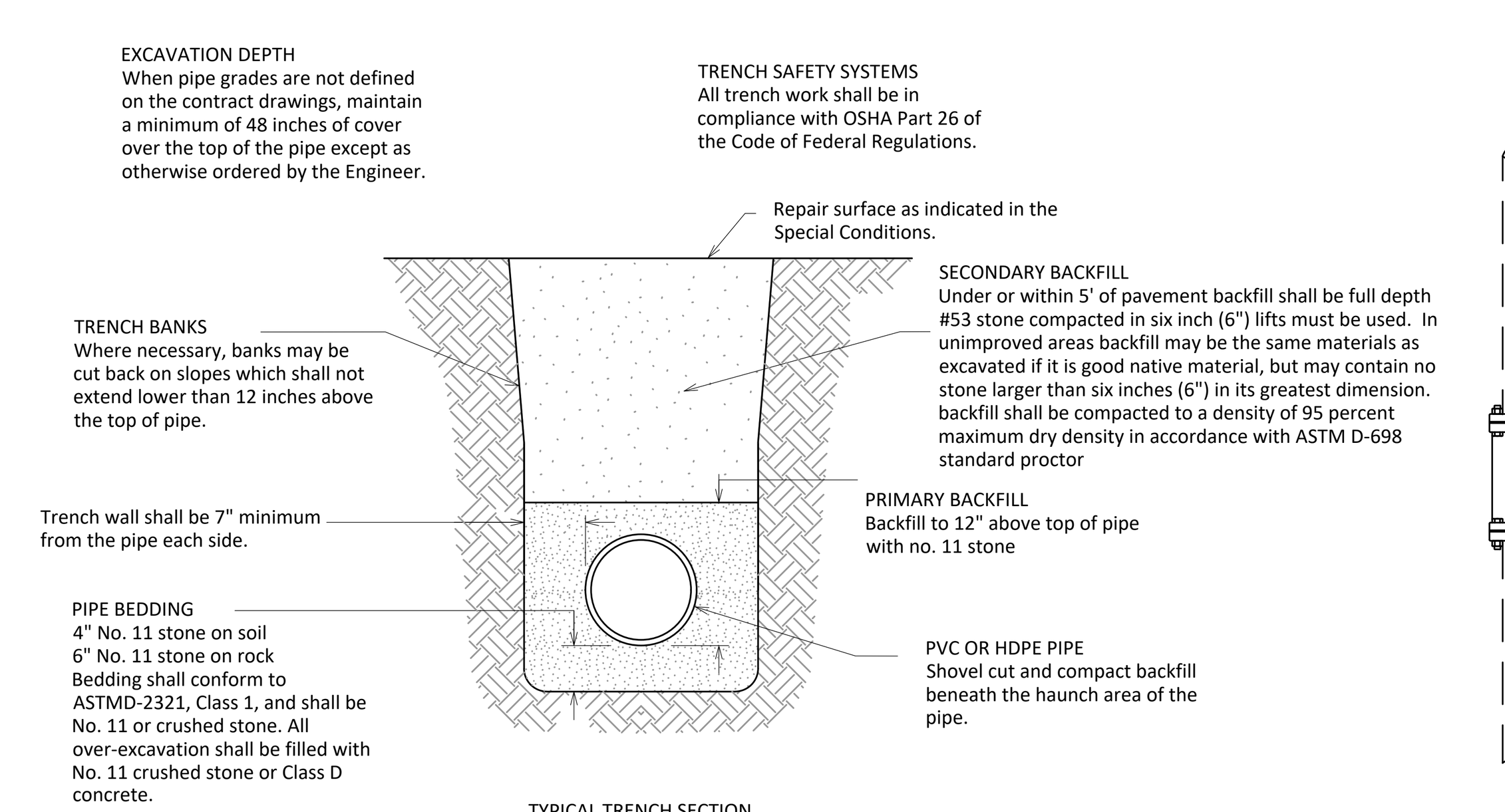
23 **POST INDICATOR VALVE**



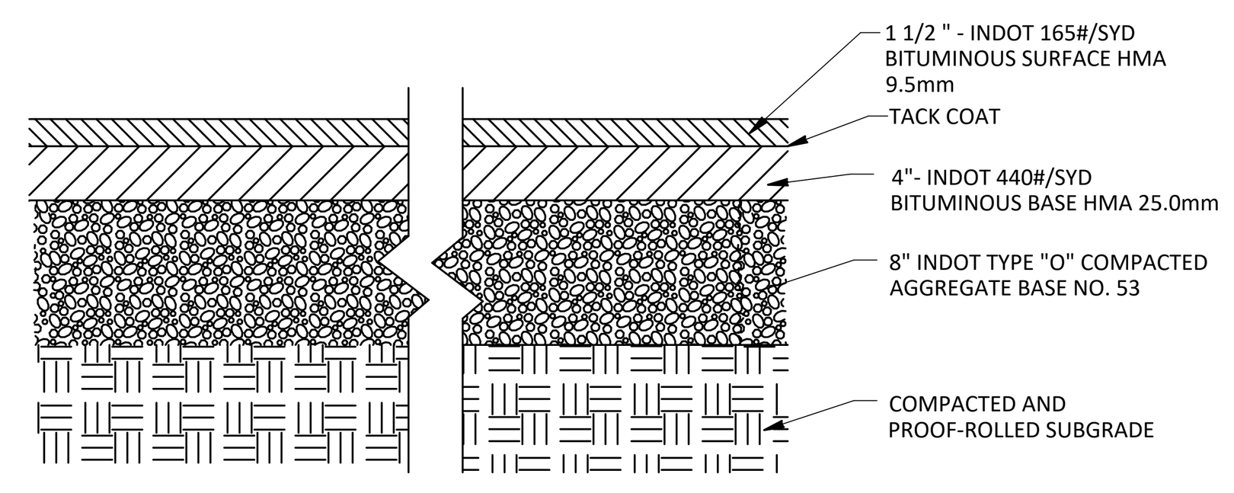
22 **FIRE DEPARTMENT CONNECTION**



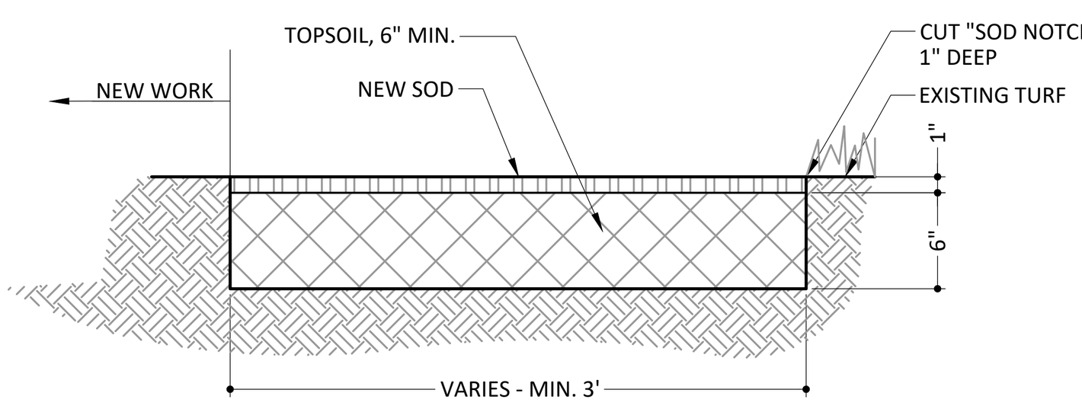
21 **BEDDING AND BACKFILL FOR RIGID PIPE**



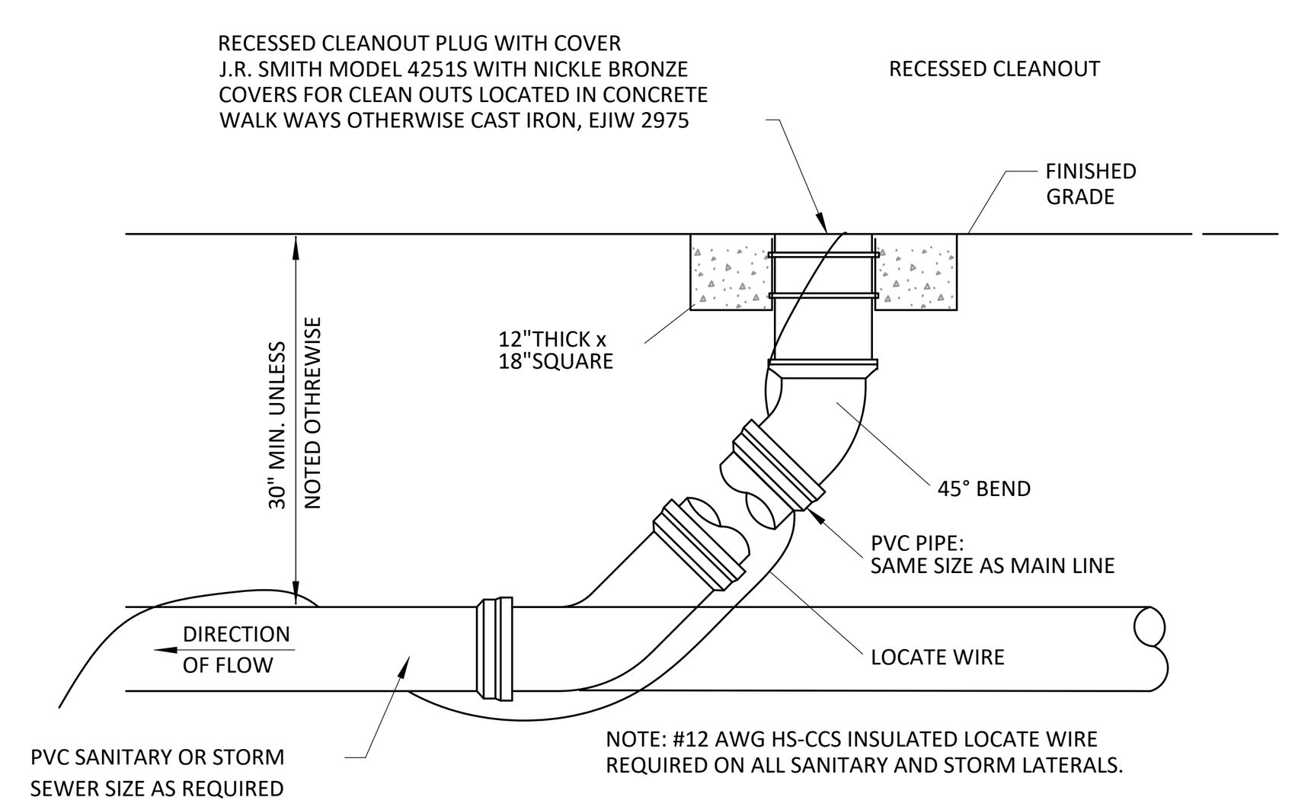
20 **BEDDING AND BACKFILL FOR PVC AND HDPE PIPE**



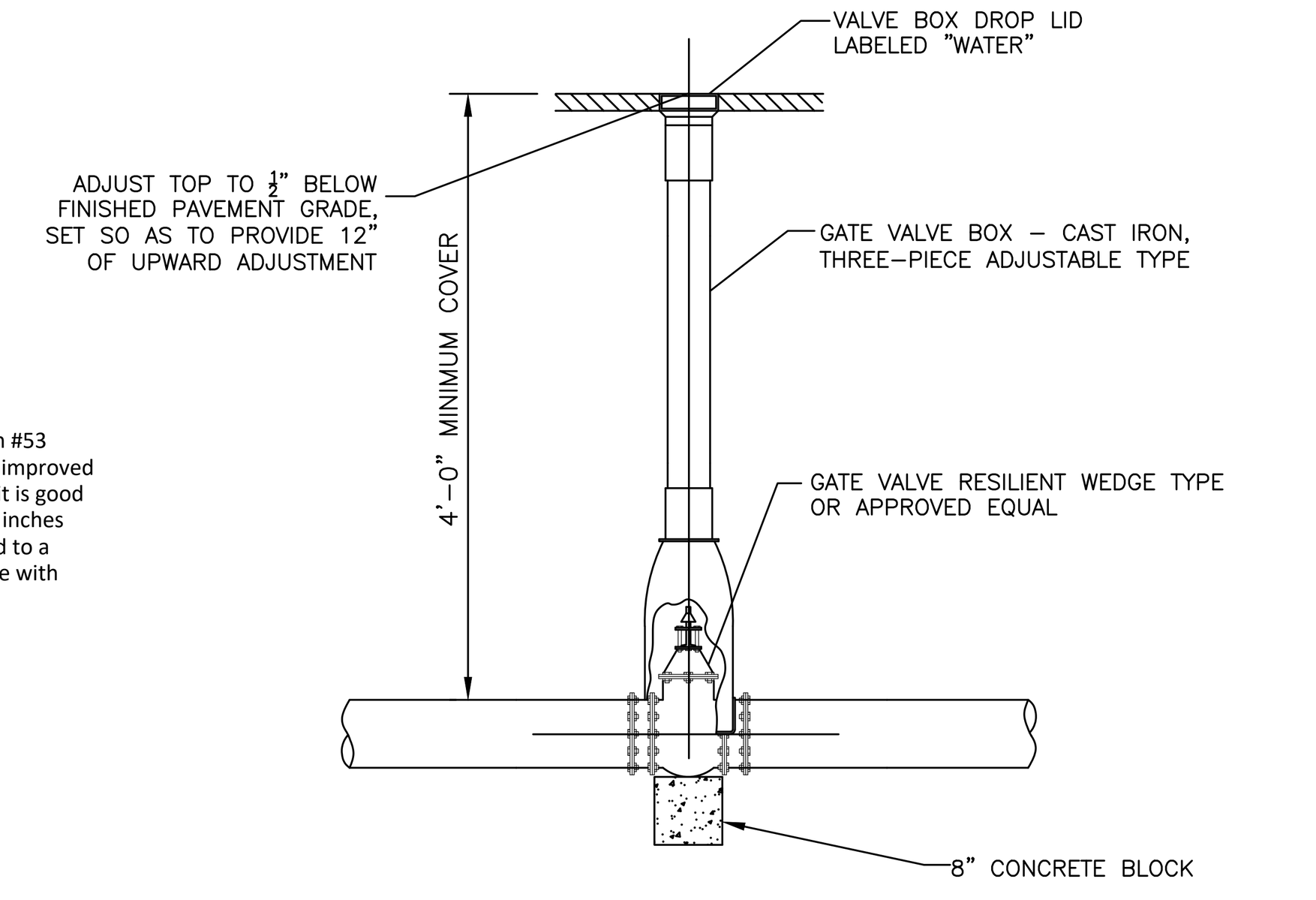
24 **HEAVY DUTY ASPHALT PAVEMENT**



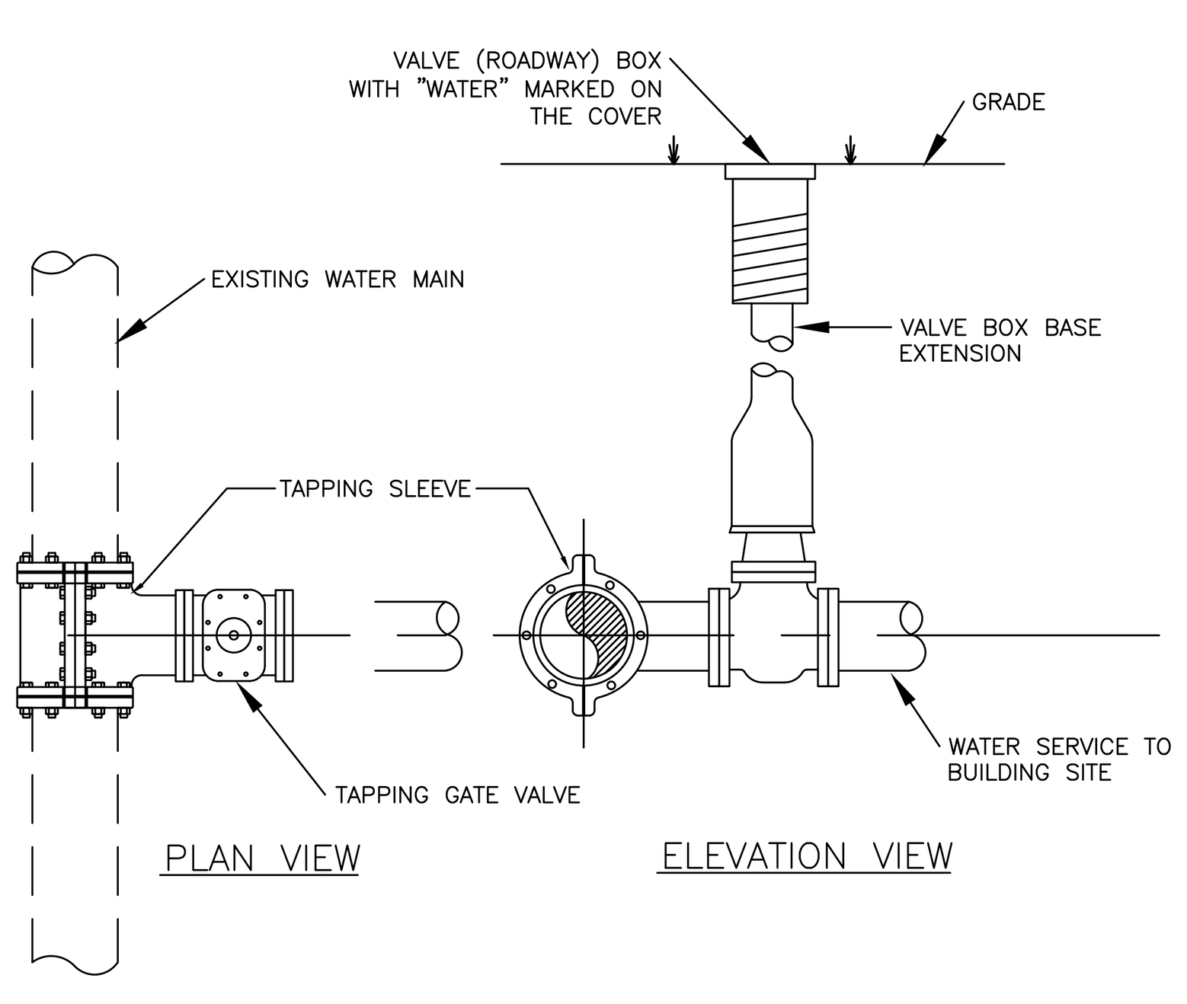
19 **SOD NOTCH DETAIL**



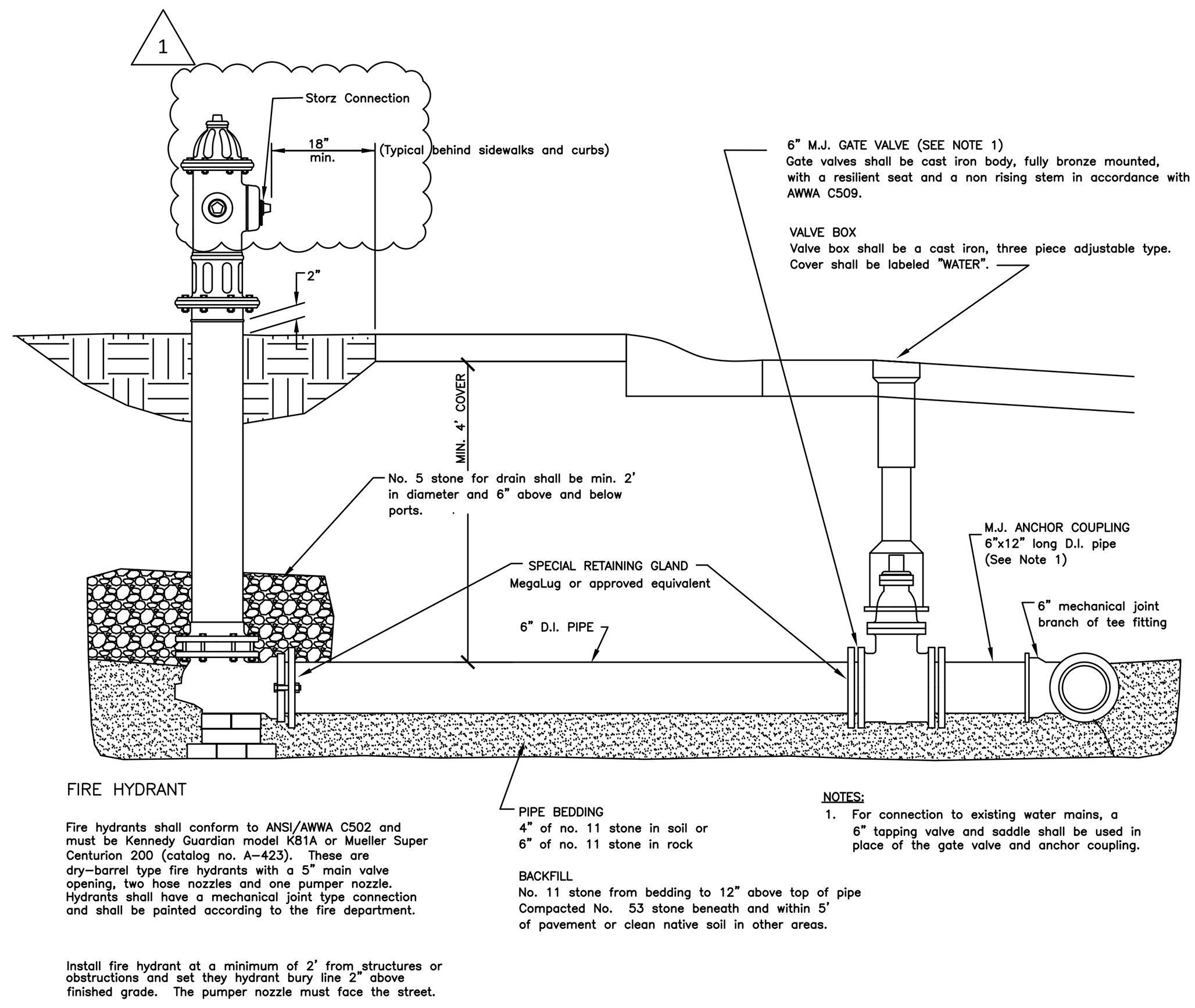
18 **TYPICAL YARD CLEANOUT**



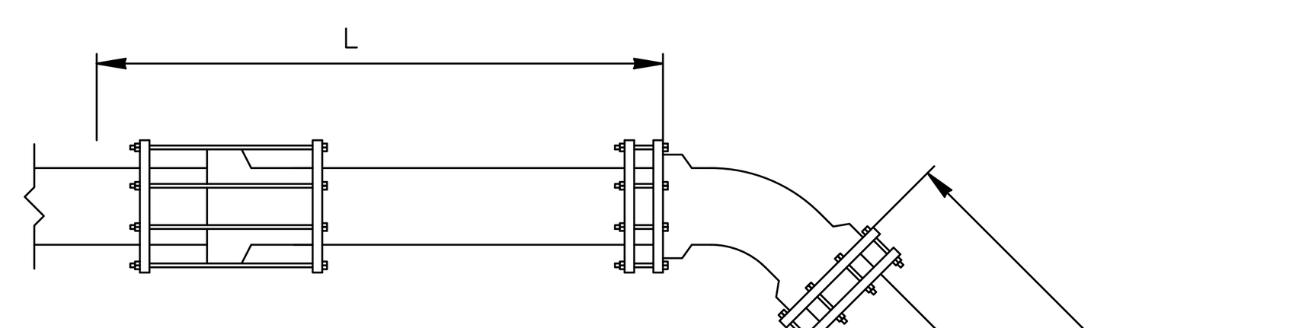
17 **VALVE AND VALVE BOX DETAIL**



16 **TAPPING VALVE DETAIL**



15 **FIRE HYDRANT DETAIL**



INSTALL A JOINT RESTRAINT DEVICE ON ALL JOINTS THAT ARE WITHIN THE MINIMUM LENGTH (L) TO BE RESTRAINED.

FOR SLIP-JOINT DUCTILE IRON PIPE USE: UNI-FLANGE SERIES 1450, EBAA SERIES 1100 HD, EBAA SERIES 1700, OR APPROVED EQUAL.

FOR COUPLING TO MECHANICAL JOINT DUCTILE IRON PIPE USE: UNI-FLANGE SERIES 1400, EBAA IRON MEGALUG, OR APPROVED EQUAL.

MINIMUM LENGTH IN FEET TO BE RESTRAINED ON EACH SIDE OF FITTING (L) UNLESS NOTED OTHERWISE

PIPE SIZE	3' OF COVER ON PIPE – HORIZ. BENDS 11¼	22½	45	90	DEAD END
4	3	5	9	21	85
6	3	6	12	29	119
8	4	8	16	38	155
10	5	9	19	44	186
12	6	11	22	52	218

PIPE SIZE	VERTICAL OFFSET (UPPER/LOWER*) 11¼	22½	45
4	9/3	17/6	35/13
6	12/5	24/9	50/18
8	16/6	31/11	65/22
10	19/7	37/13	77/26
12	22/8	44/15	91/30

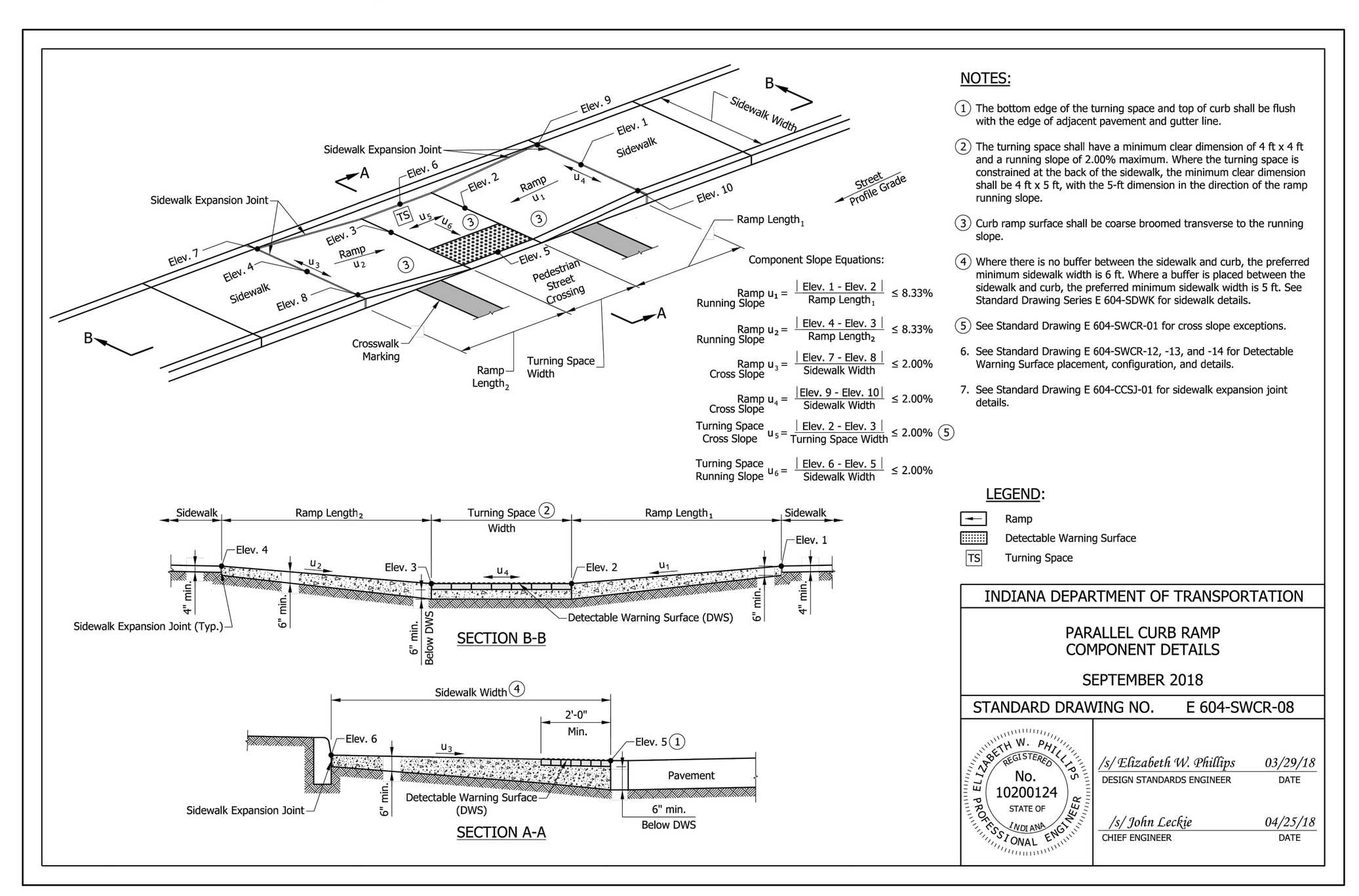
*LOWER RESTRAINT LENGTH CALCULATED FOR 2' VERTICAL OFFSET

PIPE SIZE (RUN \ BRANCH)	TEE-BRANCH LENGTH (RUN LENGTH=5') 4	6	8	10	12
4	23	77	123	160	197
6	5	56	107	148	187
8	5	35	92	135	176
10	5	13	75	121	165
12	5	5	57	108	154

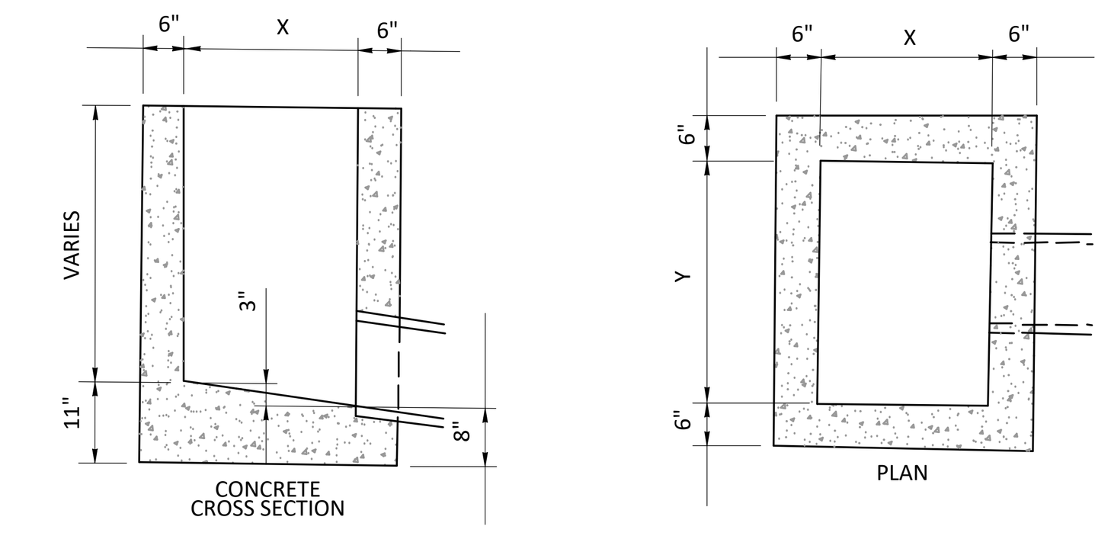
PIPE SIZE (FROM \ TO)	REDUCER LENGTH ON LARGER SIDE 4	6	8	10
6	62	–	–	–
8	112	65	–	–
10	151	114	63	–
12	189	159	116	64

CHARTS REFLECT THE FOLLOWING TYPICAL PARAMETERS:
- –ML SOIL CLASSIFICATION, SHEARING STRENGTH=450/300 PSF WORST CASE
- –TRENCH TYPE 5 (AWWA)
- –DEPTH OF COVER 3' MINIMUM
- –DUCTILE IRON PIPE WITH POLY WRAP
- –PIPE BEDDED IN GRANULAR
- –BACKFILL COMPACTED GRANULAR OR SELECT MATERIAL
- –TEST PRESSURE OF 150 PSI WITH 2:1 SAFETY FACTOR

14 **MECHANICAL JOINT RESTRAINTS**



13 **INDOT STANDARD CURB RAMP DETAILS**

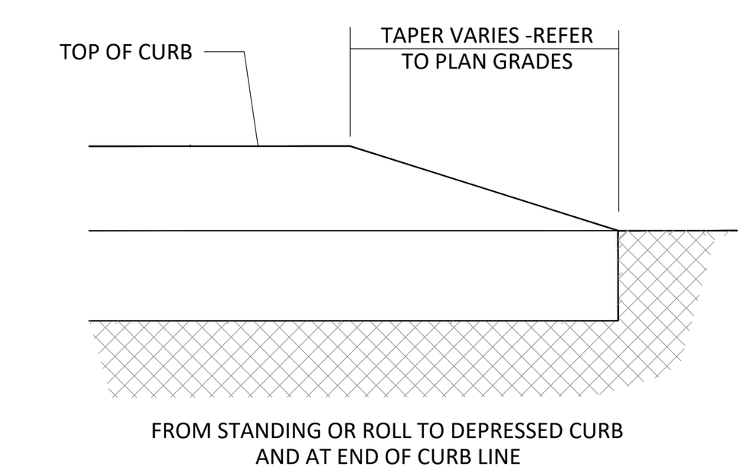


NOTE: BOX TO REST ON 4" OF COMPACTED NO. 11 STONE IF ON DIRT; 6" IF ON ROCK

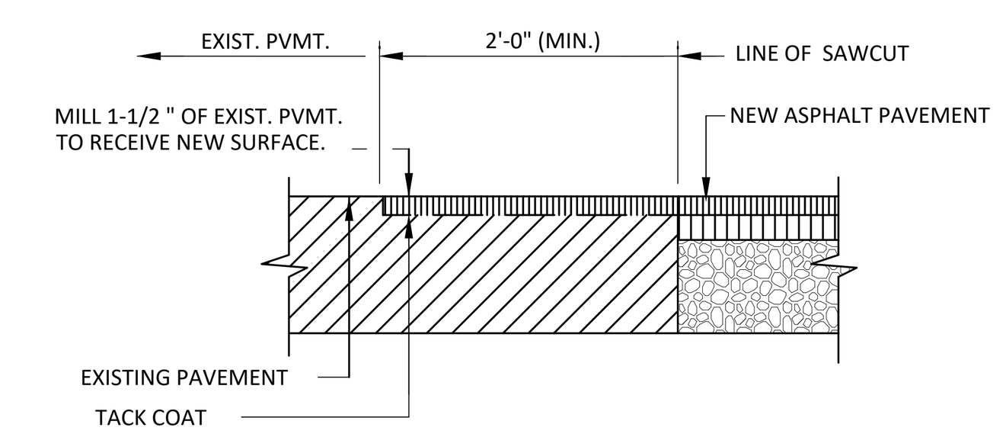
TYPE	X	Y
A	24"	24"
B	20"	42"
C	30"	48"
E	30"	30"
J	24"	36"

N.T.S.

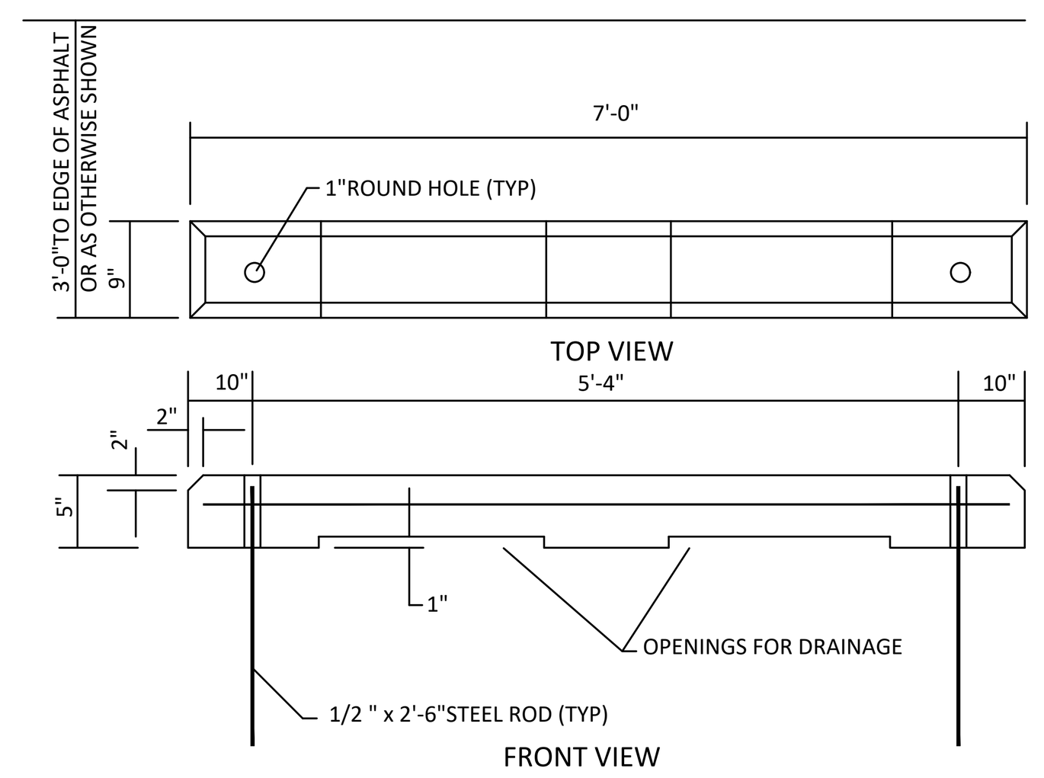
12 **STORM INLET DETAIL**



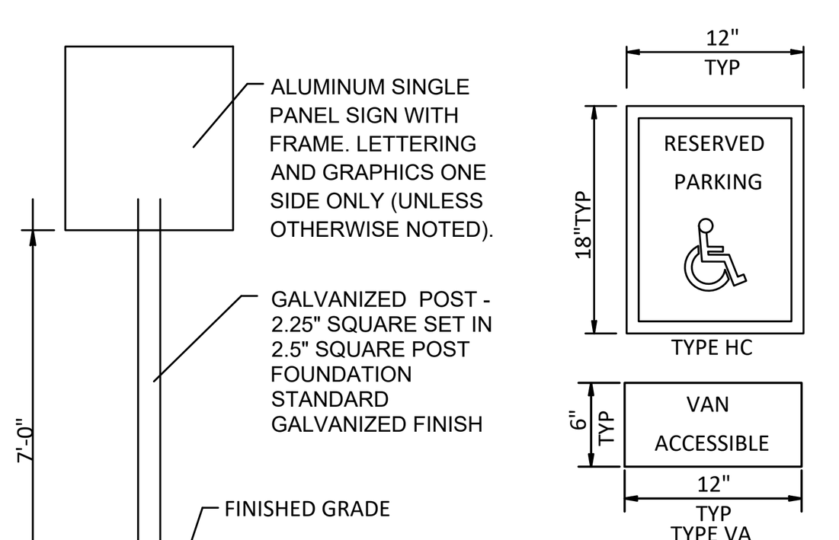
11 **CONCRETE CURB TRANSITION**



10 **NEW PAVEMENT TO EXISTING PAVEMENT**

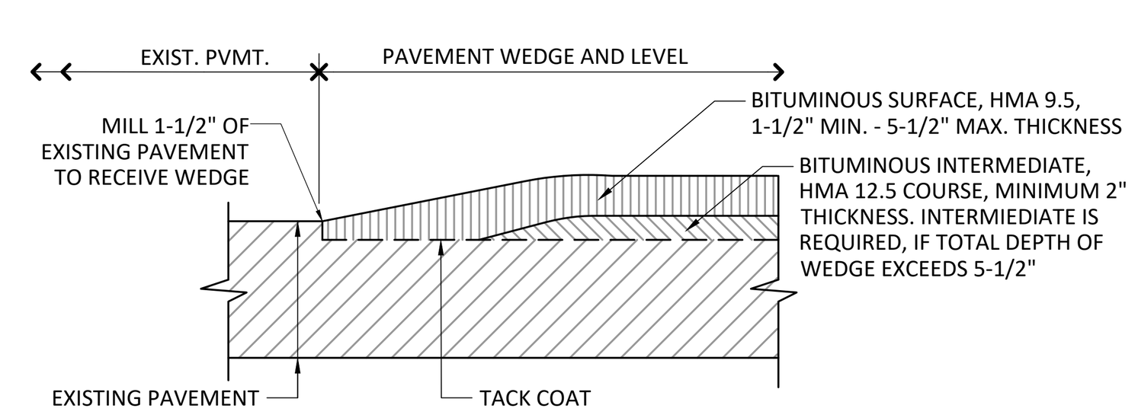


9 **CONCRETE WHEEL STOP**

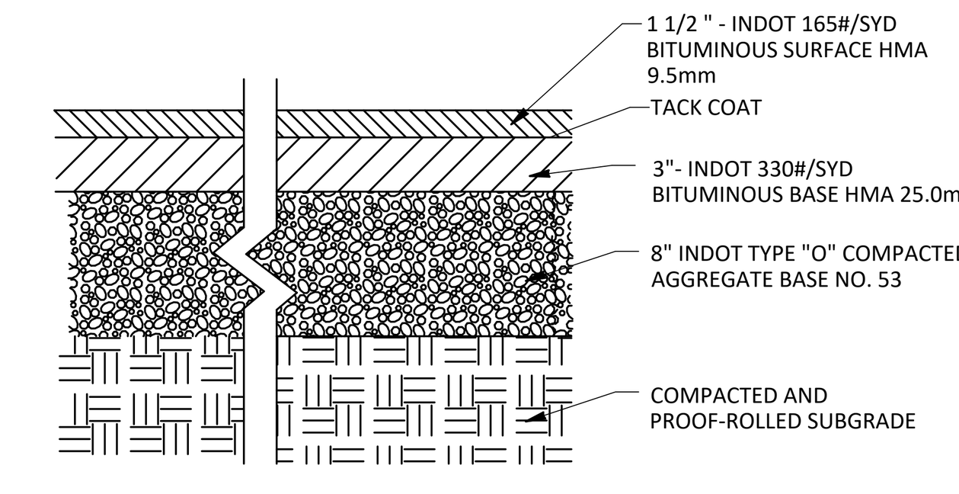


NOTES:
1. THE DRIVEN DEPTH FOR A SQUARE POST ANCHOR SHALL BE A MINIMUM OF 3'6" OF POST BELOW GRADE UNLESS MOUNTED IN QUICKSET OR SIMILAR BINDER.
2. ALL SIGNS SHALL BE HIGH INTENSITY MATERIAL.
3. ALL SIGNAGE SHALL MEET THE REQUIREMENTS OF THE INDIANA MANUAL ON TRAFFIC CONTROL DEVICES.

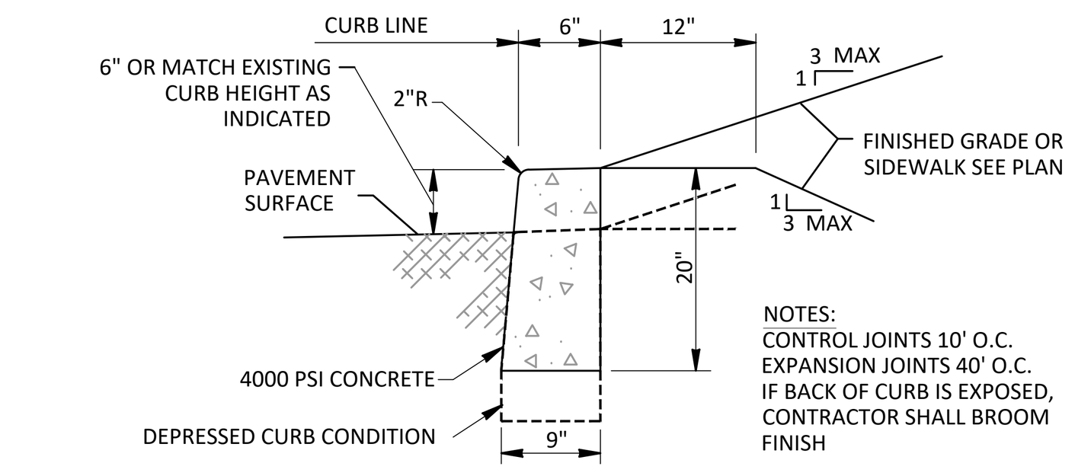
8 **SITE SIGNAGE**



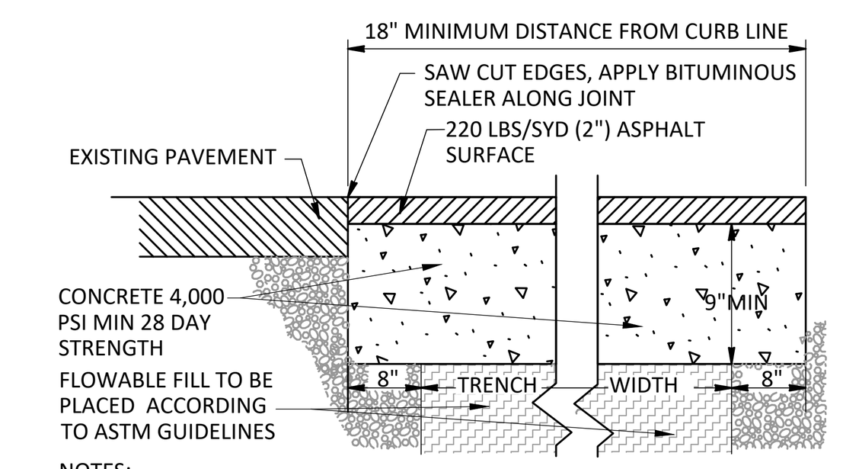
7 **BITUMINOUS WEDGE AND LEVEL**



6 **ASPHALT PAVEMENT**

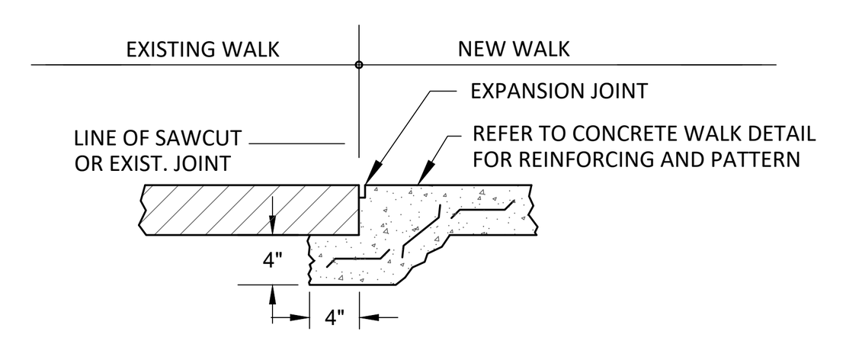


5 **STANDING CONCRETE CURB**

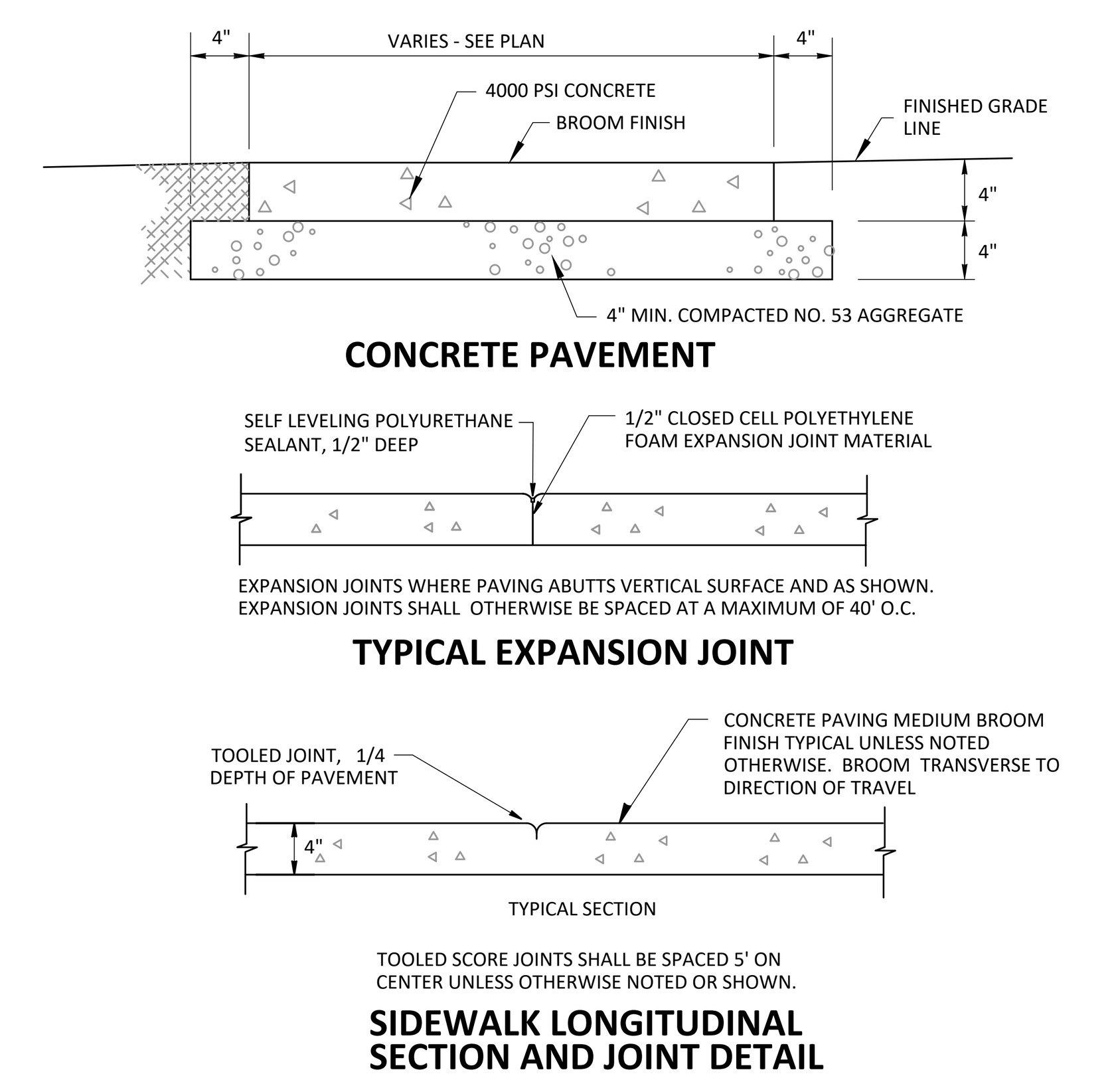


NOTES:
1. EXTEND SURFACE PATCH TO ADJACENT SEAM IF WITHIN 2' OF PATCHED AREA
2. ALLOW ADEQUATE CURE TIME BEFORE PERMITTING TRAFFIC ON CONCRETE
3. ALLOW ADEQUATE CURE TIME BEFORE PLACING COMPACTED ASPHALT SURFACE ON CONCRETE

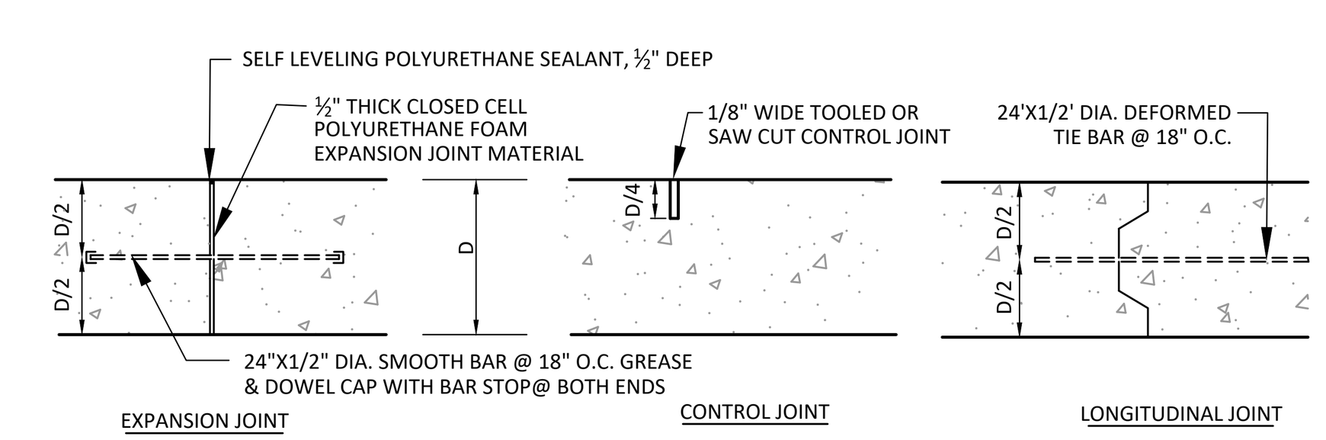
4 **PAVEMENT PATCH**



3 **NEW CONCRETE TO EXISTING CONCRETE**

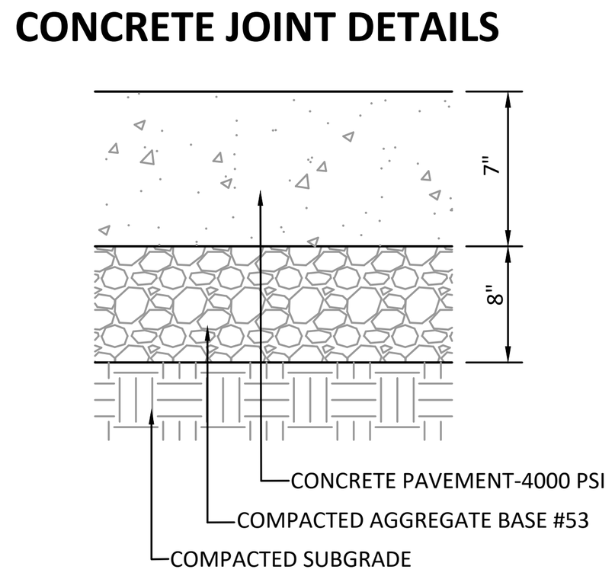


2 **STANDARD DUTY CONCRETE PAVEMENT**



NOTE: CONSTRUCT EXPANSION JOINTS WHERE INDICATED AT FIXED OBJECTS, INCLUDING CURBS, BUILDINGS AND LIGHT BASES AND CONTROL JOINTS AT 15' MAX. UNLESS OTHERWISE NOTED

CONCRETE JOINT DETAILS



1 **HEAVY DUTY CONCRETE PAVEMENT**

DETAILS ARE NOT TO SCALE

LANCER ASSOCIATES ARCHITECTURE
145 N EAST STREET
INDIANAPOLIS, IN 46204

BRCJ #11364
Bledsoe Riggert Cooper James
LAND SURVEYING • CIVIL ENGINEERING • GIS
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-8277 www.brcjcivil.com

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETTSVILLE, IN 47429

WILLIAM STUART BRIGHT
REGISTERED
NO. 870231
STATE OF
INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

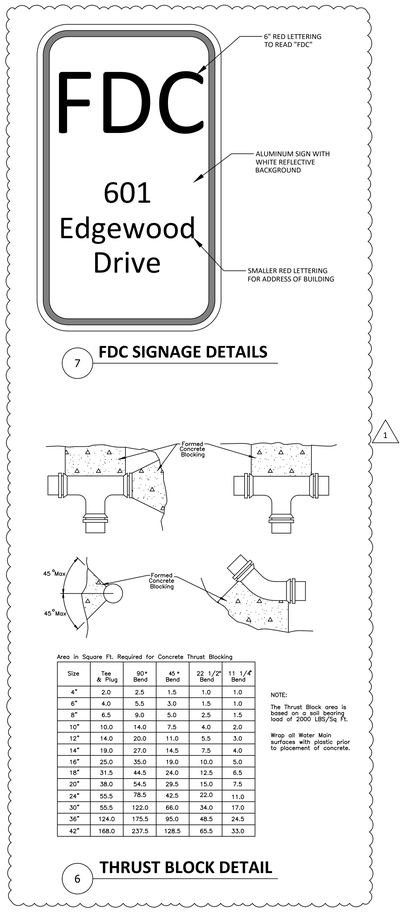
#	Date	Desc.
1	2/29/24	ADDENDUM #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JAN 31, 2024
DRAWN BY: DLN/KJP

SITE DETAILS

C801



7 **FDC SIGNAGE DETAILS**

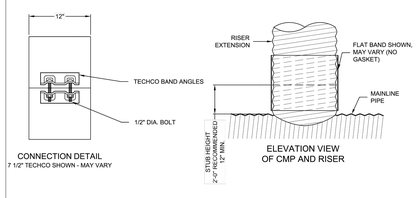
Area in Square Ft. Required for Concrete Thrust Blocking

Size	Tee & Plug	90° Bend	45° Bend	22 1/2° Bend	11 1/4° Bend
4"	2.0	2.5	1.5	1.0	1.0
6"	4.0	5.5	3.0	1.5	1.0
8"	6.5	9.0	5.0	2.5	1.5
10"	10.0	14.0	7.5	4.0	2.0
12"	14.0	20.0	11.0	5.5	3.0
14"	19.0	27.0	14.5	7.5	4.0
16"	25.0	35.0	19.0	10.0	5.0
18"	31.5	44.5	24.0	12.5	6.5
20"	38.0	54.5	29.5	15.0	7.5
24"	55.5	78.5	42.5	22.0	11.0
30"	55.5	122.0	66.0	34.0	17.0
36"	124.0	175.5	95.0	48.5	24.5
42"	168.0	237.5	128.5	65.5	33.0

NOTE:
The Thrust Block area is based on a soil bearing load of 2000 LBS/Sq Ft.

Wrap all Water Main surfaces with plastic prior to placement of concrete.

6 **THRUST BLOCK DETAIL**



CONNECTION DETAIL
7 1/2" TECHCO SHOWN - MAY VARY

ELEVATION VIEW OF CMP AND RISER

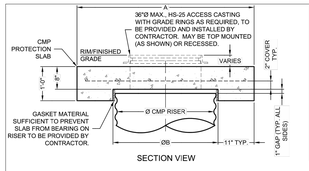
PLAIN END CMP RISER PIPE

GENERAL NOTES:

1. **DELIVERED BAND STYLE AND FASTENER TYPE MAY VARY BY FABRICATION PLANT.**
2. JOINT IS TO BE ASSEMBLED PER AASHTO BRIDGE CONSTRUCTION SPECIFICATION SEC 26.4.2.4.
3. BAND MATERIAL AND GAGE TO BE SAME AS RISER MATERIAL.
4. IF RISER HAS A HEIGHT OF COVER OF 10' OR MORE, USE A SLIP JOINT.
5. BANDS ARE NORMALLY FURNISHED AS FOLLOWS:
   - 12" THRU 48" 1-PIECE
   - 54"-2-PIECES
6. ALL RISER JOINT COMPONENTS WILL BE FIELD ASSEMBLED.
7. MANHOLE RISERS IN APPLICATIONS WHERE TRAFFIC LOADS ARE IMPOSED REQUIRE SPECIAL DESIGN CONSIDERATIONS.
8. DIMENSIONS SUBJECT TO MANUFACTURING TOLERANCES.

12" RISER BAND DETAIL
NOT TO SCALE

5 **DETENTION SYSTEM RISER**

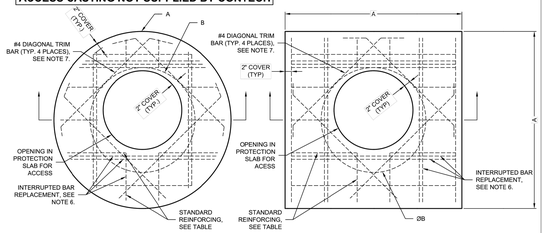


SECTION VIEW

REINFORCING TABLE				
Ø CMP RISER	A	B Ø	REINFORCING	**BEARING PRESSURE (PSF)
24"	4'Ø 4'x4'	26"	#5 @ 10" OCEW #5 @ 10" OCEW	2,540 1,900
30"	4'-6"Ø 4'-6" x 4'-6"	32"	#5 @ 10" OCEW #5 @ 9" OCEW	2,260 1,670
36"	5'Ø 5' x 5'	38"	#5 @ 9" OCEW #5 @ 8" OCEW	2,060 1,500
42"	5'-6"Ø 5'-6" x 5'-6"	44"	#5 @ 8" OCEW #5 @ 8" OCEW	1,490 1,370
48"	6'Ø 6' x 6'	50"	#5 @ 7" OCEW #5 @ 7" OCEW	1,210 1,270

** ASSUMED SOIL BEARING CAPACITY

ACCESS CASTING NOT SUPPLIED BY CONTECH



ROUND OPTION PLAN VIEW

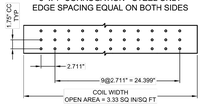
SQUARE OPTION PLAN VIEW

NOTES:

1. DESIGN IN ACCORDANCE WITH AASHTO, 17th EDITION AND ACI 350.
2. DESIGN LOAD HS25.
3. EARTH COVER = 1' MAX.
4. CONCRETE STRENGTH = 4,000 psi
5. REINFORCING STEEL = ASTM A615, GRADE 60.
6. PROVIDE ADDITIONAL REINFORCING AROUND OPENINGS EQUAL TO THE BARS INTERRUPTED, HALF EACH SIDE. ADDITIONAL BARS TO BE IN THE SAME PLANE.
7. TRIM OPENING WITH DIAGONAL #4 BARS, EXTEND BARS A MINIMUM OF 12" BEYOND OPENING, BEND BARS AS REQUIRED TO MAINTAIN BAR COVER.
8. PROTECTION SLAB AND ALL MATERIALS TO BE PROVIDED AND INSTALLED BY CONTRACTOR.
9. DETAIL DESIGN BY DELTA ENGINEERS, ARCHITECTS AND LAND SURVEYORS, ENDWELL, NY.

MANHOLE CAP DETAIL
NOT TO SCALE

4 **DETENTION SYSTEM MANHOLE CAP DETAIL** N.T.S.



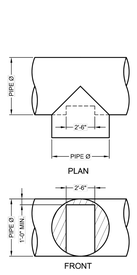
NOTES:
1. PERFORATIONS MEET AASHTO AND ASTM SPECIFICATIONS.
2. PERFORATION OPEN AREA PER SQUARE FOOT OF PIPE IS BASED ON THE NOMINAL DIAMETER AND LENGTH OF PIPE.
3. DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.
4. ALL HOLES 3/8"Ø.

EXFILTRATION AREA
STANDARD PERFORATION PATTERNS

APPROXIMATE AREA PER LINEAR FOOT OF PIPE				
PIPE	CORRUGATION PATTERN			
	2 2/3" x 1/2"	3" x 1"	5" x 1"	ULTRA FLO
48"Ø	48.9 SQ. IN.	51.6 SQ. IN.		

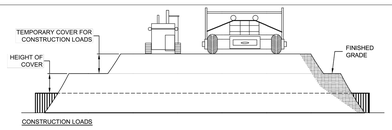
NOTES:
- GAGE AND COATING LIMITATIONS APPLY. 5" x 1" IS NOT AVAILABLE IN ALUMINUM.
- DIMENSIONS SUBJECT TO MANUFACTURER'S TOLERANCES.

TYPICAL PERFORATION DETAIL
NOT TO SCALE



48"Ø to 90"Ø FITTING REINFORCEMENT MAY BE REQUIRED BASED ON HEIGHT OF COVER AND LIVE LOAD CONDITION

TYPICAL MANWAY DETAIL
NOT TO SCALE



CONSTRUCTION LOADS

FOR TEMPORARY CONSTRUCTION VEHICLE LOADS, AN EXTRA AMOUNT OF COMPACTED COVER MAY BE REQUIRED OVER THE TOP OF THE PIPE. THE HEIGHT-OF-COVER SHALL MEET THE MINIMUM REQUIREMENTS SHOWN IN THE TABLE BELOW. THE USE OF HEAVY CONSTRUCTION EQUIPMENT NECESSITATES GREATER PROTECTION FOR THE PIPE THAN FINISHED GRADE COVER MINIMUMS FOR NORMAL HIGHWAY TRAFFIC.

PIPE SPAN, INCHES	AXLE LOADS (kips)			
	18-50	50-75	75-110	110-150
	MINIMUM COVER (FT)			
12-42	2.0	2.5	3.0	3.0
48-72	3.0	3.0	3.5	4.0
78-120	3.0	3.5	4.0	4.0
126-144	3.5	4.0	4.5	4.5

*MINIMUM COVER MAY VARY, DEPENDING ON LOCAL CONDITIONS. THE CONTRACTOR MUST PROVIDE THE ADDITIONAL COVER REQUIRED TO AVOID DAMAGE TO THE PIPE. MINIMUM COVER IS MEASURED FROM THE TOP OF THE PIPE TO THE TOP OF THE MAINTAINED CONSTRUCTION ROADWAY SURFACE.

CONSTRUCTION LOADING DIAGRAM
NOT TO SCALE

SPECIFICATION FOR CORRUGATED STEEL PIPE-ALUMINIZED TYPE 2 STEEL

SCOPE

THIS SPECIFICATION COVERS THE MANUFACTURE AND INSTALLATION OF THE CORRUGATED STEEL PIPE (CSP) DETAILED IN THE PROJECT PLANS.

MATERIAL

THE ALUMINIZED TYPE 2 STEEL COILS SHALL CONFORM TO THE APPLICABLE REQUIREMENTS OF AASHTO M274 OR ASTM A929.

PIPE

THE CSP SHALL BE MANUFACTURED IN ACCORDANCE WITH THE APPLICABLE REQUIREMENTS OF AASHTO M36 OR ASTM A760. THE PIPE SIZES, GAGES AND CORRUGATIONS SHALL BE AS SHOWN ON THE PROJECT PLANS.

ALL FABRICATION OF THE PRODUCT SHALL OCCUR WITHIN THE UNITED STATES.

HANDLING AND ASSEMBLY

SHALL BE IN ACCORDANCE WITH RECOMMENDATIONS OF THE NATIONAL CORRUGATED STEEL PIPE ASSOCIATION (NCSPA)

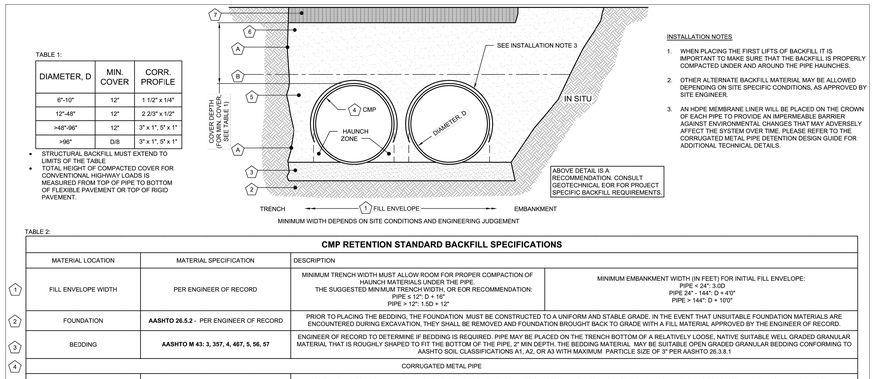
INSTALLATION

SHALL BE IN ACCORDANCE WITH AASHTO STANDARD SPECIFICATIONS FOR HIGHWAY BRIDGES, SECTION 26, DIVISION II OR ASTM A798 AND IN CONFORMANCE WITH THE PROJECT PLANS AND SPECIFICATIONS. IF THERE ARE ANY INCONSISTENCIES OR CONFLICTS THE CONTRACTOR SHOULD DISCUSS AND RESOLVE WITH THE SITE ENGINEER.

IT IS ALWAYS THE RESPONSIBILITY OF THE CONTRACTOR TO FOLLOW OSHA GUIDELINES FOR SAFE PRACTICES.

ANTI-FLOTATION PROVISIONS DUE TO HIGH GROUNDWATER OR OTHER FLOTATION CONCERNS ARE SITE-SPECIFIC DESIGN CONSIDERATIONS AND SHALL BE SPECIFIED BY ENGINEER OF

3 **DETENTION SYSTEM PERFORATION, MANWAY, AND LOADING DETAILS** N.T.S.



MINIMUM WIDTH DEPENDS ON SITE CONDITIONS AND ENGINEER'ING JUDGEMENT

TABLE 1:

DIAMETER, D	MIN. COVER	CORR. PROFILE
6"-10"	12"	1 1/2" x 1/4"
12"-48"	12"	2 2/3" x 1/2"
>48"-96"	12"	3" x 1", 5" x 1"
>96"	D/8	3" x 1", 5" x 1"

- STRUCTURAL BACKFILL MUST EXTEND TO LIMITS OF THE TABLE
- TOTAL HEIGHT OF COMPACTED COVER FOR CONVENTIONAL HIGHWAY LOADS IS MEASURED FROM TOP OF PIPE TO BOTTOM OF FLEXIBLE PAVEMENT OR TOP OF RIGID PAVEMENT.

INSTALLATION NOTES

1. WHEN PLACING THE FIRST LIFTS OF BACKFILL IT IS IMPORTANT TO MAKE SURE THAT THE BACKFILL IS PROPERLY COMPACTED UNDER AND AROUND THE PIPE HAUNCHES.
2. OTHER ALTERNATE BACKFILL MATERIAL MAY BE ALLOWED DEPENDING ON SITE SPECIFIC CONDITIONS, AS APPROVED BY SITE ENGINEER.
3. AN HDPE MEMBRANE LINER WILL BE PLACED ON THE CROWN OF EACH PIPE TO PROVIDE AN IMPERMEABLE BARRIER AGAINST ENVIRONMENTAL CHANGES THAT MAY ADVERSELY AFFECT THE SYSTEM OVER TIME. PLEASE REFER TO THE CORRUGATED METAL PIPE DETENTION DESIGN GUIDE FOR ADDITIONAL TECHNICAL DETAILS.

TABLE 2:

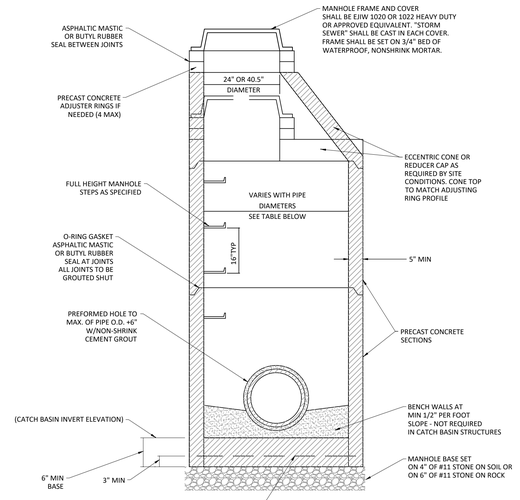
CMP RETENTION STANDARD BACKFILL SPECIFICATIONS

	MATERIAL LOCATION	MATERIAL SPECIFICATION	DESCRIPTION	
1	FILL ENVELOPE WIDTH	PER ENGINEER OF RECORD	MINIMUM TRENCH WIDTH MUST ALLOW ROOM FOR PROPER COMPACTION OF HAUNCH MATERIALS UNDER THE PIPE. THE SUGGESTED MINIMUM TRENCH WIDTH, OR EOR RECOMMENDATION: PIPE ≤ 12": D + 16" PIPE > 144": D + 100"	MINIMUM EMBANKMENT WIDTH (IN FEET) FOR INITIAL FILL ENVELOPE: PIPE < 24": 3.0D PIPE 24" - 144": D + 4'0" PIPE > 144": D + 10'0"
2	FOUNDATION	**AASHTO 26.5.2** - PER ENGINEER OF RECORD	PRIOR TO PLACING THE BEDDING, THE FOUNDATION MUST BE CONSTRUCTED TO A UNIFORM AND STABLE GRADE. IN THE EVENT THAT UNSUITABLE FOUNDATION MATERIALS ARE ENCOUNTERED DURING EXCAVATION, THEY SHALL BE REMOVED AND FOUNDATION BROUGHT BACK TO GRADE WITH A FILL MATERIAL APPROVED BY THE ENGINEER OF RECORD.	
3	BEDDING	**AASHTO M 43: 3, 357, 4, 467, 5, 56, 57**	ENGINEER OF RECORD TO DETERMINE IF BEDDING IS REQUIRED. PIPE MAY BE PLACED ON THE TRENCH BOTTOM OF A RELATIVELY LOOSE, NATIVE SUITABLE WELL GRADED GRANULAR MATERIAL THAT IS ROUGHLY SHAPED TO FIT THE BOTTOM OF THE PIPE, 2" MIN DEPTH. THE BEDDING MATERIAL MAY BE SUITABLE OPEN GRADED GRANULAR BEDDING CONFORMING TO AASHTO SOIL CLASSIFICATIONS A1, A2, OR A3 WITH MAXIMUM PARTICLE SIZE OF 3" PER AASHTO 26.3.8.1	
4	CORRUGATED METAL PIPE			
5	BACKFILL	FREE-DRAINING, ANGULAR, WASHED-STONE PER **AASHTO M 43: 3, 357, 4, 467, 5, 56, 57** OR APPROVED EQUAL *	HAUNCH ZONE MATERIAL SHALL BE HAND SHOVELED OR SHOVEL SLICED INTO PLACE TO ALLOW FOR PROPER COMPACTION WITHOUT SOFT SPOTS. BACKFILL SHALL BE PLACED IN 8" +/- LOOSE LIFTS AND COMPACTED TO 90% STANDARD PROCTOR PER AASHTO T 99. BACKFILL SHALL BE PLACED SUCH THAT THERE IS NO MORE THAN A TWO LIFT (16") DIFFERENTIAL BETWEEN ANY OF THE PIPES AT ANY TIME DURING THE BACKFILL PROCESS. THE BACKFILL SHOULD BE ADVANCED ALONG THE LENGTH OF THE SYSTEM TO AVOID DIFFERENTIAL LOADING. WHERE CONVENTIONAL COMPACTION TESTING IS NOT PRACTICAL, THE MATERIAL SHALL BE MECHANICALLY COMPACTED UNTIL NO FURTHER YIELDING OF MATERIAL IS OBSERVED UNDER THE COMPACTOR. **"IN AREAS WITH HIGH WATER TABLE FLUCTUATIONS THAT INTERACT WITH THE PIPE ZONE, CONSIDER INSTALLING A GEOTEXTILE SEPARATION LAYER TO PREVENT SOIL MIGRATION.	
6	COVER MATERIAL	UP TO MIN. COVER - **AASHTO M 145: A-1, A-2, A-3** ABOVE MIN. COVER - PER ENGINEER OF RECORD	COVER MATERIAL MAY INCLUDE NON-BITUMINOUS, GRANULAR ROADBASE MATERIAL WITHIN MIN COVER LIMITS	
7	RIGID OR FLEXIBLE PAVEMENT (IF APPLICABLE)	PER ENGINEER OF RECORD	FLEXIBLE PAVEMENT SHOULD NOT BE COUNTED AS PART OF THE FILL HEIGHT OVER THE CMP. FINAL BACKFILL MATERIAL SELECTION AND COMPACTION REQUIREMENTS SHALL FOLLOW THE PROJECT PLANS AND SPECIFICATIONS PER THE ENGINEER OF RECORD.	
A	OPTIONAL SIDE GEOTEXTILE	NONE	GEOTEXTILE LAYER IS RECOMMENDED ON SIDES OF EXCAVATION TO PREVENT SOIL MIGRATION.	
B	GEOTEXTILE BETWEEN LAYERS	NONE	IF SOIL TYPES DIFFER AT ANY POINT ABOVE PIPE INVERT, A GEOTEXTILE LAYER IS RECOMMENDED TO BE PLACED BETWEEN THE LAYERS TO PREVENT SOIL MIGRATION.	

NOTES:
- FOR MULTIPLE BARREL INSTALLATIONS, THE RECOMMENDED STANDARD SPACING BETWEEN PARALLEL PIPE RUNS SHALL BE THE PIPE DIAMETER /2 BUT NO LESS THAN 12" FOR DIAMETERS <72". FOR 72" AND LARGER DIAMETERS, THE MINIMUM SPACING IS 36". CONTACT YOUR CONTECH REPRESENTATIVE FOR NONSTANDARD SPACING.
- APPROVED REGIONAL EQUIVALENTS FOR SECTION 5 INCLUDE CA-7, MIDOT 6AA, 6A, OR 5Q, PROVIDED THEY MEET THE PARTICLE SIZES INDICATED.

MANUFACTURER RECOMMENDED BACKFILL
NOT TO SCALE

2 **DETENTION SYSTEM BACKFILL DETAILS** N.T.S.



NOTE:
MANHOLE SHALL CONFORM TO ASTM C478

MANHOLE DIAMETER DETERMINATION TABLE		
PIPE SIZE	PIPES ENTERING OR LEAVING AT A 0-45 DEGREE ANGLE	PIPES ENTERING OR LEAVING AT A 46-90 DEGREE ANGLE
12"-21"	48"	48"
24"	48"	60"
27"-30"	60"	60"
33"-36"	60"	72"

1 **STANDARD STORM MANHOLE DETAIL**

DETAILS ARE NOT TO SCALE

LANCER ASSOCIATES ARCHITECTURE
145 N EAST STREET
INDIANAPOLIS, IN 46204

BRCJ #11364
Bledsoe Riggert Cooper James
BRCJ
LAND SURVEYING • CIVIL ENGINEERING • GIS
1351 West Tapp Road Bloomington, Indiana 47403
Phone: 812-336-6277
www.brcjcivil.com

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETTSVILLE, IN 47429

WILLIAM STUART DIDIERICH — REGISTERED — NO. 870231 — STATE OF INDIANA — PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	2/29/24	ADDENDUM #2

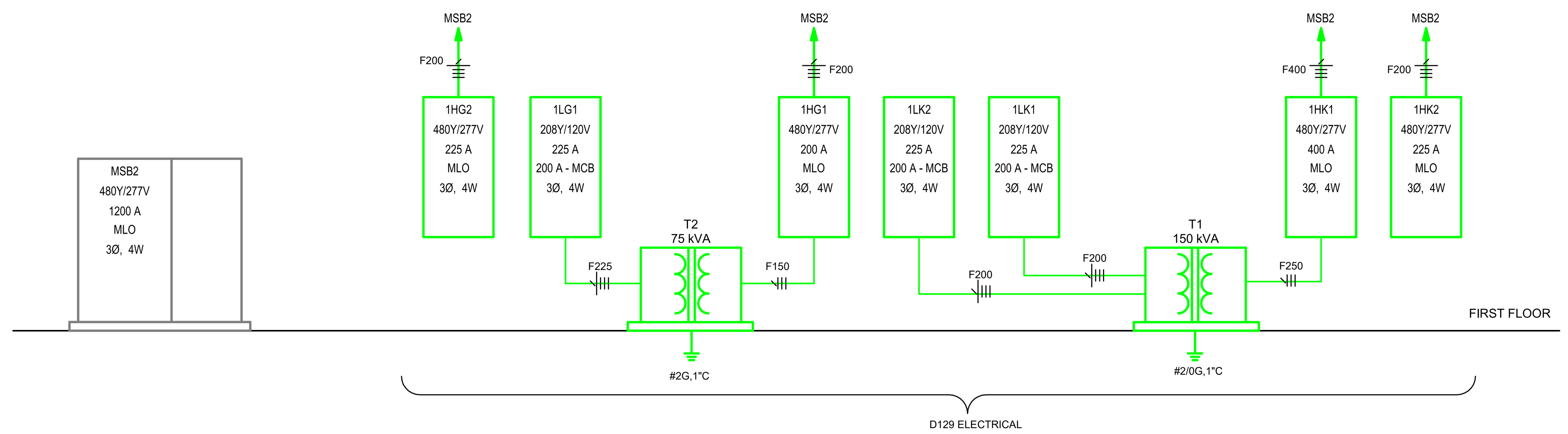
100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: JAN 31, 2024
DRAWN BY: KJP

SITE DETAILS

C802

2 MSB2 ELEVATION
NOT TO SCALE



1 PARTIAL RISER DIAGRAM
NOT TO SCALE

GENERAL ONE-LINE DIAGRAM NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

ONE-LINE DIAGRAM NOTES

1 PROVIDE (1) 400A AND (2) 200A QMJ SWITCH WITH CLASS J FUSES IN SPACE AVAILABLE AT THE BOTTOM OF MSB2 SECTION 1.
2 USE SPARE 200A FUSED SWITCH INDICATED THAT BECOMES AVAILABE AFTER DEMOLITION.

265119/265619/26213.1 - INTERIOR/EXTERIOR/EMERGENCY & EXIT LIGHT FIXTURES SCHEDULE

LABEL	DESCRIPTION	VOLTAGE	SOURCE TYPE	SOURCE LUMENS	SOURCE WATTS	SOURCE CCT	MOUNTING	LENS/REFLECTOR	CERTIFICATIONS	ACCEPTABLE MANUFACTURERS	LABEL
L1	4"X6' EXTRUDED ALUMINUM LED. 0-10V DIMMING.	120/277 V	LED	1,500 LM	45 W	5000 K	RECESSED IN GRID	FLUSH SATIN LENS	N/A	STARTEK RSLIM LITECONTROL MOD2 MARK ARCHITECTURAL MARK SLOT 4	L1
L1E	4"X6' EXTRUDED ALUMINUM LED. 0-10V DIMMING. PROVIDE EMERGENCY BATTERY INVERTER.	120/277 V	LED	1,500 LM	45 W	5000 K	RECESSED IN GRID	FLUSH SATIN LENS	N/A	STARTEK RSLIM LITECONTROL MOD2 MARK ARCHITECTURAL MARK SLOT 4	L1E
L2	16" DIAMETER LED HIGHBAY. WHITE POLYESTER POWDER COAT FINISH. ROUND, DECORATIVE SHIELD. WIDE DISTRIBUTION. 0-10V DIMMING.	120/277 V	LED	45,000 LM	324 W	5000 K	CHAIN MOUNTED TO STRUCTURE	CLEAR PRISMATIC	DLC	METALUX SSLED HOLOPHANE PHS HUBBELL PHB	L2
L2E	16" DIAMETER LED HIGHBAY. WHITE POLYESTER POWDER COAT FINISH. ROUND, DECORATIVE SHIELD. WIDE DISTRIBUTION. 0-10V DIMMING. PROVIDE EMERGENCY BATTERY INVERTER.	120/277 V	LED	45,000 LM	324 W	5000 K	CHAIN MOUNTED TO STRUCTURE	CLEAR PRISMATIC	DLC	METALUX SSLED HOLOPHANE PHS HUBBELL PHB	L2E
L3	2X4 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	3,200 LM	30 W	5000 K	RECESSED IN GRID	WHITE FROST ACRYLIC	DLC	METALUX CGT COLUMBIA CFP24 LITHONIA CPX 2X4	L3
L3E	2X4 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	3,200 LM	30 W	5000 K	RECESSED IN GRID	WHITE FROST ACRYLIC	DLC	METALUX CGT COLUMBIA CFP24 LITHONIA CPX 2X4	L3E
L4	4' LENSED LED STRIP LIGHT. 0-10V DIMMING, WHITE FINISH.	120/277 V	LED	5,000 LM	45 W	5000 K	CHAIN MOUNTED TO STRUCTURE	SEMI-FROSTED LENS	DLC	METALUX SNLED COLUMBIA MPS LITHONIA CSS	L4
L4E	4' LENSED LED STRIP LIGHT. 0-10V DIMMING, WHITE FINISH. INTEGRAL BATTERY INVERTER.	120/277 V	LED	5,000 LM	45 W	5000 K	CHAIN MOUNTED TO STRUCTURE	SEMI-FROSTED LENS	DLC	METALUX SNLED COLUMBIA MPS LITHONIA CSS	L4E
L5	4" ROUND LED DOWNLIGHT. SELF-FLANGED TRIM. WIDE DISTRIBUTION (75°). 0-10V DIMMING.	120/277 V	LED	1,000 LM	11 W	5000 K	RECESSED IN DRYWALL	SEMI-SPECULAR CLEAR	ES	PORTFOLIO LD4B PRESCOLITE LTR-4RD GOTHAM EVO	L5
L6	2X4 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	6,000 LM	42 W	5000 K	RECESSED IN GRID	WHITE FROST ACRYLIC	DLC	METALUX CGT COLUMBIA CFP24 LITHONIA CPX 2X4	L6
L6E	2X4 LED FLAT PANEL. 0-10V DIMMING. PROVIDE EMERGENCY BATTERY INVERTER.	120/277 V	LED	6,000 LM	42 W	5000 K	RECESSED IN GRID	WHITE FROST ACRYLIC	DLC	METALUX CGT COLUMBIA CFP24 LITHONIA CPX 2X4	L6E
L7	2X2 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	4,600 LM	40 W	5000 K	RECESSED IN XXX	WHITE FROST ACRYLIC	DLC	METALUX CGT COLUMBIA CFP22 LITHONIA CPX 2X2	L7
L7E	2X2 LED FLAT PANEL. 0-10V DIMMING. PROVIDE EMERGENCY BATTERY INVERTER.	120/277 V	LED	4,600 LM	40 W	5000 K	RECESSED IN GRID	WHITE FROST ACRYLIC	DLC	METALUX CGT COLUMBIA CFP22 LITHONIA CPX 2X2	L7E
L8	4' LENSED LED STRIP LIGHT. 0-10V DIMMING, WHITE FINISH.	120/277 V	LED	3,000 LM	28 W	5000 K	CHAIN MOUNTED TO STRUCTURE	SEMI-FROSTED LENS	DLC	METALUX SNLED COLUMBIA MPS LITHONIA CSS	L8
L9	2X4 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	5,000 LM	40 W	5000 K	RECESSED IN GRID	WHITE FROST ACRYLIC	DLC	METALUX CGT COLUMBIA CFP24 LITHONIA CPX 2X4	L9
L9E	2X4 LED FLAT PANEL. 0-10V DIMMING.	120/277 V	LED	5,000 LM	40 W	5000 K	RECESSED IN GRID	WHITE FROST ACRYLIC	DLC	METALUX CGT COLUMBIA CFP24 LITHONIA CPX 2X4	L9E
L10	4"X4' EXTRUDED ALUMINUM LED PENDANT. 0-10V DIMMING.	120/277 V	LED	3,500 LM	39 W	5000 K	PENDANT	FLUSH SATIN LENS	DLC	FOCAL POINT FSM4LS FINELITE HP4 PINNACLE EDGE	L10
L11	LED WALL LIGHT. DIE-CAST ALUMINUM HOUSING. HINGED DOOR FRAME. DARK BRONZE FINISH. U.L. LISTED FOR WET LOCATIONS.	120/277 V	LED	2,200 LM	30 W	5000 K	WALL MOUNTED	TYPE III DISTRIBUTION	N/A	MCGRAW-EDISON ISS SPAULDING QSP LITHONIA WSQ	L11
L12	72" EXTERIOR SURFACE MOUNTED EXTRUDED ALUMINUM LED FIXTURE. INTEGRAL BATTERY INVERTER. U.L. LISTED WET LOCATION. BRONZE FINISH. SELF-TESTING, SELF-CONTAINED 90 MINUTE EMERGENCY BATTERY PACK.	120/277 V	LED	3,000 LM	30 W	5000 K	SURFACE/WALL	DIFFUSED POLYCARBONATE	N/A	LUMINAIRE BLD72 SPITZER LIGHTING DLFV NEWSTAR GTW	L12
L13	LED TAPE LIGHT IN ALUMINUM RIGID CHANNEL.	120/277 V	LED	240 LM/FT	0 W	5000 K	SURFACE	SEMI-FROSTED LENS	N/A	LINEAR LED 'XOO' CONTECH TLT BRUCK SABER	L13
L14	2.25"X65' CONTINUOUS EXTRUDED ALUMINUM RED LED WALL WASH WITH DMX CONTROL. 10° X 60° BEAM ANGLE. HIGH OUTPUT LUMEN PACKAGE. SURFACE MOUNT BACK.	120/277 V	LED	1364 LM/FT	51 W	5000 K	SURFACE/WALL	ACRYLIC	DLC	INSIGHT LIGHTING MI SERIES SOLID STATE LUMINAIRES COLOURLINE PRECISION ARCHITECTURAL LIGHTING	L14
S1	LED SITE FIXTURE. SINGLE-PIECE ALUMINUM HOUSING. ARM MOUNT. U.L. LISTED WET LOCATION. DARK BRONZE FINISH. ROUND, STRAIGHT, STEEL, POLE DESIGNED TO SUPPORT FIXTURE(S) IN 100 MPH WINDS WITH 1.3 GUST FACTOR. PRIMARY FUSES. FLAT LENS. SURGE PROTECTION. (1) HEAD.	277	LED	7,000 LM	52 W	5000 K	30' POLE, BASE BY DIVISION 26 CONTRACTOR	N/A	N/A	McGRAW-EDISON GLEON LED BEACON VPS LITHONIA DSX1 LED	S1
S2	LED SITE FIXTURE. SINGLE-PIECE ALUMINUM HOUSING. ARM MOUNT. U.L. LISTED WET LOCATION. DARK BRONZE FINISH. ROUND, STRAIGHT, STEEL, POLE DESIGNED TO SUPPORT FIXTURE(S) IN 100 MPH WINDS WITH 1.3 GUST FACTOR. PRIMARY FUSES. FLAT LENS. SURGE PROTECTION. (1) HEAD. PROVIDE SHOUSE SIDE SHIELD.	277	LED	7,000 LM	52 W	5000 K	30' POLE, BASE BY DIVISION 26 CONTRACTOR	N/A	N/A	McGRAW-EDISON GLEON LED BEACON VPS LITHONIA DSX1 LED	S2
X2	LED EXIT LIGHT, MATTE BLACK DIE-CAST ALUMINUM HOUSING, BRUSHED ALUM. SINGLE FACE. STENCIL FACE, RED LETTERS. AC ONLY	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	N/A	N/A	SURE-LITES CX DUAL-LITE SE LITHONIA LE	X2
X3	LED EXIT LIGHT, MATTE BLACK DIE-CAST ALUMINUM HOUSING, BRUSHED ALUM. SINGLE FACE. STENCIL FACE, RED LETTERS. AC ONLY.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	N/A	N/A	SURE-LITES CX DUAL-LITE SE LITHONIA LE	X3
X4	LED EXIT LIGHT, MATTE BLACK DIE-CAST ALUMINUM HOUSING, BRUSHED ALUM. SINGLE FACE. STENCIL FACE, RED LETTERS. SELF-POWERED. NICKEL-CADMIUM BATTERY. SELF-DIAGNOSTIC/SELF-TESTING MODULE.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	N/A	N/A	SURE-LITES CX DUAL-LITE SE LITHONIA LE	X4
X5	VANDAL PROOF LED EXIT LIGHT, DIE-CAST ALUMINUM HOUSING, BLACK FINISH. SINGLE FACE. STENCIL FACE, RED LETTERS. SELF-POWERED. NICKEL-CADMIUM BATTERY. SELF-DIAGNOSTIC/SELF-TESTING MODULE.	120/277 V	LED	N/A	5 W	N/A	UNIVERSAL	VANDAL-RESISTANT POLYCARBONATE SHIELD WITH TAMPERPROOF SCREWS	N/A	SURE-LITES UX DUAL-LITE SEWL LITHONIA LV	X5

262816.1 - ENCLOSED SWITCHES & CIRCUIT BREAKERS SCHEDULE

LABEL	EQUIPMENT SERVED	EQUIPMENT RATINGS: VOLTAGE	POLES	AMPERAGE	FUSED	FUSE SIZE	NEMA ENCL	ACCESSORIES: AUX. CONTACTS	SOLID NEUTRAL	REMARKS
DS-1	CU-G108	240 V	2	30 A	Yes	20A	3R	(1) N.O. / N.C.	No	
DS-2	FC-EC130	240 V	2	30 A	Yes	20A	1	(1) N.O. / N.C.	No	
DS-3	CU-EC130	240 V	2	30 A	Yes	30A	3R	(1) N.O. / N.C.	No	
DS-4	FC-G108	240 V	2	30 A	Yes	20A	1	(1) N.O. / N.C.	No	
2 DS-5	BLEACHER MOTOR	240 V	3	30 A	No		1	(1) N.O. / N.C.	No	

262913/262923.1 - ENCLOSED & VARIABLE-FREQUENCY MOTOR CONTROLLERS SCHEDULE

LABEL	EQUIPMENT SERVED	EQUIPMENT RATINGS: VOLTAGE	PHASE	HP	FLA	NEMA ENCL	STARTER: TYPE	NEMA SIZE	DISCONNECT SWITCH: TYPE	FUSE SIZE	REMOTE CAPACITOR	REMARKS
MS-1	EF-D133	120 V	1	1/20	0.7 A	-	-	-	-	-	-	
MS-2	EF-G1	120 V	1	1/20	0.7 A	-	-	-	-	-	-	
MS-3		120 V	1	1/20	0.7 A	-	-	-	-	-	-	

262913.1 - LIGHTING CONTACTORS SCHEDULE

LABEL	EQUIPMENT RATINGS: VOLTAGE	AMPERAGE	POLES	NEMA ENCL	ACCESSORIES	COIL CIRCUIT: VOLTAGE	PANEL	CIRCUIT	CONTROL	CIRCUIT(S) CONTROLLED	REMARKS
LC-1	277 V	30 A	6	NEMA 1	H-O-A	120 V	1LG1	47	PHOTOCELL LOCATED ON ROOF	1HG1-14	

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

DAVID L. JONES III
REGISTERED
NO. PE12100175
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	02/15/24	Addendum #1
2	02/28/24	Addendum #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/24
DRAWN BY: DLJ

SCHEDULES AND RISER DIAGRAM

N
TRUE NORTH

E601

BRANCH PANELBOARD SCHEDULE

DESIGNATION:	**1LK2**	**VOLTS:**	208Y/120 V	**MAINS RATING:**	225 A
LOCATION:	Space 53	**PHASES:**	3	**MAINS TYPE:**	MCB
MOUNTING:	SURFACE	**WIRES:**	4	**MCB RATING:**	200 A
SUPPLY FROM:	T1	**AIC RATING:**		**MCB OPTIONS:**	

O	CKT NO.	CIRCUIT ROOM #	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	CIRCUIT ROOM #	CKT NO.	O
	1	HOT WELL/BREATH-E120/E122	EQUIP.	20 A	1	0.65	2.08					2	30 A	EQUIP.	DRYER-E5	2	
	3	REF. MERCHANDISER-E76	EQUIP.	20 A	2			1.04	2.08			--	--	--	--	4	--
--	5	--	--	--	--					1.04	1.07	2	20 A	EQUIP.	HEATED MERCH.-E112	6	
	7	HEATED MERCH.-E113	EQUIP.	20 A	2	0.00	1.07					--	--	--	--	8	--
--	9	--	--	--	--			0.00	0.56			2	20 A	EQUIP.	HOT WELL-E114	10	
	11	BREATH GUARD-E115	EQUIP.	20 A	1					0.12	0.56	--	--	--	--	12	--
	13	HEATED MERCH.-E104	EQUIP.	20 A	1	1.24	1.50					2	20 A	EQUIP.	HOT/COLD WELL-E105	14	
	15	SHELFGUARD-E106/E107	EQUIP.	15 A	1			1.02	1.50			--	--	--	--	16	--
	17	ED01 CAFETERIA	RECEPT.	20 A	1					1.08	1.08	1	20 A	RECEPT.	D130 SERVERY	18	
	19	COLD WELL-E121	EQUIP.	15 A	1	0.86	0.77					1	20 A	EQUIP.	HOT WELL/BREATH-E124/E126	20	
	21	COLD WELL-E126	EQUIP.	15 A	1			0.85	1.07			2	20 A	EQUIP.	HEATED MERCH.-E94	22	
	23	HOT/COLD WELL-E95	EQUIP.	20 A	2					1.50	1.07	--	--	--	--	24	--
--	25	--	--	--	--	1.50	1.02					1	15 A	EQUIP.	SHELF/GUARD-E96/E97	26	
	27	REF. MERCHANDISER-E76	EQUIP.	20 A	2			1.04	1.07			2	20 A	EQUIP.	HEATED MERCH.-E87	28	
--	29	--	--	--	--					1.04	1.07	--	--	--	--	30	--
	31	HOT WELL-E88	EQUIP.	20 A	2	0.56	0.12					1	20 A	EQUIP.	BREATH GUARD-E89	32	
--	33	--	--	--	--			0.56	1.30			2	20 A	EQUIP.	REF. MERCHANDISER-E77	34	
	35	MERCHANDISER-E78	EQUIP.	15 A	1					0.36	1.30	--	--	--	--	36	--
	37	FREEZER MERCH.-E79		15 A	1	1.14	0.72					1	20 A	RECEPT.	D130 SERVERY P.O.S.	38	
	39	FREEZER MERCH.-E79	EQUIP.	15 A	1			1.14	1.30			2	20 A	EQUIP.	REF. MERCHANDISER-E77	40	
	41	LIGHTING-E15	EQUIP.	20 A	1					0.60	1.30	--	--	--	--	42	--
	43	COOLER EVAP. COIL...	EQUIP.	20 A	1	0.19	0.16					2	20 A	EQUIP.	FREEZER EVAP. COIL FANS-E15.3A	44	
	45	FREEZER EVAP. COIL...	EQUIP.	20 A	2			1.49	0.16			--	--	--	--	46	--
--	47	--	--	--	--					1.49	0.96	1	20 A	EQUIP.	DRAIN TAPE-E15.3C	48	
	49	PREP HOOD-E51/E51.3	EQUIP.	20 A	1	0.42	0.42					1	20 A	EQUIP.	HOOD-E47/E47.3	50	
	51	BAKERY HOOD-E45	EQUIP.	20 A	1			0.12	0.78			1	20 A	EQUIP.	AIR CURTAIN-E1A	52	
	53	ROOFTOP EXHAUST-E45.1	EQUIP.	25 A	1					2.07	1.18	1	20 A	EQUIP.	ROOFTOP EXHAUST-E61.1	54	
	55	BCU-1,2	EQUIP.	20 A	3	0.00	0.00					3	20 A	EQUIP.	BCU-3,4	56	
--	57	--	--	--	--			0.00	0.00			--	--	--	--	58	--
--	59	--	--	--	--					0.00	0.00	--	--	--	--	60	--
	61	EF-D133 ON ROOF	EQUIP.	20 A	1	0.17	0.00					1	20 A		Power - Continuous	62	
	63	Power - Continuous		20 A	1			0.00	0.00			1	20 A		SPARE	64	--
	65										0.00	1	20 A		SPARE	66	--
	67						0.00					1	20 A		SPARE	68	--
	69								0.00			1	20 A		SPARE	70	--
	71										0.00	1	20 A		SPARE	72	--

TOTAL LOAD:	14.58 kVA	17.08 kVA	18.89 kVA
TOTAL AMPS:	122 A	146 A	161 A

TOTAL CONNECTED LOAD:	50.56 kVA	33.94 kVA	**TOTAL DEMAND LOAD:**
TOTAL CONNECTED AMPS:	161 A	94 A	**TOTAL DEMAND AMPS:**

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Kitchen Equipment -...	47496 VA	65.00%	30873 VA
C	CONTACTOR CONTROLLED	Mechanical - Motor	168 VA	100.00%	168 VA
G	GFCI PROTECTED	Power - Continuous	15 VA	100.00%	15 VA
P	HANDLE LOCKING DEVICE	Receptacle	2880 VA	100.00%	2880 VA
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION:	**1LG1**	**VOLTS:**	208Y/120 V	**MAINS RATING:**	225 A
LOCATION:	Space 53	**PHASES:**	3	**MAINS TYPE:**	MCB
MOUNTING:	SURFACE	**WIRES:**	4	**MCB RATING:**	225 A
SUPPLY FROM:	T2	**AIC RATING:**		**MCB OPTIONS:**	X

O	CKT NO.	DESCRIPTION	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	DESCRIPTION	CKT NO.	O
	1	IDF G108	RECEPT.	30 A	1	0.18	0.00					1	20 A		SPARE	2	--
	3	CAFETERIA EXPANSION D102	RECEPT.	20 A	1			0.36	0.54			1	20 A	RECEPT.	CAFETERIA E-D01	4	
--	5	SPARE		20 A	1					0.00	0.54	1	20 A	RECEPT.	CLASSROOM D128	6	
	7	GYMNASIUM G101	FLRBOX.	20 A	1	0.80	0.90					1	20 A	RECEPT.	G106, G111, G105, G104	8	
	9	DOOR POWER	J-BOX	20 A	1			1.50	0.36			1	20 A	RECEPT.	IDF E-C130	10	
	11	GYMNASIUM G101	FLRBOX.	20 A	1					0.80	1.00	1	20 A	J-BOX	DOOR POWER	12	
	13	CU-G108 ON ROOF	EQUIP.	20 A	2	0.77	1.77					2	20 A		CU-EC130	14	
--	15	--	--	--	--			0.77	1.77			--	--	--	--	16	--
	17	DOOR POWER	J-BOX	20 A	1					2.00	0.00	1	20 A		SPARE	18	--
	19	IDF E-C130	RECEPT.	20 A	1	0.36	0.00					1	20 A		SPARE	20	--
	21	DOOR POWER	J-BOX	20 A	1			0.50	0.00			1	20 A		SPARE	22	--
	23	IDF G108	RECEPT.	20 A	1					0.36	0.50	1	20 A	J-BOX	DOOR POWER	24	
--	25	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	26	--
	27	G108 IDF	RECEPT.	20 A	1			0.54	0.72			1	20 A	RECEPT.	OFFICE G107	28	
--	29	SPARE		20 A	1					0.00	0.72	1	20 A	RECEPT.	G111, G109,G110	30	
	31	CLASSROOM D128	RECEPT.	20 A	1	0.54	0.36					1	20 A	RECEPT.	GYMNASIUM G101	32	
	33	D102 EXPANSION	RECEPT.	20 A	1			0.72	0.90			1	20 A	RECEPT.	GYMNASIUM G101	34	
	35	SITE	RECEPT.	20 A	1					0.72	0.72	1	20 A	RECEPT.	G100, G102, G103, G11	36	
	37	CLASSROOM D128	RECEPT.	20 A	1	0.72	0.90					1	20 A	RECEPT.	GYMNASIUM G101	38	
	39	IDF E-C130	RECEPT.	30 A	1			2.40	0.54			1	20 A	RECEPT.	ROOF	40	
	41	GYMNASIUM G101	RECEPT.	20 A	1					0.90	2.40	1	30 A	RECEPT.	IDF G108	42	
	43	IDF E-C130	RECEPT.	30 A	1	2.40	1.80					3	30 A	BLEACH	GYMNASIUM G101	44	
	45	ROOF	RECEPT.	20 A	1			0.54	1.80			--	--	--	--	46	--
	47	LIGHTING CONTACTOR LC-1	LIGHTING	20 A	1					0.00	1.80	--	--	--	--	48	--
	49	D128 CLASSROOM - UV-D128	EQUIP.	20 A	1	0.01	0.00					1	20 A		SPARE	50	--
	51	STOR G109A	HOIST	30 A	1			0.00	0.00			1	20 A		SPARE	52	--
	53	STOR G109A	HOIST	20 A	1					0.00	0.00	1	20 A		SPARE	54	--
--	55	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	56	--
--	57	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	58	--
--	59	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	60	--
--	61	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	62	--
--	63	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	64	--
--	65	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	66	--
--	67	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	68	--
--	69	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	70	--
--	71	SPARE		20 A	1					0.00	0.18	1	20 A	RECEPT.	G101 GYMNASIUM-SCOREBOARD	72	

TOTAL LOAD:	11.51 kVA	13.96 kVA	12.64 kVA
TOTAL AMPS:	96 A	118 A	107 A

TOTAL CONNECTED LOAD:	38.11 kVA	32.05 kVA	**TOTAL DEMAND LOAD:**
TOTAL CONNECTED AMPS:	118 A	89 A	**TOTAL DEMAND AMPS:**

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Mechanical - Motor	10479 VA	100.00%	10479 VA
C	CONTACTOR CONTROLLED	Power - Continuous	5513 VA	100.00%	5513 VA
G	GFCI PROTECTED	Receptacle	22120 VA	72.60%	16060 VA
P	HANDLE LOCKING DEVICE	LE	0 VA	0.00%	0 VA
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION:	**1HG2**	**VOLTS:**	480Y/277 V	**MAINS RATING:**	225 A
LOCATION:	D129	**PHASES:**	3	**MAINS TYPE:**	MLO
MOUNTING:	SURFACE	**WIRES:**	4		
SUPPLY FROM:	MSB2	**AIC RATING:**			

O	CKT NO.	DESCRIPTION	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	DESCRIPTION	CKT NO.	O
	1	RTU-G2 ON ROOF	EQUIP.	110 A	3	24.38	2.65					3	20 A	EQUIP.	RTU-G3 ON ROOF	2	
--	3	--	--	--	--			24.38	2.65			--	--	--	--	4	--
--	5	--	--	--	--					24.38	2.65	--	--	--	--	6	--
	7	G100 VESTIBULE - WUH-1	EQUIP.	20 A	2	1.50	0.00					1	20 A		SPARE	8	--
--	9	--	--	--	--			1.50	0.00			1	20 A		SPARE	10	--
--	11	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	12	--
--	13	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	14	--
--	15	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	16	--
--	17	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	18	--
--	19	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	20	--
--	21	SPARE		20 A	1			0.00	--			1	--		SPACE	22	--
--	23	SPARE		20 A	1					0.00	--	1	--		SPACE	24	--
--	25	SPACE		--	1	--	--					1	--		SPACE	26	--
--	27	SPACE		--	1			--	--			1	--		SPACE	28	--
--	29	SPACE		--	1					--	--	1	--		SPACE	30	--
--	31	SPACE		--	1	--	--					1	--		SPACE	32	--
--	33	SPACE		--	1			--	--			1	--		SPACE	34	--
--	35	SPACE		--	1					--	--	1	--		SPACE	36	--
--	37	SPACE		--	1	--	--					1	--		SPACE	38	--
--	39	SPACE		--	1			--	--			1	--		SPACE	40	--
--	41	SPACE		--	1					--	--	1	--		SPACE	42	--

TOTAL LOAD:	28.53 kVA	28.53 kVA	27.03 kVA
TOTAL AMPS:	104 A	104 A	98 A

TOTAL CONNECTED LOAD:	84.08 kVA	84.08 kVA	**TOTAL DEMAND LOAD:**
TOTAL CONNECTED AMPS:	104 A	101 A	**TOTAL DEMAND AMPS:**

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Power - Continuous	84084 VA	100.00%	84084 VA
C	CONTACTOR CONTROLLED				
G	GFCI PROTECTED				
P	HANDLE LOCKING DEVICE				
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION:	**1LK1**	**VOLTS:**	208Y/120 V	**MAINS RATING:**	225 A
LOCATION:	Space 53	**PHASES:**	3	**MAINS TYPE:**	MCB
MOUNTING:	SURFACE	**WIRES:**	4	**MCB RATING:**	200 A
SUPPLY FROM:	T1	**AIC RATING:**		**MCB OPTIONS:**	

O	CKT NO.	CIRCUIT ROOM #	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	CIRCUIT ROOM #	CKT NO.	O
	1	CAN OPENER-E30	EQUIP.	15 A	1	0.18	0.88					1	15 A	EQUIP.	REFRIGERATOR-E73	2	
	3	REFRIGERATOR-E99	EQUIP.	15 A	1			0.24	0.47			1	15 A	EQUIP.	REFRIGERATOR-E83	4	
	5	FOOD SLICER-E32	RECEPT.	15 A	1					0.31	1.26	1	20 A	RECEPT.	D131 KITCHEN	6	
	7	HEATED CABINET-E72	EQUIP.	15 A	1	1.56	1.92					1	20 A	EQUIP.	WAFFLE MAKER-E102	8	
--	9	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	10	--
	11	PREP WORKTABLE-E25A	EQUIP.	20 A	1					1.20	1.92	1	20 A	EQUIP.	WAFFLE MAKER-E102	12	
	13	CAN OPENER-E30	EQUIP.	15 A	1	0.18	1.14					1	15 A	EQUIP.	REFRIGERATOR-E73	14	
	15	ICE MAKER -E26	EQUIP.	15 A	1			1.44	0.18			1	15 A	EQUIP.	DIGITAL SCALE-E29	16	
	17	DIGITAL SCALE-E29	EQUIP.	15 A	1					0.18	1.14	1	15 A	EQUIP.	REFRIGERATOR-E75	18	
	19	PREP WORKTABLE-E39A	EQUIP.	20 A	1	1.20	1.20					1	20 A	EQUIP.	PREP WORKTABLE-E25B	20	
	21	REFRIGERATOR-E73	EQUIP.	15 A	1			1.14	1.20			1	20 A	EQUIP.	PREP WORKTABLE-E39B	22	
	23	WASHER-E4	EQUIP.	20 A	1					1.20	1.20	1	20 A	EQUIP.	PREP WORKTABLE-E37B	24	
	25	HEATED CABINET-E72	EQUIP.	15 A	1	1.56	0.90					1	20 A	RECEPT.	D134 MGR OFFICE	26	
	27	PREP WORKTABLE-E37A	EQUIP.	20 A	1			1.20	1.56			1	15 A	EQUIP.	HEATED CABINET-E72	28	
	29	HEATED CABINET-E74	EQUIP.	15 A	1					1.56	1.56	2	30 A	EQUIP.	PREP WORKTABLE-E39C	30	
	31	PREP WORKTABLE-E25C	EQUIP.	30 A	2	1.56	1.56					--	--	--	--	32	--
--	33	--	--	--	--			1.56	1.56			2	30 A	EQUIP.	PREP WORKTABLE-E37C	34	
P	35	CHILLER/SHOCK FREEZER-E35	EQUIP.	20 A	3					1.09	1.56	--	--	--	--	36	--
--	37	--	--	--	--	1.09	4.80					3	50 A	EQUIP.	OVEN-E84	38	
--	39	--	--	--	--			1.09	4.80			--	--	--	--	40	--
	41	OVEN-E84	EQUIP.	50 A	3					4.80	4.80	--	--	--	--	42	--
--	43	--	--	--	--	4.80	0.00					1	20 A		SPARE	44	--
--	45	--	--	--	--			4.80	0.00			1	20 A		SPARE	46	--
--	47	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	48	--
--	49	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	50	--
S	51	BAKERY OVEN...	EQUIP.	15 A	1			1.14	1.20			1	20 A	EQUIP.	BAKERY OVEN PROOFER	52	S
--	53	SPACE FOR SHUNT TRIP		--	1					--	--	1	--		SPACE FOR SHUNT TRIP	54	--
	55	D130 SERVERY-COIL DOOR	EQUIP.	20 A	1	0.50	0.50					1	20 A	EQUIP.	D130 SERVERY-COIL DOOR	56	
	57	D130 SERVERY-COIL DOOR	EQUIP.	20 A	1			0.50	0.50			1	20 A	EQUIP.	D130 SERVERY-COIL DOOR	58	
	59															60	
	61															62	
	63															64	
	65															66	
	67															68	
	69															70	
	71															72	

TOTAL LOAD:	25.54 kVA	24.59 kVA	23.79 kVA
TOTAL AMPS:	214 A	206 A	198 A

TOTAL CONNECTED LOAD:	73.92 kVA	49.92 kVA	**TOTAL DEMAND LOAD:**
TOTAL CONNECTED AMPS:	214 A	139 A	**TOTAL DEMAND AMPS:**

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Kitchen Equipment -...	68556 VA	65.00%	44561 VA
C	CONTACTOR CONTROLLED	Power - Continuous	2000 VA	100.00%	2000 VA
G	GFCI PROTECTED	Receptacle	3360 VA	100.00%	3360 VA
P	HANDLE LOCKING DEVICE				
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION:	**1HK1**	**VOLTS:**	480Y/277 V	**MAINS RATING:**	400 A
LOCATION:	D129	**PHASES:**	3	**MAINS TYPE:**	MLO
MOUNTING:	SURFACE	**WIRES:**	4		
SUPPLY FROM:	MSB2	**AIC RATING:**	22K		

O	CKT NO.	DESCRIPTION	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	DESCRIPTION	CKT NO.	O
	1	SERVERY D130	LIGHTING	20 A	1	1.20	1.36					1	20 A	LIGHTING	KITCHEN D131	2	
	3								0.35			3	20 A	RECEPT.	GARBAGE DISPOSAL-E40	4	
	5										0.35	--	--	--	--	6	--
	7	D129 ELECTRICAL	XFMR	250 A	3	40.12	0.35					--	--	--	--	8	--
--	9	--	--	--	--			41.67	0.61			3	20 A	EQUIP.	GARBAGE DISPOSAL-E60	10	
--	11	--	--	--	--					42.68	0.61	--	--	--	--	12	--
P,S	13	TILTING SKILLET-E52	EQUIP.	25 A	3	5.54	0.61					--	--	--	--	14	--
--	15	--	--	--	--			5.54	6.01			3	20 A	EQUIP.	TILTING KETTLE-E54	16	P,S
--	17	--	--	--	--					5.54	6.01	--	--	--	--	18	--
--	19	SPACE FOR SHUNT TRIP		--	1	--	6.01					--	--	--	--	20	--
P,S	21	BAKERY OVEN-46B	EQUIP.	30 A	3			6.10	--			1	--		SPACE FOR SHUNT TRIP	22	--
--	23	--	--	--	--					6.10	7.73	3	35 A	EQUIP.	BOOSTER HEATER-E62A	24	P
--	25	--	--	--	--	6.10	7.73					--	--	--	--	26	--
--	27	SPACE FOR SHUNT TRIP		--	1			--	7.73			--	--	--	--	28	--
P	29	BOOSTER HEATER-E62B	EQUIP.	60 A	3					11.11						30	
--	31	--	--	--	--	11.11										32	
--	33	--	--	--	--			11.11								34	
	35															36	
	37															38	
	39															40	
	41															42	

TOTAL LOAD:	80.14 kVA	79.13 kVA	80.14 kVA
TOTAL AMPS:	290 A	286 A	290 A

TOTAL CONNECTED LOAD:	239.42 kVA	160.11 kVA	**TOTAL DEMAND LOAD:**
TOTAL CONNECTED AMPS:	290 A	193 A	**TOTAL DEMAND AMPS:**

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Kitchen Equipment -...	228431 VA	65.00%	148480 VA
C	CONTACTOR CONTROLLED	Lighting - Interior	2562 VA	125.00%	3203 VA
G	GFCI PROTECTED	Mechanical - Motor	168 VA	100.00%	168 VA
P	HANDLE LOCKING DEVICE	Power - Continuous	2015 VA	100.00%	2015 VA
S	SHUNT TRIP	Receptacle	6240 VA	100.00%	6240 VA
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION:	**1HK2**	**VOLTS:**	480Y/277 V	**MAINS RATING:**	225 A
LOCATION:		**PHASES:**	3	**MAINS TYPE:**	MLO
MOUNTING:	SURFACE	**WIRES:**	4		
SUPPLY FROM:	MSB2	**AIC RATING:**	22K		

O	CKT NO.	DESCRIPTION	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	DESCRIPTION	CKT NO.	O
	1	GARBAGE DISPOSAL-E66	EQUIP.	20 A	3	0.61	7.98					3	40 A	EQUIP.	COMBI STEAMER-E48A	2	P,S
--	3	--	--	--	--			0.61	7.98			--	--	--	--	4	--
--	5	--	--	--	--					0.61	7.98	--	--	--	--	6	--
P,S	7	COMBI STEAMER-E48B	EQUIP.	40 A	3	7.98	--					1	--		SPACE FOR SHUNT TRIP	8	--
--	9	--	--	--	--			7.98	7.98			3	40 A	EQUIP.	COMBI OVEN-E50A	10	P,S
--	11	--	--	--	--					7.98	7.98	--	--	--	--	12	--
--	13	SPARE FOR SHUNT TRIP		20 A	1	0.00	7.98					--	--	--	--	14	--
P,S	15	COMBI OVEN-E50B	EQUIP.	40 A	3			7.98	--			1	--		SPACE FOR SHUNT TRIP	16	--
--	17	--	--	--	--					7.98	0.69	3	20 A	EQUIP.	MIXER-E34	18	
--	19	--	--	--	--	7.98	0.69					--	--	--	--	20	--
--	21	SPACE FOR SHUNT TRIP		--	1			--	0.69			--	--	--	--	22	--
	23	AIR CURTAIN-E1B	EQUIP.	25 A	3					4.66	2.12	3	20 A	EQUIP.	ROOFTOP MAU-E47.2	24	
--	25	--	--	--	--	4.66	2.12					--	--	--	--	26	--
--	27	--	--	--	--			4.66	2.12			--	--	--	--	28	--
	29	ROOFTOP...	EQUIP.	20 A	3					1.87						30	
--	31	--	--	--	--	1.87										32	
--	33	--	--	--	--			1.87								34	
	35															36	
	37															38	
	39															40	
	41															42	

TOTAL LOAD:	41.87 kVA	41.87 kVA	41.87 kVA
TOTAL AMPS:	151 A	151 A	151 A

TOTAL CONNECTED LOAD:	125.62 kVA	81.65 kVA	**TOTAL DEMAND LOAD:**
TOTAL CONNECTED AMPS:	151 A	98 A	**TOTAL DEMAND AMPS:**

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Kitchen Equipment -...	125622 VA	65.00%	81654 VA
C	CONTACTOR CONTROLLED				
G	GFCI PROTECTED				
P	HANDLE LOCKING DEVICE				
S	SHUNT TRIP				
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI				
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

BRANCH PANELBOARD SCHEDULE

DESIGNATION:	**1HG1**	**VOLTS:**	480Y/277 V	**MAINS RATING:**	225 A
LOCATION:	D129 ELEC	**PHASES:**	3	**MAINS TYPE:**	MLO
MOUNTING:	SURFACE	**WIRES:**	4		
SUPPLY FROM:	MSB2	**AIC RATING:**	22K		

O	CKT NO.	DESCRIPTION	CIRCUIT TYPE	TRIP	P	A		B		C		P	TRIP	CIRCUIT TYPE	DESCRIPTION	CKT NO.	O
	1	SITE LIGHTS	LIGHTING	20 A	1	0.21	1.72					1	20 A	LIGHTING	D102 CAFETERIA EXPANSION	2	
	3	G111 AND ADAJACENT ROOMS	LIGHTING	20 A	1			1.92	4.86			1	20 A	LIGHTING	GYMNASIUM G101	4	
	5	GYMNASIUM G101	LIGHTING	20 A	1					3.24	24.38	3	110 A	EQUIP.	RTU-G1 ON ROOF	6	
	7	GYMNASIUM G101	LIGHTING	20 A	1	3.24	24.38					--	--	--	--	8	--
	9	T2		20 A	3			11.51	24.38			--	--	--	--	10	--
--	11	--	--	--	--					13.96	3.24	1	20 A	LIGHTING	GYMNASIUM G101	12	
--	13	--	--	--	--	12.64	0.36					1	30 A	LIGHTING	GYMNASIUM G101 EXTERIOR	14	
--	15	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	16	--
--	17	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	18	--
--	19	SPARE		20 A	1	0.00	0.00					1	20 A		SPARE	20	--
--	21	SPARE		20 A	1			0.00	0.00			1	20 A		SPARE	22	--
--	23	SPARE		20 A	1					0.00	0.00	1	20 A		SPARE	24	--
--	25	SPACE		--	1	--	0.00					1	20 A		SPARE	26	--
--	27	SPACE		--	1			--	--			1	--		SPACE	28	--
--	29	SPACE		--	1					--	--	1	--		SPACE	30	--
--	31	SPACE		--	1	--	--					1	--		SPACE	32	--
--	33	SPACE		--	1			--	--			1	--		SPACE	34	--
--	35	SPACE		--	1					--	--	1	--		SPACE	36	--
--	37	SPACE		--	1	--	--					1	--		SPACE	38	--
--	39	SPACE		--	1			--	--			1	--		SPACE	40	--
--	41	SPACE		--	1					--	--	1	--		SPACE	42	--

TOTAL LOAD:	42.54 kVA	42.67 kVA	44.81 kVA
TOTAL AMPS:	154 A	154 A	162 A

TOTAL CONNECTED LOAD:	130.03 kVA	128.49 kVA	**TOTAL DEMAND LOAD:**
TOTAL CONNECTED AMPS:	162 A	155 A	**TOTAL DEMAND AMPS:**

PANELBOARD & CIRCUIT BREAKER OPTIONS ("O" COLUMN / MCB OPTIONS ABBREVIATIONS)		LOAD CLASSIFICATION	CONNECTED LOAD (VA)	DEMAND FACTOR	ESTIMATE DEMAND (VA)
		Lighting - Interior	18075 VA	125.00%	22594 VA
C	CONTACTOR CONTROLLED	Lighting - Exterior	568 VA	100.00%	568 VA
G	GFCI PROTECTED	Mechanical - Motor	10479 VA	100.00%	10479 VA
P	HANDLE LOCKING DEVICE	Power - Continuous	78641 VA	100.00%	78641 VA
S	SHUNT TRIP	Receptacle	22120 VA	72.60%	16060 VA
X	80% RATED MAIN CIRCUIT BREAKER WITH LSI	LE	0 VA	0.00%	0 VA
Y	100% RATED MAIN CIRCUIT BREAKER WITH LSI				
Z	100% RATED MAIN CIRCUIT BREAKER WITH LSIG				
	FEED THROUGH LUGS (FTL)				
	SUB FEED LUGS (SFL)				

NOTES:

PLOT DATE/TIME:2/28/2024 12:11:20 PM

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

creative engineering solutions
mechanical • electrical • plumbing
201 S Rural St., Suite 210
Indianapolis, IN 46201 • 463-777-8182
www.creativeng.net

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

DAVID L. JONES III
REGISTERED
NO. PE12100175
STATE OF INDIANA
PROFESSIONAL ENGINEER

David L. Jones III

REVISIONS:

#	Date	Desc.
1	02/15/24	Addendum #1
2	02/28/24	Addendum #2

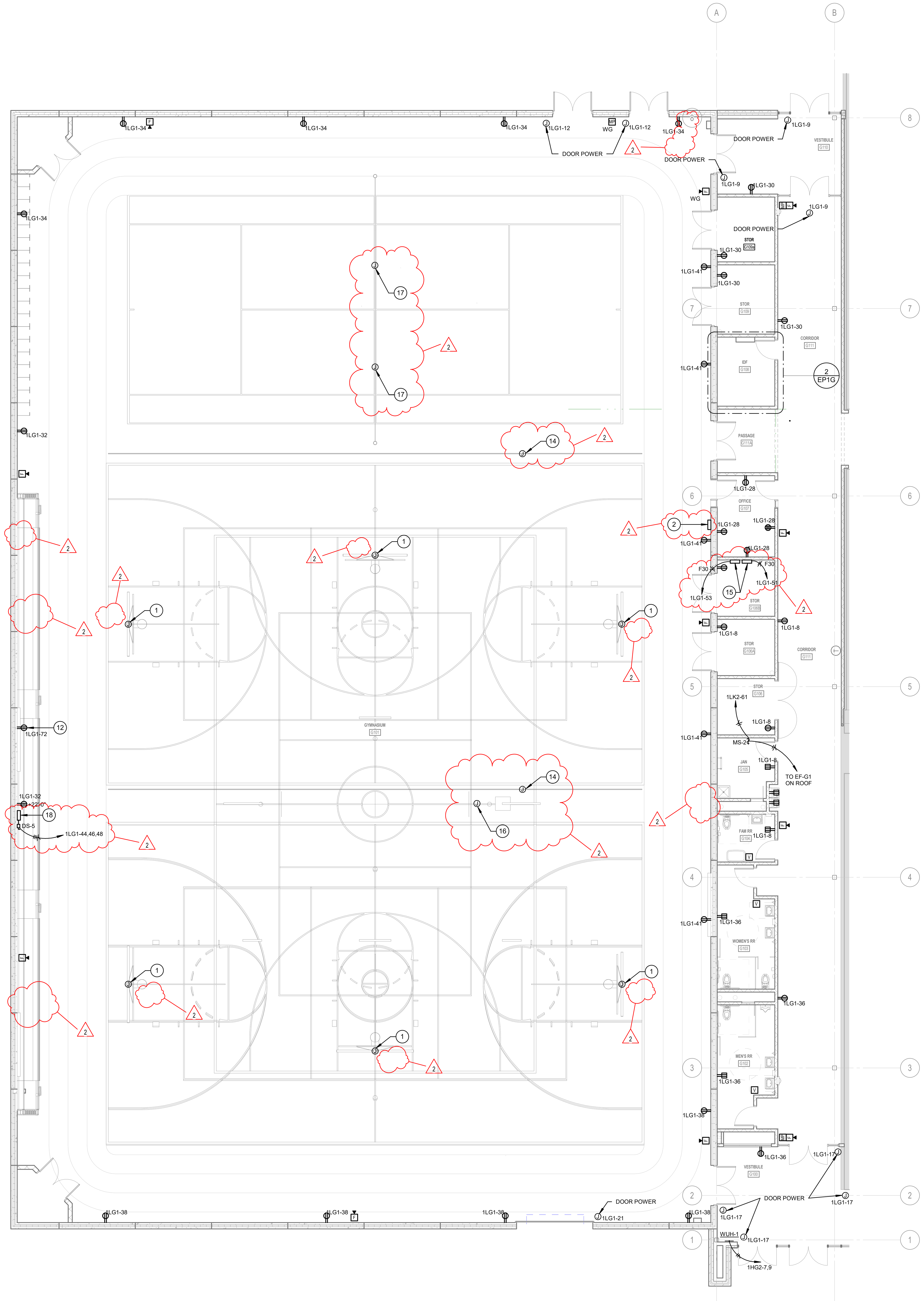
100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/24
DRAWN BY: DLJ

PANELBOARD SCHEDULES

N
TRUE NORTH

E602



1 FIRST FLOOR POWER PLAN - UNIT G
1/8" = 1'-0"

GENERAL POWER NOTES

A REFER TO ELECTRICAL SYMBOLS AND ABBREVIATIONS SHEET E001 FOR ADDITIONAL INFORMATION.

POWER PLAN NOTES

1 PROVIDE A 4" SQUARE JUNCTION BOX WITHIN 3' OF HOIST MOTOR. A TWIST LOCK RECEPTACLE AND COVER PLATE WILL BE PROVIDED BY THE MANUFACTURER. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH THE MANUFACTURER. INSTALL 2#10, 1#10 GND, 3/4" C FROM RECEPTACLE TO GYM HOIST CONTROL PANEL.

2 GYM HOIST KEY PAD. CONNECT COMPLETE TO INTERFACE CABINET.

3 SINGLE CHANNEL SURFACE RACEWAY.

4 CONNECT NEW RECEPTACLES TO CIRCUITS SERVING EXISTING RECEPTACES.

6 COORDINTATE RECEPTACLE ELEVATION WITH WITH DIVISION 27 CONTRACTOR.

7 REPAIR CONCRETE AFTER REMOVAL OF FLOOR BOXES.

8 CONNECT TO EXISTING BRANCH CIRCUIT WHICH SERVED PREVIOUS RECEPTACLE ON WALL REMOVED DURING DEMOLITION PHASE.

9 CONNECT NEW RECPTACLES TO EXISTING CIRCUIT LA-19 SERVING THIS ROOM.

10 PROVIDE POWER TO EXHAUST FAN FROM PANEL 'LF'. USE SPARE 20A BREAKER IN PANEL.

11 120V CONNECTION FOR ALUMINUM COILED DOOR. PROVIDE ALL CONTROL WIRING PER MANUFACTURERE'S INSTALLATION GUIDELINES.

12 COORDINATE SCOREBOARD RECEPTACLE HEIGHT WITH MANUFACTURERES GUIDELINES.

13 APPROXIMATE LOCATION OF POST INDICATOR VALVE. PROVIDE CONNECTION TO EXITING FIRE ALARM PANEL. SEE CIVIL DRAWINGS FOR EXACT LOCATION.

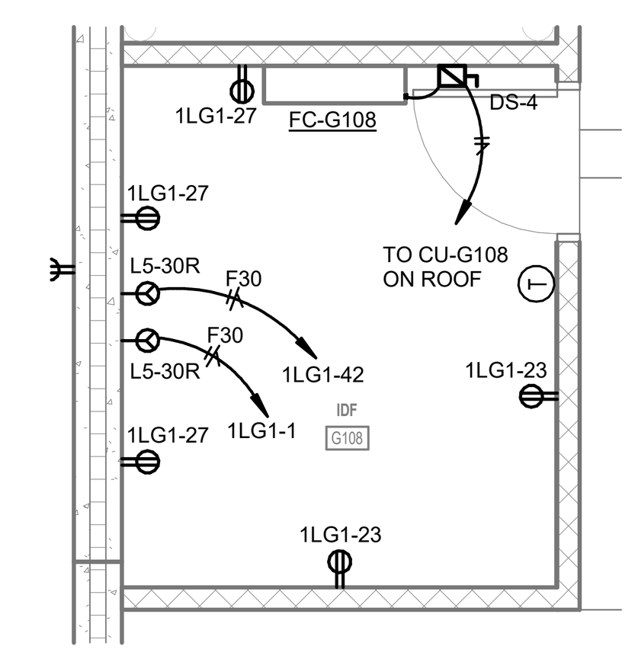
14 PROVIDE A 4" SQUARE JUNCTION BOX WITHIN 3' OF HOIST MOTOR FOR CURTAIN DIVIDER. A TWIST LOCK RECEPTACLE AND COVER PLATE WILL BE PROVIDED BY THE MANUFACTURER. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH THE MANUFACTURER. INSTALL 2#10, 1#10 GND, 3/4" C FROM RECEPTACLE TO GYM HOIST CONTROL PANEL.

15 GYM HOIST INTERFACE CABINET AND RELAY PANEL PROVIDED BY OTHERS, INSTALLED BY DIVISION 26. CONNECT TO CIRCUITS INDICATED AND TO GYM HOIST KEY PAD. COORDINATE ALL REQUIREMENTS WITH MANUFACTURER.

16 PROVIDE A 4" SQUARE JUNCTION BOX WITHIN 3' OF HOIST MOTOR FOR VOLLEYBALL SYSTEM. PROVIDE A TWIST LOCK RECEPTACLE AND COVER PLATE. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH THE MANUFACTURER. INSTALL 2#10, 1#10 GND, 3/4" C FROM RECEPTACLE TO GYM HOIST CONTROL PANEL.

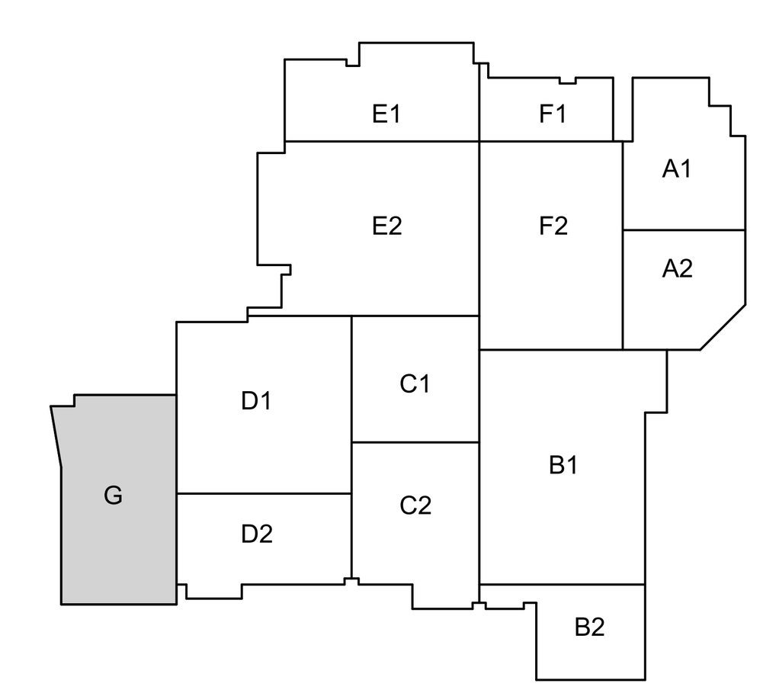
17 PROVIDE A 4" SQUARE JUNCTION BOX WITHIN 3' OF HOIST MOTOR FOR BATTING CAGES. PROVIDE A TWIST LOCK RECEPTACLE AND COVER PLATE. COORDINATE EXACT LOCATION AND REQUIREMENTS WITH THE MANUFACTURER. INSTALL 2#10, 1#10 GND, 3/4" C FROM RECEPTACLE TO GYM HOIST CONTROL PANEL.

18 12" X 12" X 6" JUNCTION BOX FOR MOTORIZED BLEACHERS. INSTALL BOX AT 5'-0" A.F.F. TO C.L. INSTALL IN LOCATION AS RECOMMENDED BY BLEACHER MANUFACTURER. CONTACTORS AND CONTROLLERS ARE PROVIDED AND INSTALLED BY MANUFACTURER. INSTALL (1) 3/4" CONDUIT TO ADJACENT DISCONNECT SWITCH. CONNECT COMPLETE.



2 ENLARGED POWER PLAN - IDF G108
1/4" = 1'-0"

COORDINATE ALL DEVICE MOUNTING HEIGHTS AND CODNUIT RUNS IN THE GYMNASIUM WITH PRECAST MANUFACTURER. ALL JUNCTION BOXES AND CONDUIT ARE REQUIRED TO BE INBEDDED IN PRECAST PANELS.



LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

DAVID L. JONES III
REGISTERED
No. PE12100175
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	02/15/24	Addendum #1
2	02/28/24	Addendum #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/24
DRAWN BY: DLJ

FIRST FLOOR POWER PLAN - UNIT G

N
TRUE NORTH

EP1G

ROOFTOP AIR HANDLING UNIT SCHEDULE - 23 74 16.11

IDENTITY DATA						UNIT SIZE			SUPPLY FAN							SUPPLY FAN SOUND POWER (OUTLET)								EXHAUST FAN						EXHAUST FAN SOUND POWER (OUTLET)							
													MOTOR			OCTAVE BAND											MOTOR			OCTAVE BAND							
MARK	MANUFACTURER	MODEL	LOCATION	SERVICE	WEIGHT (LBS)	L	W	H	AIRFLOW (CFM)	MIN. OA (CFM)	ESP/TSP (IN-WG)	RPM	QTY	HP EA.	BHP EA.	1	2	3	4	5	6	7	8	AIRFLOW (CFM)	ESP/TSP (IN-WG)	RPM	QTY	HP EA.	BHP EA.	1	2	3	4	5	6	7	8
RTU-G1, G2	VALENT	VX-212-30I-N-J1	ROOF	SAS	4,275	163.2"	68.2"	76.2"	8,765	2,275	1.0/3.68	2,115	1	10.0	9.98	88	87	98	88	84	76	73	70	8765	0.5/0.69	1,759	1	5.0	5.0	101	81	74	70	61	59	57	54
RTU-G3	VALENT	VX-12-5I-C-G1	ROOF	SAS	1,097	82.2"	44"	58.1"	1,615	455	1/1.9	1,879	1	1.0	0.8	81	73	80	83	71	67	64	64	-	-	-	-	-	-	-	-	-	-	-	-	-	-

ROOFTOP AIR HANDLING UNIT SCHEDULE (CONTINUED)

		GAS HEATING DATA				DX COOLING DATA												COMPRESSOR		HOT GAS REHEAT		FILTER	ELECTRICAL DATA			
MARK	MIN OUTSIDE AIR (CFM)	INPUT (MBH)	OUTPUT (MBH)	STAGES	EAT/LAT (°F)	NOM. TONS	TOTAL (MBH)	SENSIBLE (MBH)	EAT (°F) DB/WB	LAT (°F) DB/WB	SEER MIN.	EER. MIN	REFRIG.	ROWS	FPI	FACE AREA (SQFT)	APD (IN-WG)	QTY	STAGES	LOAD (BTUH)	EAT/LAT (°F)	MERV	VOLT/PH/HZ	MCA (A)	MOCP (A)	NOTES
RTU-G1, G2	2,275	500	405	16:1	53.2/96	30	374	245	79.2/67.1	53.7/53.55	14.0	9.8	R-410A	6	14	20.2	0.7	2	INVERTER	303	53/85	8	460/3/60	92.0	110	1,2,3,5,6,7
RTU-G3	455	100	81	16:1	51.3/98	5	68	44	79.5/67.5	54.1/54.1	14.0	9.8	R-410A	4	14	5.8	0.2	1	INVERTER	37	54/75	8	460/3/60	14.2	20	1,2,3,4,5,6

ROOFTOP AIR HANDLING UNIT SCHEDULE NOTES:
1. OVERLOAD PROTECTED DISCONNECT BY MANFUACTURER. SINGLE POINT POWER.
2. AMBIENT TEMPERATURES ARE SUMMER: 91F DB, 78 F WB AND WINTER: -0.5 F DB.
3. SINGLE ZONE OPERATION.
4. ENTHALPY ECONOMIZER WITH RELIEF AIR DAMPER.
5. BACNET COMMUNICATION CARD FOR BMS INTERFACE.
6. HOT GAS REHEAT.
7. ENTHALPY ECONOMIZER WITH EXHAUST FAN

HORIZONTAL UNIT VENTILATOR SCHEDULE - 23 82 23.98

IDENTITY DATA			SUPPLY FAN DATA						PREHEAT COIL DATA						COOLING COIL DATA								OVERALL UNIT ELECTRICAL DATA			
						MOTOR																				
MARK	MANUFACTURER	MODEL	AIRFLOW (CFM)	MIN. OA (CFM)	ESP (IN-WG)	QTY.	HP EA.	BHP EA.	CAPACITY (MBH)	EAT/LAT (°F)	EWT/LWT (°F)	GPM	WPD (FT-WG)	ROWS	TOTAL (MBH)	SENSIBLE (MBH)	EAT (°F) DB/WB	LAT (°F) DB/WB	EWT/LWT (°F)	GPM	WPD (FT-WG)	ROWS	VOLT/PH/HZ	MCA (A)	FLA (A)	NOTES
UV-D128	KRUEGER	KHGEA-20	1,100	405	0.75	2	0.50	-	68	55/111	140/121	7.5	3.6	2	36	28	80/67	57/56	44/52	10.0	2.3	4	115/1/60	14.6	13	1,2

HORIZONTAL UNIT VENTILATOR SCHEDULE NOTES:
1. DISCONNECT BY MANUFACTURER. SINGLE POINT POWER.
2. SEE M-701 FOR UNIT CONTROL DEVICES AND SEQUENCES.

4-PIPE HYDRONIC BLOWER COIL UNIT SCHEDULE - 23 82 19

IDENTITY DATA			DIMENSIONS				SUPPLY FAN DATA							COOLING DATA									HEATING DATA								ELECTRICAL DATA			
MARK	MANUFACTURER	MODEL	L	W	H	WEIGHT (LBS)	CFM	ESP (IN-WG)	HP	BHP	SPEEDS	SPEED SETTING	MIN OUTSIDE AIR (CFM)	TOTAL (MBH)	SENSIBLE (MBH)	ROWS	GPM	EWT/LWT (°F)	EAT (°F) DB/WB	LAT (°F) DB/WB	COIL WPD (FT-WG)	FLUID TYPE	CAPACITY (BTUH)	ROWS	GPM	EWT/LWT (°F)	EAT/LAT (°F)	COIL WPD (FT-WG)	FLUID TYPE	VOLT/PH/HZ	MCA (A)	MOCP (A)	NOTES	
BCU-1,2,3,4	KRUEGER	BCU-20	60"	58"	18"	518	1,640	1.0	1.0	0.9	2	MED	175	49	37	6	9.0	44/55	77/66	56/56	7.9	30% PROP. GLY.	71	2	7.2	140/120	60/100	0.8	WATER	208/3/60	4.6	15.0	1,2,3,4,5,6	

HYDRONIC BLOWER COIL UNIT SCHEDULE NOTES:
1. DISCONNECT BY MANUFACTURER.
2. UNIT SELECTED FOR SCHEDULED SPEED SETTING. SCHEDULED CFM IS NOMINAL CFM. BALANCE FAN COIL UNIT TO AIRFLOW INDICATED ON PLANS.
3. PROVIDE HEATING COIL IN PREHEAT POSITION.
4. FILTERS: MERV 8
5. RETURN AIR LOCATION: SIDE
6. RETURN AND OA FILTER MIXING BOX WITH DAMPERS. ACTUATORS BY TCC.

SPLIT SYSTEM FAN COIL UNIT SCHEDULE - 23 81 26

IDENTITY DATA				DIMENSIONS			COOLING CAPACITY		AIRFLOW DATA					ELECTRICAL DATA			
MARK	MANUFACTURER	MODEL	WEIGHT (LBS)	L	W	H	TOTAL (BTUH)	SENSIBLE (BTUH)	MIN (CFM)	MAX (CFM)	DESIGN (CFM)	ESP (IN-WG)	REF. TYPE	VOLT/PH/HZ	FLA (A)	MOCP (A)	NOTES
FC-G108	LG	LSN	18	32	12	13	12,000	10,560	317	459	338	-	R-410A	-	-	-	1,2
FC-EC130	LG	LSN181HSV5	26	39	13	15	18,000	12,240	371	530	477	-	R-410A	-	-	-	1,2

SPLIT SYSTEM FAN COIL UNIT SCHEDULE NOTES:
1. FURNISH WITH CONDENSATE PUMP.
2. INDOOR FAN COIL UNIT POWERED BY OUTDOOR CONDENSING UNIT.

AIR COOLED SPLIT SYSTEM CONDENSING UNIT SCHEDULE - 23 81 26

IDENTITY DATA					COOLING DATA		ENERGY DATA				ELECTRICAL DATA			
MARK	MANUFACTURER	MODEL	SYSTEM SERVED	WEIGHT (LBS)	NOMINAL (BTUH)	AMB. (°F)	EER	SEER	COP	REF. TYPE	VOLT/PH/HZ	MCA (A)	MOCP (A)	NOTES
CU-G108	LG	LSU120HSV5	FC-G108	74	12,000.0	95	12.5	22.0	-	R-410A	208/1/60	10.0	15.0	1,2,3
CU-EC130	LG	LSU180HSV5	FC-EC130	128	18,000.0	95	12.5	22.0	-	R-410A	208/1/60	19.0	30.0	1,2,3

AIR COOLED SPLIT SYSTEM CONDENSING UNIT SCHEDULE NOTES
1. DISCONNECT BY MANUFACTURER.
2. SEE M-700 SERIES SHEETS FOR TEMPERATURE CONTROLS INFORMATION.
3. MECHANICAL CONTRACTOR SHALL COORDINATE REFRIGERANT PIPE SIZING AND PIPE ROUTING WITH MANUFACTURER.

EXHAUST FAN SCHEDULE - 23 34 23

IDENTITY DATA					FAN DATA						SOUND CRITERIA			ELECTRICAL DATA	
MARK	MANUFACTURER	MODEL	SERVICES	WEIGHT (LBS)	FAN TYPE	DRIVE TYPE	AIRFLOW (CFM)	ESP (IN-WG)	RPM	HP/BHP	SONES	DBA	UNIT CONTROL	VOLT/PH/HZ	NOTES
EF-D133	GREENHECK	G-080-D	KITCHEN RESTROOM	29	UPBLAST CENTRIFUGAL	DIRECT	150	0.57	1550	0.05/0.05	7.9	55	BMS	115/1/60	1,2,3,4
EF-EB136A	GREENHECK	G-70-D	PRINT ROOM	24	UPBLAST CENTRIFUGAL	DIRECT	260	0.25	1550	0.03/0.03	4.7	47	TIMER SWITCH	115/1/60	1,3,4
EF-G1	GREENHECK	G-090-D	RESTROOM	28	UPBLAST CENTRIFUGAL	DIRECT	540	0.51	1550	0.07/0.07	7.4	54	BMS	115/1/60	1,2,3,4

EXHAUST FAN SCHEDULE NOTES:
1. DISCONNECT BY MANUFACTURER.
2. SEE M-700 SERIES SHEETS FOR CONTROL INFORMATION.
3. FAN SPEED CONTROLLER FOR BALANCING.
4. PROVIDE GRAVITY BACKDRAFT DAMPER

GRAVITY VENTILATOR SCHEDULE - 23 37 23

IDENTITY DATA					THROAT DATA				HOOD DATA			
						DIMENSIONS						
MARK	MANUFACTURER	MODEL	SYSTEM SERVED	WEIGHT (LBS)	VELOCITY (FPM)	L	W	Ø	AIRFLOW (CFM)	TSP (IN-WG)	VELOCITY (FPM)	NOTES
GV-D130	GREENHECK	GRSI-48	KITCHEN	80	511	48	48	-	6,560	0.2	725	1
GV-D128	GREENHECK	GRSI-12	CLASSROOM D128	10	1,220	-	-	12	1,100	0.3	1,844	1

GRAVITY VENTILATOR SCHEDULE NOTES:
1. SEE DETAIL 9 ON M501.

ELECTRIC CABINET UNIT HEATER SCHEDULE - 23 82 39

IDENTITY DATA				HEATING DATA	FAN DATA	ELECTRICAL DATA					
MARK	MANUFACTURER	MODEL	WEIGHT (LBS)	CAPACITY (KW)	CFM	VOLTAGE (V)	PHASE	FREQ (HZ)	FLA (A)	MOCP (A)	NOTES
WUH-1	REZNOR	EHA	24	3	160	480	1	60	-	-	1,2,3,4

ELECTRIC CABINET UNIT HEATER SCHEDULE NOTES:
1. MOUNT 12" AFF.
2. RECESSED IN WALL.
3. COORDINATE COLOR WITH ARCHITECT.
4. INTEGRAL THERMOSTAT.

VAV BOX WITH HOT WATER REHEAT SCHEDULE - 23 36 00

IDENTITY DATA				AIRFLOW DATA				NOISE DATA		REHEAT COIL DATA									
MARK	MANUFACTURER	MODEL	INLET DIAMETER	COOLING MAX (CFM)	HEATING MAX (CFM)	OCC. MIN. (CFM)	SPI (IN-WG)	MAX DISCH.	MAX RAD.	CAPACITY (MBH)	EAT/LAT (°F)	APD (IN-WG)	FLOW (GPM)	EWT/LWT (°F)	WPD (FT-WG)	ROWS	VALVE TYPE	NOTES	
VAV-A107	PRICE	SDV	8	470	235	145	1.0	-	-	10	55/95	0.2	1.3	130/114	0.4	2	2-WAY	1,2,3,4	
VAV-A104	PRICE	SDV	8	525	265	160	1.0	21	-	12	55/95	0.3	1.7	130/116	0.7	2	2-WAY	1,2,3,4	
VAV-A111	PRICE	SDV	8	620	310	185	1.0	20	-	13	55/95	0.5	1.4	130/111	0.5	2	2-WAY	1,2,3,4	
VAV-A101	PRICE	SDV	8	615	305	185	1.0	20	-	13	55/95	0.5	1.4	130/111	0.5	2	2-WAY	1,2,3,4	

VAV BOX WITH HOT WATER REHEAT SCHEDULE NOTES:
1. COORDINATE LOCATION OF BOX ABOVE CEILING WITH LIGHT FIXTURES, FIRE PROTECTION, HEATING AND COOLING SYSTEM PIPING, PLUMBING SYSTEMS, AND WIRE TRAYS.
2. SEE M-700 SERIES DRAWINGS FOR TEMPERATURE CONTROLS INFORMATION.
3. INSULATED BOTTOM ACCESS DOOR UPSTREAM OF COIL WITH SNAP LATCH FASTENERS.
4. CONTROLS SHALL BE INSTALLED IN THE FIELD BY TCC.

233713 DIFFUSERS, REGISTERS, AND GRILLES

IDENTITY DATA				NECK SIZE (IN)	MODULE SIZE			
MARK	DESCRIPTION	MANUFACTURER	MODEL	Ø	W	L	MATERIAL	NOTES
HDRG 72/48	HEAVY DUTY ALUMINUM GYMNASIUM RETURN GRILLE	PRICE	99 Series		72"	48"	Aluminum	
RCD-6	ROUND CONE DIFFUSER	PRICE	RCD	6"				
EC24/12	EGG CRATE FACE RETURN	PRICE	80		24"	12"		
EC24/24	EGG CRATE FACE RETURN	PRICE	80		24"	24"		
EG24/12	LOUVER FACE GRILLE EXHAUST	PRICE	630		12"	24"		
RG12/6	LOUVER FACE RETURN GRILLE	PRICE	630		6"	12"		
RG12/10	LOUVER FACE RETURN GRILLE	PRICE	630		10"	12"		
RG24/12	LOUVER FACE RETURN GRILLE	PRICE	630		12"	24"		
SD12-6	SQUARE CONE DIFFUSER	PRICE	ASCDA	6"	12"	12"		
SD24-6	SQUARE CONE DIFFUSER	PRICE	ASCDA	6"	24"	24"		
SD24-8	SQUARE CONE DIFFUSER	PRICE	ASCDA	8"	24"	24"		
SD24-10	SQUARE CONE DIFFUSER	PRICE	ASCDA	10"	24"	24"		
SD24-12	SQUARE CONE DIFFUSER	PRICE	ASCDA	12"	24"	24"		
SG10/6A	LOUVER FACE GRILLE SUPPLY	PRICE	620		6"	10"		

2

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

creative engineering solutions
mechanical • electrical • plumbing
201 S Rural St., Suite 210
Indianapolis, IN 46201 • 463-777-8182
www.creativeng.net

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

GABRIEL S. CURRIER
REGISTERED
NO. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	2/15/2024	Addendum #1
2	02/28/2024	Addendum #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: GC / AR

MECHANICAL SCHEDULES

M601

DEMOLITION GENERAL NOTES

A DARK DASHED LINES INDICATE EXISTING EQUIPMENT AND SYSTEMS THAT SHALL BE REMOVED COMPLETELY AS PART OF DEMOLITION WORK.

B LIGHT SOLID LINES INDICATE EXISTING EQUIPMENT AND SYSTEMS THAT SHALL REMAIN. THE CONTRACTOR SHALL PROTECT ALL EXISTING EQUIPMENT AND SYSTEMS THAT SHALL REMAIN, DURING DEMOLITION PHASE

C THE CONTRACTOR SHALL INCLUDE ALL SCOPE TO REMOVE ITEMS MADE OBSOLETE BY NEW WORK. THE CONTRACTOR SHALL GIVE THE OWNER FIRST RIGHT OF REFUSAL OF ANY EXISTING EQUIPMENT PRIOR TO REMOVAL FROM THE SITE.

D THE CONTRACTOR SHALL REMOVE AND PROTECT CEILING TILES AND GRID AS NEEDED TO ACCESS AND REMOVE ITEMS AS NOTED. CEILING REMOVAL AND REINSTALLATION TO ALLOW FOR INSTALLATION OF NEW SYSTEMS ABOVE CEILING IS ALSO THE CONTRACTORS RESPOSIBILITY.

E VERIFY EXISTING CONDITIONS PRIOR TO BIDDING AND DEMOLITION.

DEMOLITION HVAC PLAN NOTES

1 REMOVE COMPLETELY RELATED ROOF EQUIPMENT. CAP ROOF PENETRATIONS WEATHER TIGHT.

2 REMOVE AND REPLACE PIPING. NEW PIPING WILL ROUTE IN SAME LOCATION. SEE MP1A FOR NEW WORK

3 REMOVE EXISTING SUPPLY GRILLE AND PROVIDE CAP. SEE SHEET MH1D1 FOR NEW WORK.

4 REMOVE AHU, AHU STRUCTURAL FRAME, CONTROLS AND DUCTWORK. LOUVER SHALL REMAIN WITH INSULATED BLANK-OFF PANEL. SEE MH1D1 FOR NEW WORK.

5 REMOVE EXISTING PIPING BACK TO POINT INDICATED. SEAL PIPING PENETRATIONS THAT ARE NOT REUSED.

6 REMOVE EXISTING CUH AND CONTROLS COMPLETE.

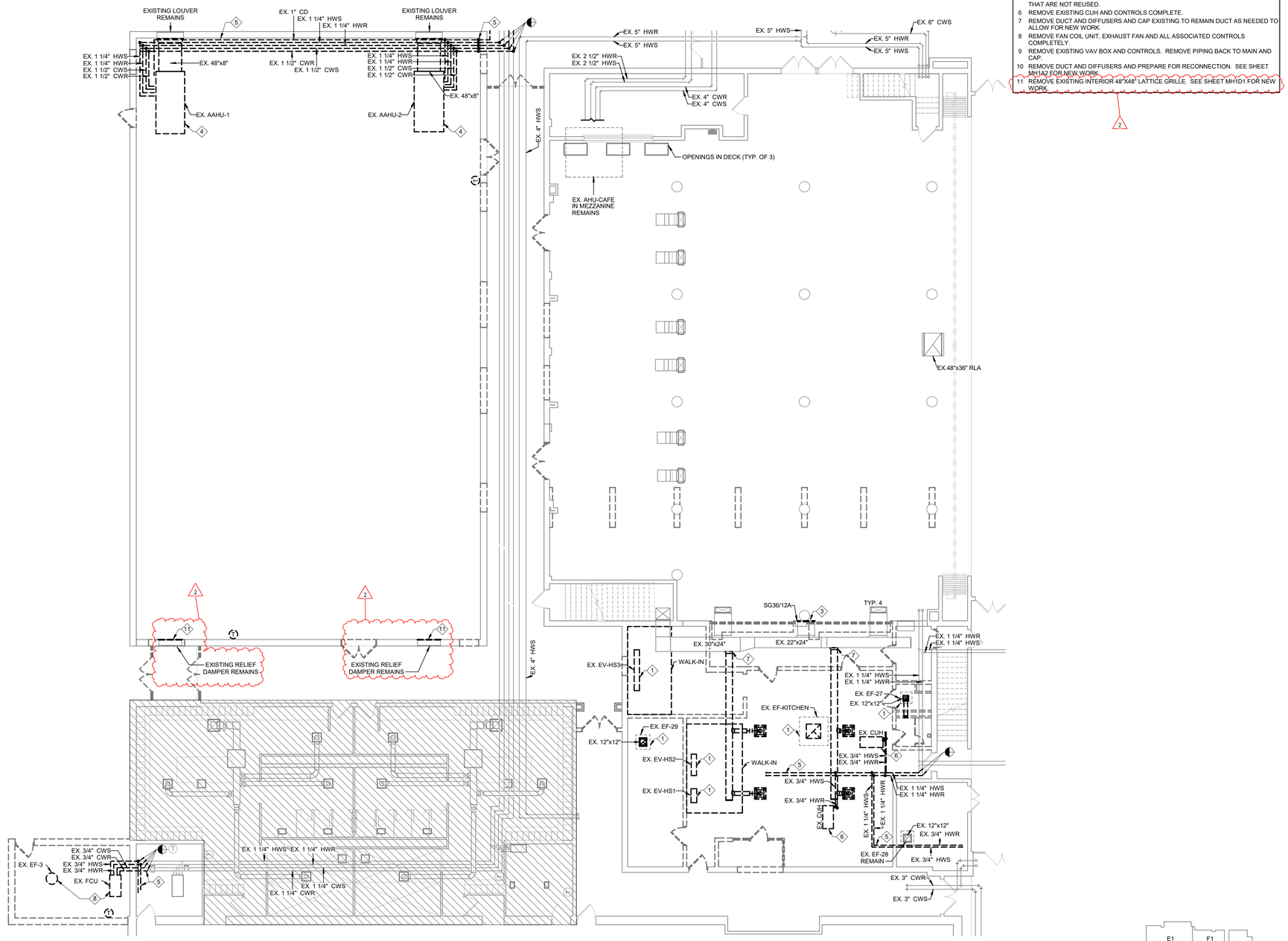
7 REMOVE DUCT AND DIFFUSERS AND CAP EXISTING TO REMAIN DUCT AS NEEDED TO ALLOW FOR NEW WORK.

8 REMOVE FAN COIL UNIT, EXHAUST FAN AND ALL ASSOCIATED CONTROLS COMPLETELY.

9 REMOVE EXISTING VAV BOX AND CONTROLS. REMOVE PIPING BACK TO MAIN AND CAP.

10 REMOVE DUCT AND DIFFUSERS AND PREPARE FOR RECONNECTION. SEE SHEET MH1A2 FOR NEW WORK.

11 REMOVE EXISTING INTERIOR 48"X48" LATTICE GRILLE. SEE SHEET MH1D1 FOR NEW WORK.



1 **FIRST FLOOR MECHANICAL DEMOLITION PLAN - UNIT D1**
1/8" = 1'-0"

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

creative engineering solutions
mechanical - electrical - plumbing
201 S Rural St., Suite 210
Indianapolis, Indiana 46239 317-716-9192
www.creativeeng.net

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

GABRIEL S. CURLIER REGISTERED NO. PE10808972 STATE OF INDIANA PROFESSIONAL ENGINEER

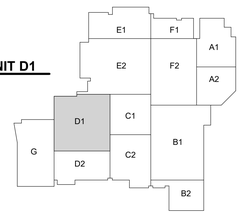
REVISIONS:

#	Date	Desc.
1	02/29/2024	Addendum #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: GC / AR

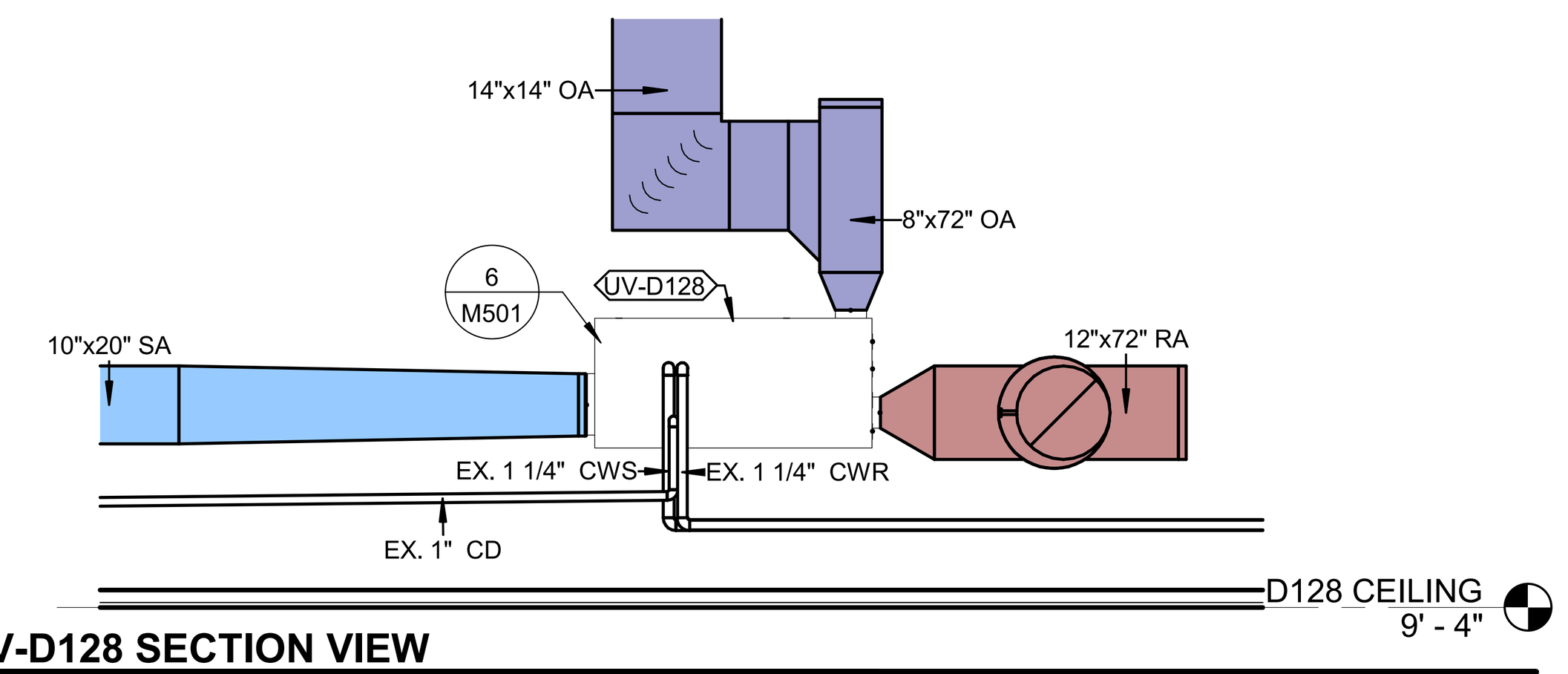
FIRST FLOOR DEMOLITION PLAN - UNIT D1



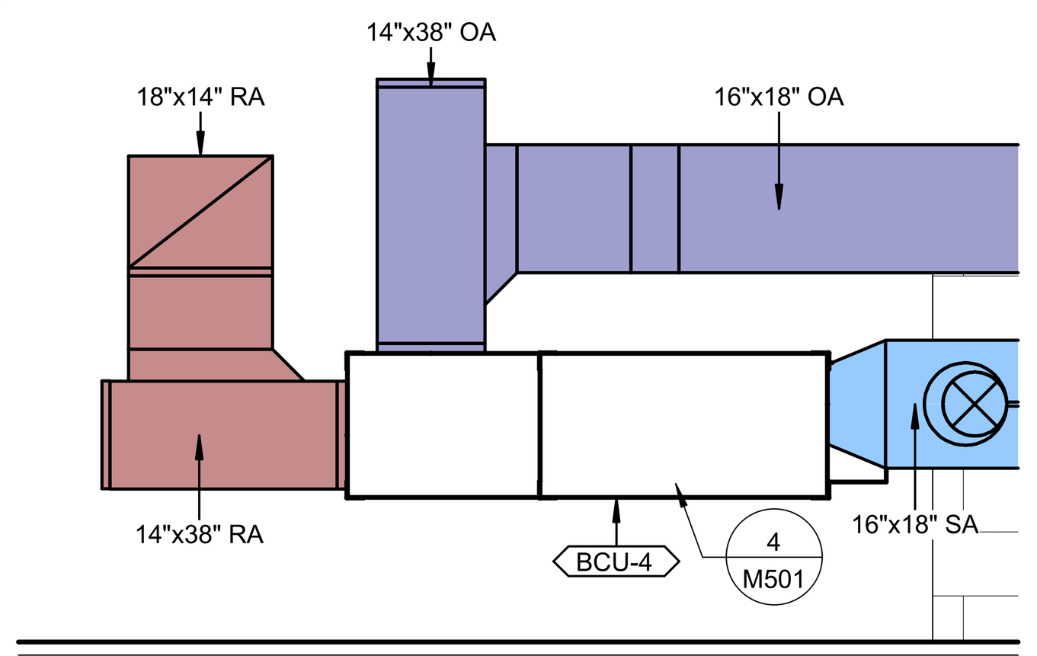
N TRUE NORTH

MD1D1

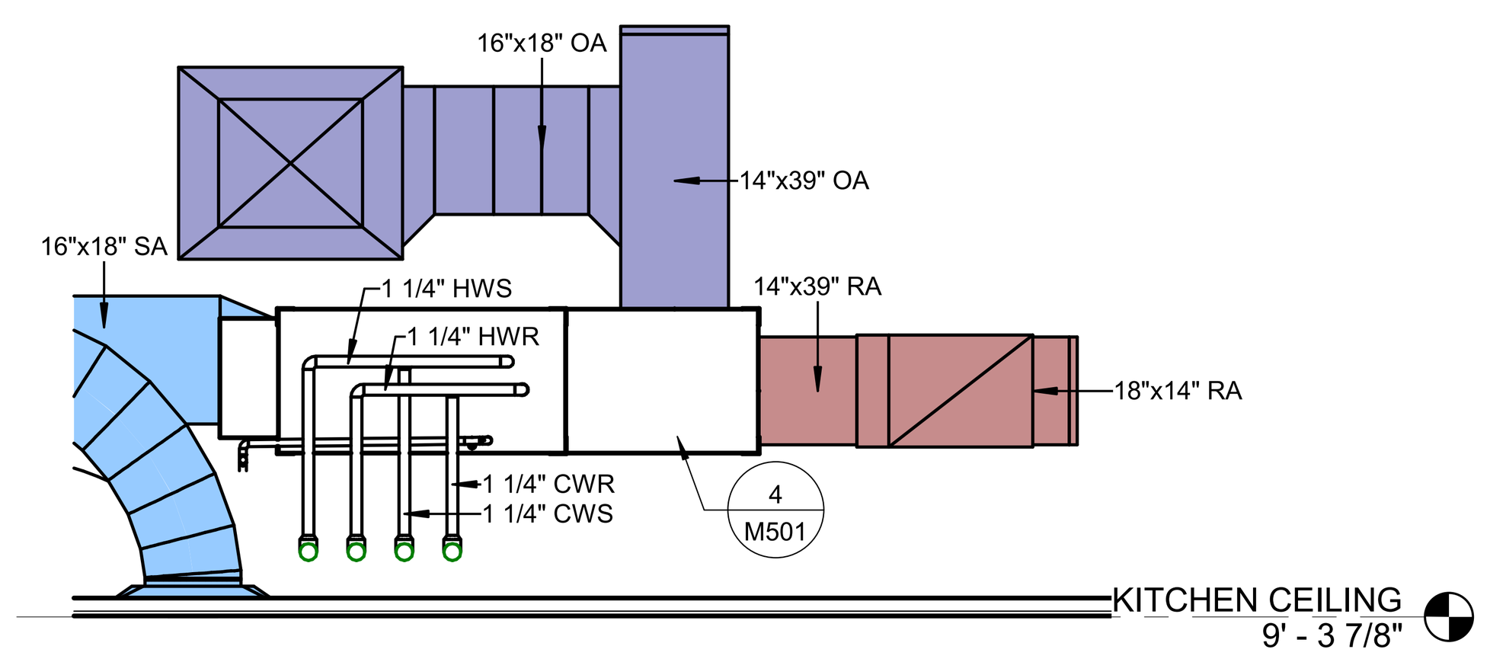
PLOT DATE/TIME:2/29/2024 2:29:51 PM



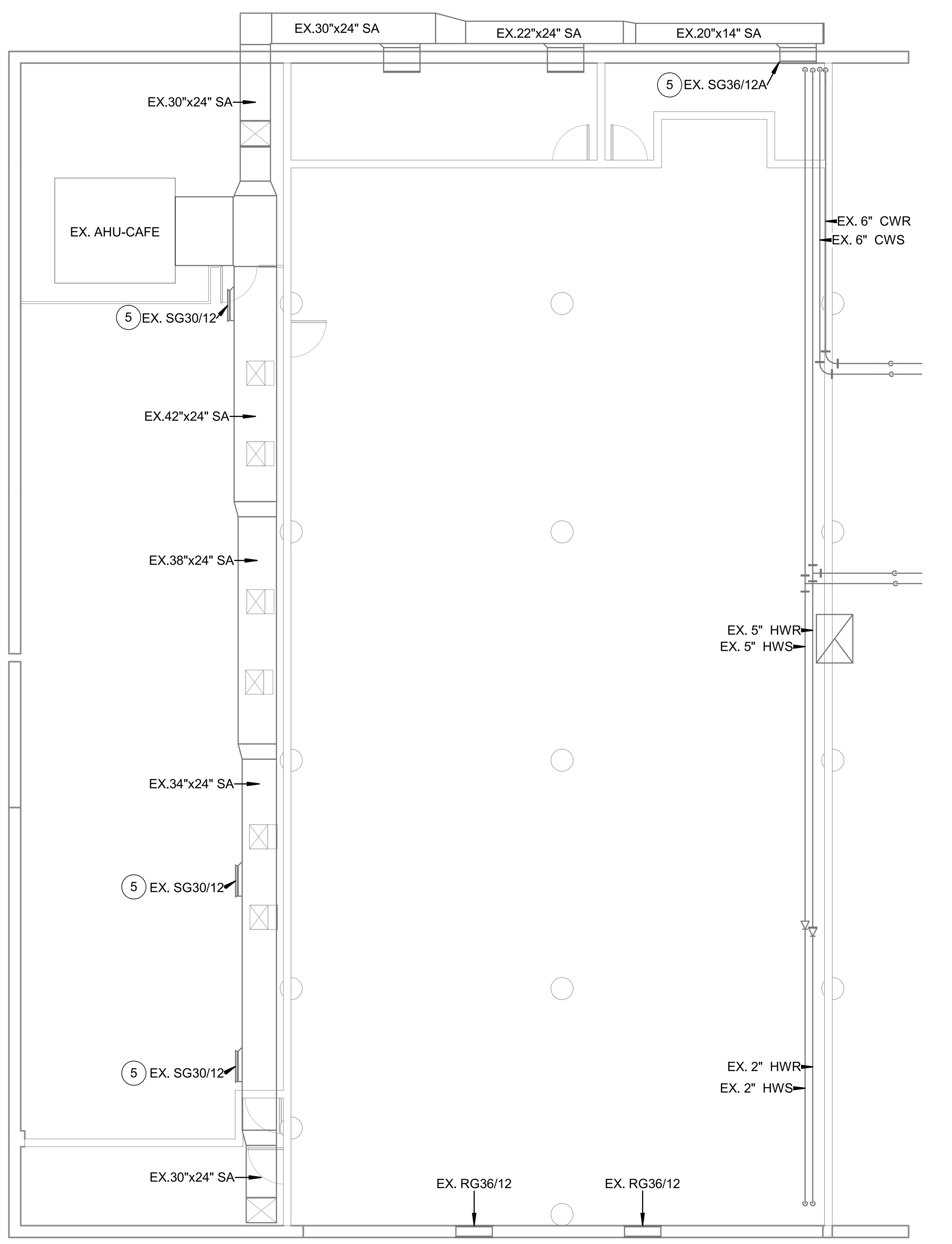
5 UV-D128 SECTION VIEW
1/2" = 1'-0"



4 DUCT CONNECTION TO BCU-4
1/2" = 1'-0"



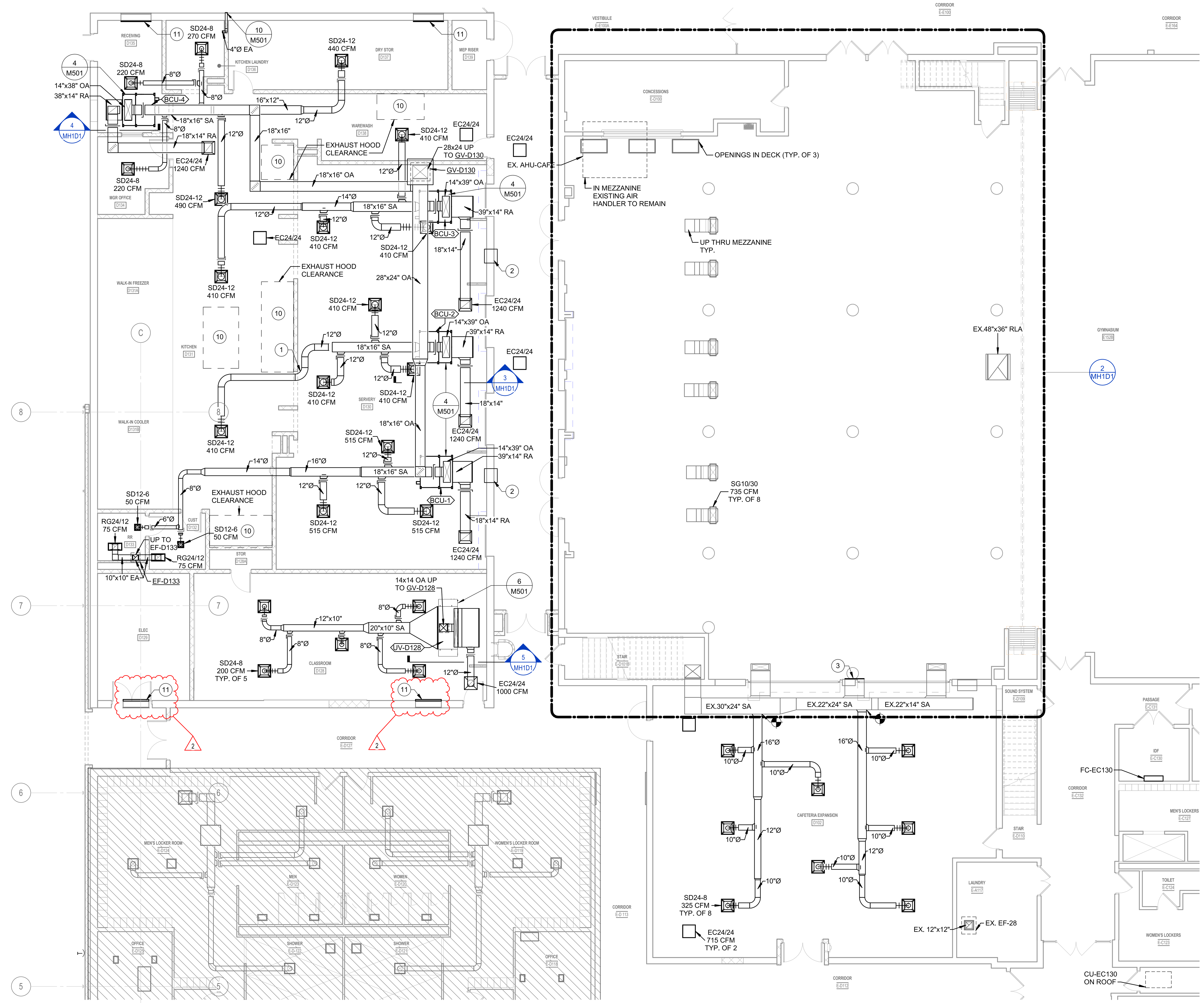
3 DUCT CONNECTION TO BCU 1,2,3
1/2" = 1'-0"



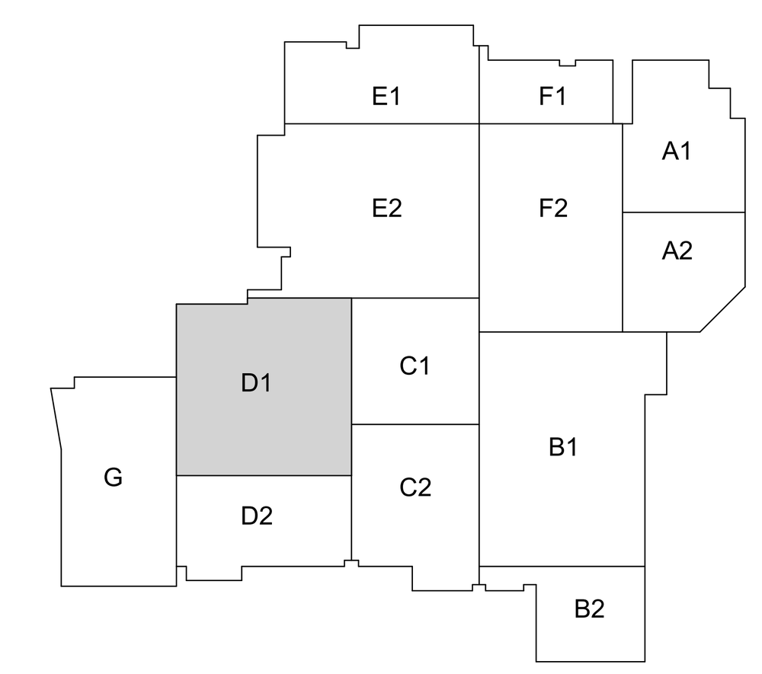
2 MEZZANINE HVAC PARTIAL FLOOR PLAN - UNIT D1
1/8" = 1'-0"

MECHANICAL HVAC PLAN NOTES

1 ROUTE AROUND EXHAUST HOOD.
2 INSTALL 26X18 TRANSFER OPENING ABOVE CEILING.
3 CAP EXISTING DUCTWORK.
4 4" DIA. DRYER VENT. SEE DETAIL 10 ON SHEET M501 FOR INSTALLATION AND TERMINATION.
5 REBALANCE GRILLE TO ORIGINAL CFM VALUE. PROVIDE AND INSTALL NEW GRILLE WITH OPPOSED BLADE DAMPER.
6 COORDINATE FINAL GRILLE LOCATION WITH EXISTING CEILING EQUIPMENT GRID, FURNITURE PLAN AND ARCHITECT.
7 INSTALL NEW EXHAUST FAN ON ROOF TO SERVE PRINT SHOP ON ROOF CURB. MAINTAIN ALL ROOF WARRANTIES.
8 ROUTE 12X12 EXHAUST DUCT FROM EXHAUST GRILLE PLENUM UP TO EXHAUST FAN AND TRANSITION TO EF CONNECTION.
9 PROVIDE AND INSTALL TIMER SWITCH ON WALL FOR EXHAUST FAN CONTROL. COORDINATE WITH EC FOR SWITCH INSTALLATION.
10 SEE KITCHEN DRAWINGS FOR HOOD EXHAUST AND DIRECT MAKE-UP WORK.
11 INSTALL GALVANIZED BLANK-OFF PANEL WITH 2" RIGID INSULATION. SEAL WEATHER TIGHT.
12 INSTALL PAINTABLE DUCTWORK IN CORRIDOR.



1 FIRST FLOOR HVAC PLAN - UNIT D1 AND PARTIAL C2
1/8" = 1'-0"



N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

creative engineering solutions

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

GABRIEL S. CURRIER REGISTERED NO. PE10808972 STATE OF INDIANA PROFESSIONAL ENGINEER

REVISIONS:

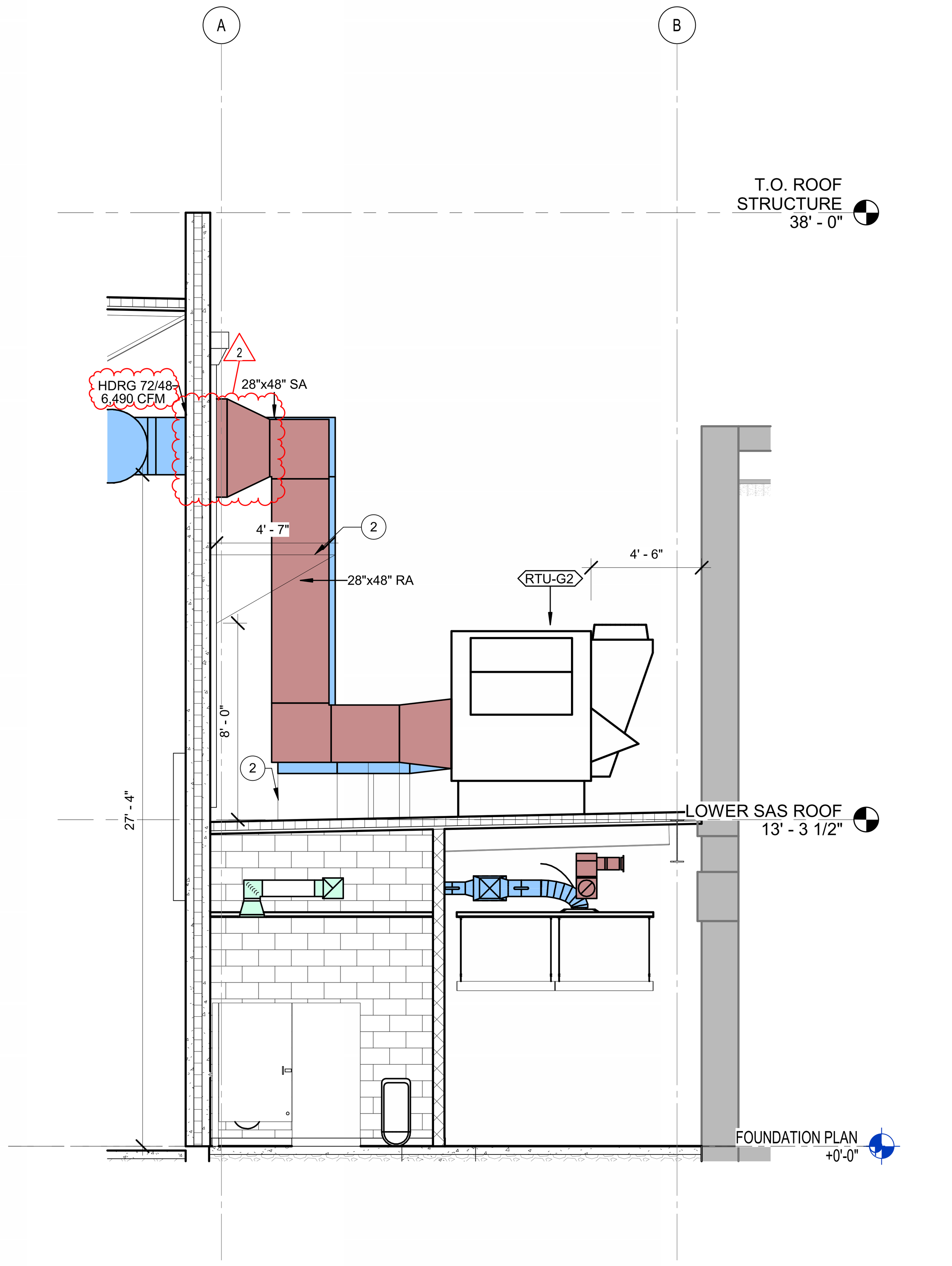
#	Date	Desc.
1	02/28/2024	Addendum #2

100% CONSTRUCTION DOCUMENTS

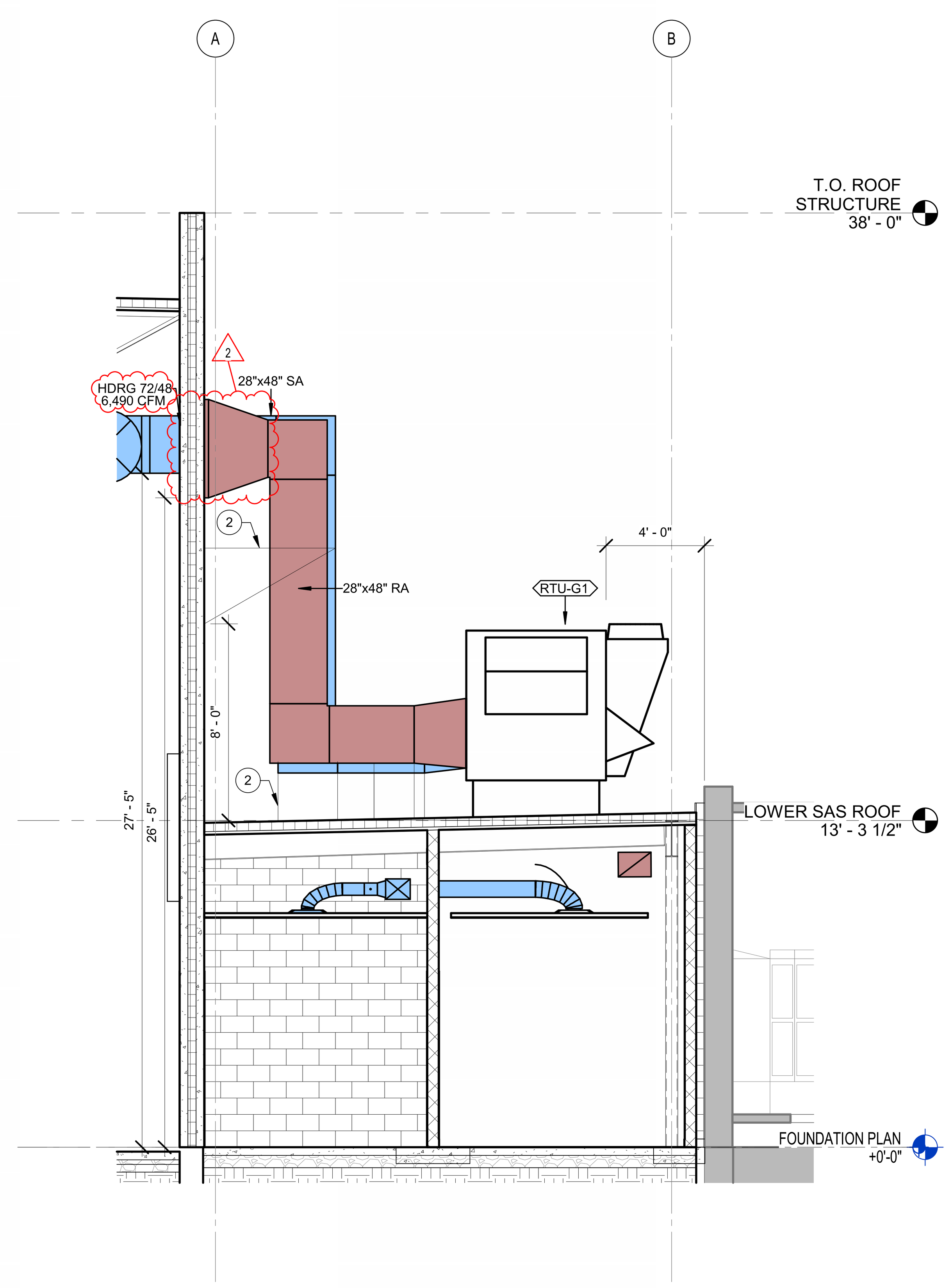
PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: GC / AR

HVAC FLOOR PLANS AND SECTIONS- UNIT D1 AND PARTIAL C2

MH1D1



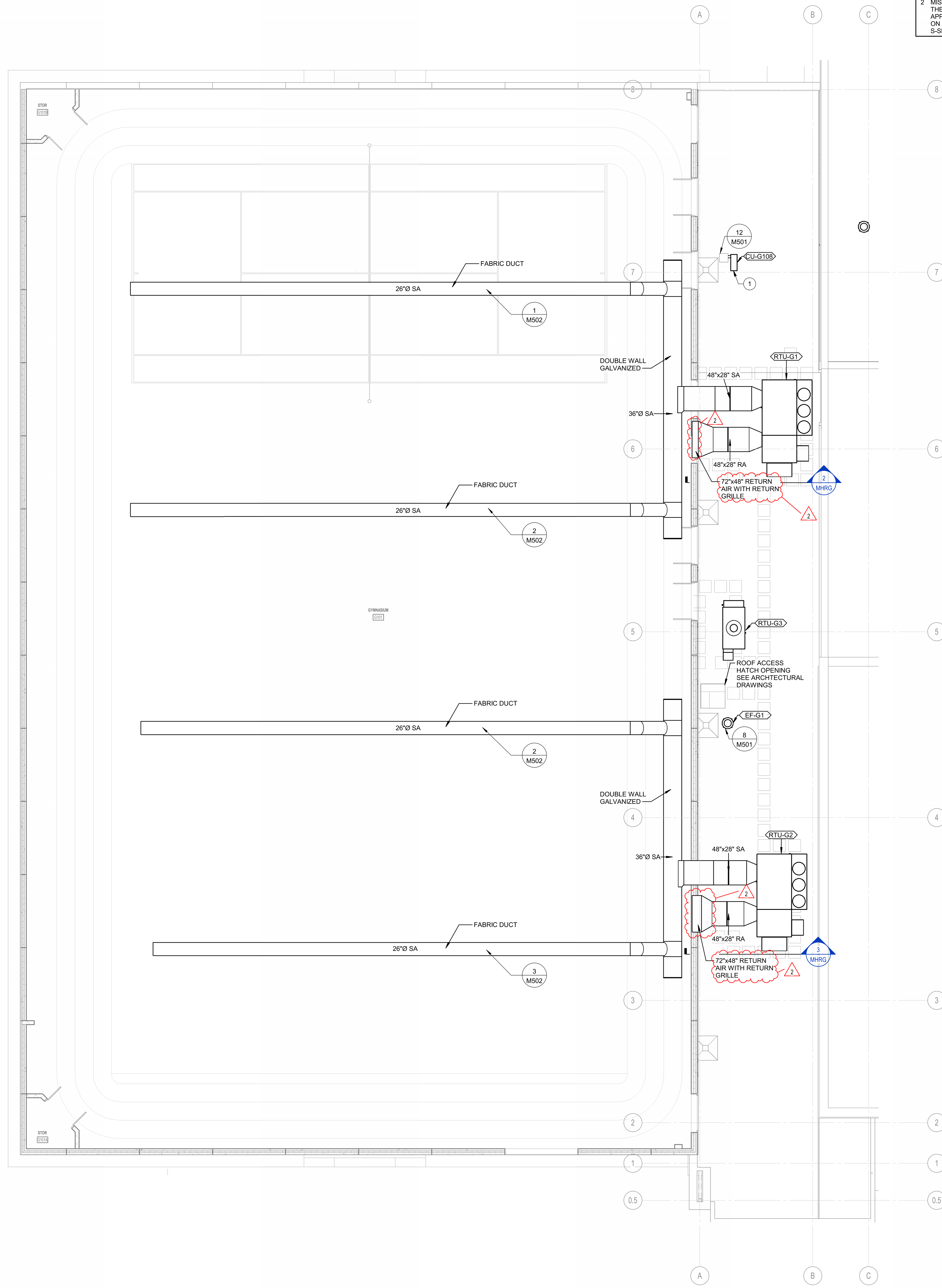
3 RTU-G2 SECTION VIEW
1/4" = 1'-0"



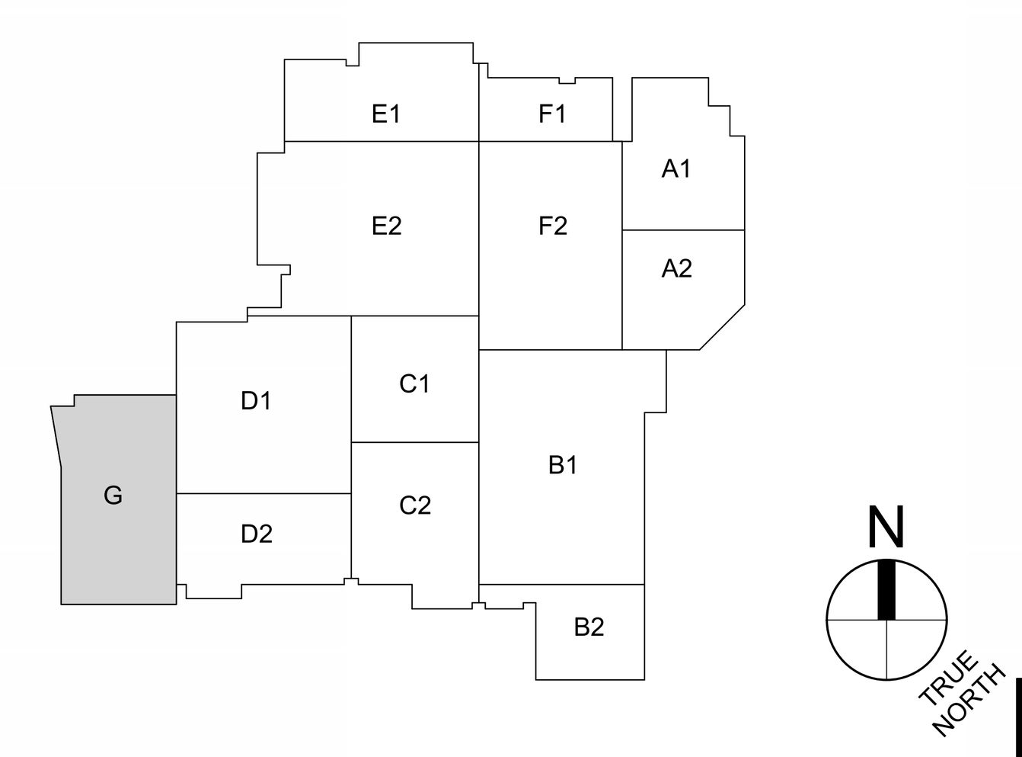
2 RTU-G1 SECTION VIEW
1/4" = 1'-0"

MECHANICAL ROOF PLAN NOTES

1. INSTALL CONDENSING UNIT ON EXISTING ROOF ON EQUIPMENT RAILS. MAINTAIN ROOF WARRANTY.
2. MISCELLANEOUS STEEL DUCT SUPPORT BY DELEGATED ENGINEER REGISTERED IN THE STATE OF INDIANA. COORDINATE ATTACHMENT OF SUPPORTS WITH APPROPRIATE TRADES (PRECAST WALL SUPPLIER, ETC.). WHERE SUPPORTS LAND ON ROOF, PROVIDE CHANNEL IN DECK FLUTES LIKE RTU CURB SUPPORT DETAIL ON S-SERIES DRAWINGS.



1 MECHANICAL ROOF PLAN AND UPPER SAC - UNIT G
1/8" = 1'-0"



LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

creative engineering solutions

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

GABRIEL S. CURRIER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

#	Date	Desc.
1	2/15/2024	Addendum #1
2	02/28/2024	Addendum #2

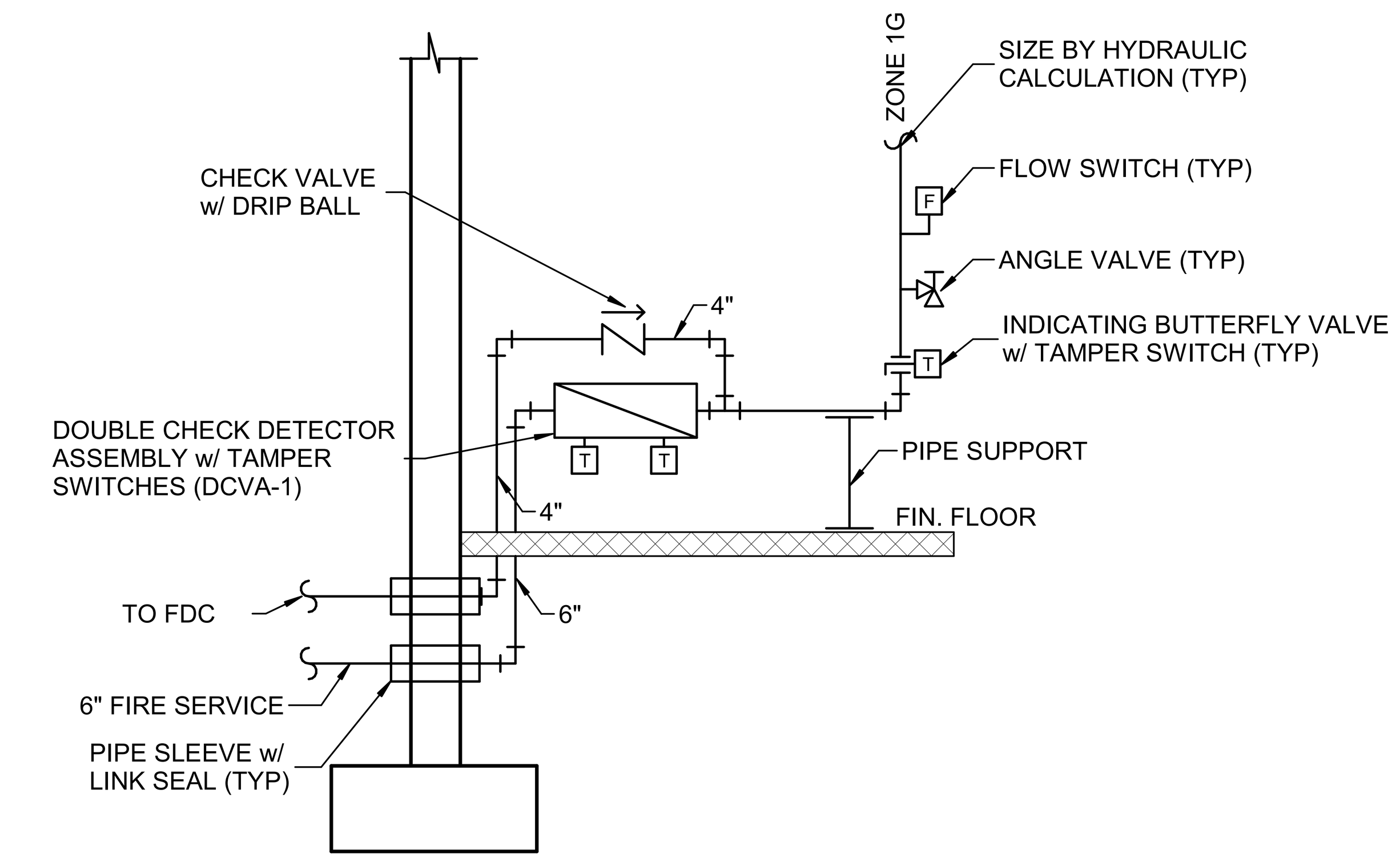
100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: GC / AR

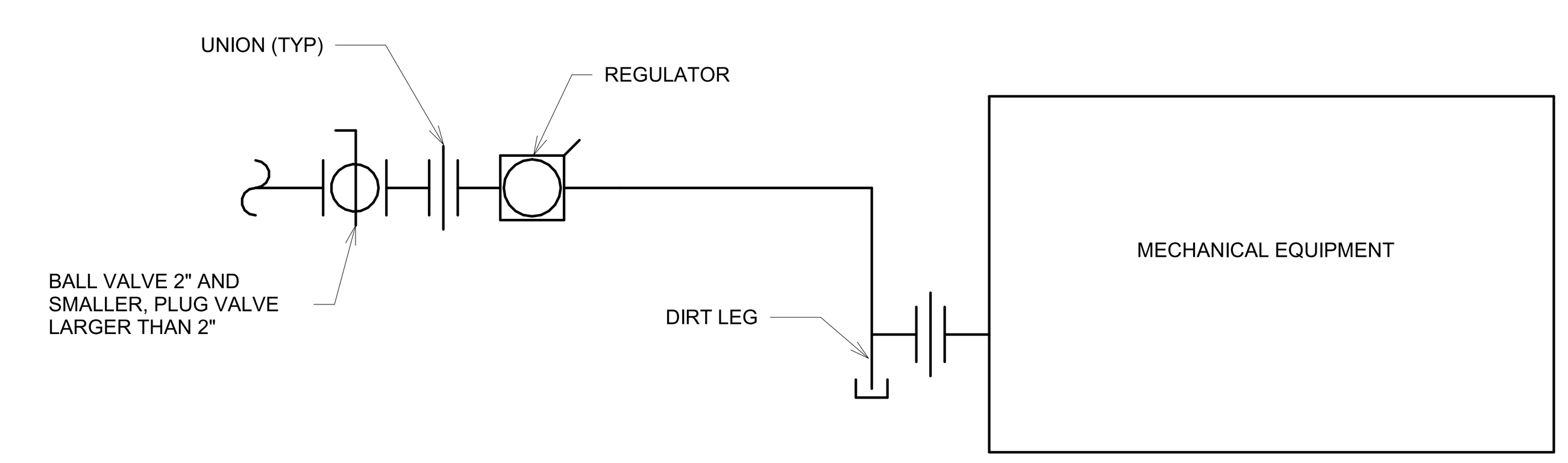
MECHANICAL ROOF PLAN AND UPPER SAC - UNIT G

MHRG

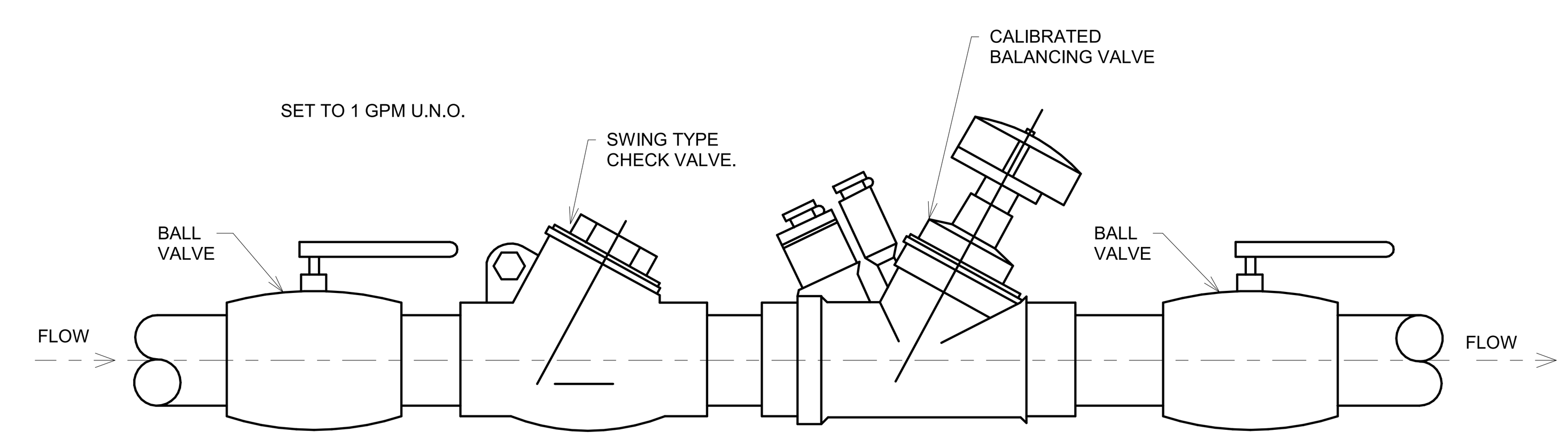
PLOT DATE/TIME 2/26/2024 2:29:44 PM



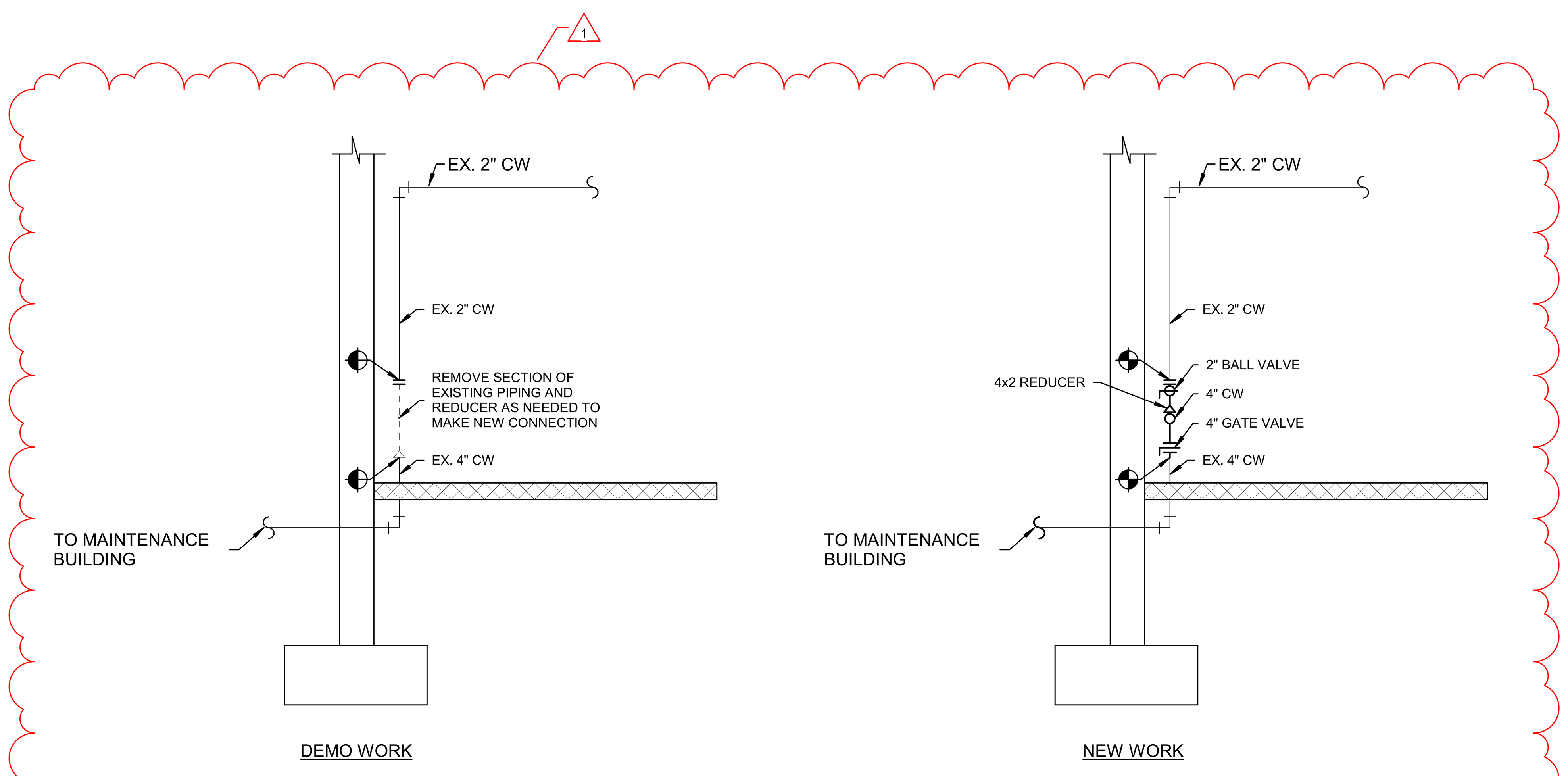
3 FIRE RISER DETAIL
NOT TO SCALE



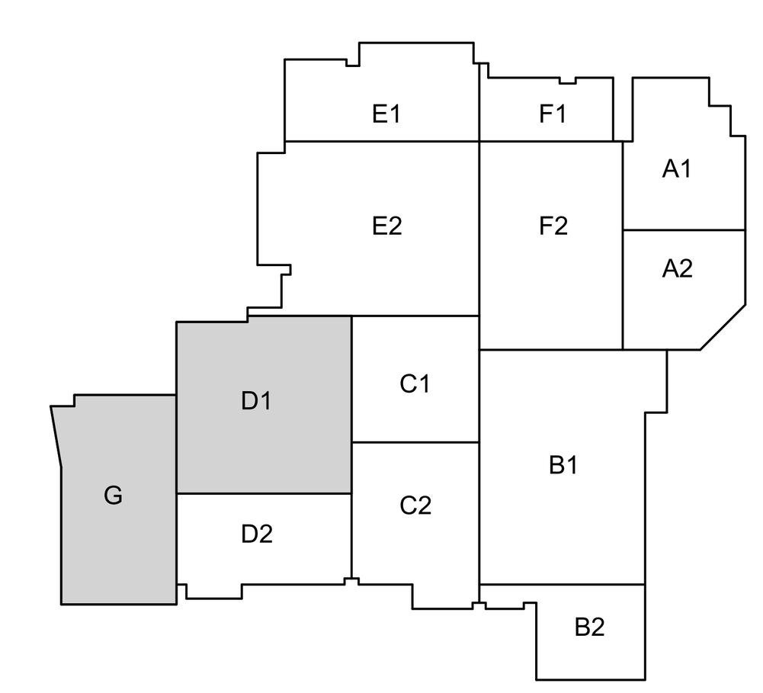
2 GAS CONNECTION TO MECHANICAL EQUIPMENT DETAIL
NOT TO SCALE



1 BALANCING STATION
NOT TO SCALE



4 DEMO AND NEW WATER PIPING DETAIL
NOT TO SCALE



N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

GABRIEL S. CURRIER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

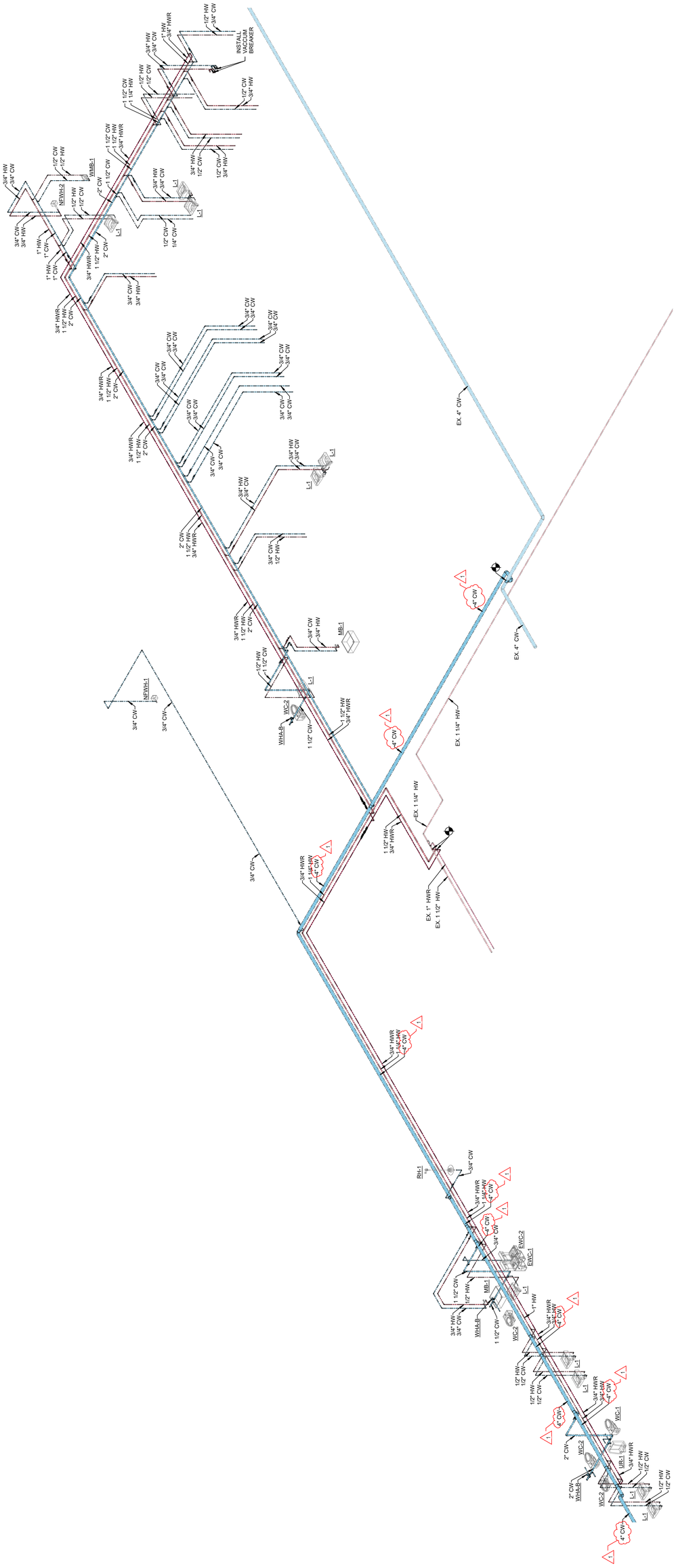
#	Date	Desc.
1	02/28/2024	Addendum #2

100% CONSTRUCTION DOCUMENTS

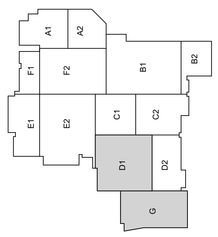
PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: CCW / IOP

PLUMBING DETAILS

P501



1 DOMESTIC WATER ISOMETRIC - UNITS D1 & G
NOT TO SCALE



TRUE NORTH

P901

DOMESTIC WATER ISOMETRIC - UNITS D1 & G

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: CCW / IOP

100% CONSTRUCTION DOCUMENTS

REVISIONS:		
#	Date	Desc.
1	02/28/2024	Addendum #2

GABRIEL S. DURBER
LICENSED PROFESSIONAL ENGINEER
NO. PE10800972
STATE OF INDIANA

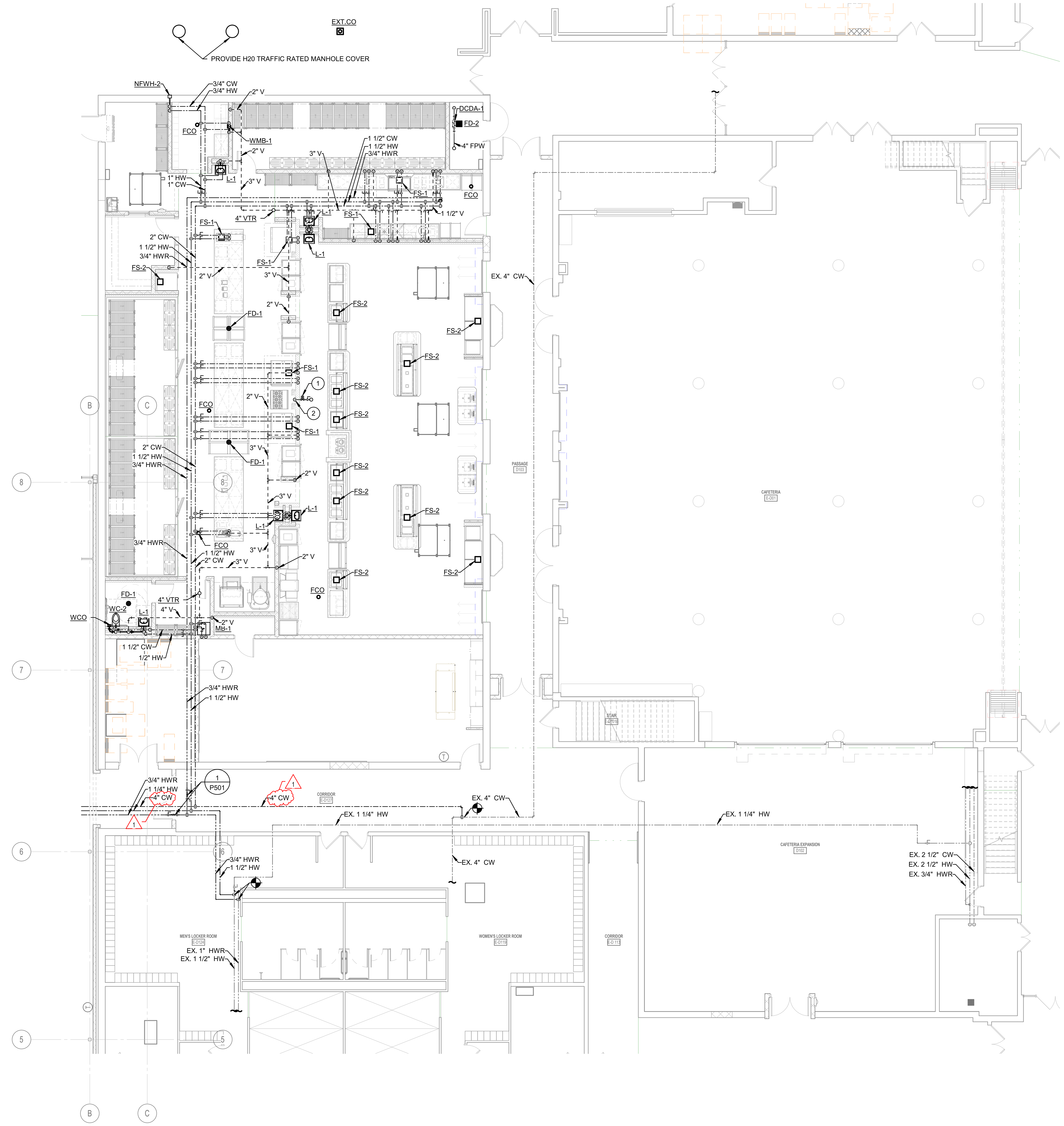
RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

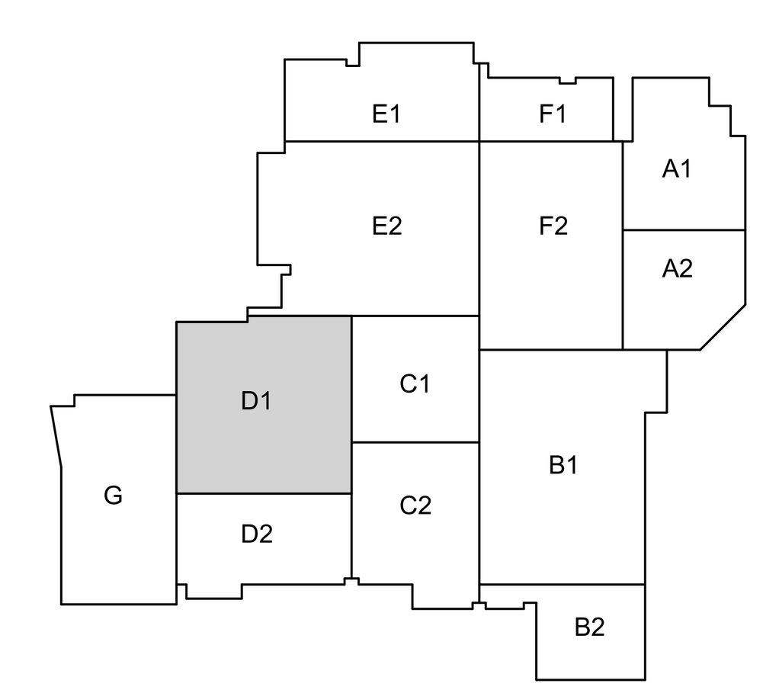
PLOT DATE/TIME 2/27/2024 1:22:34 PM

PLUMBING PLAN NOTES

1. VALVE BY KEC, INSTALLED BY MECHANICAL CONTRACTOR.
2. GAS REGULATOR - 2 PSIG TO 10" W.C. @ 215 CFH CAPACITY. SEE DETAIL 2/501 FOR MORE INFORMATION.



1 FIRST FLOOR PLUMBING PLAN - UNIT D1
1/8" = 1'-0"



N
TRUE NORTH

PLOT DATE/TIME 2/27/2024 1:22:42 PM

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

creative engineering solutions

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

GABRIEL S. CURRIER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

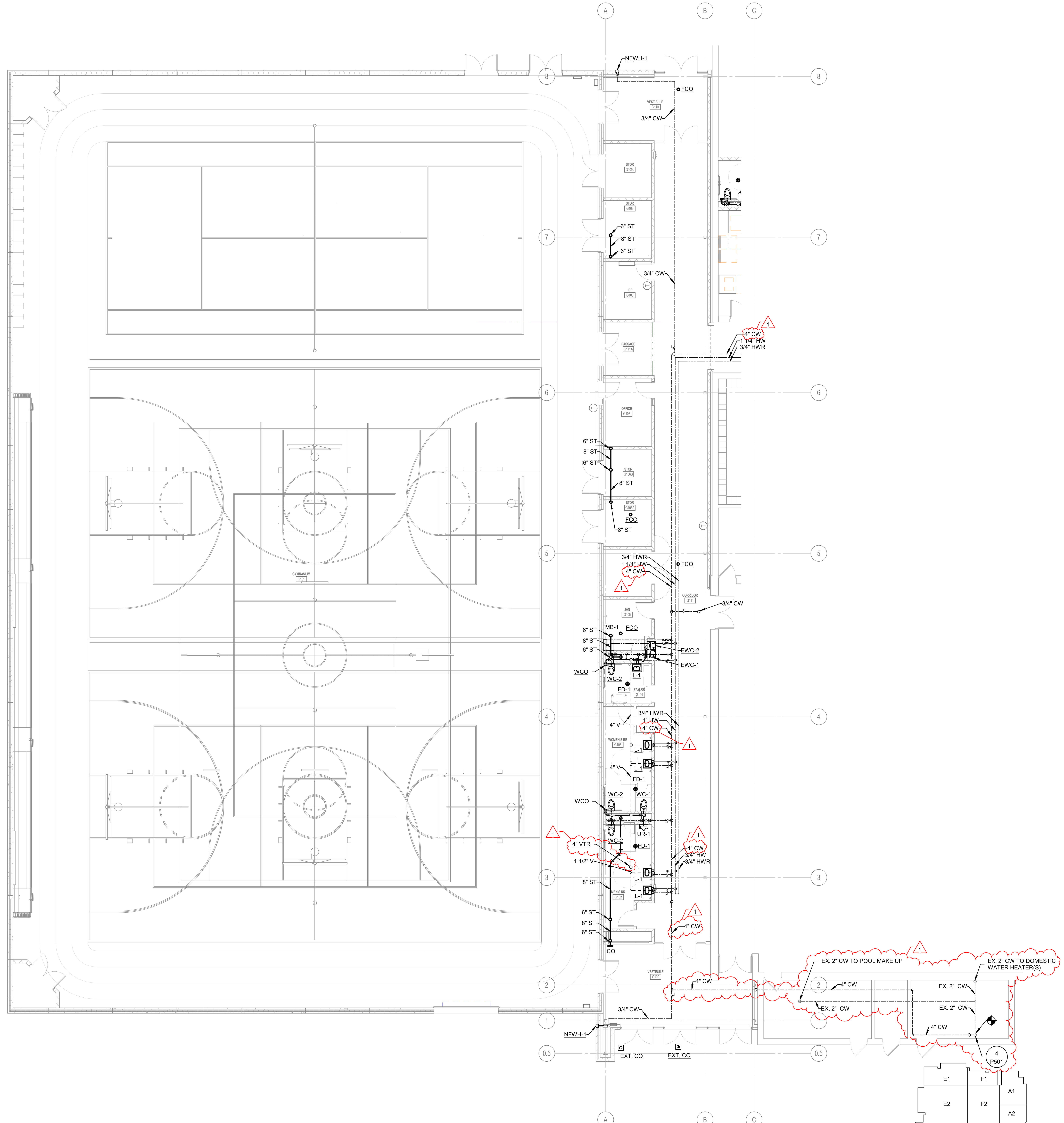
#	Date	Desc.
1	02/28/2024	Addendum #2

100% CONSTRUCTION DOCUMENTS

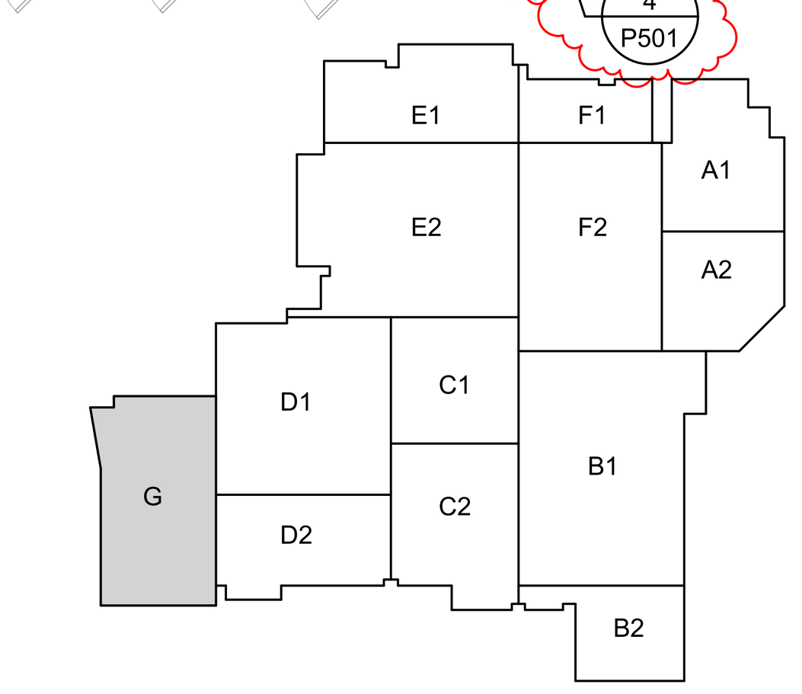
PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: CCW / IOP

FIRST FLOOR PLUMBING PLAN - UNIT D1

PP1D1



1 FIRST FLOOR PLUMBING PLAN - UNIT G
1/8" = 1'-0"



N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

GABRIEL S. CURRIER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

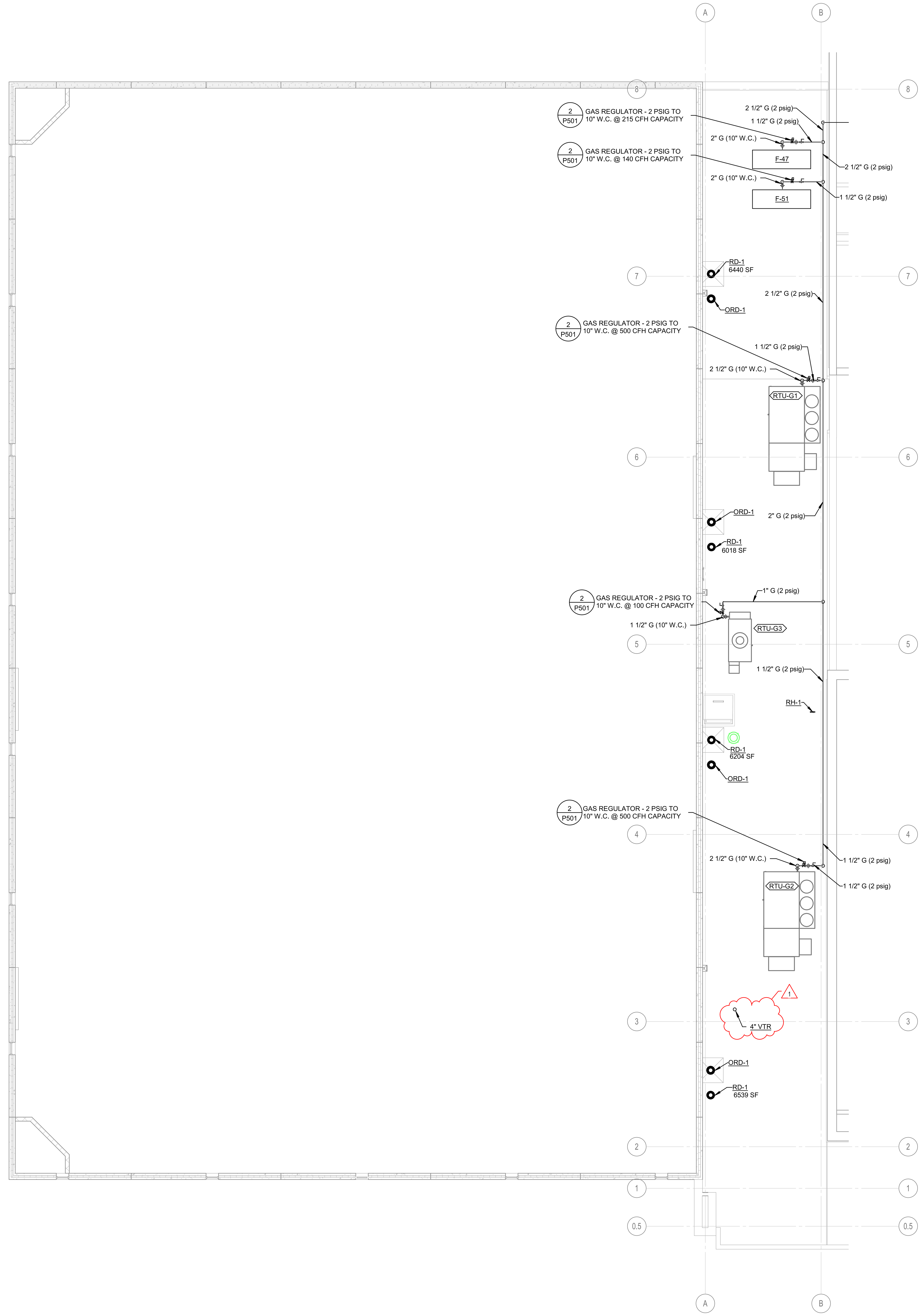
#	Date	Desc.
1	02/28/2024	Addendum #2

100% CONSTRUCTION DOCUMENTS

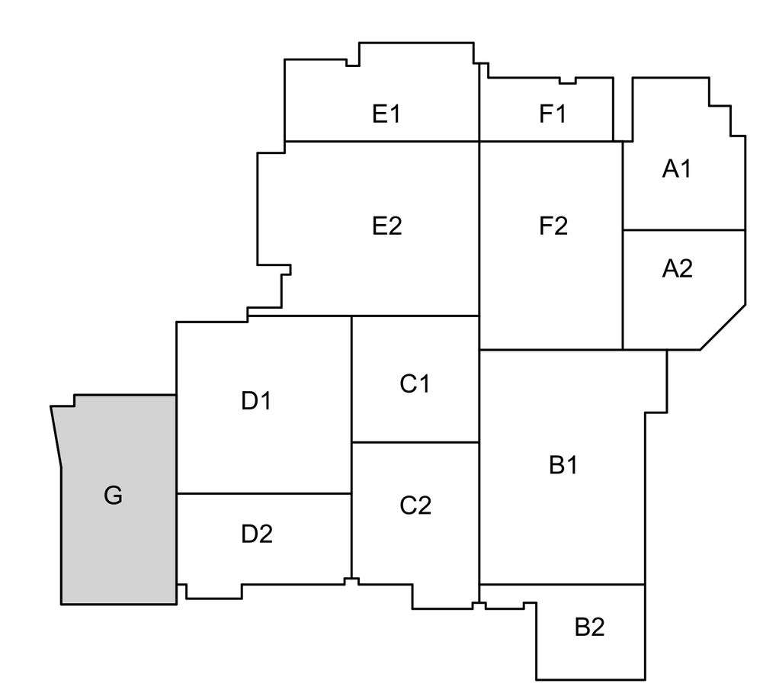
PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: CCW / IOP

FIRST FLOOR PLUMBING PLAN - UNIT G

PP1G



1 **ROOF PLUMBING PLAN - UNIT G**
1/8" = 1'-0"



N
TRUE NORTH

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

creative engineering solutions

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

GABRIEL S. CURRIER
REGISTERED
No. PE10808972
STATE OF INDIANA
PROFESSIONAL ENGINEER

REVISIONS:

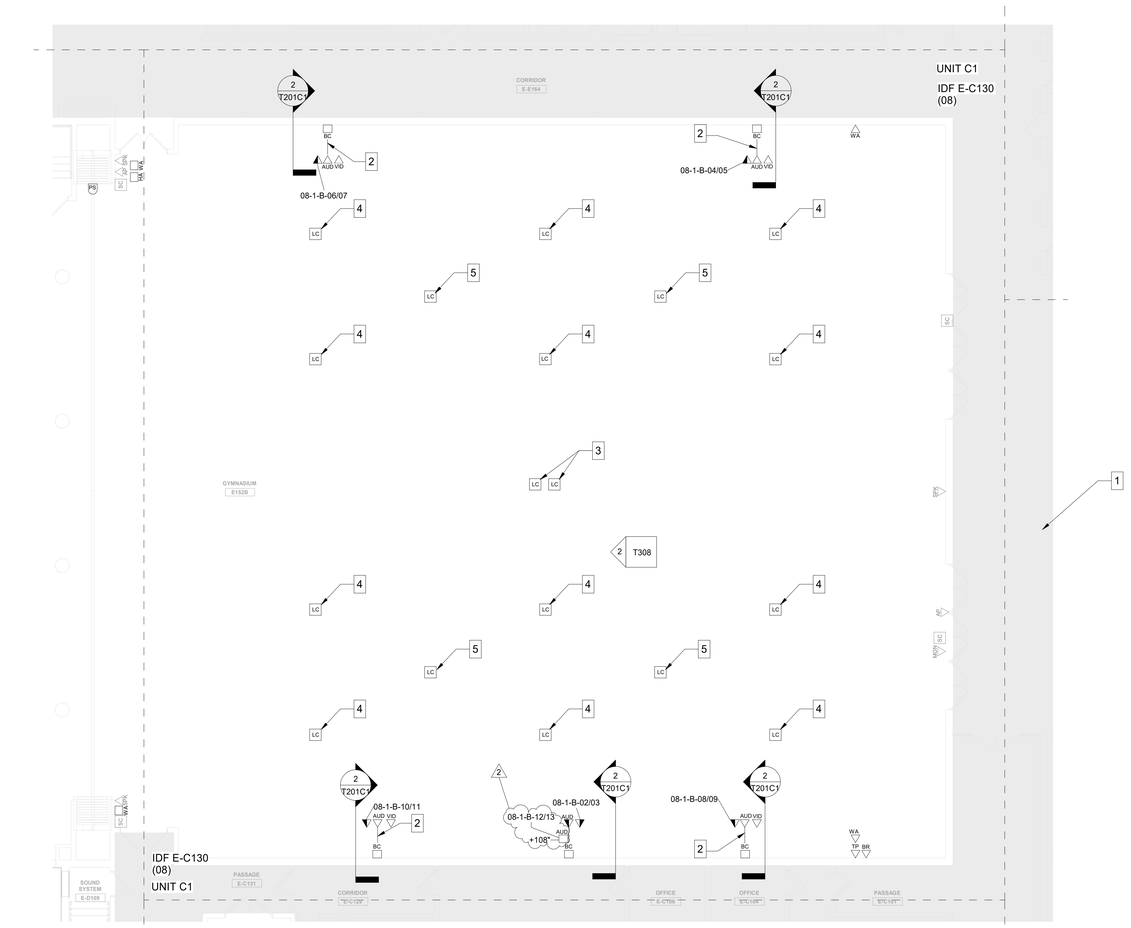
#	Date	Desc.
1	02/28/2024	Addendum #2

100% CONSTRUCTION DOCUMENTS

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: CCW / IOP

ROOF PLUMBING PLAN - UNIT G

PR1G



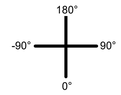
1 FIRST FLOOR TECHNOLOGY PLAN - UNIT C1
1/8" = 1'-0"

SHEET NOTES

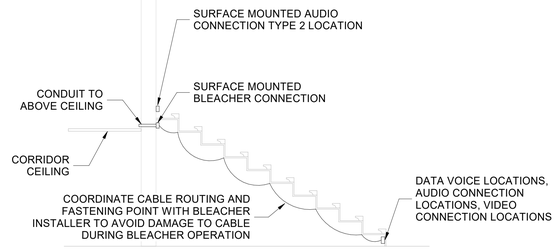
1. FILLED REGION INDICATES AREA OUTSIDE OF SCOPE.
2. CABLING ROUTED UNDER BLEACHERS. COORDINATE WITH BLEACHER INSTALLER TO AVOID CABLE DAMAGE DURING BLEACHER OPERATIONS
3. LOUDSPEAKER TYPE 4 LOCATION.
4. LOUDSPEAKER TYPE 5 LOCATION.
5. LOUDSPEAKER TYPE 6 LOCATION.

SPEAKER SCHEDULE - EXISTING GYM

LABEL	HOR (DEG)	VERT (DEG)	PLACEMENT COMMENTS
CENTER 1 - LOUDSPEAKER TYPE 4	-90	-50	MOUNTED CENTERALLY OVER CENTER COURT FACING WEST
CENTER 2 - LOUDSPEAKER TYPE 4	90	50	MOUNTED CENTERALLY OVER CENTER COURT FACING EAST
NORTH LOWER 1 - LOUDSPEAKER TYPE 5	180	-45	MOUNTED TO STEEL JOIST ABOVE FACING NORTH. STEEL JOIST LOCATED APPROXIMATELY 16 FEET AND 6 INCHES FROM CENTER
NORTH LOWER 2 - LOUDSPEAKER TYPE 5	180	-45	MOUNTED TO STEEL JOIST ABOVE FACING NORTH. STEEL JOIST LOCATED APPROXIMATELY 16 FEET AND 6 INCHES FROM CENTER
NORTH LOWER 3 - LOUDSPEAKER TYPE 5	180	-45	MOUNTED TO STEEL JOIST ABOVE FACING NORTH. STEEL JOIST LOCATED APPROXIMATELY 16 FEET AND 6 INCHES FROM CENTER
NORTH SUB 1 - LOUDSPEAKER TYPE 6	180	-7	MOUNTED TO STEEL JOIST ABOVE FACING NORTH. STEEL JOIST LOCATED APPROXIMATELY 24 FEET AND 9 INCHES FROM CENTER
NORTH SUB 2 - LOUDSPEAKER TYPE 6	180	-7	MOUNTED TO STEEL JOIST ABOVE FACING NORTH. STEEL JOIST LOCATED APPROXIMATELY 24 FEET AND 9 INCHES FROM CENTER
NORTH UPPER 1 - LOUDSPEAKER TYPE 5	180	-16	MOUNTED TO STEEL JOIST ABOVE FACING NORTH. STEEL JOIST LOCATED APPROXIMATELY 33 FEET FROM CENTER
NORTH UPPER 2 - LOUDSPEAKER TYPE 5	180	-16	MOUNTED TO STEEL JOIST ABOVE FACING NORTH. STEEL JOIST LOCATED APPROXIMATELY 33 FEET FROM CENTER
NORTH UPPER 3 - LOUDSPEAKER TYPE 5	180	-16	MOUNTED TO STEEL JOIST ABOVE FACING NORTH. STEEL JOIST LOCATED APPROXIMATELY 33 FEET FROM CENTER
SOUTH LOWER 1 - LOUDSPEAKER TYPE 5	0	-45	MOUNTED TO STEEL JOIST ABOVE FACING SOUTH. STEEL JOIST LOCATED APPROXIMATELY 16 FEET AND 6 INCHES FROM CENTER
SOUTH LOWER 2 - LOUDSPEAKER TYPE 5	0	-45	MOUNTED TO STEEL JOIST ABOVE FACING SOUTH. STEEL JOIST LOCATED APPROXIMATELY 16 FEET AND 6 INCHES FROM CENTER
SOUTH LOWER 3 - LOUDSPEAKER TYPE 5	0	-45	MOUNTED TO STEEL JOIST ABOVE FACING SOUTH. STEEL JOIST LOCATED APPROXIMATELY 16 FEET AND 6 INCHES FROM CENTER
SOUTH SUB 1 - LOUDSPEAKER TYPE 6	0	-7	MOUNTED TO STEEL JOIST ABOVE FACING SOUTH. STEEL JOIST LOCATED APPROXIMATELY 24 FEET AND 9 INCHES FROM CENTER
SOUTH SUB 2 - LOUDSPEAKER TYPE 6	0	-7	MOUNTED TO STEEL JOIST ABOVE FACING SOUTH. STEEL JOIST LOCATED APPROXIMATELY 24 FEET AND 9 INCHES FROM CENTER
SOUTH UPPER 1 - LOUDSPEAKER TYPE 5	0	-16	MOUNTED TO STEEL JOIST ABOVE FACING SOUTH. STEEL JOIST LOCATED APPROXIMATELY 33 FEET FROM CENTER
SOUTH UPPER 2 - LOUDSPEAKER TYPE 5	0	-16	MOUNTED TO STEEL JOIST ABOVE FACING SOUTH. STEEL JOIST LOCATED APPROXIMATELY 33 FEET FROM CENTER
SOUTH UPPER 3 - LOUDSPEAKER TYPE 5	0	-16	MOUNTED TO STEEL JOIST ABOVE FACING SOUTH. STEEL JOIST LOCATED APPROXIMATELY 33 FEET FROM CENTER



HORIZONTAL ANGLING



2 GYMNASIUM E152B BLEACHER CONNECTION SECTION
1/4" = 1'-0"

GENERAL HORIZONTAL CABLING NOTES

A	MINIMUM CATEGORY 6 COMPLIANT 4-PAIR UNSHIELDED TWISTED PAIR (UTP). ALL HORIZONTAL CABLING MUST BE PLENUM RATED.
B	PAINTING OF THE STRUCTURED CABLING WILL VOID THE WARRANTY. ENSURE PROPER COORDINATION WITH PAINTING CONTRACTOR SO THAT ALL STRUCTURED CABLING IS PROTECTED PRIOR TO ANY PAINTING.
C	CONTRACTOR SHALL PROVIDE A DOCUMENTED MANUFACTURER CERTIFIED SOLUTION INCLUDING THE MINIMUM PERFORMANCE AND APPLICATIONS WARRANTY.
D	PROVIDE A MINIMUM 10 FOOT MAINTENANCE LOOP ON EACH HORIZONTAL CABLING RUN. MAINTENANCE LOOPS SHALL BE STORED ABOVE ACCESIBLE CEILINGS, IN CABLE TRAY, AND IN TELECOMMUNICATION ROOM CABLE TRAY. CABLING ABOVE CEILING SHALL BE SUSPENDED FROM APPROPRIATE SUPPORTS AND SHALL NOT TOUCH THE CEILING.
E	ALL PIN/PAIR ASSIGNMENTS SHALL BE T568B.
F	LABELING SHALL BE COMPLETED AS DEFINED IN THE CONTRACT DOCUMENTS AND SHALL BE COORDINATED WITH THE OWNER.
G	PROVIDE ALL TELECOMMUNICATION OUTLETS AS SHOWN ON THE DRAWINGS AND AS REQUIRED TO PROVIDE CONNECTIONS FOR EACH DEVICE SHOWN ON THE DRAWINGS.
H	ALL TESTING OF HORIZONTAL CABLING SHALL BE COMPLETED AS DIRECTED BY THE PROJECT SPECIFICATIONS. ALL CABLING MUST BE TESTED AND CERTIFIED TO THE APPLICABLE STANDARDS.
I	REFER TO SPECIFICATION SECTION 27 15 13 FOR CABLE JACK COLOR REQUIREMENTS.

TECHNOLOGY LEGEND

- DATA VOICE LOCATION - FLUSH MOUNTED
- DATA VOICE RE-CABLE LOCATION
- RC — DATA VOICE LOCATION - SURFACE MOUNTED
- MC — MOBILE CART CONNECTION LOCATION - SURFACE MOUNTED
- MON — MONITOR LOCATION - FLUSH MOUNTED
- MON — MONITOR LOCATION - SURFACE MOUNTED
- WH — WALL HOME LOCATION - FLUSHED MOUNTED
- WH — WALL HOME LOCATION - SURFACE MOUNTED
- AP — WIRELESS ACCESS POINT - CEILING MOUNTED
- AP — WIRELESS ACCESS POINT - WALL MOUNTED
- AV — AV INPUT LOCATION - TYPE 1 FLUSH MOUNTED
- AV — AV INPUT LOCATION - TYPE 2 SURFACE MOUNTED
- AV RACK — AV RACK LOCATION
- AUD — AUDIO CONNECTION LOCATION - TYPE 1 FLUSH MOUNTED
- AUD — AUDIO CONNECTION LOCATION - TYPE 2 FLUSH MOUNTED
- AUD — AUDIO CONNECTION LOCATION - TYPE 3 SURFACE MOUNTED
- AUD — AUDIO CONNECTION LOCATION - TYPE 4 FLUSH MOUNTED
- BC — BLEACHER CONNECTION LOCATION - FLUSH MOUNTED
- BC — BLEACHER CONNECTION LOCATION - SURFACE MOUNTED
- BR — BLUETOOTH RECEIVER LOCATION - FLUSH MOUNTED
- BR — BLUETOOTH RECEIVER LOCATION - SURFACE MOUNTED
- C — CLOCK LOCATION
- C C — DUAL SIDED CLOCK LOCATION
- HA — HEARING ASSIST LOCATION - FLUSH MOUNTED
- HA — HEARING ASSIST LOCATION - SURFACE MOUNTED
- PS — PARTITION SENSOR - CEILING MOUNTED
- TP — TOUCH PANEL - FLUSH MOUNTED
- TP — TOUCH PANEL - SURFACE MOUNTED
- VS — VIDEO INPUT LOCATION - FLUSH MOUNTED
- VC — VOLUME CONTROL LOCATION - FLUSH MOUNTED
- VC — VOLUME CONTROL LOCATION - SURFACE MOUNTED
- WA — WIRELESS MICROPHONE ANTENNA LOCATION - FLUSH MOUNTED
- WA — WIRELESS MICROPHONE ANTENNA LOCATION - SURFACE MOUNTED
- LC — LOUDSPEAKER CONNECTION LOCATION
- PHN — PAGING HORN - WALL MOUNTED
- SPK — PROGRAM SPEAKER LOCATION - WALL MOUNTED
- S — PAGING SPEAKER LOCATION - CEILING MOUNTED
- S — PROGRAM SPEAKER LOCATION - CEILING MOUNTED
- S — SPEAKER - PROGRAM PENDANT MOUNTED
- SW — SPEAKER - PENDANT MOUNTED SUBWOOFER
- CR — CARD READER ROUGH-IN LOCATION
- CR — CARD READER ROUGH-IN LOCATION- MULLION MOUNTED
- D — DOOR POSITION SENSOR ROUGH-IN LOCATION
- SC — SECURITY CAMERA ROUGH-IN - CEILING MOUNTED
- SC — SECURITY CAMERA ROUGH-IN - WALL MOUNTED

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

DESIGN 27 TECHNOLOGY + ACOUSTICS
1650 E. 49TH STREET
INDIANAPOLIS, IN 46205
317.536.8000
WWW.DESIGN27.COM

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Matthew Connolly
BICSI ID # 212593
EXPIRES 12-31-24
RCDD

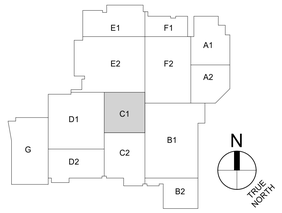
REVISIONS:		
#	Date	Desc.
1	02/15/24	Addendum 1
2	02/28/24	Addendum 2

100% Construction Documents

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: Author

FIRST FLOOR TECHNOLOGY PLAN - UNIT C1

T201C1



PLOT DATE/TIME: 2/28/2024 9:24:47 PM

SHEET NOTES

1. FILLED REGION INDICATES AREA OUTSIDE OF SCOPE.
2. DESIGNATED DATA CONNECTION FOR O.F.C.I. MOBILE MONITOR. REFER TO THE MOBILE CART CONNECTION LOCATION DETAIL IN THE T400 SERIES
3. O.F.C.I ADJUSTABLE MOBILE MONITOR CART LOCATION. REFER TO T300 SERIES FOR AV DIAGRAMS.
4. DATA VOICE LOCATION TO SERVE NEW T.C.C. PANEL. COORDINATE FINAL LOCATION WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION.

GENERAL HORIZONTAL CABLING NOTES

A	MINIMUM CATEGORY 6 COMPLIANT 4-PAIR UNSHIELDED TWISTED PAIR (UTP). ALL HORIZONTAL CABLING MUST BE PLENUM RATED.
B	PAINTING OF THE STRUCTURED CABLING WILL VOID THE WARRANTY. ENSURE PROPER COORDINATION WITH PAINTING CONTRACTOR SO THAT ALL STRUCTURED CABLING IS PROTECTED PRIOR TO ANY PAINTING.
C	CONTRACTOR SHALL PROVIDE A DOCUMENTED MANUFACTURER CERTIFIED SOLUTION INCLUDING THE MINIMUM PERFORMANCE AND APPLICATIONS WARRANTY.
D	PROVIDE A MINIMUM 10 FOOT MAINTENANCE LOOP ON EACH HORIZONTAL CABLING RUN. MAINTENANCE LOOPS SHALL BE STORED ABOVE ACCESIBLE CEILINGS, IN CABLE TRAY, AND IN TELECOMMUNICATION ROOM CABLE TRAY. CABLING ABOVE CEILING SHALL BE SUSPENDED FROM APPROPRIATE SUPPORTS AND SHALL NOT TOUCH THE CEILING.
E	ALL PIN/PAIR ASSIGNMENTS SHALL BE T568B.
F	LABELING SHALL BE COMPLETED AS DEFINED IN THE CONTRACT DOCUMENTS AND SHALL BE COORDINATED WITH THE OWNER.
G	PROVIDE ALL TELECOMMUNICATION OUTLETS AS SHOWN ON THE DRAWINGS AND AS REQUIRED TO PROVIDE CONNECTIONS FOR EACH DEVICE SHOWN ON THE DRAWINGS.
H	ALL TESTING OF HORIZONTAL CABLING SHALL BE COMPLETED AS DIRECTED BY THE PROJECT SPECIFICATIONS. ALL CABLING MUST BE TESTED AND CERTIFIED TO THE APPLICABLE STANDARDS.
I	REFER TO SPECIFICATION SECTION 27 15 13 FOR CABLE JACK COLOR REQUIREMENTS.

TECHNOLOGY LEGEND

- DATA VOICE LOCATION - FLUSH MOUNTED
- DATA VOICE RE-CABLE LOCATION
- RC — DATA VOICE LOCATION - SURFACE MOUNTED
- MC — MOBILE CART CONNECTION LOCATION - SURFACE MOUNTED
- MON — MONITOR LOCATION - FLUSH MOUNTED
- MON — MONITOR LOCATION - SURFACE MOUNTED
- WF — WALL HOME LOCATION - FLUSHED MOUNTED
- WH — WALL HOME LOCATION - SURFACE MOUNTED
- AP — WIRELESS ACCESS POINT - CEILING MOUNTED
- AP — WIRELESS ACCESS POINT - WALL MOUNTED
- AV — AV INPUT LOCATION - TYPE 1 FLUSH MOUNTED
- AV — AV INPUT LOCATION - TYPE 2 SURFACE MOUNTED
- AV RACK — AV RACK LOCATION
- AUD — AUDIO CONNECTION LOCATION - TYPE 1 FLUSH MOUNTED
- AUD — AUDIO CONNECTION LOCATION - TYPE 2 FLUSH MOUNTED
- AUD — AUDIO CONNECTION LOCATION - TYPE 3 SURFACE MOUNTED
- AUD — AUDIO CONNECTION LOCATION - TYPE 4 FLUSH MOUNTED
- BC — BLEACHER CONNECTION LOCATION - FLUSH MOUNTED
- BC — BLEACHER CONNECTION LOCATION - SURFACE MOUNTED
- BR — BLUETOOTH RECEIVER LOCATION - FLUSH MOUNTED
- BR — BLUETOOTH RECEIVER LOCATION - SURFACE MOUNTED
- C — CLOCK LOCATION
- C C — DUAL SIDED CLOCK LOCATION
- HA — HEARING ASSIST LOCATION - FLUSH MOUNTED
- HA — HEARING ASSIST LOCATION - SURFACE MOUNTED
- PS — PARTITION SENSOR - CEILING MOUNTED
- TP — TOUCH PANEL - FLUSH MOUNTED
- TP — TOUCH PANEL - SURFACE MOUNTED
- VID — VIDEO INPUT LOCATION - FLUSH MOUNTED
- VC — VOLUME CONTROL LOCATION - FLUSH MOUNTED
- VC — VOLUME CONTROL LOCATION - SURFACE MOUNTED
- WA — WIRELESS MICROPHONE ANTENNA LOCATION - FLUSH MOUNTED
- WA — WIRELESS MICROPHONE ANTENNA LOCATION - SURFACE MOUNTED
- LC — LOUDSPEAKER CONNECTION LOCATION
- PAGING HORN - WALL MOUNTED
- PROGRAM SPEAKER LOCATION - WALL MOUNTED
- S — PAGING SPEAKER LOCATION - CEILING MOUNTED
- S — PROGRAM SPEAKER LOCATION - CEILING MOUNTED
- S — SPEAKER - PROGRAM PENDANT MOUNTED
- SW — SPEAKER - PENDANT MOUNTED SUBWOOFER
- CR — CARD READER ROUGH-IN LOCATION
- CR — CARD READER ROUGH-IN LOCATION- MULLION MOUNTED
- DOOR POSITION SENSOR ROUGH-IN LOCATION
- SC — SECURITY CAMERA ROUGH-IN - CEILING MOUNTED
- SC — SECURITY CAMERA ROUGH-IN - WALL MOUNTED

1 FIRST FLOOR TECHNOLOGY PLAN - UNIT D1
1/8" = 1'-0"

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

DESIGN 27 TECHNOLOGY + ACOUSTICS
1650 E. 49TH STREET
INDIANAPOLIS, IN 46205
317.536.8000
WWW.DESIGN27.COM

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI Matthew Connolly BICSI ID # 212593 EXPIRES 12-31-24
RCDD

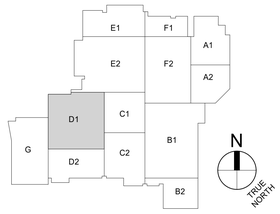
REVISIONS:

#	Date	Desc.
1	02/15/24	Addendum 1
2	02/26/24	Addendum 2

100% Construction Documents

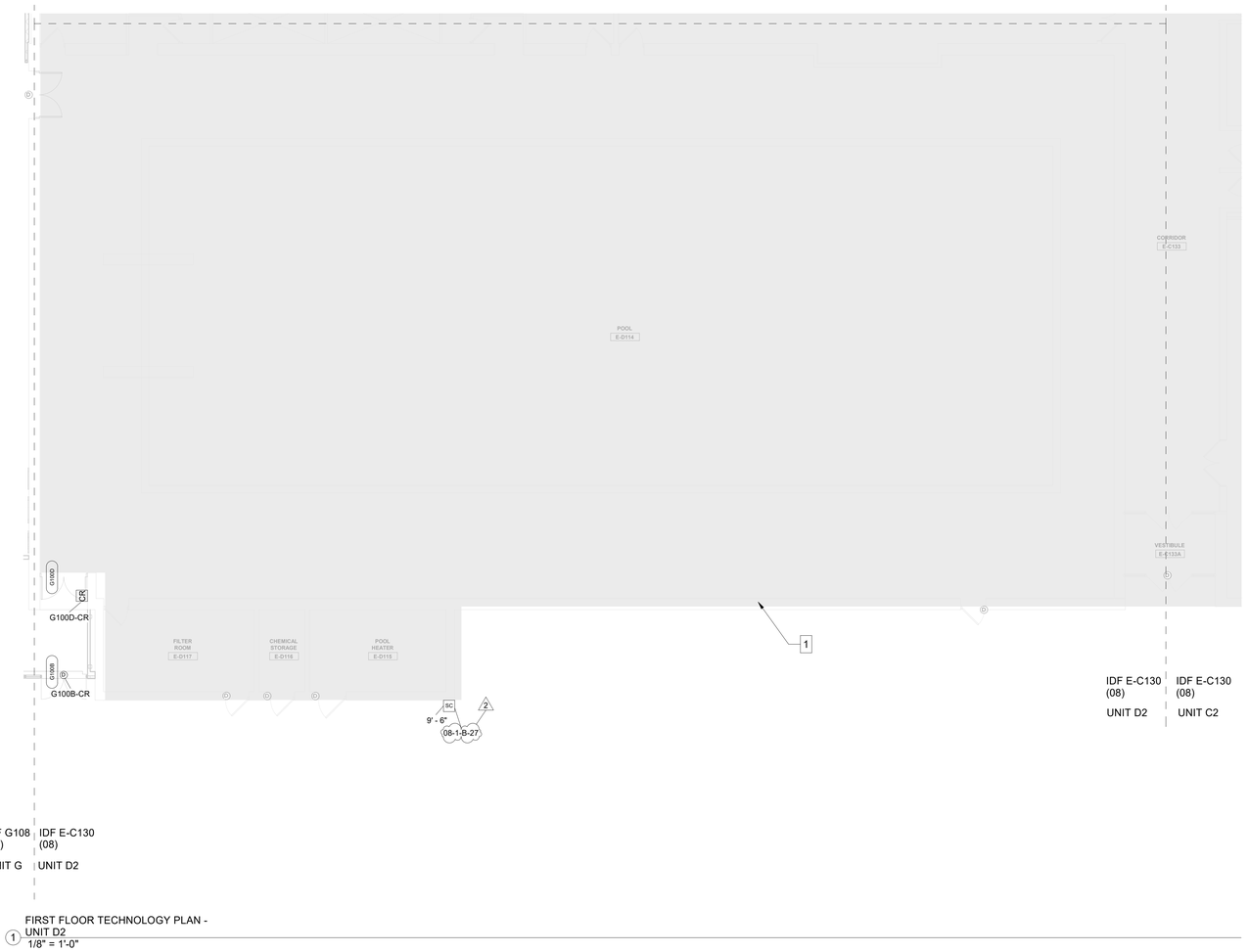
PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: Author

FIRST FLOOR TECHNOLOGY PLAN - UNIT D1



T201D1

PLOT DATE/TIME: 2/28/2024 5:25:07 PM



1 FIRST FLOOR TECHNOLOGY PLAN - UNIT D2
1/8" = 1'-0"

SHEET NOTES

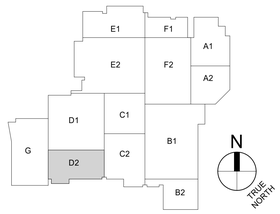
1 FILLED REGION INDICATES AREA OUTSIDE OF SCOPE.

GENERAL HORIZONTAL CABLING NOTES

A	MINIMUM CATEGORY 6 COMPLIANT 4-PAIR UNSHIELDED TWISTED PAIR (UTP). ALL HORIZONTAL CABLING MUST BE PLENUM RATED.
B	PAINTING OF THE STRUCTURED CABLING WILL VOID THE WARRANTY. ENSURE PROPER COORDINATION WITH PAINTING CONTRACTOR SO THAT ALL STRUCTURED CABLING IS PROTECTED PRIOR TO ANY PAINTING.
C	CONTRACTOR SHALL PROVIDE A DOCUMENTED MANUFACTURER CERTIFIED SOLUTION INCLUDING THE MINIMUM PERFORMANCE AND APPLICATIONS WARRANTY.
D	PROVIDE A MINIMUM 10 FOOT MAINTENANCE LOOP ON EACH HORIZONTAL CABLING RUN. MAINTENANCE LOOPS SHALL BE STORED ABOVE ACCESIBLE CEILINGS, IN CABLE TRAY, AND IN TELECOMMUNICATION ROOM CABLE TRAY. CABLING ABOVE CEILING SHALL BE SUSPENDED FROM APPROPRIATE SUPPORTS AND SHALL NOT TOUCH THE CEILING.
E	ALL PIN/PAIR ASSIGNMENTS SHALL BE T568B.
F	LABELING SHALL BE COMPLETED AS DEFINED IN THE CONTRACT DOCUMENTS AND SHALL BE COORDINATED WITH THE OWNER.
G	PROVIDE ALL TELECOMMUNICATION OUTLETS AS SHOWN ON THE DRAWINGS AND AS REQUIRED TO PROVIDE CONNECTIONS FOR EACH DEVICE SHOWN ON THE DRAWINGS.
H	ALL TESTING OF HORIZONTAL CABLING SHALL BE COMPLETED AS DIRECTED BY THE PROJECT SPECIFICATIONS. ALL CABLING MUST BE TESTED AND CERTIFIED TO THE APPLICABLE STANDARDS.
I	REFER TO SPECIFICATION SECTION 27 15 13 FOR CABLE JACK COLOR REQUIREMENTS.

TECHNOLOGY LEGEND

- DATA VOICE LOCATION - FLUSH MOUNTED
- DATA VOICE RE-CABLE LOCATION
- RC — DATA VOICE LOCATION - SURFACE MOUNTED
- MC — MOBILE CART CONNECTION LOCATION - SURFACE MOUNTED
- MON — MONITOR LOCATION - FLUSH MOUNTED
- MON — MONITOR LOCATION - SURFACE MOUNTED
- WP — WALL HOME LOCATION - FLUSHED MOUNTED
- WP — WALL HOME LOCATION - SURFACE MOUNTED
- AP — WIRELESS ACCESS POINT - CEILING MOUNTED
- AP — WIRELESS ACCESS POINT - WALL MOUNTED
- AV — AV INPUT LOCATION - TYPE 1 FLUSH MOUNTED
- AV — AV INPUT LOCATION - TYPE 2 SURFACE MOUNTED
- AV RACK — AV RACK LOCATION
- AUD — AUDIO CONNECTION LOCATION - TYPE 1 FLUSH MOUNTED
- AUD — AUDIO CONNECTION LOCATION - TYPE 2 FLUSH MOUNTED
- AUD — AUDIO CONNECTION LOCATION - TYPE 3 SURFACE MOUNTED
- AUD — AUDIO CONNECTION LOCATION - TYPE 4 FLUSH MOUNTED
- BC — BLEACHER CONNECTION LOCATION - FLUSH MOUNTED
- BC — BLEACHER CONNECTION LOCATION - SURFACE MOUNTED
- BR — BLUETOOTH RECEIVER LOCATION - FLUSH MOUNTED
- BR — BLUETOOTH RECEIVER LOCATION - SURFACE MOUNTED
- C — CLOCK LOCATION
- C C — DUAL SIDED CLOCK LOCATION
- HA — HEARING ASSIST LOCATION - FLUSH MOUNTED
- HA — HEARING ASSIST LOCATION - SURFACE MOUNTED
- PS — PARTITION SENSOR - CEILING MOUNTED
- TP — TOUCH PANEL - FLUSH MOUNTED
- TP — TOUCH PANEL - SURFACE MOUNTED
- VID — VIDEO INPUT LOCATION - FLUSH MOUNTED
- VC — VOLUME CONTROL LOCATION - FLUSH MOUNTED
- VC — VOLUME CONTROL LOCATION - SURFACE MOUNTED
- WA — WIRELESS MICROPHONE ANTENNA LOCATION - FLUSH MOUNTED
- WA — WIRELESS MICROPHONE ANTENNA LOCATION - SURFACE MOUNTED
- LC — LOUDSPEAKER CONNECTION LOCATION
- SPK — PAGING HORN - WALL MOUNTED
- SPK — PROGRAM SPEAKER LOCATION - WALL MOUNTED
- S — PAGING SPEAKER LOCATION - CEILING MOUNTED
- S — PROGRAM SPEAKER LOCATION - CEILING MOUNTED
- S — SPEAKER - PROGRAM PENDANT MOUNTED
- SW — SPEAKER - PENDANT MOUNTED SUBWOOFER
- CR — CARD READER ROUGH-IN LOCATION
- CR — CARD READER ROUGH-IN LOCATION- MULLION MOUNTED
- D — DOOR POSITION SENSOR ROUGH-IN LOCATION
- SC — SECURITY CAMERA ROUGH-IN - CEILING MOUNTED
- SC — SECURITY CAMERA ROUGH-IN - WALL MOUNTED



LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

DESIGN 27 TECHNOLOGY + ACOUSTICS
1650 E. 49TH STREET
INDIANAPOLIS, IN 46205
317.536.8000
WWW.DESIGN27.COM

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Matthew Connolly
BICSI ID # 212593
EXPIRES 12-31-24
RCDD

REVISIONS:

#	Date	Desc.
1	02/15/24	Addendum 1
2	02/26/24	Addendum 2

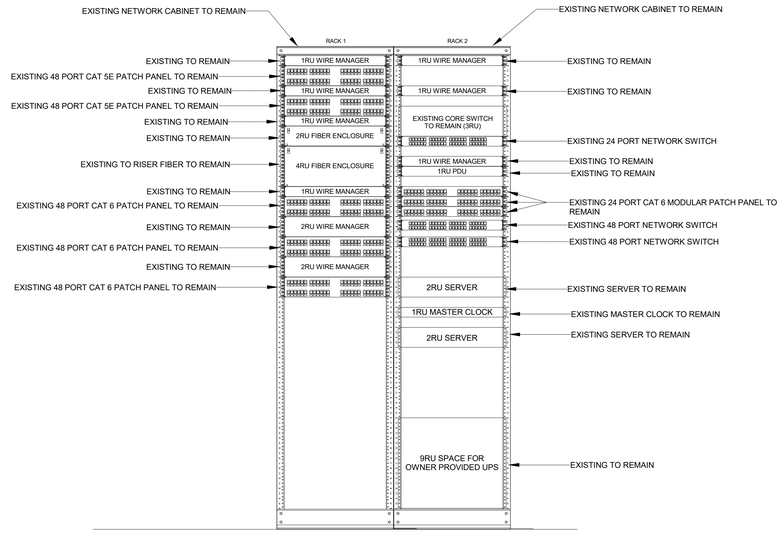
100% Construction Documents

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: Author

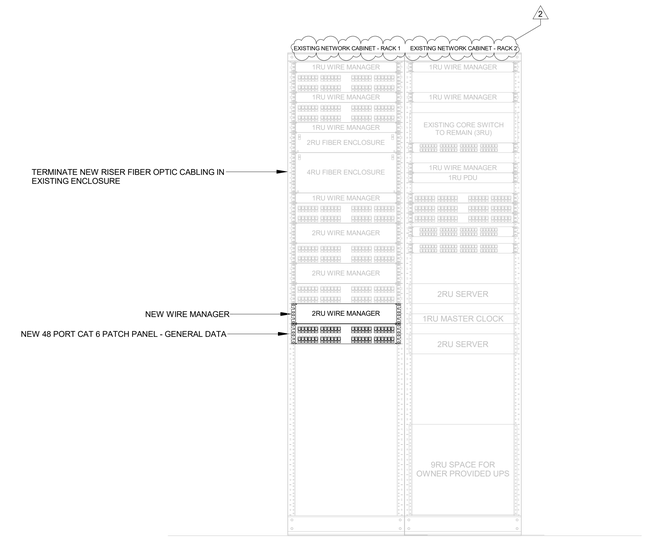
FIRST FLOOR TECHNOLOGY PLAN - UNIT D2

T201D2

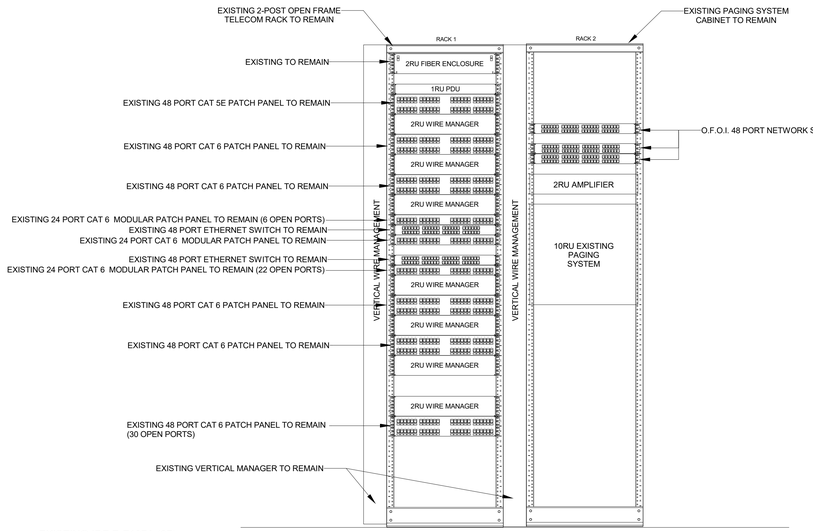
PLOT DATE/TIME: 2/29/2024 5:25:59 PM



4 EXISTING MDF (00) E-E154
RACK ELEVATION
N.T.S.



13 NEW MDF (00) E-E154 RACK ELEVATION
N.T.S.



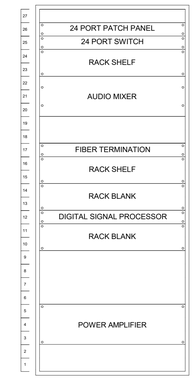
2 EXISTING IDF E-F107A (07)
RACK ELEVATION
N.T.S.

12 NEW IDF E-F107A (07) RACK ELEVATION
N.T.S.

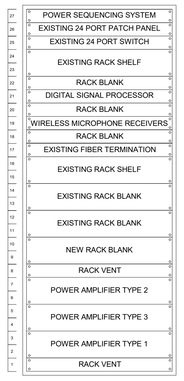
1 EXISTING IDF E-C130 (08)
RACK ELEVATION
N.T.S.

11 NEW IDF E-C130 (08) RACK ELEVATION
N.T.S.

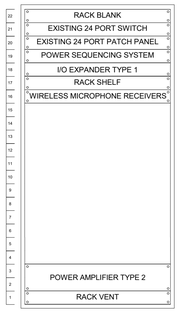
3 NEW IDF G108 (09) RACK ELEVATION
N.T.S.



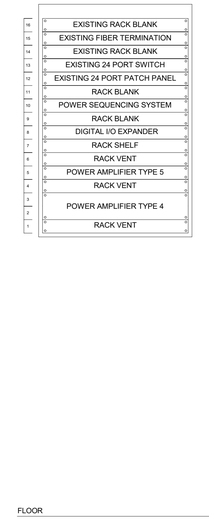
8 HOME FOOTBALL PRESSBOX EXISTING AV RACK ELEVATION
N.T.S.



9 HOME FOOTBALL PRESSBOX NEW AV RACK ELEVATION
N.T.S.



10 VISITOR FOOTBALL PRESSBOX NEW AV RACK ELEVATION
N.T.S.



5 CONCESSION FOOTBALL PRESSBOX AV RACK ELEVATION
N.T.S.

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

DESIGN 27 TECHNOLOGY + ACOUSTICS
1650 E. 49TH STREET
INDIANAPOLIS, IN 46205
317.536.8000
WWW.DESIGN27.COM

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REVISIONS:

#	Date	Desc.
1	02/15/24	Addendum 1
2	02/26/24	Addendum 2

100% Construction Documents

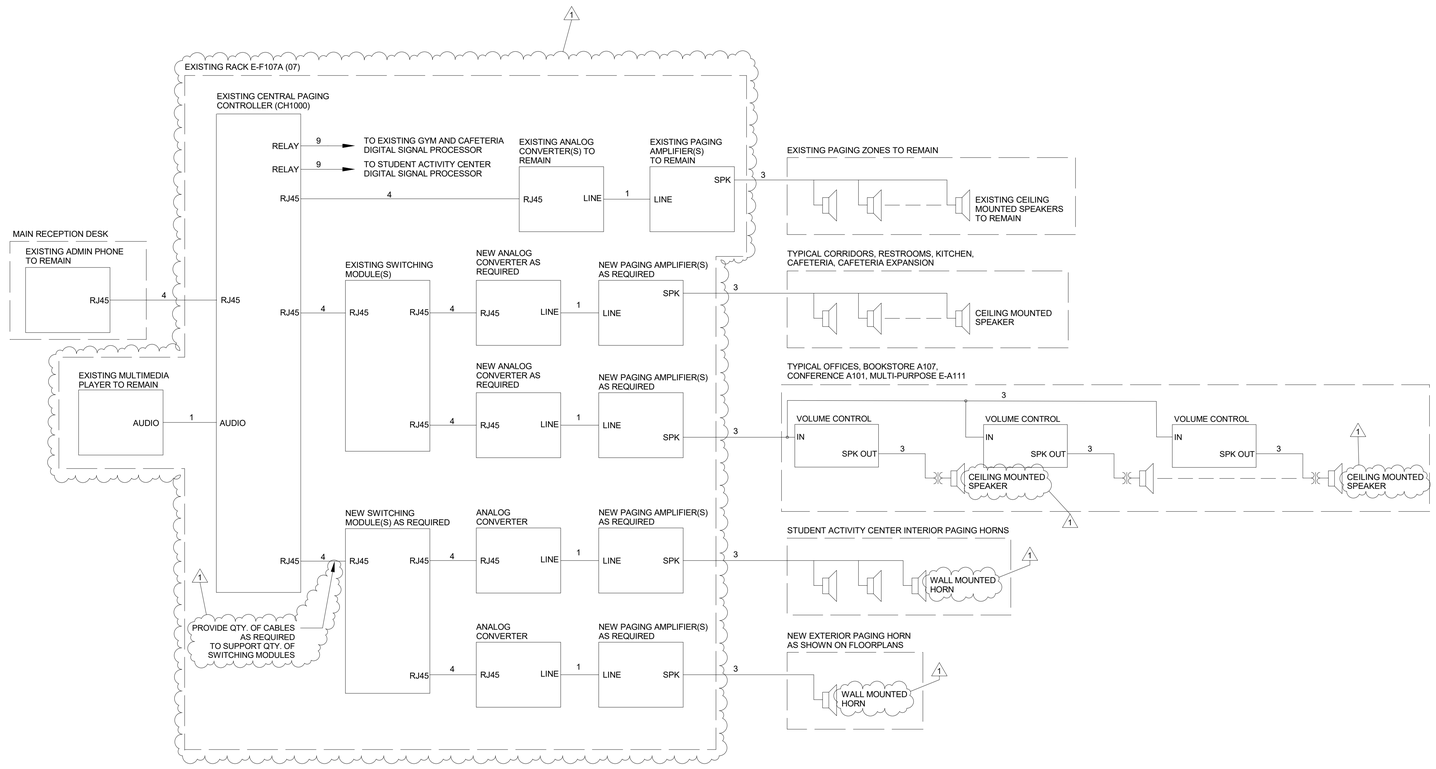
PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: Author

RACK ELEVATIONS

T302

PLOT DATE/TIME:2/28/2024 5:25:12 PM

AV CABLING LEGEND	
1	BALANCED MICROPHONE / LINE LEVEL CABLING
2	12 AWG LOUDSPEAKER CABLING
3	16 AWG LOUDSPEAKER CABLING
4	UTP CABLING
5	STP CABLING
6	HDMI CABLING
7	USB CABLING
8	RS-232 CABLING
9	RELAY CABLING
10	RF CABLING
11	MANUFACTURER RECOMMENDED CABLING



1 PAGING AND INTERCOM DIAGRAM
N.T.S.

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

DESIGN 27 TECHNOLOGY + ACOUSTICS
1650 E. 49TH STREET
INDIANAPOLIS, IN 46205
317.536.8000
WWW.DESIGN27.COM

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Matthew Connolly
BICSI ID # 212593
EXPIRES 12-31-24
RCDD

REVISIONS:

#	Date	Desc.
1	02/28/24	Addendum 2

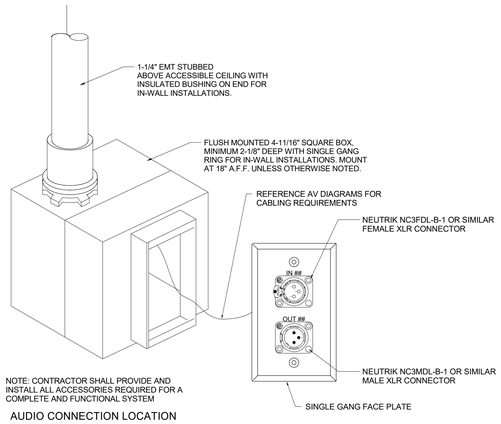
100% Construction Documents

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: Author

AV DIAGRAM

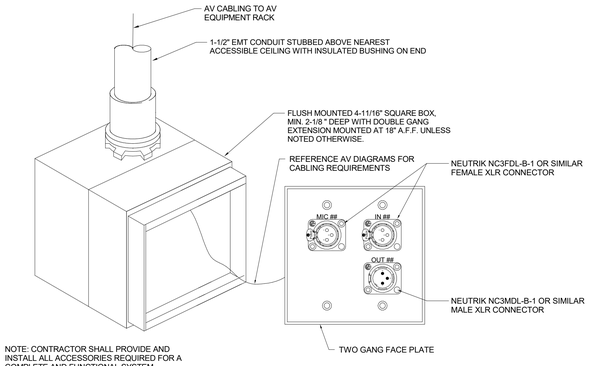
T305

PLOT DATE/TIME: 2/28/2024 9:25:13 PM



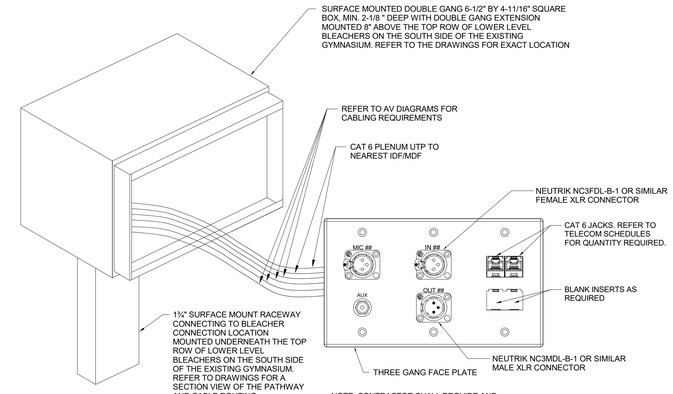
NOTE: CONTRACTOR SHALL PROVIDE AND INSTALL ALL ACCESSORIES REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM

1 AUDIO CONNECTION LOCATION - TYPE 1
N.T.S.



NOTE: CONTRACTOR SHALL PROVIDE AND INSTALL ALL ACCESSORIES REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM

2 AUDIO CONNECTION LOCATION - TYPE 2
N.T.S.



NOTE: CONTRACTOR SHALL PROVIDE AND INSTALL ALL ACCESSORIES REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM

3 AUDIO CONNECTION LOCATION - TYPE 3
N.T.S.

NOTE: CONTRACTOR SHALL PROVIDE AND INSTALL ALL ACCESSORIES REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM

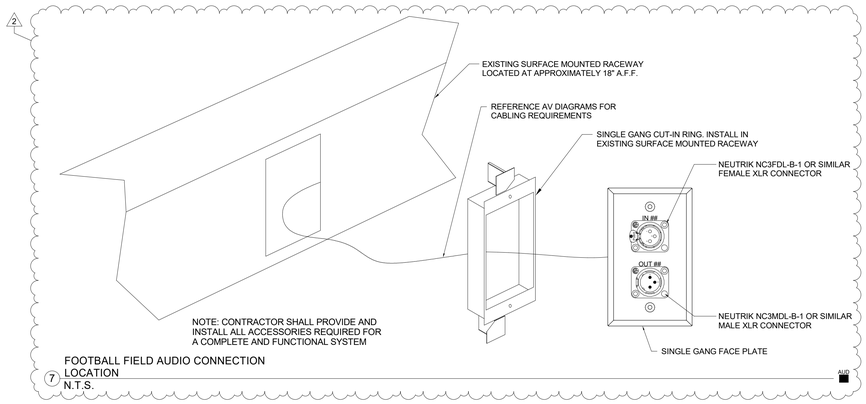
4 AUDIO CONNECTION LOCATION - TYPE 4
N.T.S.

NOTE: CONTRACTOR SHALL PROVIDE AND INSTALL ALL ACCESSORIES REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM

5 AV CONNECTION LOCATION - TYPE 1
N.T.S.

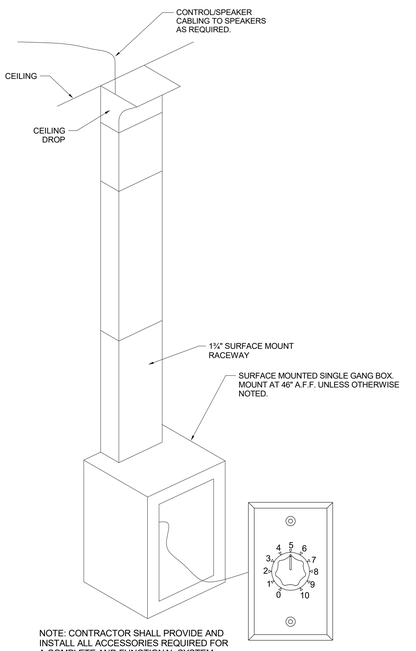
NOTE: CONTRACTOR SHALL PROVIDE AND INSTALL ALL ACCESSORIES REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM

6 AV CONNECTION LOCATION - TYPE 2
N.T.S.



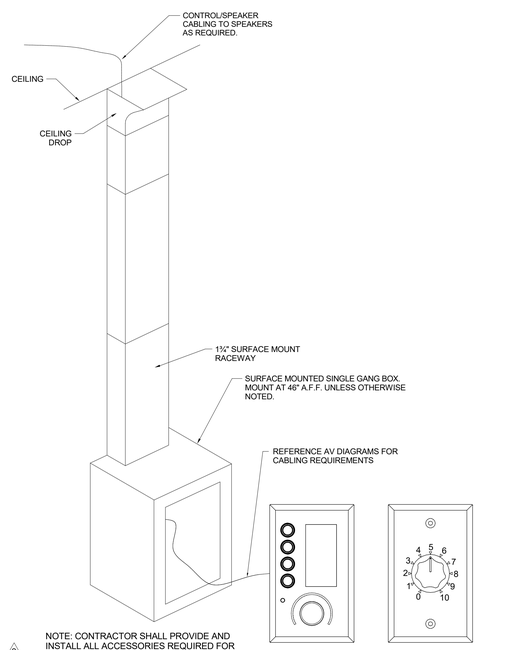
NOTE: CONTRACTOR SHALL PROVIDE AND INSTALL ALL ACCESSORIES REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM

7 FOOTBALL FIELD AUDIO CONNECTION LOCATION
N.T.S.



NOTE: CONTRACTOR SHALL PROVIDE AND INSTALL ALL ACCESSORIES REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM

8 VOLUME CONTROL LOCATION - SURFACE MOUNTED
N.T.S.



NOTE: CONTRACTOR SHALL PROVIDE AND INSTALL ALL ACCESSORIES REQUIRED FOR A COMPLETE AND FUNCTIONAL SYSTEM

VOLUME CONTROL LOCATION TYPE 2

VOLUME CONTROL LOCATION TYPE 3

9 FOOTBALL FIELD VOLUME CONTROL LOCATIONS
N.T.S.

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

DESIGN 27 TECHNOLOGY + ACOUSTICS
1650 E. 49TH STREET
INDIANAPOLIS, IN 46205
317.536.8000
WWW.DESIGN27.COM

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REVISIONS:

#	Date	Desc.
1	02/15/24	Addendum 1
2	02/26/24	Addendum 2

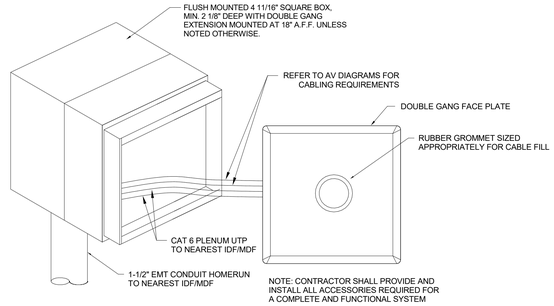
100% Construction Documents

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: Author

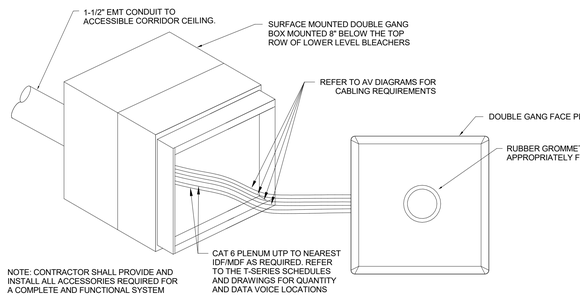
TECHNOLOGY DETAILS

T401

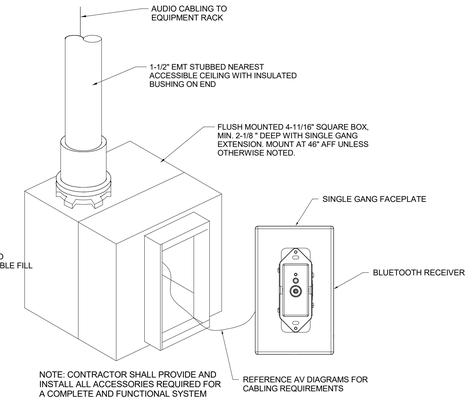
PLOT DATE/TIME: 2/28/2024 9:25:14 PM



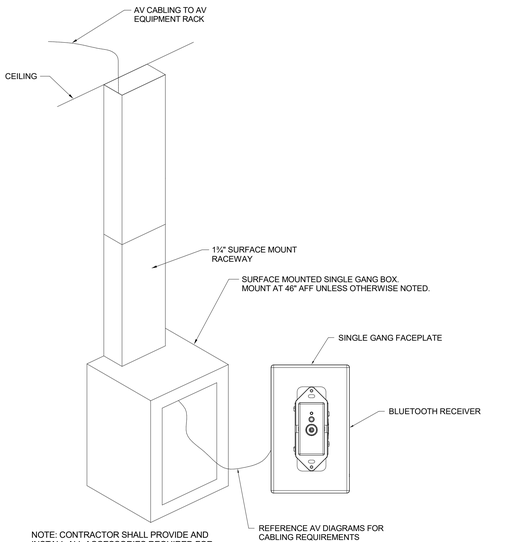
1 BLEACHER CONNECTION LOCATION - FLUSH MOUNTED
N.T.S.



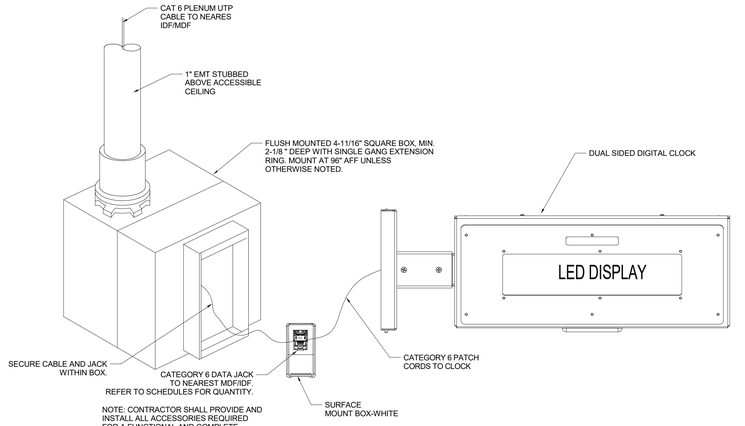
2 BLEACHER CONNECTION LOCATION - SURFACE MOUNTED
N.T.S.



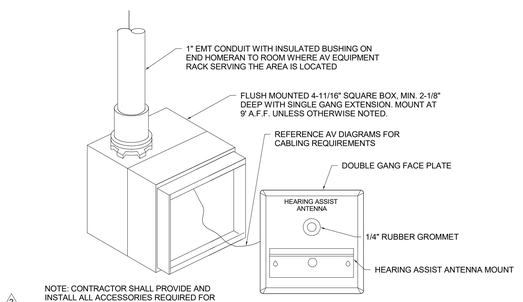
3 BLUETOOTH RECEIVER LOCATION - FLUSH MOUNTED
N.T.S.



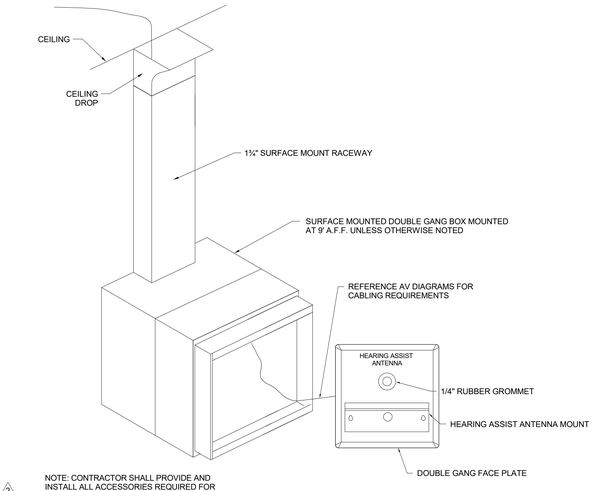
4 BLUETOOTH RECEIVER LOCATION - SURFACE MOUNTED
N.T.S.



5 DUAL SIDED CLOCK LOCATION
N.T.S.



6 HEARING ASSIST ANTENNA LOCATION - FLUSH MOUNTED
N.T.S.



7 HEARING ASSIST ANTENNA LOCATION - SURFACE MOUNTED
N.T.S.

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST STREET
INDIANAPOLIS, IN 46204

DESIGN 27 TECHNOLOGY + ACOUSTICS
1650 E. 49TH STREET
INDIANAPOLIS, IN 46205
317.536.8000
WWW.DESIGN27.COM

RICHLAND-BEAN BLOSSOM CSC
EDGEWOOD HS - ADDITION & RENOVATIONS
601 EDGEWOOD DR,
ELLETSVILLE, IN 47429

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
BICSI
Matthew Connolly
BICSI ID # 212593
EXPIRES 12-31-24
RCDD

REVISIONS:

#	Date	Desc.
1	02/15/24	Addendum 1
2	02/26/24	Addendum 2

100% Construction Documents

PROJECT: #23117
DATE: 01/31/2024
DRAWN BY: Author

TECHNOLOGY DETAILS

T402

PLOT DATE/TIME: 2/29/2024 5:45:15 PM