ADDENDUM NO. ONE

PROJECT:	**Sunman-Dearborn Community Schools ECHS RESTROOM/CONCESSION**
PROJECT NUMBER:	**23138**
DATE OF ADDENDUM:	**2025-07-08**

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 & ANSWERS:

Q: On sheet A601 Is the one sectional door 7'4"wide x 8'0"tall or 8'0"wide x 7'4"tall? Door Schedule says both.
A: 7’-4” tall, 8’-0” wide

Q: For spec section 08 36 13 Is a 3 HP motor for the sectional overhead door necessary? 1/2 HP was recommended by contractor.
A: Provide the power requirements as specified

Q: What color are the counter shutters and the sectional door to be? Sectional overhead doors spec mentions white interior then selected by the Architect for exterior.
A: For the OH door and counter shutters color to be selected from the list manufacturer's standard colors.

Q: Spec calls for counter shutters to be insulated. Is this necessary?
A: Yes, please provide insulated overhead shutters

Q: Are motors necessary for the counter shutters? Speced to have 1/2 HP motor.
A: Yes, please provide motors

Q: On Sheet A311 Section number 2 calls out to have 3" Rigid Insulation while all other sections call out 2" Rigid, are they all to be 2" or 3"? Will the insulation differ along foundation up to where the walls start?
A: All wall insulation to be 2”

Q: Hardware group no. 11 calls out doors E101 and E102. These doors are not shown on door schedule or drawings. Are these to be added to drawings or deleted from current specs?
A: These doors are the exterior gates. Keep the specs as they are

Q: Spec calls out to match existing keying system. What keyway is the existing?
A: Match High School keying system

Q: Reference detail 2/A003 – Roof Assembly R1a. Detail shows a cover board between the insulation and membrane, but there’s no leader calling it out. It’s not shown in the wall sections and not specified in Section 075323. Is a cover board required? If so, please provide spec on the cover board.
A: Do not provide cover board

Q: Sheet S100: All the wall footers at the plumbing chase walls are noted as WF36 or WF36T, but they scale 4’6” to 4’11” in width, please clarify what size these footers should be.
A: The W36/W36T wall footings under the chase walls represent 2 separate wall footings, one for each chase wall. Both wall footings should be centered under their respective wall. The intersection of the two will create one continuous mass of concrete. The two transverse bars can be combined into one that runs the full width of the footing (with typical cover). The scaled width of the total footing would depend on the spacing of the chase walls since each W36/36T is centered on the walls.

SPECIFICATIONS:

1. Specification Section 08 33 14, “Electric Hand Dryers”

2. Specification Section 232500, “HVAC Water Treatment”.
   A. Part 2.2 A 1: Add LinkOne Industrial Solutions One Guard as an acceptable product for inhibited propylene glycol.

3. Specification Section 26 0811, “Electric Hand Dryers”
   A. Add section in its entirety.

4. Specification Section 33 32 00, “Hand Rails”
   Add section in its entirety

DRAWINGS:

1. Sheet 200
   - Added notes clarifying fence removal in several areas
   - Added notes to remove lighted bollards and return to owner
   - Added note to remove and relocate the gate stop post in the existing sidewalk

2. Sheet 300
   - Adjusted the limits of fence removal at the western drive entrance and location of new fencing.
   - Added a note to relocate the existing gate stop post by the sidewalk connection.
   - Added the ‘A’ tag in the landscape area between the new sidewalk and existing
   drive.

3. Sheet 500
   - Added additional spot grades on the backside of the new building to better
   illustrate drainage patterns.
   - Revised the grading for the new sidewalk on the west side of the bleachers to be ADA compliant.

4. Drawing Sheet Number: A102
   Drawing Sheet Title: FLOOR PLAN – FIRST FLOOR - BLEACHERS

   a. Adjust the layout of the vinyl graphics

5. Drawing Sheet Number: A311
   Drawing Sheet Title: WALL SECTIONS

   a. On detail 2 change wall insulation thickness to 2”

6. Drawing sheet E101
   A. Delete bollards as indicated. Refer to supplemental information drawing E101 for additional information.

7. Drawing Sheet E501
   A. Light Fixture Schedule: Add the following manufacture to fixture type BL1: LITHONIA #MRW-P2-40K-SR4-MVOLT

Attachments:

Sheets: 200, 300, 500, A102, E101

END OF ADDENDUM NO. ONE

SECTION 33 3200 – HANDRAILS

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. Installation of handrails.

1.3 PERFORMANCE REQUIREMENTS

A. Delegated Design: Design railings, including comprehensive engineering analysis by a qualified professional engineer, using performance requirements and design criteria indicated.

B. General: In engineering railings to withstand structural loads indicated, determine allowable design working stresses of railing materials based on the following:

1. Stainless Steel: 60 percent of minimum yield strength.

C. Structural Performance: Railings shall withstand the effects of gravity loads and the following loads and stresses within limits and under conditions indicated:

1. Handrails and Top Rails of Guards:

a. Uniform load of 50 lbf/ ft. applied in any direction.

b. Concentrated load of 200 lbf applied in any direction.

c. Uniform and concentrated loads need not be assumed to act concurrently.

2. Infill of Guards:

a. Concentrated load of 50 lbf applied horizontally on an area of 1 sq. ft.

b. Infill load and other loads need not be assumed to act concurrently.

D. Thermal Movements: Allow for thermal movements from ambient and surface temperature changes acting on exterior metal fabrications by preventing buckling, opening of joints, overstressing of components, failure of connections, and other detrimental effects.

1. Temperature Change: 120 deg F, ambient; 180 deg F, material surfaces.

E. Control of Corrosion: Prevent galvanic action and other forms of corrosion by insulating metals and other materials from direct contact with incompatible materials.

1.4 ACTION SUBMITTALS

A. Product Data: For the following:

1. Manufacturer's product lines of mechanically connected railings.

2. Railing brackets.

3. Grout, anchoring cement, and paint products.

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work.

C. Samples for Verification: For each type of exposed finish required.

1. Sections of each distinctly different linear railing member, including handrails, top rails, posts, and balusters.

2. Fittings and brackets.

D. Delegated-Design Submittal: For installed products indicated to comply with performance requirements and design criteria, including analysis data signed and sealed by the qualified professional engineer responsible for their preparation.

1.5 INFORMATIONAL SUBMITTALS

A. Qualification Data: For qualified professional engineer and testing agency.

B. Mill Certificates: Signed by manufacturers of stainless-steel products certifying that products furnished comply with requirements.

C. Welding certificates.

D. Product Test Reports: Based on evaluation of comprehensive tests performed by a qualified testing agency, according to ASTM E 894 and ASTM E 935.

1.6 QUALITY ASSURANCE

A. Source Limitations: Obtain each type of railing from single source from single manufacturer.

B. Professional Engineer Qualifications: A professional engineer who is legally qualified to practice in jurisdiction where Project is located and who is experienced in providing engineering services of the kind indicated.

C. Fabricator Qualifications: A firm experienced in producing metal stairs similar to those indicated for this Project and with a record of successful in-service performance, as well as sufficient production capacity to produce required units.

D. Design and Fabrication Standards:

1. Fabricate railings in accordance with the recommendations of ANSI/NAAMM AMP-521. Finish joints in railings accordance with the following National and Ornamental & Miscellaneous Metal Association (NOMMA) standards:

a. Commercial Stairs, Guard Rails in Occupied Spaces: Type 2

E. Welding Qualifications: Qualify procedures and personnel according to the following:

1. AWS D1.6, "Structural Welding Code - Stainless Steel."

1.7 PROJECT CONDITIONS

A. Field Measurements: Verify actual locations of walls and other construction contiguous with metal fabrications by field measurements before fabrication.

1.8 COORDINATION AND SCHEDULING

A. Coordinate selection of shop primers with topcoats to be applied over them. Comply with paint and coating manufacturers' written recommendations to ensure that shop primers and topcoats are compatible with one another.

B. Coordinate installation of anchorages for railings. Furnish setting drawings, templates, and directions for installing anchorages, including sleeves, concrete inserts, anchor bolts, and items with integral anchors, that are to be embedded in concrete or masonry. Deliver such items to Project site in time for installation.

C. Schedule installation so wall attachments are made only to completed walls. Do not support railings temporarily by any means that do not satisfy structural performance requirements.

PART 2 - PRODUCTS

2.1 MANUFACTURERS

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

1. Stainless-Steel Pipe and Tube Railings:

a. Construction Services, Inc., Decatur, Alabama

b. Jerico Metal Specialties, Inc.

c. Lin-El, Inc., Martinsville, Indiana

d. Livers Bronze Co., Inc.

e. Thomco, Indianapolis, Indiana

f. Custom producers listed above using the following:
   1) Blum: Julius Blum and Co., Inc.
   2) Braun: J. G. Braun Co.
   3) Wagner: R & B Wagner, Inc.

2.2 METALS, GENERAL

A. Metal Surfaces, General: Provide materials with smooth surfaces, without seam marks, roller marks, rolled trade names, stains, discolorations, or blemishes.

B. Brackets, Flanges, and Anchors: Cast or formed metal of same type of material and finish as supported rails unless otherwise indicated.

2.3 STAINLESS STEEL

A. Tubing: ASTM A 554, Grade MT 316L.

B. Pipe: ASTM A 312/A 312M, Grade TP 316L.

C. Castings: ASTM A 743/A 743M, Grade CF 8M or CF 3M.

D. Plate and Sheet: ASTM A 240/A 240M or ASTM A 666, Type 316L.

2.4 FASTENERS

A. General: Provide the following:

1. Stainless-Steel Railings: Type 316 stainless-steel fasteners.

B. Fasteners for Anchoring Railings to Other Construction: Select fasteners of type, grade, and class required to produce connections suitable for anchoring railings to other types of construction indicated and capable of withstanding design loads.

C. Fasteners for Interconnecting Railing Components:

1. Provide concealed fasteners for interconnecting railing components and for attaching them to other work, unless otherwise indicated.

2. Material for Exterior Locations and Where Stainless Steel is Indicated: Alloy Group 2 (A4) stainless-steel bolts, ASTM F 593, and nuts, ASTM F 594.

2.5 MISCELLANEOUS MATERIALS

A. Welding Rods and Bare Electrodes: Select according to AWS specifications for metal alloy welded.

1. For stainless-steel railings, provide type and alloy as recommended by producer of metal to be welded and as required for color match, strength, and compatibility in fabricated items.

B. Bituminous Paint: Cold-applied asphalt emulsion complying with ASTM D 1187.

C. Nonshrink, Nonmetallic Grout: Factory-packaged, nonstaining, noncorrosive, nongaseous grout complying with ASTM C 1107. Provide grout specifically recommended by manufacturer for interior and exterior applications.

D. Anchoring Cement: Factory-packaged, nonshrink, nonstaining, hydraulic-controlled expansion cement formulation for mixing with water at Project site to create pourable anchoring, patching, and grouting compound.

1. Water-Resistant Product: At exterior locations and where indicated provide formulation that is resistant to erosion from water exposure without needing protection by a sealer or waterproof coating and that is recommended by manufacturer for exterior use.

2.6 FABRICATION

A. General: Fabricate railings to comply with requirements indicated for design, dimensions, member sizes and spacing, details, finish, and anchorage, but not less than that required to support structural loads.

B. Assemble railings in the shop to greatest extent possible to minimize field splicing and assembly. Disassemble units only as necessary for shipping and handling limitations. Clearly mark units for reassembly and coordinated installation. Use connections that maintain structural value of joined pieces.

C. Cut, drill, and punch metals cleanly and accurately. Remove burrs and ease edges to a radius of approximately 1/32 inch unless otherwise indicated. Remove sharp or rough areas on exposed surfaces.

D. Form work true to line and level with accurate angles and surfaces.

E. Fabricate connections that will be exposed to weather in a manner to exclude water. Provide weep holes where water may accumulate.

F. Cut, reinforce, drill, and tap as indicated to receive finish hardware, screws, and similar items.

G. Connections: Fabricate railings with welded connections unless otherwise indicated.

H. Welded Connections: Cope components at connections to provide close fit, or use fittings designed for this purpose. Weld all around at connections, including at fittings.

1. Use materials and methods that minimize distortion and develop strength and corrosion resistance of base metals.

2. Obtain fusion without undercut or overlap.

3. Remove flux immediately.

I. Nonwelded Connections: Connect members with concealed mechanical fasteners and fittings. Fabricate members and fittings to produce flush, smooth, rigid, hairline joints.

J. Form changes in direction as follows:

1. As detailed.

2. By bending or by inserting prefabricated elbow fittings.

K. Bend members in jigs to produce uniform curvature for each configuration required; maintain cross section of member throughout entire bend without buckling, twisting, cracking, or otherwise deforming exposed surfaces of components.

L. Close exposed ends of railing members with prefabricated end fittings.

M. Provide wall returns at ends of wall-mounted handrails unless otherwise indicated. Close ends of returns unless clearance between end of rail and wall is 1/4 inch or less.

N. Brackets, Flanges, Fittings, and Anchors: Provide wall brackets, flanges, miscellaneous fittings, and anchors to interconnect railing members to other work unless otherwise indicated.

O. Provide inserts and other anchorage devices for connecting railings to concrete or masonry work. Fabricate anchorage devices capable of withstanding loads imposed by railings. Coordinate anchorage devices with supporting structure.

P. For railing posts set in concrete, provide stainless-steel sleeves not less than 6 inches long with inside dimensions not less than 1/2 inch greater than outside dimensions of post, with metal plate forming bottom closure.

2.7 FINISHES, GENERAL

A. Comply with NAAMM's "Metal Finishes Manual for Architectural and Metal Products" for recommendations for applying and designating finishes.

B. Protect mechanical finishes on exposed surfaces from damage by applying a strippable, temporary protective covering before shipping.

C. Appearance of Finished Work: Variations in appearance of abutting or adjacent pieces are acceptable if they are within one-half of the range of approved Samples. Noticeable

variations in the same piece are not acceptable. Variations in appearance of other components are acceptable if they are within the range of approved Samples and are assembled or installed to minimize contrast.

D. Provide exposed fasteners with finish matching appearance, including color and texture, of railings.

2.8 STAINLESS-STEEL FINISHES

A. Remove tool and die marks and stretch lines, or blend into finish.

B. Grind and polish surfaces to produce uniform, directionally textured, polished finish indicated, free of cross scratches. Run grain with long dimension of each piece.

C. Directional Satin Finish: No. 4.

D. When polishing is completed, passivate and rinse surfaces. Remove embedded foreign matter and leave surfaces chemically clean.

PART 3 - EXECUTION

3.1 EXAMINATION

3.2 INSTALLATION, GENERAL

A. Fit exposed connections together to form tight, hairline joints.

B. Perform cutting, drilling, and fitting required for installing railings. Set railings accurately in location, alignment, and elevation; measured from established lines and levels and free of rack.

1. Do not weld, cut, or abrade surfaces of railing components that have been coated or finished after fabrication and that are intended for field connection by mechanical or other means without further cutting or fitting.

2. Set posts plumb within a tolerance of 1/16 inch in 3 feet.

3. Align rails so variations from level for horizontal members and variations from parallel with rake of steps and ramps for sloping members do not exceed 1/4 inch in 12 feet.

C. Adjust railings before anchoring to ensure matching alignment at abutting joints.

D. Fastening to In-Place Construction: Use anchorage devices and fasteners where necessary for securing railings and for properly transferring loads to in-place construction.

3.3 RAILING CONNECTIONS

A. Nonwelded Connections: Use mechanical or adhesive joints for permanently connecting railing components. Seal recessed holes of exposed locking screws using plastic cement filler colored to match finish of railings.

B. Welded Connections: Use fully welded joints for permanently connecting railing components. Comply with requirements for welded connections in "Fabrication" Article whether welding is performed in the shop or in the field.

C. Expansion Joints: Install expansion joints at locations indicated but not farther apart than required to accommodate thermal movement. Provide slip-joint internal sleeve extending 2 inches beyond joint on either side, fasten internal sleeve securely to one side, and locate joint within 6 inches of post.

3.4 ANCHORING POSTS

A. Form or core-drill holes not less than 5 inches deep and 3/4 inch larger than OD of post for installing posts in concrete. Clean holes of loose material, insert posts, and fill annular space between post and concrete with nonshrink, nonmetallic grout or anchoring cement, mixed and placed to comply with anchoring material manufacturer's written instructions.

B. Cover anchorage joint with flange of same metal as post, attached to post with set screws.

C. Install removable railing sections, where indicated, in slip-fit metal sockets cast in concrete.

3.5 ATTACHING RAILINGS

A. Attach railings to wall with wall brackets, except where end flanges are used. Provide brackets with 1-1/2-inch clearance from inside face of handrail and finished wall surface. Locate brackets as indicated or, if not indicated, at spacing required to support structural loads.

1. Use type of bracket with predrilled hole for exposed bolt anchorage.

2. Locate brackets as indicated or, if not indicated, at spacing required to support structural loads.

B. Secure wall brackets and railing end flanges to building construction as follows:

1. For concrete and solid masonry anchorage, use drilled-in expansion shields and hanger or lag bolts.

2. For hollow masonry anchorage, use toggle bolts.

3. For wood stud partitions, use hanger or lag bolts set into studs or wood backing between studs. Coordinate with carpentry work to locate backing members.

3.6 ADJUSTING AND CLEANING

A. Clean stainless steel by washing thoroughly with clean water and soap and rinsing with clean water.

3.7 PROTECTION

A. Protect finishes of railings from damage during construction period with temporary protective coverings approved by railing manufacturer. Remove protective coverings at time of Substantial Completion.

B. Restore finishes damaged during installation and construction period so no evidence remains of correction work. Return items that cannot be refinished in the field to the shop; make required alterations and refinish entire unit, or provide new units.

END OF SECTION 33 3200

SECTION 26 0811 - ELECTRIC HAND DRYERS

PART 1 GENERAL

1.1 SECTION INCLUDES

A. Heated Air Electric Hand Dryers.

B. Non-heated Air Electric Hand Dryers

1.2 RELATED REQUIREMENTS

A. Section 26 0519 - Low-Voltage Electrical Power Conductors and Cables: Cable assemblies consisting of conductors protected by integral metal armor.

1.3 REFERENCE STANDARDS

A. ICC A117.1 - Accessible and Usable Buildings and Facilities; 2017.

B. ISO 14025 - Environmental Labels and Declarations - Type III Environmental Declarations - Principles and Procedures; 2006.

1.4 SUBMITTALS

A. See Section 01 3000 - Administrative Requirements for submittal procedures.

B. Product Data: For Each Type.

1. Preperation instructions and recommendations
2. Operating Instructions and Performance
3. Storage and handling requirements and recommendations
4. Electrcial wiring diagrams
5. Installation methods

C. Shop Drawings: Indicate dimensions method of attachement, and required support.

D. Enviromental appication product declaration

1. Provide Environmental Product Declaration (EPD) conforming to ISO 14025 and EN 15804 with content declarations for each product.

E. Health Product Declaration:

1. Provide applicable Health Product Declaration (HPD) with content inventory for each product.

F. Warranty for review by Architect.

G. Manufacturer's Certificates: Certify products meet or exceed specified requirements.

1.5 QUALITY ASSURANCE

A. Manufacturer Qualifications: Company specializing in manufacturing electric hand dryers with 10 years minimum experience.

B. Installer Qualifications: Obtain all electric hand dryers from a single source and from single manufacturer.

C. Equipment certified by Underwriters Laboratory, Inc., with UL and ULC labels.

D. Comply with ICC/ANSI A117.1.

1.6 WARRANTY

A. Provide manufacturer's standard limited warranty for product specified.

1. Warranty Period of 7 years following date of Substantial Completion.

2. Warranty Period 5 years following date of Substantial Completion.

PART 2 PRODUCTS

2.1 HEATED AIR ELECTRIC HAND DRYERS

A. Manufacturer:

1. Excel Hand dryer, INC, Xlerator Series

B. Mounting:

1. Surface Mounted

C. Controls: Automatic, activated by infrared optical sensor located next to the air outlet. Dryer will operate if hands are under the air outlet and has a 35-second lockout feature if hands are not removed. Control includes adjustable sound and speed control mechanism, adjustable heat control with High, Medium, Low and Off settings and a filter sensor which is activated should the filter become clogged. Sensor equipped with externally visible Red LED light that flashes error codes to assist in troubleshooting. Control assembly sealed for protection against moisture, lint, dust, and vandalism.

D. Air Intake: Inlet openings on bottom of cover.

E. Air Outlet: Delivers focused air stream of 19,000 LFM at nozzle and 16,000 LFM at average hand position of 4 inches (102 mm) below air outlet.

F. PreFilter: Extends the lifespan and improves reliability. Reduces lint, dust and other airborne debris from entering the internal motor chamber. Filter sensor is activated if filter becomes clogged.

G. Nominal Size: 11-3/4 inches (298 mm) wide by 12-11/16 inches (322 mm) high by 6-11/16 inches (170 mm) deep.

H. Power Requirements

1. 110 - 120 Volts, 11.3 - 12.2 Amps, 50/60 Hz, 1213 - 1450 Watts.

I. Combination Motor and Blower: Series commutated, through-flow discharge, vacuum type; 5/8 HP, 24,000 RPM. Airflow rate: 20,000 linear feet per minute (101 meters per second) at air outlet, 17000 linear feet per minute (86) meters per second) at average hand position of 4 inches (102 mm) below air outlet. Includes a washable metal mesh filter for more reliable performance.

J. Heater: Nichrome wire element, mounted inside blower housing to be vandal resistant. Heater Safeguard: Automatic resetting thermostat to open when airflow is restricted and close when airflow is resumed.

K. Air Temperature: 130 degrees F (54 degrees C) measured at average hand position of 4 inches (102 mm) below air outlet. Air Heater Output: 970 watts.

L. All metal parts coated according to Underwriters Laboratories, Inc. requirements.

M. Optional accessories:

1. HEPA Filtration System: Removes 99.999 percent of viral surrogate organisms of E.coil bacteriophage MS2 (ATCC 15597-B1) as tested using parts of ASTM F 2100 and ASTM F 2101

2. Noise Reduction Nozzle: Reduces air deflection noise level by 9 dB and increases the dry time by 2-3 seconds.

3. Anti-Microbial Wall Guards: Plastic Microban Anti-microbial Wall Guards 31-3/4 inches (806 mm) by 15-3/4 inches (400 mm) by 1/16 inch (1.5 mm) deep with 1/2 inch (13 mm) radius corners with double sided construction grade 3M adhesive tape on the mounting side.

a. White plastic. (2 per set)
b. Brushed stainless steel. (2 per set)
c. Black plastic. (2 per set)

N. Architect shall select cover finish from manufacuters avialable colors including Custom special paint or Custom Special images.

PART 3 EXECUTION

3.1 EXAMINATION

A. If substrate preparation is the responsibility of another installer, notify Architect of unsatisfactory preparation before proceeding.

3.2 PREPARATION

A. Prepare surfaces using the methods recommended by the manufacturer for achieving the best result for the substrate under the project conditions.

B. Coordinate requirements for blocking to ensure adequate means for support and installation of hand dryers.

C. Coordinate requirements for power supply, conduit, disconnect switches and wiring.

3.3 INSTALLATION

A. Install dryers at specified heights.

B. Install dryers securely to supporting substrate so that fixtures are level and aligned with each other. Use type and length of fastener as recommended by manufacturer for type of substrate.

3.4 PROTECTION

A. Protect installed products until completion of project.

B. Replace damaged products before Substantial Completion.

END OF SECTION 26 0811

Sunman-Dearborn Community Schools – BP#3

ADDENDUM #1

July, 9th 2025

This Addendum is hereby made a part of the Drawings and Specifications on the subject work as though originally included therein. The following amendments, additions, and/or corrections shall govern this work.

General

1) All contractors **MUST BE** prequalified to submit a bid as a Tier-1 contractor on this project. Reach out to Maxwell Construction if you are unsure if you are pre-qualified.
2) All substitution requests and questions must be submitted to skelley@maxwellbuilds.com by noon on Monday 7/14/25.
3) See attached Pre-Bid Sign-in Sheet for a list of the Pre-Bid meeting attendees.
4) See attached Pre-Bid Meeting Notes for general notes from the meeting.
5) Final 01 21 00 Allowance, 00 43 22 Unit Price, and 00 43 23 Alternates Forms to be distributed with Final Addendum.
    a. Refer to bottom of Addendum 1 for additions/ clarifications to each of these forms.
6) Make sure to refer to Lancer Narrative for additional addendum 1 information and updated drawings

Attachments

1. Pre-bid Agenda
2. Pre-bid Sign-in Sheet
3. Billing Schedule
4. Geotech Report

General Clarifications, Questions, and Answers

1. **Q:** When are billings due each month?
    i. **A:** Refer to the attached billing schedule which goes through August ’26.
2. **Q:** Where are bids to be dropped off at?
    i. **A:** All bids to be dropped off at ECHS Door 8 on 7/17/2025 by 1PM.
3. **Q:** Who is responsible for permitting?
    i. **A:** CMc to take care of permitting except for fire suppression. The fire suppression contractor is responsible for submitting fire suppression drawings and associated permitting costs.
4. **Q:** Is this project subject to prevail wage rates?
    i. **A:** Project is standard wage rates.
5. **Q:** Is this project subject to tax exemption?
    i. **A:** Project is tax exempt.
6. **Q:** Who is responsible for fire caulking?
    i. **A:** Contractor responsible for making penetration is required to fire caulk or sound/ smoke caulk penetrations per 01 12 00 MCS.
7. **Q:** Who is responsible for temporary fencing?
    i. **A:** CMc to supply and install temporary fencing at areas as identified on logistics plan.
8. **Q:** Who is responsible for testing?

i. **A:** Per MCS Spec Section 01 12 00 1.4.A.11, "Owner or CMc will provide a third-party testing and inspections agency but it is up to the Bid Package Contractors to coordinate tests and inspections through CMc."

9. **Q:** Who is responsible for temporary toilets?
   i. **A:** CMc to be responsible for supplying temporary toilet facilities to be used by all Tier-1 Contractors and their subs.
10. **Q:** Who is responsible for supplying temporary fire extinguishers?
   i. **A:** CMc to supply temporary fire extinguishers for Architectural Renovation Spaces. BC-1 HVAC Contractor responsible for supplying temporary fire extinguishers in Boiler Room and areas of mechanical work.

Bid Category Specifications Clarifications and Questions/ Answers

1. BC-1 HVAC/ Plumbing

- **Clarifications**
  - Moving of miscellaneous items on structure and structure itself in stagecraft room for pipe chase to be handled by owner.
- **Questions and Answers**
  - **Q:** Is there an existing tap on the sanitary main connecting the current rest rooms? If yes, is it big enough to accommodate our new 6" lateral?
    - **A:** It is likely that there is an existing tap to the main for a lateral connection from the existing restroom. However, we did not pick up a cleanout or any information on that lateral during our survey. Since there is no structure, it is likely tee'd into the main. Depending on what us discovered in the field, the existing tap may be reusable depending on its condition.

2. BC-2 General Trades

- **Clarifications**
  - See below for updated Alternates form for verbiage of Alternate #3 Jersey Bleachers.
    - Drawings are attached to the Lancer Narrative.
- **Questions and Answers**
  - **Q:** Looks to be a French drain under gravel where sidewalk to be put in behind bleachers. Will this need to be demo'd and replaced?
    - **A:** The extents of this black plastic pipe are unknown based on the survey. The pipe should be fully uncovered to determine its use prior to demolition or replacement.
  - **Q:** Note 51 in MCS says BC2 is responsible for landscaping/planting of grass. There is no landscape plan in drawing set. Please clarify landscaping scope.
    - **A:** At this time, we only show seed/straw required in the landscaped areas for this project. We can include a more detailed landscape plan if the owner wants additional landscaping. We can also note that any extra landscaping beyond what is shown shall be done by the owner after the projects completion.

3. BC-3 Masonry

- **Questions and Answers**
  - **Q:** To Include Winter Conditions in Bid?
    - **A:** See below for updated Allowance form including $20,000 Allowance for Winter Conditioning that is to be included.

4. BC-6 Roofing

- **Questions and Answers**
  - **Q:** Reference detail 2/A003 – Roof Assembly R1a. Detail shows a cover board between the insulation and membrane, but there's no leader calling it out. It's not shown in the wall sections and not specified in Section 075323. Is a cover board required? If so, please provide spec on the cover board.
    - **A:** No Cover Board to be required.

5. BC-9 Electrical

- **Clarifications**
  - Clarification for scope of camera work
    - States in the MCS 'Supply and install of cameras, associated NVR's, and programming to be by Owner's DIV 28 Camera Contractor.

DIV 00 and 01 Updates

- **Updates to Spec Section 00 43 22 – Unit Prices**

1) BC-3 Masonry

1. State the cost to include (1) 100lb Propane Tank for winter conditions.

   UNIT COST: _____

2. State the cost to include (1) 20x100 roll of plastic for winter conditions.

   UNIT COST: _____

3. State the cost to include (1) 40x100 roll of plastic for winter conditions.

   UNIT COST: _____

4. State the cost to rent (1) Pod Heater for a day for winter conditions including heater, manifold, and hose.

   UNIT COST: _____

5. State the cost to include (1) wind clip for winter conditions.

   UNIT COST: _____

6. State the cost to include (1) roll of tie wire for winter conditions.

   UNIT COST: _____

7. State the cost to include (1) roll of #9 wire for winter conditions.

   UNIT COST: _____

8. State the cost to rent (1) Heat Blanket weekly for winter conditions.

   UNIT COST: _____

9. State the cost to include (1) Boom Lift for winter conditions.

   UNIT COST: _____

10. State the cost to include labor for (1) Foreman for winter conditions.

    UNIT COST: _____

11. State the cost to include labor for (1) Brick Layer for winter conditions.

    UNIT COST: _____

12. State the cost to include labor for (1) Forklift Operator for winter conditions.

    UNIT COST: _____

13. State the cost to include labor for (1) Mason Tender for winter conditions.

    UNIT COST: _____

- **Updates to Spec Section 00 43 23 – Alternates:**

1. **Alternate No. 3 Jersey Bleachers – Alternate #3 Described on sheet A102**
   Responsible Bid Categories: BC-2 General Trades
   ADD_____ DEDUCT_____ NO CHANGE_____ NOT APPLICABLE_____
   _____ Dollars ($_____)

- Base bid Description: BC-2 GT's Contractor to include no work behind bleachers as shown on Sheet A102.

- Alternate #7 Description: BC-2 GT's Contractor to demo existing wood-framed storage building behind bleachers, including wood framing and siding. Supply and install Gameday Vision Bleacher Jersey on back and sides of bleachers, system to go around press box structural steel, system to be anchored to ground via allowance and bleacher structural beam leaving some seating exposed.

- Alternate #3 Allowances
  - Include a **$25,000 Allowance** for any repainting for the press box, pressure washing, securing the Bleacher Jersey System, and residing the press box.
  - Include a **$5,000 Allowance** for new River Rock gravel on ground of where the existing building was covering.

- **Updates to Spec Section 01 21 00 - Allowances:**

1. **BC-3 Masonry: (Added Allowance)**
   1. Include **Winter Conditions Allowance** of **$20,000** to be used for providing and installing all winter enclosures, labor, materials, fuel, and heating for the Masonry Scope of work.
2. **Alternate #3 Jersey Bleachers: (Added Allowance)**
   1. Include a **$25,000 Allowance** for any repainting for the press box, pressure washing, securing the Bleacher Jersey System, and residing the press box.
   2. Include a **$5,000 Allowance** for new River Rock gravel on ground of where the existing building was covering.

MAXWELL CONSTRUCTION

PRE-BID AGENDA

Sunman Dearborn Community Schools – BP#3
6/30/2025

1. Introductions
    a. Owner: Sunman Dearborn School Corporation
    b. A/E/CD: Lancer Associates/ Primary Engineering/ Context Design
        i. Lancer Associates: Misha Belyayev
        ii. Primary Engineering: Andrew Louderback
    c. CMc: Maxwell Construction
        i. Senior Project Manager: Chris Grabosky
        ii. Project Manager: Kameron Gick
2. Pre-Bid Sign-In Sheet
3. Advertisement for Prequalified Tier-1 Bidders – Summary
    a. Bid Date: Thursday 7/17/25
    b. Bid Time: 1:00PM
        i. Contractors to drop bids off at Door 8
    c. Bid Location: 1 Trojan Place, Brookville, IN 47012 (Door 8)
    d. Bid Openings: Bids to be read aloud publicly in ECHS Trojan Room.
        i. Contractors to drop bids off at Door 8 and proceed to Trojan Room to wait until bids are read aloud.
4. Description – Sunman Dearborn Additions and Renovations 2024 BP#3 includes 5 separate bid categories with work at East Central High School.
5. Drawings/ Specs: https://distribution.easternengineering.com/View/MultiPlanroomJobList.aspx
6. Preliminary Schedule – Refer to Spec Section 003113 Preliminary Schedules
    a. Work set to begin December ’25 with completion July ’26.
7. Prequalification – **MUST** be Prequalified to bid on project
    a. Non-pre-qualified bids will be returned unopened.
8. Bid Categories (Bidding)
    a. BC-1: HVAC/ Plumbing
    b. BC-2: General Trades
    c. BC-3: Masonry
    d. BC-6: Roofing
    e. BC-9: Electrical
9. Bid Categories (BP#2 Tier-1)
    a. BC-4: Flooring
    b. BC-5: Drywall
    c. BC-8: Paving/Milling

10. Bid Envelope Requirements – Refer to Bid Form Spec 00 41 16.1 (Checklist on final page.)
    a. 004116.1 Completed Bid Form
    b. Financial Statements
    c. Non-Collusion Affidavit
        i. Is part of bid form and needs to be notarized.
    d. 004321 Allowance Form – Be sure to include Allowances in base-bid value.
        i. All OH&P for Allowance to be included in base-bid value.
        ii. Allowance Values shown on 012100 Allowances Form and 011200 Multiple Contract Summary.
    e. 004323 Alternates Form – Contractor **MUST** turn in signed Alternates Form regardless of if there is an alternate in Bid Category or not.
    f. 004116.2 E-Verify Affidavit
    g. 004116.3 Drug Testing Policy
    h. Bid Envelope: Project Name, Date, Bid Category, Company Name.
11. Multiple Contract Summary – Specifies Scope of Work
    a. Spec Section 01 12 00 (Volume 1 Specs)
12. Notable Items
    a. All Contractors
        i. Site Logistics: Refer to 01 14 12 Access to Site
        ii. Dumpsters: To be provided by BC-2 General Trades as noted in MCS.
        iii. Scope of Work: Refer to 01 12 00 Multiple Contract Summary
        iv. Fire/ Sound/ Smoke Caulking: All contractors to be responsible for caulking of own wall penetrations.
        v. Responsible for any blocking required for BC's scope of work unless otherwise noted.
        vi. Concrete Patching: Contractors are responsible for any required concrete floor and wall patching for their scope of work.
        vii. Contractors to refer to Spec Section 01 12 00 Multiple Contract Summary for full scope of work breakdown for each Bid Category. The items below are a high level overview of important/ notable items in each BC Scope of Work.
        viii. Sheet C200 – Topographic & Demolition Plan is scaled wrong and will be addressed via Addendum 1.
        ix. Alternate 3 will be revised via Addendum 1.
    b. BC-1 HVAC/ Plumbing
        i. HVAC/ Plumbing work
        ii. Contract Award
            1. Low and Responsive Bidder to be given Notice of Intent to proceed with submittals and shop drawings if Owner approves after bids have been reviewed and post-bid interviews have been conducted assuming project comes in under budget.
                a. Contractor to immediately begin working on submittals and shop drawings for equipment that will be needed for all Work.
        iii. Roofing

1. Responsible for providing roof protection if work is required on the roof.

iv. Laydown/ Storage Areas
    1. Refer to Spec Section 011413 Access to Site for dedicated outdoor storage area.

v. Brief Scope Outline (Includes but is not Limited to)
    1. Responsible for capping off all utilities prior to demo.
        a. Existing equipment to be demoed by BC-2 General Trades
    2. New hydronic valves off main in corridor as shown on Sheet M101 are to be installed by owner and capped on backside of valve prior to BP#3 work taking place.
    3. Responsible for full HVAC/Plumbing Scope.
    4. Responsible for changing HVAC filters during construction.
    5. Include all layout and installation of plumbing system pipe hangers, sleeves, and housekeeping pads.
    6. Plumbing connections to all equipment.
    7. Responsible for providing and installing all fixtures shown in drawings.
    8. Provide and install all required interior and exterior cleanouts.

c. BC-2 General Trades

i. Scope Outline
    1. Responsible for all Selective/Mass Demolition as shown on drawings including but not limited to:
        a. Including all existing HVAC/Plumbing equipment in buildings.
        b. Concessions building
        c. Ticketing building
        d. Restrooms
        e. Concrete in area hatched to be demoed
            i. Including area plan east, right of bleachers on Sheet EC200
            ii. Including curb not noted plan east, under additional concrete demo listed above on Sheet EC200
        f. Fencing
            i. Including area not noted plan east, connecting to the bleachers on Sheet EC200
    2. Supplying dumpsters as noted in MCS.
    3. All concrete work shown on drawings.
    4. Hualing all concrete, asphalt, and organic materials from site.
        a. Dumpster allowance is not to be used for these items.
    5. Site cleanliness.
    6. Structural Steel as identified in S Series Drawings.
        a. To supply lintels and embed plates to BC-3 Masonry Contractor for installation.
    7. Supplying and installing roof trusses and associated roof/parapet blocking as shown on drawings.

a. Coordinate with BC-6 prior to their install.

8. Responsible for supply and installing DIV 07 Metal Panels per plan and spec.
    a. Responsible for treating wood sheathing with Prosoco MVP wrap air/water resistive barrier prior to installation of metal panels.
9. Caulking of HM Doorframes and casework.
10. Supply and installation of overhead doors and coiling doors.
11. Doors and Frames
    a. Supply and installation of HM Doors.
    b. Supply of HM frames installed in masonry walls to BC-3 Masonry.
12. All interior and exterior painting, staining, sealing, varnishing, and block filler.
13. Division 10 Items
14. Signage to be handled via allowance
15. Fire Suppression
16. Earthwork, Site Demo, Fencing, and Site-concrete
    a. Include winter conditions/blanketing for footer install.

d. BC-3 Masonry

i. Scope Outline

1. Installation of lintels and embeds as shown on drawings for masonry walls.
    a. Steel to be supplied by BC-2 General Trades.
2. Cutting and toothing in brick/ block for new openings.
3. Installing and grouting new door frames in masonry walls.
    a. Frames to be supplied by BC-2 General Trades.
4. Caulking, AVB, Drainage Board, Weeps, and Accessories for CMU/ Brick.
5. CMU/ Block for all areas as shown on drawings.

e. BC-6 Roofing Contractor

i. Scope Outline

1. Providing and installing Membrane roofing per drawings.
    a. Include gutters and downspouts
2. Blocking for associated roof coping and gutters to be provided and installed by BC-2 GT's Contractor. BC-6 Roofing Contractor to coordinate installation with GT's Contractor to ensure that the correct material is installed.

f. BC-9 Electrical Contractor

i. Scope Outline

1. All electrical demo shown of Sheet E101.
2. Electrical per E Series drawings.
    a. All power, lighting, and systems noted
3. All trenching and backfilling required to complete work.

13. Addendum Process

a. Email all questions to Simon Kelley at skelley@maxwellbuilds.com be sure to include Kameron Gick kgick@maxwellbuilds.com and Chris Grabosky cgrabosky@maxwellbuilds.com on copy for all questions.
    i. All questions need to be submitted by noon on 7/14/25. (Addendums to be distributed via Eastern Engineering.)
        1. First Addendum: Tentatively Tuesday 7/8/25
            a. Questions need received by noon Monday 7/7/25
        2. Third and Final Addendum: Tentatively Tuesday 7/15/25
            a. Questions need received by noon Monday 7/14/25

14. This Agenda sheet will be attached with the release of the 1st Addendum.
15. Questions for Design Team/ MCC?
16. General Walkthrough

MAXWELL CONSTRUCTION

PRE-BID SIGN-IN

MAXWELL CONSTRUCTION

Sunman-Dearborn Community Schools Additions and Renovations - BP#3 Sign-in Sheet 6/30/2025			
NAME	COMPANY	EMAIL	CELL PHONE
Ker Vang	Tetra	KVANG@TETRAAMERICA.com	513/623-7986
John Kurzhals	Kurzhals Inc	KURZHALS@ZOOMTOWN.com	513/543-5539
Adam Jacob	Jacob Masonry	ajacob@jacobmasonry.com	513/353-2100
Mitchel Day	Southern Roofing	Mday@southernroofing inc.com	812-314-9798
GREG KNUE	TP MECHANICAL	greg.knue@tpmechanical.com	502-525-7050
Roger Runkel	TRITON	RRunkel@tritonservicesinc.com	513-679-6800
Sean Laub	JL Electric	Sean@JLElectricinc.com	812-907-0324
Brian Sylva	Loncer	bsylva@loncerarchitects	812-380-7700
Dan Schuck	Koch Mech	danse@davemara.com	812-346-1624
~~[illegible]~~	~~[illegible]~~		

Billing Schedule

Billing Schedule

Contractor Pencil Copy Due	Contractor Final Billing Due
December 15, 2025	December 22, 2025
January 15, 2026	January 22, 2026
February 15, 2026	February 22, 2026
March 15, 2026	March 22, 2026
April 15, 2026	April 22, 2026
May 15, 2026	May 22, 2026
June 15, 2026	June 22, 2026
July 15, 2026	July 22, 2026
August 15, 2026	August 22, 2026

MAXWELL
CONSTRUCTION

GEO-TECH REPORT

SUBSURFACE INVESTIGATION &
GEOTECHNICAL RECOMMENDATIONS

NEW CONCESSIONS BUILDING
ST. LEON, INDIANA
ALT & WITZIG ENGINEERING PROJECT NO.: 25CN0073

PREPARED FOR:
SUNMAN DEARBORN COMMUNITY SCHOOL CORPORATION
1 TROJAN ROAD, SUITE B
ST. LEON, IN 47001

PREPARED BY:
ALT & WITZIG ENGINEERING, INC.
GEOTECHNICAL DIVISION
HEBRON, KENTUCKY

APRIL 11, 2025

Alt & Witzig Engineering, Inc.
1020 Arbor Tech Drive • Hebron, Kentucky 41048
Phone: (859)551-4944 • www.altwitzig.com

April 11, 2025

Sunman Dearborn Community School Corporation
1 Trojan Road, Suite B
St. Leon, IN 47001
Attention: Mrs. Mary Ann Baines

Report of Subsurface Investigation and Geotechnical Recommendations

RE: New Concessions Building
1 Trojan Road A
East Central High School
St. Leon, Indiana
Alt & Witzig Engineering Project No.: 25CN0073

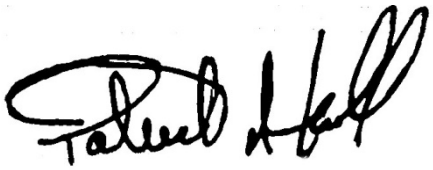
Dear Mrs. Baines:

In compliance with your request, Alt & Witzig Engineering, Inc. has completed a subsurface investigation for the above-mentioned Site. The Statement of Objectives, Scope of Work, and results of our investigation are presented in the following report. It is our pleasure to transmit a .pdf copy of our findings.

The results of our test borings and laboratory tests completed to date are presented in the appendix of the report. Our recommendations for the project are presented in the "Geotechnical Analyses and Recommendations" section of the report. If you have any questions or comments regarding this matter, please contact us at your convenience.

Sincerely,
Alt & Witzig Engineering, INC.

Benjamin E. Armstrong, P.E.
Project Engineer



Patrick A. Knoll, P.E.
Principal Engineer

TABLE OF CONTENTS

EXECUTIVE SUMMARY

Alt & Witzig Engineering, Inc. has performed a subsurface investigation and geotechnical analysis for the New Concessions Building to be constructed within the southwest quadrant of the football and track field at East Central High School in St. Leon, Indiana, in conformance with the scope and limitations of our proposal dated March 3, 2025 (*Alt & Witzig Engineering Proposal 2502CN003)*. This investigation was performed for Sunman Dearborn Community School Corporation. Authorization to perform this investigation was in the form of an Alt & Witzig Engineering proposal accepted by Mr. Mary Ann Baines of Sunman Dearborn Community School Corporation and an executed agreement.

In compliance with your request, 12-soil borings were completed for the proposed project and future development, as part of on-going school campus upgrades. Alt & Witzig has conducted a previous investigation (*Project Number 24IN0416*) involving this campus, which included 11-soil borings. The historical data was reviewed as part of this investigation and preparation of this report. A preliminary site plan was provided for the purposed project, indicating that a new concession building will be constructed for this development. The purpose of this investigation was to determine the various soil profile components and the engineering characteristics of the subsurface materials to use in the design of the new concession building.

Based on the investigation, the following conditions and concerns are relevant for this project.

- A total of 12-soil borings were completed for this investigation. During drilling operations, 4 to 10-inches of asphalt with 2 to 17-inches of gravel subbase was met within all borings. At boring B-6, 2.5-feet of possible fill was classified, consisting of dark gray and brown to brown and gray clay. At all other borings, and beneath the possible fills at B-6, brown and gray clays with varying amounts of concretions, silt, sand, and gravel were encountered. Auger refusal was met at all borings at depths ranging from 11.5 to 17.5-feet beneath existing grades. It is anticipated that auger refusal was met on Shale or Limestone bedrock. Bedrock was observed in all soil borings, apart from B-11 and B-12, at depths ranging from 12 to 14.5-feet beneath existing grades. SPT values ranged from 7 to 62, with an average of 23 for all tests conducted across the site.

- Conventional foundations can be utilized for building support, bearing immediately upon stiff, native materials or documented structural fills. A “net allowable” bearing capacity of 3,500-psf can be utilized to dimension foundations for the proposed structure. When utilizing net allowable pressures for dimensioning footings, it is necessary to consider only those loads applied above the finished floor elevations. Where highly plastic soils are exposed in foundation excavations, undercutting up to 24-inches below the bottom of footing would be required. The undercut footing areas should be re-established with either granular soils or lean concrete. All exterior foundations should be founded a minimum of 30-inches or greater below the finished grade to reduce frost action.

- Except for topsoil, the on-site soils observed in the borings are suitable for reuse as structural fill. The laboratory tests indicated that the soils have moisture contents ranging between 10% and 28% with an average of 19%. Optimum moisture content for the clay soils is anticipated to be in the range of 12% to 20% based on historical standard proctors taken from soils across this campus. Proper moisture content must be maintained for these soils to be used as structural fill. Based on moisture contents of the boring samples, portions of the shallow soils appear to be above optimum moisture content.

1.0 INTRODUCTION

1.1 Purpose

The purpose of this investigation was to determine the various soil profile components, the engineering characteristics of the subsurface materials, and to provide geotechnical recommendations to use in the design of the new concessions building.

1.2 Statement of Objectives

In compliance with your request, 12-soil borings were completed for this investigation. At this time, a grading plan has not been completed and could not be provided for this investigation.

This project included:

- A review of geological maps of the area and review of geologic and related literature
- A reconnaissance of the immediate site and subsurface exploration
- Field and laboratory testing
- Engineering analysis and evaluation of the materials

1.3 Incorporations by Reference

The subsurface investigation was conducted in accordance with guidelines set forth in the scope of services and applicable industry standards. This investigation was performed for Sunman Dearborn Community School Corporation. The proposed statement of objectives and scope of work were outlined in the form of *Alt & Witzig Engineering Proposal Number 2502CN003* duly authorized by Mr. Mary Ann Baines of Sunman Dearborn Community School Corporation.

1.4 Report Reliance

This report is solely for the use of Sunman Dearborn Community School Corporation and any reliance of this report by third parties shall be at such party's sole risk and may not contain sufficient information for purposes of other parties for other uses. This report shall only be presented in full and may not be used to support any other objectives than those set out in the scope of work, except where written approval and consent are provided by Sunman Dearborn Community School Corporation and Alt & Witzig Engineering.

2.0 BACKGROUND INFORMATION

2.1 Site Location and Description

The site of the proposed new concessions building to be constructed within the southwest quadrant of the football and track field at East Central High School in St. Leon, Indiana. The location of the site is shown on the enclosed *Site Location Map* presented in the Appendix and in *Figure 1*.

***Figure 1**: 2022 Google Aerial – Site Location (Outlined in RED)*

The site is currently occupied by several standing structures, including a bathroom, light poles, a tornado siren, bleachers, and surface parking spaces. The site is surrounded by a developed school campus. According to information provided by Google Earth Pro and the preliminary site plan, elevations across the site range from 1,006-ft AMSL to 1,011-ft AMSL. Available historical aerial imagery indicates that this property has remained relatively undisturbed for more than 20 years, according to Google Earth Historical Imagery from 2005.

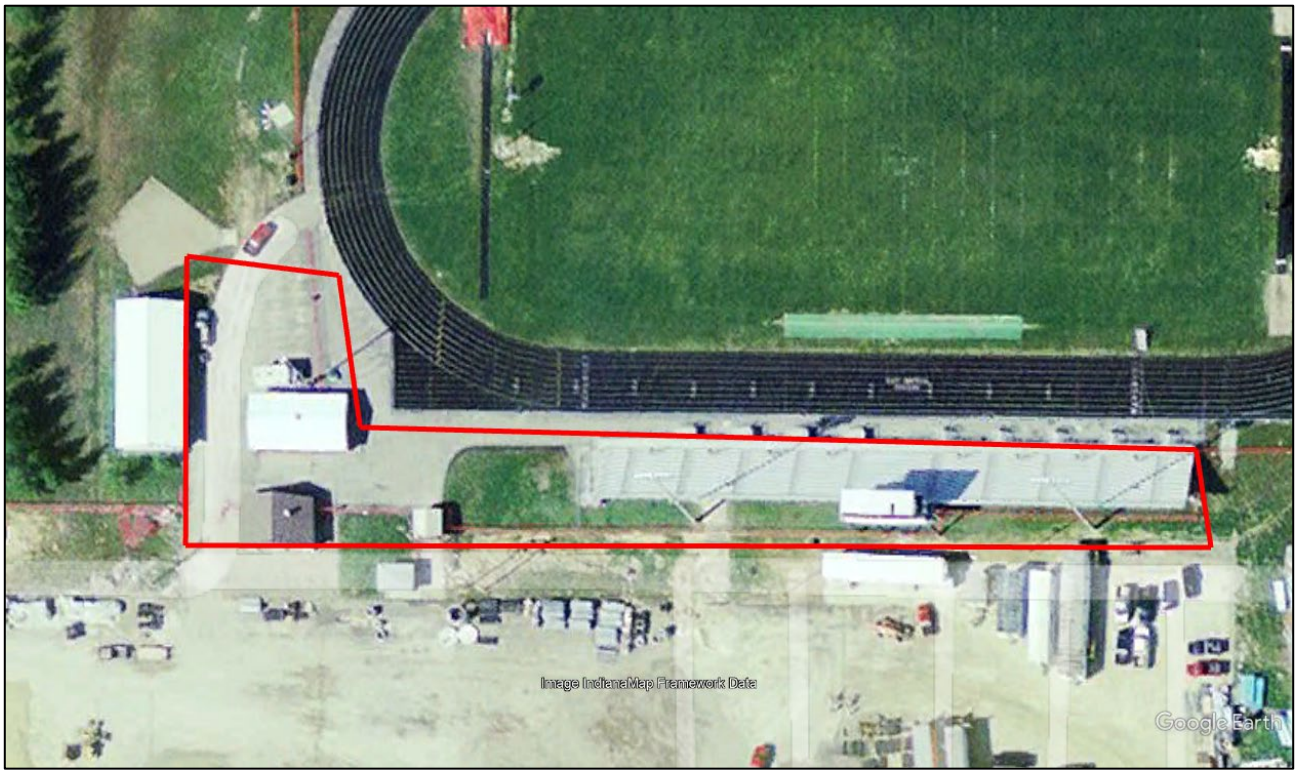


***Figure 2**: Google Earth Historical Imagery from 2005*

2.2 General Site Geology

The site lies within the Switzerland Hills Section of the Bluegrass Natural physiographic Region of the State of Indiana. Typical soil makeup consists of silt loams, parented by loess over loamy till. Slopes typically range from 0 to 6%. The bedrock found here is representative of the Ordovician aged Whitewater Formation, made up of limestone and interbedded calcareous shale, with an average thickness of 80-feet.

3.0 Work Performed

3.1 Boring Locations

The boring locations were selected by the client and field staked by members of Alt & Witzig Engineering. The boring locations were overlain on available aerial imagery from Google Earth and can be seen in *Boring Location Plan* found in the appendix of this report and in *Figure 4*.

***Figure 4**: Boring Locations Over Existing Conditions and Preliminary Site Plan*

3.2 Soil Sampling

The field investigation included a reconnaissance of the project site and the completion of 12-soil borings. The soil borings were performed with a drilling rig equipped with a rotary head. Conventional hollow-stem augers were used to advance the holes. Boring locations were accessed by a track mounted drilling rig. During the sampling procedure, standard penetration tests were performed at regular intervals in accordance with ASTM Method D1586 to obtain the standard penetration value of the soil. The standard penetration value is defined as the number of blows a 140-lb hammer, falling 30-inches, required to advance the split-spoon sampler 12-inches into the soil. The results of the standard penetration tests indicate the relative density and comparative consistency of the soils and thereby provide a basis for estimating the relative strength and compressibility of the soil profile components.

Soil samples were field classified and placed in unpreserved glass jars with Teflon-lined lids for transport to our geotechnical laboratory for further analysis.

3.2.1 Laboratory Analyses for Soil Samples

A supplementary laboratory investigation was conducted to ascertain additional pertinent engineering characteristics of the subsurface materials necessary in analyzing the behavior of the proposed structures. All phases of the laboratory investigation were conducted in general accordance with applicable ASTM Specifications. The laboratory-testing program included:

- Visual classification in accordance with ASTM D 2488.
- Moisture content tests in accordance with ASTM D 2216.
- Atterberg limit testing in accordance with ASTM D 4318.

Samples of the cohesive soil from the split-spoon-sampling device were frequently tested in unconfined compression by use of a calibrated spring testing machine. In addition, a calibrated soil penetrometer was used as an aid in determining the strength of the soil. The values of the unconfined compressive strength as determined on soil samples from the split-spoon sampling must be considered approximate values since the split-spoon sampling techniques provide a representative but somewhat disturbed soil sample.

3.3 Groundwater Elevation

Initial depths to groundwater were estimated based on where water was observed on the sampling rods. Upon completion of drilling activities, the depth to water was measured using a 100-foot tape measure with a weighted end. The depths presented on the *Boring Logs* are accurate only for the day on which they were recorded. The exact location of the water table shall be anticipated to fluctuate depending upon normal seasonal variations in preparation and surface runoff.

3.3 Ground Surface Elevation

Ground surface elevations at the boring locations have not been obtained for this investigation. Surface elevations have been **estimated** based on available data from Google Earth and are shown on the *Boring Logs* and tabulated in other areas of this report. Once elevations become available, the data should be provided to Alt & Witzig to determine if changes need to be made to this report.

4.0 INVESTIGATION RESULTS

The types of subsurface materials encountered have been visually classified and are described in detail on the *Boring Logs*. The results of the field penetration tests, strength tests, water level observations and laboratory water contents are presented on the *Boring Logs* in numerical form. Representative samples of the soils encountered in the field were placed in sample jars and are now stored in our laboratory for further analysis if desired. Unless notified to the contrary, all samples will be disposed of after 30 days.

4.1 Subsurface Conditions

A total of 12-soil borings were completed for this investigation. During drilling operations, 4 to 10-inches of asphalt with 2 to 17-inches of gravel subbase was met within all borings. At boring B-6, 2.5-feet of possible fill was classified, consisting of dark gray and brown to brown and gray clay. At all other borings, and beneath the possible fills at B-6, brown and gray clays with varying amounts of concretions, silt, sand, and gravel were encountered. Auger refusal was met at all borings at depths ranging from 11.5 to 17.5-feet beneath existing grades. It is anticipated that auger refusal was met on Shale or Limestone bedrock. Bedrock was observed in all soil borings, apart from B-11 and B-12, at depths ranging from 12 to 14.5-feet beneath existing grades. SPT values ranged from 7 to 62, with an average of 23 for all tests conducted across the site. The following table summarizes the subsurface conditions encountered:

Boring	Asphalt (in)	Gravel Subbase (in)	Bedrock Depth (ft)
B-01	6.0	6.0	14.5
B-02	8.0	4.0	14.5
B-03	7.0	2.0	14.5
B-04	4.0	4.0	14.5
B-05	10.0	7.0	14.5
B-06	6.0	6.0	13.0
B-07	4.0	5.0	14.0
B-08	8.0	8.0	14.0
B-09	8.0	12.0	14.5
B-10	7.0	17.0	12.0
B-11	7.0	9.0	-
B-12	6.0	10.0	-

Portions of the cohesive soils encountered across the site were tested for plasticity. Highly plastic soils exhibit a high-volume change with variations in moisture content. This volume change can be detrimental to the performance of structural elements, such as foundations, pavements, and floor slabs placed immediately upon them. The following table summarizes the Atterberg limit testing on representative samples of soils suspected of high plasticity. These results are indicative of highly plastic clays.

Atterberg Limit Testing		
Liquid Limit	Plastic Limit	Plasticity Index
60%	18%	42%

The following table summarizes the auger refusal estimated elevation data obtained at the boring locations:

Boring	Estimated Surface Elevation (ft)	Estimated Bedrock Elevation (ft)	Auger Refusal Elevation (ft)
B-01	1008.0	993.5	992.0
B-02	1009.0	994.5	993.5
B-03	1007.0	992.5	991.5
B-04	1008.0	993.5	992.5
B-05	1008.0	993.5	992.5
B-06	1007.0	994.0	989.5
B-07	1007.0	993.0	992.3
B-08	1008.0	994.0	993.2
B-09	1009.0	994.5	994.0
B-10	1006.0	994.0	992.5
B-11	1006.0	-	994.5
B-12	1011.0	-	995.0

4.2 Water Observations

Dry conditions were observed during and upon completion of all borings. Note that these readings were taken during a short observation window. Several days to weeks of observation are required to accurately estimate the elevation of the water table. The exact level of the water table should be expected to fluctuate based on seasonal variations.

4.3 Seismic Parameters

An evaluation of the seismic site class has been performed for this site. The Indiana Building Code indicates that the seismic site class is determined by averaging soil conditions within the top 100 feet with respect to the shear wave velocity. This evaluation is based on data obtained to termination of the soil borings and our knowledge of soils in the area. Based on the field and laboratory tests performed on the encountered subsurface materials to boring termination, this site should be considered a Site Class B in accordance with the current Indiana Building Code. Seismic acceleration parameters of S_s=0.149g and S_1=0.079g can be utilized for design, assuming the building has risk category of 1, 2, or 3.

5.0 Geotechnical Analyses and Recommendations

5.1 Project Description

A preliminary site plan was provided for this investigation indicating that a new concession building with 20-kip column loads and 4,000-PLF will be constructed as part of this project. **A grading plan was not available at the time of this investigation.** It is estimated that the building will be constructed at or near existing grades. Once a grading plan has been prepared, it should be provided to Alt & Witzig to determine if any modifications to this report are warranted. Slopes steeper than 3H:1V should not be considered for this project.

5.2 Bulk Earthwork

Aspahlt thicknesses up to 10-inches and up to 17-inches of gravel subbase were encountered across the site. Prior to bulk earthwork and/or fine grading these materials should be stripped from the proposed building footprint. Up to 2.5-feet of possible fill materials were encountered at boring B-6. These materials are not suitable for conventional support of building foundations. Undocumented fill materials should be either removed and replaced or undercut to firm native materials during foundation excavation.

After the above-mentioned stripping has been performed, the exposed subgrade should be proof-rolled with approved equipment to identify soft or yielding soils. Any soft or unsuitable soils should be removed and replaced with a well-compacted material. It is recommended that a representative of Alt & Witzig Engineering, Inc. be present for this phase of this project. After the existing subgrade soils are excavated to design grade, proper control of subgrade compaction and fill, and structural fill replacement should be maintained by a representative of the soils engineer. This will minimize volume changes and differential settlements which are detrimental to behavior of shallow foundations, floor slabs and pavements.

Using approved materials, it is recommended that the minimum dry density as determined in accordance with ASTM D-698 be achieved in the various areas across the site. The following table illustrates the recommended compaction percentage in several areas of the site:

Area	Min. Percentage of Compaction ASTM D698 or D1557	Acceptable Material*	Typical Maximum Lift Thickness
Roads, Drives, & Parking Areas (including future areas)	98%	Any besides ML, MH, CH, OL, OH	8”
Under Foundations and Footings	98%	Any besides ML, MH, CH, OL, OH	8”
Sub grade Below Slab-On-Grade	98%	Dense grade crushed stone or other coarse-grained material approved by the geotechnical engineer	8”
Lower-Level Walls	98%	Clean, GW or SW containing less than 5 percent fines by weight, approved by geotechnical engineer.	8”
Trench Backfill within Buildings and Pavement Areas	98%	GW, GP, SW, SP	8”
USCS Classifications: GW-Well Graded Gravel GP-Poorly Graded Gravel GM-Silty Gravel	GC-Clayey Gravel SW-Well Graded Sand SP-Poorly Graded Sand SM-Silty Sand	SC-Clayey Sand CL-Lean Clay ML-Silt CH-Fat Clay	MH-Elastic Silt OL-Organic Clay/Silt OH-Organic Clay/Silt

Except for topsoil and fat clays, the on-site soils observed in the borings are suitable for reuse as structural fill. The laboratory tests indicated that the soils have moisture contents ranging between 10% and 28% with an average of 19%. Optimum moisture content for the clay soils is anticipated to be in the range of 12% to 20% based on historical standard proctors taken from soils across this campus. Proper moisture content must be maintained for these soils to be used as structural fill.

Based on moisture contents of the boring samples, portions of the shallow soils appear to be above optimum moisture content. Moisture conditioning of the cut soils to be used as structural fill will be required. This can be accomplished by spreading the soils in a thin (approximately 8-inches) loose lift in favorable weather conditions and continuously disking the soils until a suitable moisture content is reached. Alternatively, chemical drying can be performed by mixing very moist to wet soils with approximately 3% lime kiln dust per dry soil weight.

All fills should be formed from material free of vegetable matter, rubbish, rock larger than 12-inches in plane and 4-inches in depth, and other deleterious material. Prior to placement of fill, a sample of the proposed fill material should be submitted to Alt & Witzig Engineering for approval. The fill material should be placed in layers not to exceed the loose thickness mentioned in the chart above. Each layer should be uniformly compacted by means of suitable equipment of the type required by the materials composing the fill.

5.3 Foundation Recommendations

Conventional foundations can be utilized for building support, bearing immediately upon stiff, native materials or documented structural fills. When utilizing net allowable pressures for dimensioning footings, it is necessary to consider only those loads applied above the finished floor elevations. Where highly plastic soils are exposed in foundation excavations, undercutting up to 24-inches below the bottom of footing would be required. The undercut footing areas should be re-established with either granular soils or lean concrete. All exterior foundations should be founded a minimum of 30-inches or greater below the finished grade to reduce frost action. The following table can be utilized to dimension undercuts bearing immediately upon stiff, native soils or suitable documented fills. It is anticipated that isolated pockets of soils will be undercut for the new building due to the existing developments and likelihood for undocumented fill soils, utilities, etc. to be within the new building footprint.

	Footing Type	
	Continuous Footings	**Spread Footings**
Net Allowable Bearing Pressure[1]	3,500-psf	3,500-psf
Minimum Depth	30-inches	30-inches
Estimated Maximum Total Settlement	1-inch	1-inch
Estimated Maximum Differential Settlement	½-inch	½ -inch
***[1] Note - In utilizing a net allowable bearing pressure, it is only necessary to account for structural loads applied above finished floor elevation.**		

All foundation soils excavations should be inspected by a representative of Alt & Witzig Engineering to ensure suitable soils exist in the base of all footings. At the time of the inspection, a visual examination, hand penetrometer, and/or housel penetrometer tests can be performed on the foundation soils. *Figure 5* depicts a typical undercut replaced with lean concrete or suitable structural fill.

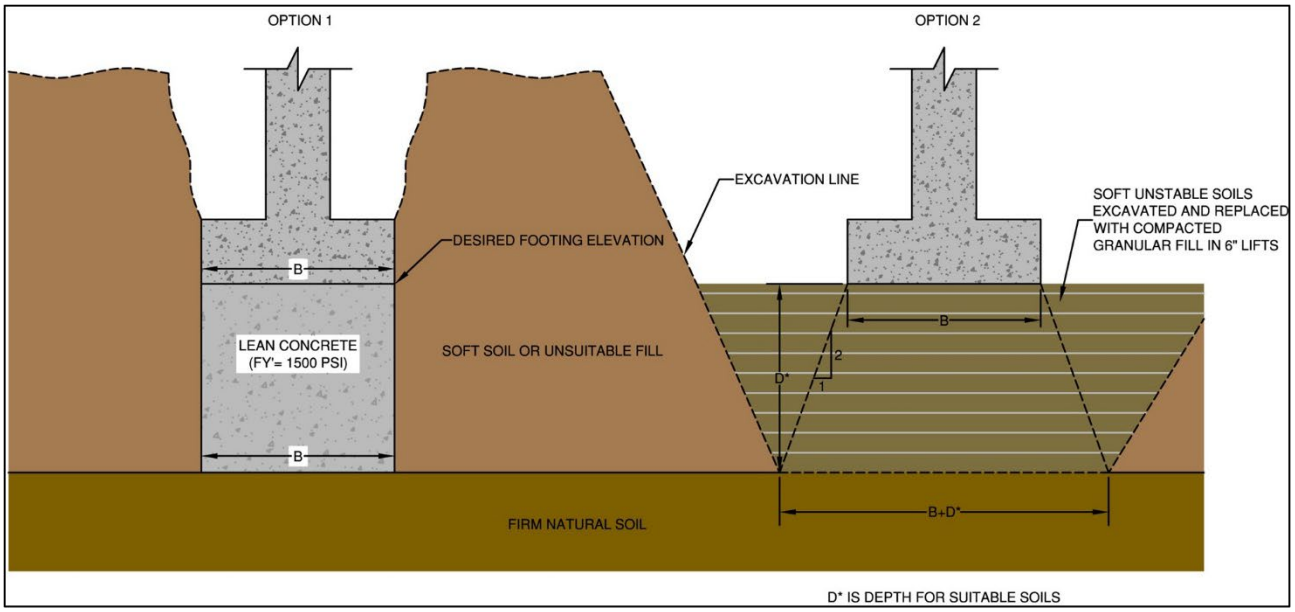


***Figure 5**: Example of Undercut Soils Replaced with Lean Concrete or Suitable Structural Fill*

5.4 Floor Slab Recommendations

Floor slabs can be supported by native soils and/or lean structural fills. After the building area has been cut/raised to the proper elevation, a 4-inch compacted granular fill should be placed immediately beneath the floor slab. This compacted granular fill will provide a uniform surface for construction of the slab. A vapor barrier should be placed immediately below the floor slab in any areas of the building where floor coverings such as carpet, vinyl tile, ceramic tile, etc. will be placed. Where floor loads due to building structure will be necessary a modulus of subgrade reaction of 75-pci should be used to dimension the slab thickness.

5.5 Proposed Pavement Construction

Proposed pavements can be supported by native soils and/or lean structural fills. Fat clays can be detrimental to the performance of pavements. Thus, it is recommended that no fat clays be placed in the upper 2-feet of pavement elevations. Pavements that are situated in cut areas should be inspected for presence of fat clays. After design subgrade elevations are achieved, any fat clay soils in the upper 2-feet of the pavement subgrade should be undercut and replaced with granular materials. Alternatively, pavement subgrade soils can be stabilized to a depth of 16-inches utilizing a minimum of 6% LKD per dry soil weight. Based upon our laboratory tests and on experience with soils having a similar consistency, a design CBR value of 7.0 can be used for the pavement design over a chemically stabilized subgrade. A CBR of 3.0 can be used for non-stabilized pavement design over a properly prepared subgrade. Pavement recommendations can be provided by Alt & Witzig upon receipt of traffic data if desired.

All paved areas should be designed to prevent water from collecting or ponding immediately beneath the pavement. It is suggested that underdrains be installed in the pavement areas and behind all curbs to minimize potential saturation of these soils. These drains should be installed in any areas where surrounding grades promote drainage toward the pavement or in frequently irrigated areas. Underdrains should be installed a minimum of 10-feet to either side of underground structures. For underdrains to be effective, minimum installation depths of 18-inches is suggested. The drains should consist of a 4-inch perforated plastic pipe encased in a clean granular backfill such as washed No. 57 stone.

5.6 Groundwater Considerations

Dry conditions were observed during and upon completion of all borings. The exact elevation of the water table will fluctuate depending upon normal seasonal variations in precipitation and surface runoff. Groundwater is anticipated to be encountered at the interface between soil and bedrock.

Based on these observations, groundwater concerns with short term excavations should not present major difficulties; however, groundwater seepage through the sandy and silty clay soils observed in the borings may occur depending upon the time of the year and the weather conditions when the excavations are made. Excavations should be frequently monitored for groundwater seepage. Flattening of excavations could be required where if softening of the excavation sides occurs due to groundwater seepage and/or runoff.

Seepage from surface runoff may occur into shallow excavations and soften the subgrade materials. Since these foundation materials tend to loosen when exposed to free water, every effort should be made to keep the excavations dry should water be encountered. Sump pumps or other conventional dewatering procedures should be sufficient for this purpose. All concrete for footings should be poured the same day as the excavation is made to prevent the softening of foundation soils.

5.7 Utility Excavations

With construction of the new concession building, placement of underground structures will be required. The shallow soils encountered at the site are classified as Type B soils in OSHA Construction Standards for Excavations. Therefore, it will be necessary to maintain all construction slopes greater than 4 feet at 1:1 (H:V) or flatter. If it is not possible to maintain this slope, shoring will be required. All shoring should be in accordance with applicable OSHA standards. Temporary excavations into competent bedrock can be near vertical. It should be noted that the shallow soil is susceptible to erosion. Thus, excavations should be monitored until backfill can occur. Flattening of the slopes could be required to maintain safe conditions. Excavations extending into sound bedrock can be near vertical. Excavations greater than 20-feet in depth are required to be designed by a professional engineer.

5.8 Future Improvements

Preliminary concept plans indicate the possibility of future improvements to the south of the existing grandstands in the areas of B-10, B-11 & B-12. Bedrock consisting of gray weathered shale was observed at 12.0-feet beneath grades at B-10. Soils in these areas appear to be favorable for future expansion. Once further design details are known, additional soils data should be obtained to finalize design of future improvements.

6.0 STATEMENT OF LIMITATIONS

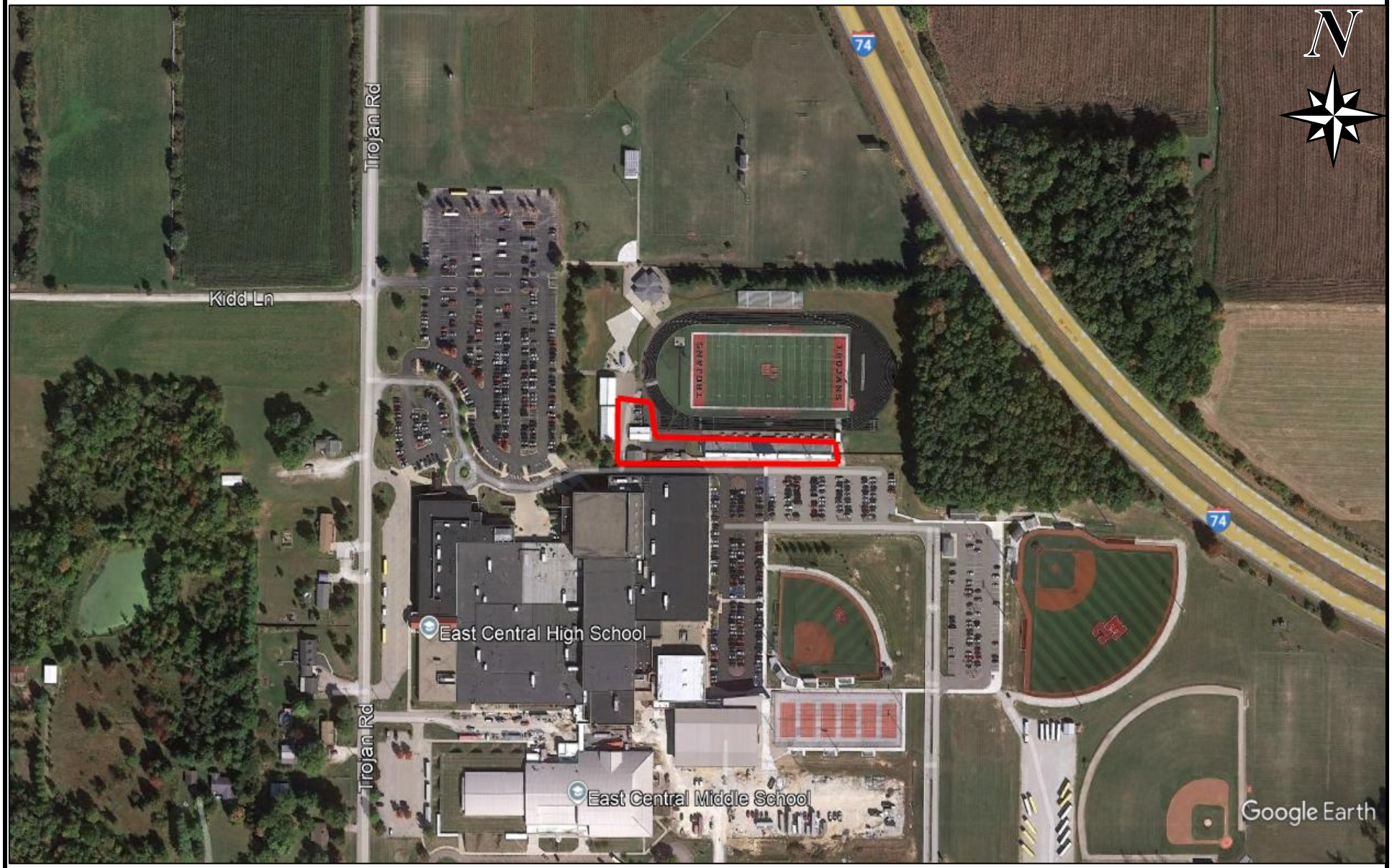
An inherent limitation of any geotechnical engineering study is that conclusions must be drawn based on data collected at a limited number of discrete locations. The geotechnical parameters provided in this report were developed from the information obtained from the test borings that depict subsurface conditions only at these specific locations and on the date indicated on the boring logs. Soil conditions at other locations may differ from conditions encountered at these boring locations and groundwater levels shall be expected to vary with time. The nature and extent of variations between the borings may not become evident until the course of construction.

The recommendations submitted are based on the available soil information and assumed design details enumerated in this report. If actual design details differ from those specified in this report, this information should be brought to the attention of Alt & Witzig Engineering, Inc. so that it may be determined if changes in the recommendations herein are required. If deviations from the noted subsurface conditions are encountered during construction, they should also be brought to the attention of Alt & Witzig Engineering, Inc.

Alt & Witzig Engineering, INC.

APPENDIX A

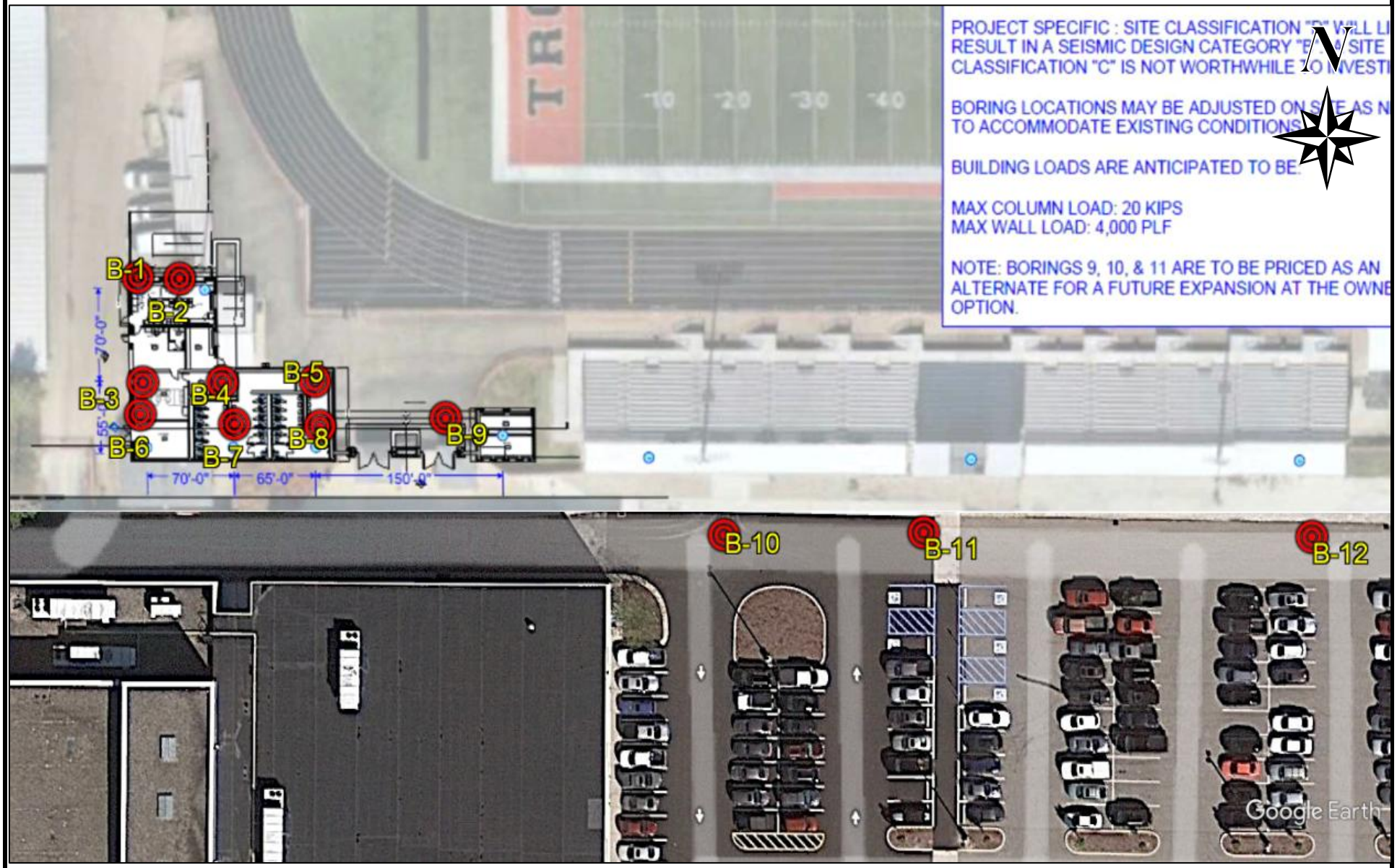
Site Location Map
Boring Location Plan
Boring Logs
General Notes



PROJECT: New Concessions Building
LOCATION: St. Leon, Indiana
CLIENT: Sunman Dearborn Community School Corporation
ALT & WITZIG ENGINEERING FILE NO.: 25CN0073

SITE LOCATION MAP

Alt & Witzig Engineering, Inc.
1020 Arbor Tech Drive Suite J
Hebron, KY 41048
TEL (859)551-4944 · www.altwitzig.com



PROJECT: New Concessions Building
LOCATION: St. Leon, Indiana
CLIENT: Sunman Dearborn Community School Corporation
ALT & WITZIG ENGINEERING FILE NO.: 25CN0073

BORING LOCATION PLAN

Alt & Witzig Engineering, Inc.
1020 Arbor Tech Drive Suite J
Hebron, KY 41048
TEL (859)551-4944 · www.altwitzig.com

BORING LOG

Alt & Witzig Engineering, Inc.

CLIENT **Sunman Dearborn Community School Corporation** BORING # **B-01**

PROJECT NAME **East Central High School - New Concessions Buildin** ALT & WITZIG FILE # **25CN0073**

PROJECT LOCATION **St. Leon, IN**

DRILLING and SAMPLING INFORMATION

Date Started	3/28/25	Hammer Wt.	140 lbs.
Date Completed	3/28/25	Hammer Drop	30 in.
Boring Method	HSA	Spoon Sampler OD	2 in.
Driller	J. Roark	Rig Type	B-57 Truck

STRATA ELEV.	SOIL CLASSIFICATION SURFACE ELEVATION 1008.0	Strata Depth	Depth Scale	Sample No.	Sample Type	Sampler Graphics / Recovery Graphics	Ground Water	TEST DATA: Standard Penetration Test, N - blows/foot	TEST DATA: Qu-tsf Unconfined Compressive Strength	TEST DATA: PP-tsf Pocket Penetrometer	TEST DATA: Moisture Content % / *Dry Unit Weight (pcf)*	Remarks
1007.5	Asphalt *(6-inches)*	0.5										
1007.0	Gravel *(6-inches)*	1.0										
				1	SS			8		2.5	23.9	
	Brown and Gray CLAY with Concretions and Trace Sand		5	2	SS			9		2.0	21.2	
1001.0		7.0		3	SS			10		3.0	20.7	
	Brown and Gray CLAY with Trace Concretions		10	4	AUGER			16			11.1	
993.5		14.5										
992.0	Gray Weathered SHALE with Limestone Seams	16.0	15	5	SS			50/2				
	(Auger Refusal @ 16-feet) End of Boring at 16 feet											

Sample Type
- SS - Driven Split Spoon
- ST - Pressed Shelby Tube
- CA - Continuous Flight Auger
- RC - Rock Core
- CU - Cuttings
- CT - Continuous Tube

Groundwater
- ○ During Drilling *Dry ft.*
- ▽ At Completion *Dry ft.*

Boring Method
- HSA - Hollow Stem Augers
- CFA - Continuous Flight Augers
- DC - Driving Casing
- MD - Mud Drilling

BORING LOG

Alt & Witzig Engineering, Inc.

CLIENT **Sunman Dearborn Community School Corporation**
PROJECT NAME **East Central High School - New Concessions Buildin**
PROJECT LOCATION **St. Leon, IN**

BORING # **B-02**
ALT & WITZIG FILE # **25CN0073**

DRILLING and SAMPLING INFORMATION

Date Started **3/27/25**
Date Completed **3/27/25**
Boring Method **HSA**
Driller **J. Roark**
Hammer Wt. **140** lbs.
Hammer Drop **30** in.
Spoon Sampler OD **2** in.
Rig Type **B-57 Truck**

STRATA ELEV.	SOIL CLASSIFICATION SURFACE ELEVATION 1009.0	Strata Depth	Depth Scale	Sample No.	Sample Type	Sampler Graphics / Recovery Graphics	Ground Water	TEST DATA: Standard Penetration Test, N - blows/foot	TEST DATA: Qu-tsf Unconfined Compressive Strength	TEST DATA: PP-tsf Pocket Penetrometer	TEST DATA: Moisture Content % / *Dry Unit Weight (pcf)*	Remarks
1008.3	Asphalt *(8-inches)*	0.7										
1008.0	Gravel *(4-inches)*	1.0		1	SS			7		2.0	25.1	
	Brown and Gray CLAY with Concretions and Trace Sand		5	2	SS			9		2.5	19.0	
1002.0		7.0		3	SS			15		4.5	17.5	
	Brown and Gray CLAY with Concretions and Trace Sand											
999.5		9.5	10	4	SS			10		1.3	27.9	
	Brown and Gray CLAY with Trace Sand, Silt, and Gravel											
994.5		14.5										
993.5	Gray Weathered SHALE with Limestone Seams	15.5	15	5	SS			50/2				
	(Auger Refusal @ 15.5-feet) End of Boring at 15.5 feet											

Sample Type
SS - Driven Split Spoon
ST - Pressed Shelby Tube
CA - Continuous Flight Auger
RC - Rock Core
CU - Cuttings
CT - Continuous Tube

Groundwater
○ During Drilling *Dry ft.*
▽ At Completion *Dry ft.*

Boring Method
HSA - Hollow Stem Augers
CFA - Continuous Flight Augers
DC - Driving Casing
MD - Mud Drilling

BORING LOG

Alt & Witzig Engineering, Inc.

CLIENT **Sunman Dearborn Community School Corporation**
PROJECT NAME **East Central High School - New Concessions Buildin**
PROJECT LOCATION **St. Leon, IN**

BORING # **B-03**
ALT & WITZIG FILE # **25CN0073**

DRILLING and SAMPLING INFORMATION

Date Started **3/27/25**
Date Completed **3/27/25**
Boring Method **HSA**
Driller **J. Roark**
Hammer Wt. **140** lbs.
Hammer Drop **30** in.
Spoon Sampler OD **2** in.
Rig Type **B-57 Truck**

STRATA ELEV.	SOIL CLASSIFICATION SURFACE ELEVATION 1007.0	Strata Depth	Depth Scale	Sample No.	Sample Type	Sampler Graphics / Recovery Graphics	Ground Water	TEST DATA: Standard Penetration Test, N - blows/foot	TEST DATA: Qu-tsf Unconfined Compressive Strength	TEST DATA: PP-tsf Pocket Penetrometer	TEST DATA: Moisture Content % / *Dry Unit Weight (pcf)*	Remarks
1006.4	Asphalt *(7-inches)*	0.6										
1006.3	Gravel *(2-inches)*	0.8										
1005.0	Dark Gray CLAY Brown and Gray CLAY with Concretions	2.0		1	SS			10		2.5	23.7	
1002.0		5.0	5	2	SS			23		4.0	17.7	
1000.0	Gray and Brown CLAY with Concretions and Trace Sand	7.0		3	SS			20		4.0	20.9	LL = 60% PL = 18% PI = 42%
997.5	Brown and Gray FAT CLAY with Sand, Concretions, and Trace Gravel	9.5	10	4	SS			13		3.3	13.4	
	Gray and Brown CLAY with Silt, Sand, and Trace Gravel											
992.5		14.5										
991.5	Gray Weathered SHALE with Limestone Seams	15.5	15	5	SS			50/2				
	(Auger Refusal @ 15.5-feet) End of Boring at 15.5 feet											

Sample Type
SS - Driven Split Spoon
ST - Pressed Shelby Tube
CA - Continuous Flight Auger
RC - Rock Core
CU - Cuttings
CT - Continuous Tube

Groundwater
○ During Drilling *Dry ft.*
▽ At Completion *Dry ft.*

Boring Method
HSA - Hollow Stem Augers
CFA - Continuous Flight Augers
DC - Driving Casing
MD - Mud Drilling

BORING LOG

Alt & Witzig Engineering, Inc.

CLIENT **Sunman Dearborn Community School Corporation**
PROJECT NAME **East Central High School - New Concessions Buildin**
PROJECT LOCATION **St. Leon, IN**

BORING # **B-04**
ALT & WITZIG FILE # **25CN0073**

DRILLING and SAMPLING INFORMATION

Date Started **3/27/25**
Date Completed **3/27/25**
Boring Method **HSA**
Driller **J. Roark**

Hammer Wt. **140** lbs.
Hammer Drop **30** in.
Spoon Sampler OD **2** in.
Rig Type **B-57 Truck**

STRATA ELEV.	SOIL CLASSIFICATION SURFACE ELEVATION 1008.0	Strata Depth	Depth Scale	Sample No.	Sample Type	Sampler Graphics / Recovery Graphics	Ground Water	TEST DATA: Standard Penetration Test, N - blows/foot	TEST DATA: Qu-tsf Unconfined Compressive Strength	TEST DATA: PP-tsf Pocket Penetrometer	TEST DATA: Moisture Content % / *Dry Unit Weight (pcf)*	Remarks
1007.7	Asphalt *(4-inches)*	0.3										
1007.3	Gravel *(4-inches)*	0.7										
1005.5	Dark Brown and Gray CLAY	2.5		1	SS			8		3.5	22.2	
1003.5	Brown and Gray CLAY with Concretions and Trace Sand	4.5	5	2	SS			13		4.0	19.0	
1001.0	Brown and Gray CLAY with Sand and Concretions	7.0		3	SS			13		3.0	26.7	LL = 60% PL = 18% PI = 42%
998.5	Brown and Gray FAT CLAY with Concretions	9.5	10	4	SS			15		2.8	10.7	
993.5	Brown and Gray Gravelly CLAY with Sand, Silt, and Trace Concretions	14.5										
992.5	Gray Weathered SHALE with Limestone Seams	15.5	15	5	SS			50/2				
	(Auger Refusal @ 15.5-feet) End of Boring at 15.5 feet											

Sample Type
SS - Driven Split Spoon
ST - Pressed Shelby Tube
CA - Continuous Flight Auger
RC - Rock Core
CU - Cuttings
CT - Continuous Tube

Groundwater
○ During Drilling *Dry ft.*
▽ At Completion *Dry ft.*

Boring Method
HSA - Hollow Stem Augers
CFA - Continuous Flight Augers
DC - Driving Casing
MD - Mud Drilling

BORING LOG

Alt & Witzig Engineering, Inc.

CLIENT **Sunman Dearborn Community School Corporation**
PROJECT NAME **East Central High School - New Concessions Buildin**
PROJECT LOCATION **St. Leon, IN**

BORING # **B-05**
ALT & WITZIG FILE # **25CN0073**

DRILLING and SAMPLING INFORMATION

Date Started **3/27/25**
Date Completed **3/27/25**
Boring Method **HSA**
Driller **J. Roark**
Hammer Wt. **140** lbs.
Hammer Drop **30** in.
Spoon Sampler OD **2** in.
Rig Type **B-57 Truck**

STRATA ELEV.	SOIL CLASSIFICATION SURFACE ELEVATION 1008.0	Strata Depth	Depth Scale	Sample No.	Sample Type	Sampler Graphics / Recovery Graphics	Ground Water	TEST DATA: Standard Penetration Test, N - blows/foot	TEST DATA: Qu-tsf Unconfined Compressive Strength	TEST DATA: PP-tsf Pocket Penetrometer	TEST DATA: Moisture Content % / *Dry Unit Weight (pcf)*	Remarks
1007.2	Asphalt *(10-inches)*	0.8										
1006.6		1.4										
1006.0	Gravel *(7-inches)*	2.0										
	Dark Brown and Gray CLAY			1	SS			8		4.5	18.3	
	Brown and Gray CLAY with Silt, Sand, and Trace Concretions		5	2	SS			8		3.0	18.0	
1001.0		7.0		3	SS			12		4.3	21.2	
	Brown and Gray CLAY with Trace Gravel and Concretions		10	4	SS			17		4.0	9.9	
997.5		10.5										
	Brown and Gray Residual CLAY with Gravel and Sand											
993.5		14.5										
992.5	Gray Weathered SHALE with Limestone Seams	15.5	15	5	SS			50/1				
	(Auger Refusal @ 15.5-feet) End of Boring at 15.5 feet											

Sample Type
SS - Driven Split Spoon
ST - Pressed Shelby Tube
CA - Continuous Flight Auger
RC - Rock Core
CU - Cuttings
CT - Continuous Tube

Groundwater
○ During Drilling *Dry ft.*
▽ At Completion *Dry ft.*

Boring Method
HSA - Hollow Stem Augers
CFA - Continuous Flight Augers
DC - Driving Casing
MD - Mud Drilling

BORING LOG

Alt & Witzig Engineering, Inc.

CLIENT **Sunman Dearborn Community School Corporation**
PROJECT NAME **East Central High School - New Concessions Buildin**
PROJECT LOCATION **St. Leon, IN**

BORING # **B-06**
ALT & WITZIG FILE # **25CN0073**

DRILLING and SAMPLING INFORMATION

Date Started **3/26/25**
Date Completed **3/26/25**
Boring Method **HSA**
Driller **J. Roark**
Hammer Wt. **140** lbs.
Hammer Drop **30** in.
Spoon Sampler OD **2** in.
Rig Type **B-57 Truck**

STRATA ELEV.	SOIL CLASSIFICATION SURFACE ELEVATION 1007.0	Strata Depth	Depth Scale	Sample No.	Sample Type	Sampler Graphics / Recovery Graphics	Ground Water	TEST DATA: Standard Penetration Test, N - blows/foot	TEST DATA: Qu-tsf Unconfined Compressive Strength	TEST DATA: PP-tsf Pocket Penetrometer	TEST DATA: Moisture Content % / *Dry Unit Weight (pcf)*	Remarks
1006.5	Asphalt *(6-inches)*	0.5										
1005.8	Gravel *(8-inches)*	1.2										
1004.5	Brown and Gray CLAY *(Possible Fill)*	2.5		1	SS			14		3.5	21.3	
	Brown and Gray CLAY with Silt, Sand, and Concretions		5	2	SS			13		4.0	17.5	
1000.0		7.0		3	SS			11		2.3	25.4	
	Brown and Gray CLAY with Trace Concretions											
997.0		10.0	10	4	SS			14		3.0	13.0	
	Brown and Gray Gravelly Sandy CLAY with Silt											
994.0		13.0										
	Gray Weathered SHALE with Limestone Seams		15	5	SS			50/2				
989.5		17.5		6	SS			50/2				
	(Auger Refusal @ 17.5-feet) End of Boring at 17.5 feet											

Sample Type
SS - Driven Split Spoon
ST - Pressed Shelby Tube
CA - Continuous Flight Auger
RC - Rock Core
CU - Cuttings
CT - Continuous Tube

Groundwater
○ During Drilling *Dry ft.*
▽ At Completion *Dry ft.*

Boring Method
HSA - Hollow Stem Augers
CFA - Continuous Flight Augers
DC - Driving Casing
MD - Mud Drilling

BORING LOG

Alt & Witzig Engineering, Inc.

CLIENT **Sunman Dearborn Community School Corporation**
PROJECT NAME **East Central High School - New Concessions Buildin**
PROJECT LOCATION **St. Leon, IN**

BORING # **B-07**
ALT & WITZIG FILE # **25CN0073**

DRILLING and SAMPLING INFORMATION

Date Started **3/26/25**
Date Completed **3/26/25**
Boring Method **HSA**
Driller **J. Roark**
Hammer Wt. **140** lbs.
Hammer Drop **30** in.
Spoon Sampler OD **2** in.
Rig Type **B-57 Truck**

STRATA ELEV.	SOIL CLASSIFICATION SURFACE ELEVATION 1007.0	Strata Depth	Depth Scale	Sample No.	Sample Type	Sampler Graphics / Recovery Graphics	Ground Water	TEST DATA: Standard Penetration Test, N - blows/foot	TEST DATA: Qu-tsf Unconfined Compressive Strength	TEST DATA: PP-tsf Pocket Penetrometer	TEST DATA: Moisture Content % / *Dry Unit Weight (pcf)*	Remarks
1006.7	Asphalt *(4-inches)*	0.3										
1006.3	Gravel *(5-inches)*	0.8										
				1	SS			8		3.0	22.4	
	Brown and Gray CLAY with Concretions and Trace Sand		5	2	SS			11		3.5	19.0	
1000.0		7.0		3	SS			12		2.0	24.7	
	Brown and Gray Silty CLAY with Gravel, Concretions, and Fat Clay Pockets		10	4	SS			62		2.8	14.5	
993.0		14.0										
992.3	Gray Highly Weathered SHALE with Limestone Seams	14.7		5	SS			50/2				
	(Auger Refusal @ 14.66-feet) End of Boring at 14.66 feet											

Sample Type
SS - Driven Split Spoon
ST - Pressed Shelby Tube
CA - Continuous Flight Auger
RC - Rock Core
CU - Cuttings
CT - Continuous Tube

Groundwater
○ During Drilling *Dry ft.*
▽ At Completion *Dry ft.*

Boring Method
HSA - Hollow Stem Augers
CFA - Continuous Flight Augers
DC - Driving Casing
MD - Mud Drilling

BORING LOG

Alt & Witzig Engineering, Inc.

CLIENT **Sunman Dearborn Community School Corporation**
PROJECT NAME **East Central High School - New Concessions Buildin**
PROJECT LOCATION **St. Leon, IN**

BORING # **B-08**
ALT & WITZIG FILE # **25CN0073**

DRILLING and SAMPLING INFORMATION

Date Started **3/27/25**
Date Completed **3/27/25**
Boring Method **HSA**
Driller **J. Roark**
Hammer Wt. **140** lbs.
Hammer Drop **30** in.
Spoon Sampler OD **2** in.
Rig Type **B-57 Truck**

STRATA ELEV.	SOIL CLASSIFICATION SURFACE ELEVATION 1008.0	Strata Depth	Depth Scale	Sample No.	Sample Type	Sampler Graphics / Recovery Graphics	Ground Water	TEST DATA: Standard Penetration Test, N - blows/foot	TEST DATA: Qu-tsf Unconfined Compressive Strength	TEST DATA: PP-tsf Pocket Penetrometer	TEST DATA: Moisture Content % / *Dry Unit Weight (pcf)*	Remarks
1007.3	Asphalt *(8-inches)*	0.7										
1006.7	Gravel *(8-inches)*	1.3										
	Brown and Gray CLAY with Concretions and Trace Sand			1	SS			11		3.5	23.4	
			5	2	SS			11		2.5	18.6	
1001.0		7.0		3	SS			15		3.3	25.8	
	Brown and Gray FAT CLAY with Silt, Sand, and Concretions		10	4	SS			15		1.5	22.9	
994.0		14.0										
993.2	Gray Weathered SHALE with Limestone Seams	14.8		5	SS			50/2				
	(Auger Refusal @ 14.8-feet) End of Boring at 14.8 feet											

Sample Type
SS - Driven Split Spoon
ST - Pressed Shelby Tube
CA - Continuous Flight Auger
RC - Rock Core
CU - Cuttings
CT - Continuous Tube

Groundwater
○ During Drilling *Dry ft.*
▽ At Completion *Dry ft.*

Boring Method
HSA - Hollow Stem Augers
CFA - Continuous Flight Augers
DC - Driving Casing
MD - Mud Drilling

BORING LOG

Alt & Witzig Engineering, Inc.

CLIENT **Sunman Dearborn Community School Corporation**
PROJECT NAME **East Central High School - New Concessions Buildin**
PROJECT LOCATION **St. Leon, IN**

BORING # **B-09**
ALT & WITZIG FILE # **25CN0073**

DRILLING and SAMPLING INFORMATION

Date Started **3/26/25**
Date Completed **3/26/25**
Boring Method **HSA**
Driller **J. Roark**
Hammer Wt. **140** lbs.
Hammer Drop **30** in.
Spoon Sampler OD **2** in.
Rig Type **B-57 Truck**

STRATA ELEV.	SOIL CLASSIFICATION SURFACE ELEVATION 1009.0	Strata Depth	Depth Scale	Sample No.	Sample Type	Sampler Graphics / Recovery Graphics	Ground Water	TEST DATA: Standard Penetration Test, N - blows/foot	TEST DATA: Qu-tsf Unconfined Compressive Strength	TEST DATA: PP-tsf Pocket Penetrometer	TEST DATA: Moisture Content % / *Dry Unit Weight (pcf)*	Remarks
1008.3	Asphalt *(8-inches)*	0.7										
1007.3	Gravel *(12-inches)*	1.7		1	SS			9		3.0	23.7	
	Brown and Gray CLAY with Concretions and Sand		5	2	SS			10		3.3	19.4	
1002.0		7.0		3	SS			16		4.0	21.5	LL = 60% PL = 18% PI = 42%
	Brown and Gray FAT CLAY with Trace Concretions											
999.0		10.0	10	4	SS			50		3.3	9.7	
	Brown and Gray Gravelly Sandy CLAY with Silt and Cobble											
994.5		14.5										
994.0	Gray Weathered SHALE with Limestone Seams	15.0	15	5	SS			50/2				
	(Auger Refusal @ 15-feet) End of Boring at 15 feet											

Sample Type
SS - Driven Split Spoon
ST - Pressed Shelby Tube
CA - Continuous Flight Auger
RC - Rock Core
CU - Cuttings
CT - Continuous Tube

Groundwater
○ During Drilling *Dry ft.*
▽ At Completion *Dry ft.*

Boring Method
HSA - Hollow Stem Augers
CFA - Continuous Flight Augers
DC - Driving Casing
MD - Mud Drilling

BORING LOG

Alt & Witzig Engineering, Inc.

CLIENT **Sunman Dearborn Community School Corporation** BORING # **B-10**

PROJECT NAME **East Central High School - New Concessions Buildin** ALT & WITZIG FILE # **25CN0073**

PROJECT LOCATION **St. Leon, IN**

DRILLING and SAMPLING INFORMATION

Date Started **3/27/25** Hammer Wt. **140** lbs.

Date Completed **3/27/25** Hammer Drop **30** in.

Boring Method **HSA** Spoon Sampler OD **2** in.

Driller **J. Roark** Rig Type **B-57 Truck**

STRATA ELEV.	SOIL CLASSIFICATION SURFACE ELEVATION 1006.0	Strata Depth	Depth Scale	Sample No.	Sample Type	Sampler Graphics / Recovery Graphics	Ground Water	Standard Penetration Test, N - blows/foot	Qu-tsf Unconfined Compressive Strength	PP-tsf Pocket Penetrometer	Moisture Content % / *Dry Unit Weight (pcf)*	Remarks
1005.4	Asphalt *(7-inches)*	0.6										
1004.0	Gravel and Sand	2.0		1	SS			9		4.5	19.4	
	Brown and Gray CLAY with Concretions and Sand											
1001.0		5.0	5	2	SS			11		3.5	18.4	
	Brown and Gray CLAY with Trace Concretions											
998.0		8.0		3	SS			16		3.8	20.3	
	Brown and Gray Gravelly Sandy CLAY with Silt and Trace Concretions											
996.0		10.0	10	4	SS			50/3		>4.5	10.4	
	Brown and Gray Silty Gravelly CLAY with Sand											
994.0		12.0		5	SS			50/2				
992.5	Gray Weathered SHALE with Limestone Seams	13.5										
	(Auger Refusal @ 13.5-feet) End of Boring at 13.5 feet											

TEST DATA

Sample Type

SS - Driven Split Spoon
ST - Pressed Shelby Tube
CA - Continuous Flight Auger
RC - Rock Core
CU - Cuttings
CT - Continuous Tube

Groundwater

○ During Drilling *Dry ft.*
▽ At Completion *Dry ft.*

Boring Method

HSA - Hollow Stem Augers
CFA - Continuous Flight Augers
DC - Driving Casing
MD - Mud Drilling

BORING LOG

Alt & Witzig Engineering, Inc.

CLIENT **Sunman Dearborn Community School Corporation**
PROJECT NAME **East Central High School - New Concessions Buildin**
PROJECT LOCATION **St. Leon, IN**

BORING # **B-11**
ALT & WITZIG FILE # **25CN0073**

DRILLING and SAMPLING INFORMATION

Date Started **3/27/25**
Date Completed **3/27/25**
Boring Method **HSA**
Driller **J. Roark**
Hammer Wt. **140** lbs.
Hammer Drop **30** in.
Spoon Sampler OD **2** in.
Rig Type **B-57 Truck**

SURFACE ELEVATION 1006.0

STRATA ELEV.	SOIL CLASSIFICATION	Strata Depth	Depth Scale	Sample No.	Sample Type	Sampler Graphics Recovery Graphics	Ground Water	TEST DATA: Standard Penetration Test, N - blows/foot	TEST DATA: Qu-tsf Unconfined Compressive Strength	TEST DATA: PP-tsf Pocket Penetrometer	TEST DATA: Moisture Content % Dry Unit Weight (pcf)	Remarks
1005.4	Asphalt	0.6										
1004.7	*(7-inches)*	1.3										
1004.0	Gravel	2.0										
	(9-inches)			1	SS			15		4.0	18.5	
	Dark Gray CLAY											
	Brown and Gray CLAY with Sand and Concretions		5	2	SS			11		3.3	18.1	
999.0		7.0										
	Brown and Gray Gravelly CLAY with Sand and Silt			3	SS			11		2.8	16.1	
996.5		9.5										
	Brown and Gray Silty Gravelly CLAY with Sand		10	4	SS			20		>4.5	18.8	
994.5		11.5										
	(Auger Refusal @ 11.5-feet) End of Boring at 11.5 feet											

Sample Type
SS - Driven Split Spoon
ST - Pressed Shelby Tube
CA - Continuous Flight Auger
RC - Rock Core
CU - Cuttings
CT - Continuous Tube

Groundwater
○ During Drilling *Dry ft.*
▽ At Completion *Dry ft.*

Boring Method
HSA - Hollow Stem Augers
CFA - Continuous Flight Augers
DC - Driving Casing
MD - Mud Drilling

BORING LOG

Alt & Witzig Engineering, Inc.

CLIENT **Sunman Dearborn Community School Corporation**
PROJECT NAME **East Central High School - New Concessions Buildin**
PROJECT LOCATION **St. Leon, IN**

BORING # **B-12**
ALT & WITZIG FILE # **25CN0073**

DRILLING and SAMPLING INFORMATION

Date Started _____
Date Completed _____
Boring Method **HSA**
Driller **J. Roark**

Hammer Wt. **140** lbs.
Hammer Drop **30** in.
Spoon Sampler OD **2** in.
Rig Type **B-57 Truck**

STRATA ELEV.	SOIL CLASSIFICATION SURFACE ELEVATION 1011.0	Strata Depth	Depth Scale	Sample No.	Sample Type	Sampler Graphics / Recovery Graphics	Ground Water	TEST DATA: Standard Penetration Test, N - blows/foot	TEST DATA: Qu-tsf Unconfined Compressive Strength	TEST DATA: PP-tsf Pocket Penetrometer	TEST DATA: Moisture Content % / *Dry Unit Weight (pcf)*	Remarks
1010.5	Asphalt *(6-inches)*	0.5										
1009.7	Gravel *(10-inches)*	1.3										
	Brown and Gray CLAY with Concretions and Trace Sand			1	SS			12		>4.5	15.7	
1006.5		4.5										
	Brown and Gray Silty CLAY with a Trace of Sand		5	2	SS			10		3.8	18.0	
1004.0		7.0										
	Brown and Gray CLAY with Silt Pockets and Trace Gravel			3	SS			11		4.3	19.4	
1001.5		9.5										
	Brown and Gray Silty Gravelly CLAY with Sand		10	4	SS			35		4.5	12.7	
996.5		14.5										
	Brown and Gray Residual CLAY with Gravel and Sand		15	5	SS			50/3		>4.5	11.6	
995.0		16.0										
	(Auger Refusal @ 16-feet) End of Boring at 16 feet											

Sample Type
SS - Driven Split Spoon
ST - Pressed Shelby Tube
CA - Continuous Flight Auger
RC - Rock Core
CU - Cuttings
CT - Continuous Tube

Groundwater
○ During Drilling _____ *Dry ft.*
▽ At Completion _____ *Dry ft.*

Boring Method
HSA - Hollow Stem Augers
CFA - Continuous Flight Augers
DC - Driving Casing
MD - Mud Drilling

GENERAL NOTES

SAMPLE IDENTIFICATION

The Unified Soil Classification System is used to identify the soil unless otherwise noted.

SOIL PROPERTY SYMBOLS

N:	Standard "N" penetration: Blows per foot of a 140 pound hammer falling 30 inches on a 2 inch O.D. split-spoon.
Qu:	Unconfined compressive strength, TSF
Qp:	Penetrometer value, unconfined compressive strength, TSF
Mc:	Water content, %
LL:	Liquid limit, %
PL:	Plastic limit, %
Dd:	Natural dry density, PCF
▼ :	Apparent groundwater level at time noted after completion

DRILLING AND SAMPLING SYMBOLS

SS:	Split-spoon - 1 3/8" I.D., 2" O.D., except where noted
ST:	Shelby tube - 3" O.D., except where noted
AU:	Auger sample
DB:	Diamond bit
CB:	Carbide bit
WS:	Washed sample

RELATIVE DENSITY AND CONSISTENCY CLASSIFICATION

TERM (NON-COHESIVE SOILS)	BLOWS PER FOOT
Very loose	0 - 4
Loose	5 - 10
Firm	11 - 30
Dense	31 - 50
Very Dense	Over 50

TERM (COHESIVE SOILS)	Qu (TSF)
Very soft	0 - 0.25
Soft	0.25 - 0.50
Medium	0.50 - 1.00
Stiff	1.00 - 2.00
Very Stiff	2.00 - 4.00
Hard	4.00+

PARTICLE SIZE

Boulders	8 in.(+)	Coarse Sand	5 mm-0.6 mm	Silt	0.075 mm - 0.005 mm
Cobbles	8 in. - 3 in.	Medium Sand	0.6mm-0.2 mm	Clay	0.005mm(-)
Gravel	3 in. - 5 mm	Fine Sand	0.2mm-0.075 mm		

BENCHMARK INFORMATION

TBM #400
NORTH/NORTHEAST BONNET BOLT OF FIRE HYDRANT LOCATED ±40' EAST OF THE CENTERLINE OF "TROJAN ROAD" & ±67' NORTH OF THE CENTERLINE OF "SCHUMAN ROAD", UNABLE TO FIND EXISTING CUT "X" AT TIME OF SURVEY

ELEV. = 1006.75

TBM #401
CUT "X" ON THE EAST SIDE OF A CONCRETE LIGHTPOLE BASE LOCATED ±70' EAST OF THE CENTER LINE OF "TROJAN ROAD" & ±65' WEST/NORTHWEST OF THE NORTHWEST CORNER OF THE HIGH SCHOOL BUILDING.

ELEV. = 1007.63

TOPOGRAPHICAL AND DEMO NOTES

1. CONTRACTOR SHALL DISPOSE OF ALL MATERIALS IN ACCORDANCE WITH FEDERAL, STATE, AND LOCAL REGULATIONS.
2. UTILITIES ARE GRAPHICAL REPRESENTATION PER SURVEY AND MAPPING. CONTRACTOR SHALL FIELD VERIFY ALL UTILITIES PRIOR TO CONSTRUCTION.
3. CONTRACTOR SHALL COORDINATE WITH APPLICABLE UTILITY COMPANIES FOR SERVICE DIS-CONNECTIONS.
4. THE SITE ASPHALT AND CONCRETE AREAS HATCHED FOR REMOVAL SHALL BE REMOVED COMPLETELY PRIOR TO PLACEMENT OF NEW MATERIAL.

FLOODPLAIN INFORMATION

BY GRAPHIC PLOTTING ONLY, THIS TRACT OF LAND DESCRIBED HEREON LIES WITHIN ZONE "X" (AREAS OUTSIDE THE 500-YEAR FLOODPLAIN) AND IS NOT IN A SPECIAL FLOOD HAZARD AREA AS PLOTTED ON THE FEDERAL EMERGENCY MANAGEMENT AGENCY FLOOD INSURANCE RATE MAP FOR DEARBORN & RIPLEY COUNTIES, INDIANA, COMMUNITY PANEL NO. 180038, 180596, & 180600, WHICH BEARS AN EFFECTIVE DATE OF APRIL 16, 2014.

NORTH

20 0 20 40

SCALE: 1" = 20'

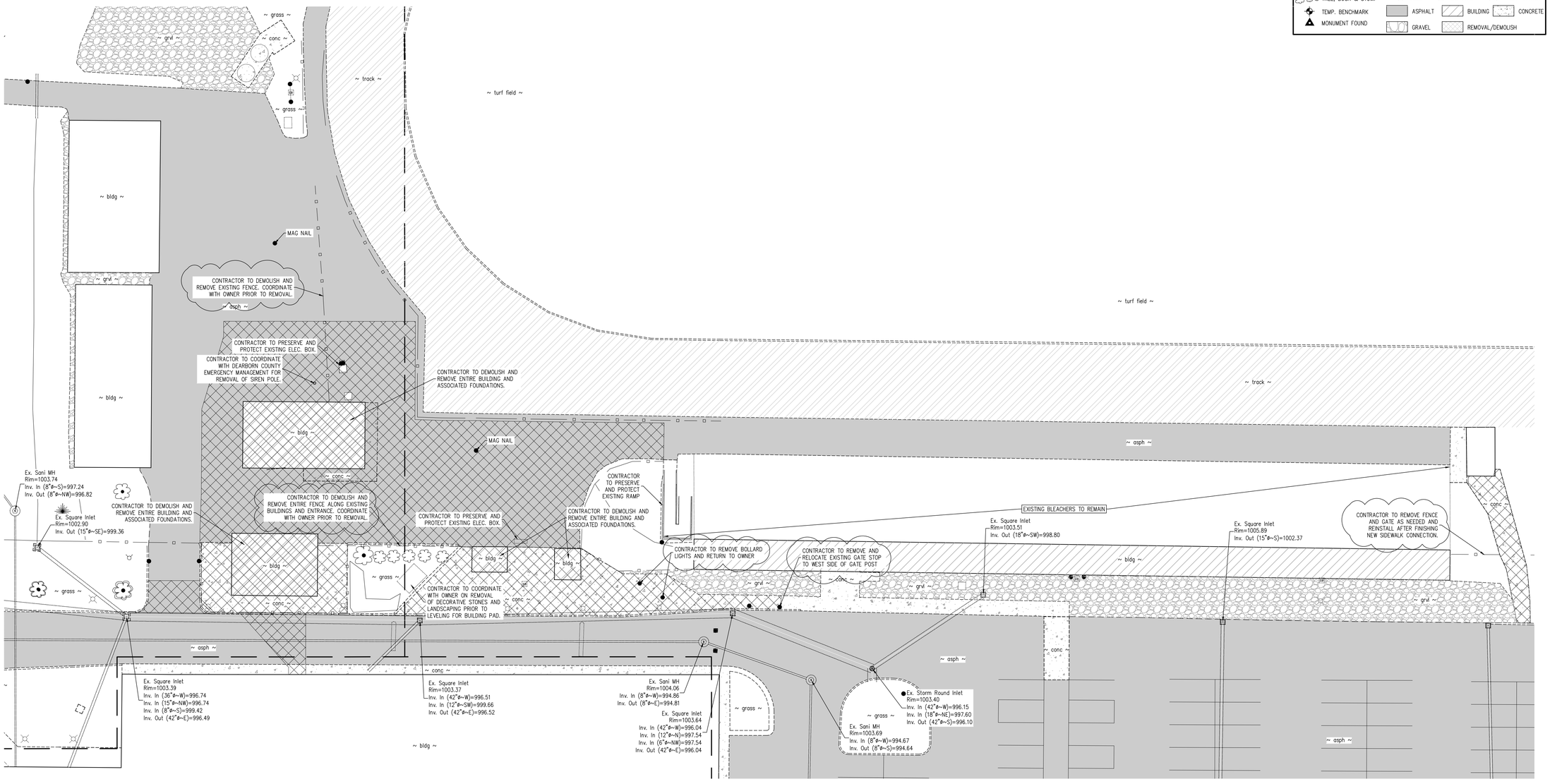
EXISTING LEGEND

POWERPOLE	800	CONTOURS	
POWERPOLE W/RISER		PROPERTY LINE	
POWERPOLE W/LIGHT		SECTION LINE	
LIGHT POLE		RIGHT-OF-WAY	
ELECTRIC METER		EASEMENT	
ELECTRIC BOX		ADJOINER LINE	
YARD LIGHT		PAVEMENT LINE	
GUY WIRE		FIELD LINE	
TELEPHONE MANHOLE		PRIVACY FENCE	
TELEPHONE RISER		CHAINLINK FENCE	
WATER VALVE		SPLIT RAIL FENCE	
FIRE HYDRANT		WIRE FENCE	
WELL		DITCH	
WATER MANHOLE		GAS LINE	
WATER METER		TELEPHONE LINE	
GAS VALVE		WATER LINE	
GAS METER		CABLE TV LINE	
CABLE TV RISER		ELECTRIC LINE	
CLEANOUT		OVERHEAD UTILITY LINE	
SIGN		TREE LINE	
MAILBOX		SANITARY SEWER W/MANHOLE	
STORM INLETS		STORM SEWER W/ MANHOLE & END SECTION	
STORM CURB INLET			
RIGHT-OF-WAY MARKER			
TREE, BUSH & STUMP	(D) DEED	(M) MEASURE	(PS) PLAT SURVEY
TEMP. BENCHMARK	ASPHALT	BUILDING	CONCRETE
MONUMENT FOUND	GRAVEL	REMOVAL/DEMOLISH	

UTILITY CONTACTS

Note: Listed below are the Indiana Underground Plant Protection Services Contacts. Others not listed may exist. The underground utilities shown have been located from field survey information and existing drawings. The surveyor makes no guarantees that the underground utilities comprise all such utilities in the area, either in-service or abandoned. The surveyor further does not warrant that the underground utilities shown are in the exact location indicated although the surveyor does certify that they are located as accurately as possible from information available. The surveyor has not physically located the underground utilities.

UTILITY	COMPANY	CONTACT	PHONE	EMAIL
COMMUNICATIONS	Southeastern IN REMC		(812) 689-4111	contact_us@seiremc.com
ELECTRIC	Southeastern IN REMC		(812) 689-4111	contact_us@seiremc.com
SANITARY	St. Leon Wastewater Utility		(812) 637-2150	
WATER	North Dearborn Water Corp.	Gary Gaynor	(812) 576-2177	ndw@northdearbornwater.com
GAS	Ohio Valley Gas Corp.		(765) 825-1148	
FIRE DEPARTMENT	IVFA District 19	Ben Sieverding	(812) 621-1150	district19@ivfa.org



NOTE:
SECTION LINES, PROPERTY LINES, AND RIGHT-OF-WAY LINES ARE BASED ON GIS IMAGERY. CONTRACTOR WILL NEED TO FIELD VERIFY BEFORE CONSTRUCTION BEGINS.

EXISTING UTILITY SIZE AND MATERIAL INFORMATION SHOWN ON THESE PLANS ARE PER THE BEST GRAPHICAL AND VISIBLE INFORMATION AVAILABLE. CONFLICTS MAY EXIST AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL SIZING AND MATERIAL INFORMATION PROVIDED. IF ACTUAL CONDITIONS DIFFER FROM THAT INFORMATION SHOWN ON THE PLANS, THE CONTRACTOR SHALL, PRIOR TO THE INSTALLATION OF ANY PROPOSED INFRASTRUCTURE, NOTIFY THE DESIGN ENGINEER IMMEDIATELY.

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DIRECTORY PATH : R:\Active\Lance+Beebe\Summan-Dearborn\HS Football Concessions\Design\CAD\Plans
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CROSSROAD ENGINEERS, PC
Transportation & Development Consultants
115 N. 17th AVENUE, BEECH GROVE, IN 46107 (317) 780-1555

SHEET 200

TOPOGRAPHIC & DEMOLITION PLAN

ECHS FOOTBALL CONCESSIONS

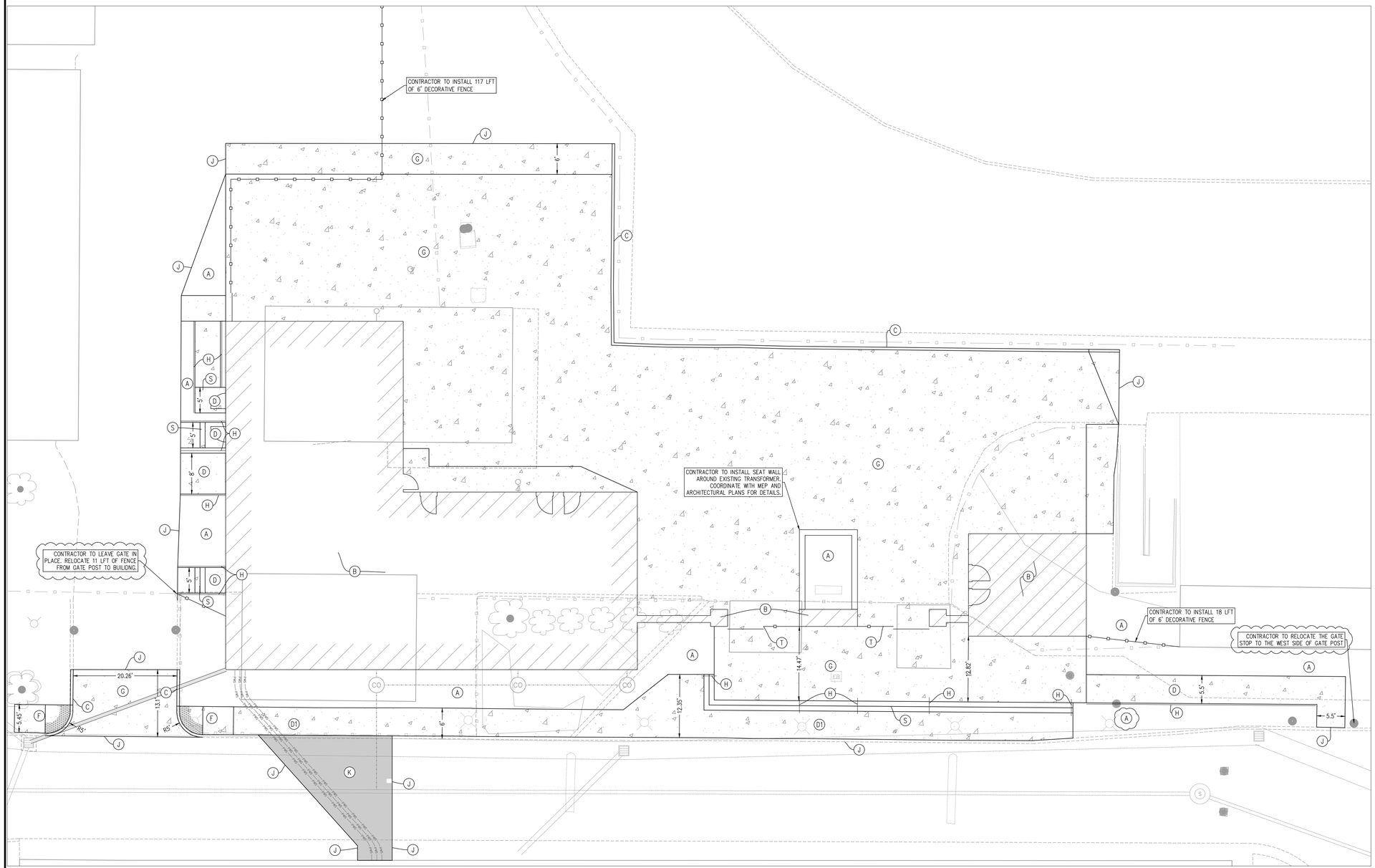
JOB No.	DRAWN	CHECKED	APPR.
-	DEP	BTV	GJI

DATE June 4, 2025 DESIGNED BTV CHECKED GJI APPR.

REVISIONS

NO.	DATE	BY	APPR.
1	07/08/2025	ADDENDUM NO. 1	GJI

SHEET 200



SITE DIMENSION LEGEND

- (A) MULCH SEEDING/LANDSCAPE AREAS
- (B) STRUCTURE FOUNDATION – PER BUILDING PLANS
- (C) STRAIGHT CONCRETE CURB (SEE DETAIL–SHEET 700)
- (D) 4" CONCRETE SIDEWALK (SEE DETAIL–SHEET 700)
- (D1) MONOLITHIC CONCRETE CURB AND SIDEWALK (SEE DETAIL–SHEET 700)
- (F) HANDICAP RAMP (SEE DETAIL–SHEET 700)
- (G) TYPICAL CONCRETE SECTION
  6" CONCRETE SLAB ON
  6" COMPACTED AGGREGATE #53 TYPE 'O' ON
  COMPACTED SUBGRADE (SEE DETAIL–SHEET 700)
- (K) TYPICAL ASPHALT SECTION
  1" HMA SURFACE 9.5mm, ON
  2" HMA INTERMEDIATE 19.0mm, ON
  8" COMPACTED AGGREGATE #53, ON
  COMPACTED SUBGRADE (SEE DETAIL–SHEET 700)
- (H) HANDRAIL (SEE DETAIL–SHEET 700)
- (J) SAWCUT
- (S) STEPS (SEE DETAIL–SHEET 700)
- (T) DECORATIVE FENCE AND GATE (SEE DETAIL–SHEET 700)

SITE DIMENSION NOTES

1. CONTRACTOR SHALL NOTIFY ENGINEER, IF PROOF ROLL OF SUBGRADE FAILS, TO DETERMINE IF LIME STABILIZATION OF SUBGRADE IS NECESSARY.
2. ALL RADII DIMENSIONS ARE TO THE FACE OF PROPOSED CURB.
3. REFER TO ARCHITECTURAL PLANS FOR ADDITIONAL SIGNAGE. VERIFY CONFLICTS WITH OWNER.
4. CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING TRAFFIC AND PROVIDING ALL NECESSARY FLAGMAN, BARRELS, SIGNAGE, ETC. DURING CONSTRUCTION. ALL APPLICABLE M.U.T.C.D. STANDARDS SHALL GOVERN THIS WORK.
5. CONTRACTOR SHALL COORDINATE WITH APPLICABLE UTILITY COMPANY'S AND BUILDING PLANS FOR WATER, CABLE, ELECTRIC, GAS, AND TELEPHONE CONNECTION SERVICE POINTS.
6. LIGHTING PLANS TO BE PROVIDED BY OTHERS. CONTRACTOR SHALL COORDINATE WITH OWNER AND DEARBORN COUNTY FOR SPECIFICATIONS.
7. NO VALVES, MANHOLE FRAMES OR CASTINGS, WITH THE EXCEPTION OF CURB INLETS, SHALL BE PERMITTED UNDER PAVEMENT, SIDEWALK, CURB OR PATH WITHIN THE EXISTING OR PROPOSED RIGHT–OF–WAY.
8. ALL EXISTING CURBING AND SIDEWALK TO BE REMOVED SHALL BE SAWCUT AT THE NEAREST EXISTING JOINT BEYOND THE REMOVAL LIMITS.
9. EXISTING UTILITY SIZE AND MATERIAL INFORMATION SHOWN ON THESE PLANS ARE PER THE BEST GRAPHICAL AND VISIBLE INFORMATION AVAILABLE. CONFLICTS MAY EXIST AND IT SHALL BE THE CONTRACTOR'S RESPONSIBILITY TO FIELD VERIFY ALL SIZING AND MATERIAL INFORMATION PROVIDED. IF ACTUAL CONDITIONS DIFFER FROM THAT INFORMATION SHOWN ON THE PLANS, THE CONTRACTOR SHALL, PRIOR TO THE INSTALLATION OF ANY PROPOSED INFRASTRUCTURE, NOTIFY THE DESIGN ENGINEER IMMEDIATELY.

ABBREVIATIONS

FYS	FRONT YARD SETBACK
SYS	SIDE YARD SETBACK
RYS	REAR YARD SETBACK
DUE	DRAINAGE & UTILITY EASEMENT
NAE	NON–ACCESS EASEMENT
AE	ACCESS EASEMENT
M.F.P.G.	MINIMUM FLOOD PROTECTION GRADE
M.L.A.G.	MINIMUM LOWEST ADJACENT GRADE
F.F.E.	FINISH FLOOR ELEVATION

PAVEMENT DETAILS ARE LOCATED ON SHEET ____

NOTE: NO EARTHWORK DISTURBING ACTIVITY MAY COMMENCE UNTIL A STORM WATER MANAGEMENT PERMIT IS OBTAINED.

NORTH

10 0 10 20

SCALE: 1" = 10'

DIRECTORY PATH : R:\Active\Lennox-Beebe\Sumner-Dearborn\HS Football Concessions\Design\CAD\Plans
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CROSSROAD ENGINEERS, PC
Transportation & Development Consultants
115 N. 17th AVENUE, BEECH GROVE, IN 46107 (317) 780-1555

SHEET 300

SITE DIMENSION PLAN

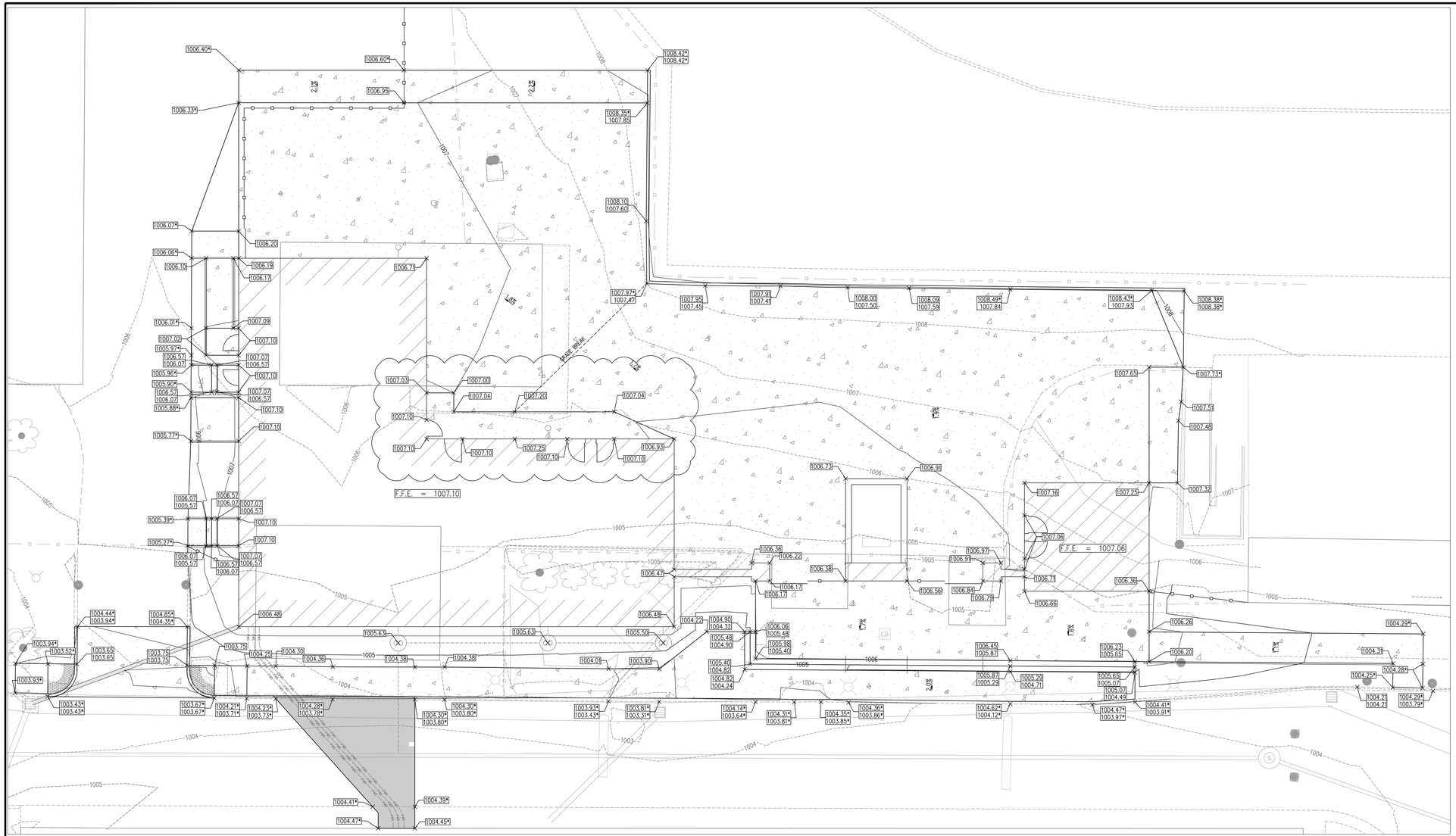
ECHS FOOTBALL CONCESSIONS

JOB No.	DRAWN	CHECKED	APPR.
.	DEP	CJI	CJI

DATE June 4, 2025 | DESIGNED BTV

BRADLEY THOMAS VAUGHAN REGISTERED No. 12400527 STATE OF INDIANA PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	BY	APPR.
1	07/08/2025	ADDENDUM NO. 1	BTV	CJI
2				
3				
4				
5				
6				
7				
8				
9				



GRADING NOTES

1. CONTRACTOR SHALL PROVIDE POSITIVE DRAINAGE AWAY FROM ALL BUILDINGS IN FINAL GRADING OF SITE. CONTRACTOR SHALL COORDINATE WITH THE ARCHITECT TO DETERMINE PROPER FOUNDATION EXPOSURE FOR EACH BUILDING TYPE, HOWEVER, IN NO INSTANCE SHALL DRAINAGE TOWARDS THE BUILDING FOUNDATION BE ALLOWED.
2. CONTRACTOR SHALL NOT ALLOW DRAINAGE FROM PROJECT SITE TO DISCHARGE ONTO ADJACENT PROPERTIES IN FINAL GRADING OF SITE. CONTRACTOR SHALL PLACE A BERM WHERE NECESSARY.

GRADING LEGEND

860.00 TOP OF CURB 859.50 EDGE OF PAVEMENT 860.00 FINISH GRADE	PROPOSED ELEVATIONS
860.00* 859.50* 860.00*	EXISTING ELEVATIONS
FFE = XXX.XX	PROPOSED FINISH FLOOR ELEVATION
	PROPOSED DRAINAGE SWALE
800	EXISTING CONTOURS
800	PROPOSED CONTOURS
GRADE BREAK	GRADE BREAK
	CURB HEIGHT TO TAPER FROM 0.5' TO 0.0' IN 6 LFT.

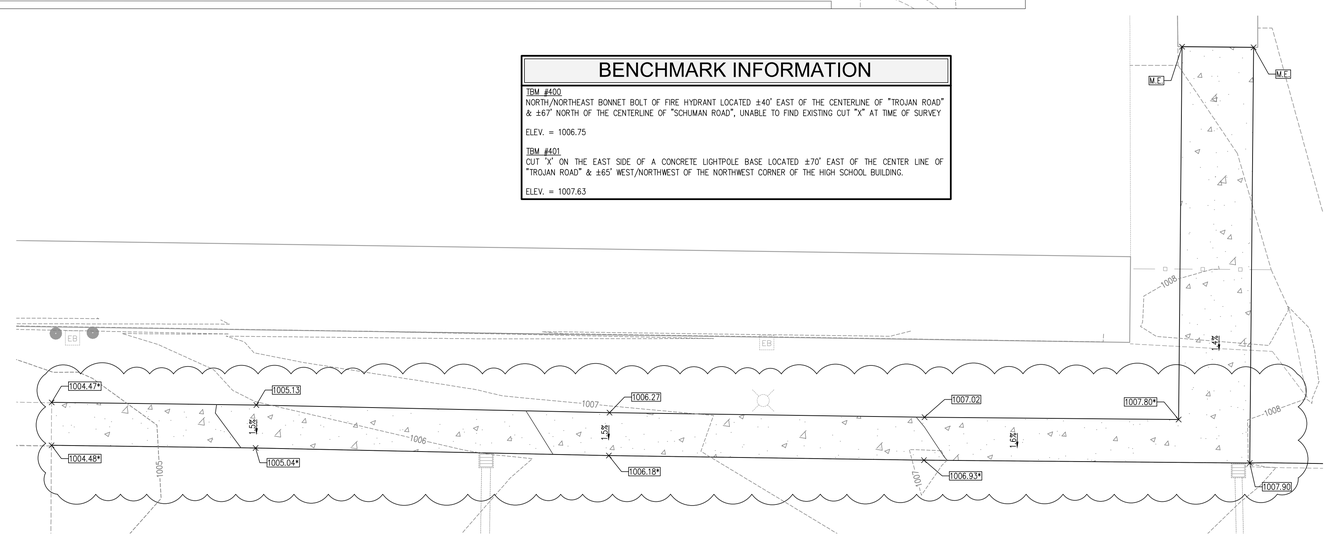
BENCHMARK INFORMATION

TBM #400
NORTH/NORTHEAST BONNET BOLT OF FIRE HYDRANT LOCATED ±40' EAST OF THE CENTERLINE OF "TROJAN ROAD" & ±67' NORTH OF THE CENTERLINE OF "SCHUMAN ROAD", UNABLE TO FIND EXISTING CUT "X" AT TIME OF SURVEY

ELEV. = 1006.75

TBM #401
CUT 'X' ON THE EAST SIDE OF A CONCRETE LIGHTPOLE BASE LOCATED ±70' EAST OF THE CENTER LINE OF "TROJAN ROAD" & ±65' WEST/NORTHWEST OF THE NORTHWEST CORNER OF THE HIGH SCHOOL BUILDING.

ELEV. = 1007.63



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DIRECTORY PATH : R:\Mitchell\Lancer-Reebel\Summan-Dearborn\HS Football Concessions\Design\CAD\Plans
FILENAME : 500 GRADING.dwg / Braughan
DATE/USER : 7/7/2025 10:27 AM / Braughan

CROSSROAD ENGINEERS, PC
Transportation & Development Consultants
115 N. 17th AVENUE, BEECH GROVE, IN 46107 (317) 780-1555

GRADING PLAN

ECHS FOOTBALL CONCESSIONS

JOB No.	DRAWN	CHECKED	APPR.
-	DEP	CJI	CJI

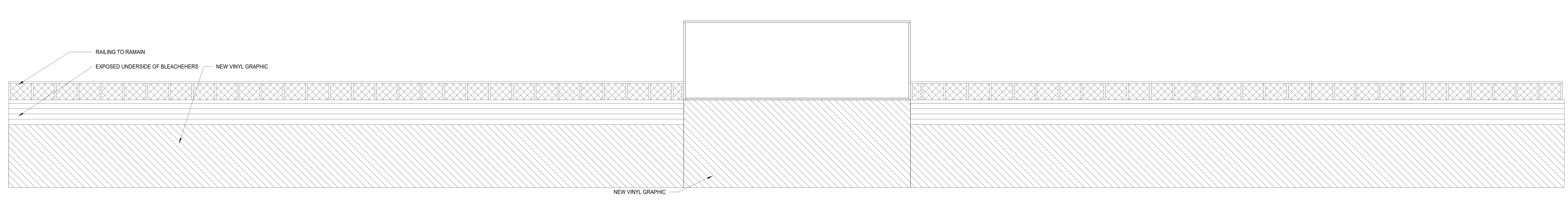
DATE	DESIGNED	BY	APPR.
June 4, 2025	BTV	BTV	CJI

SHEET 500

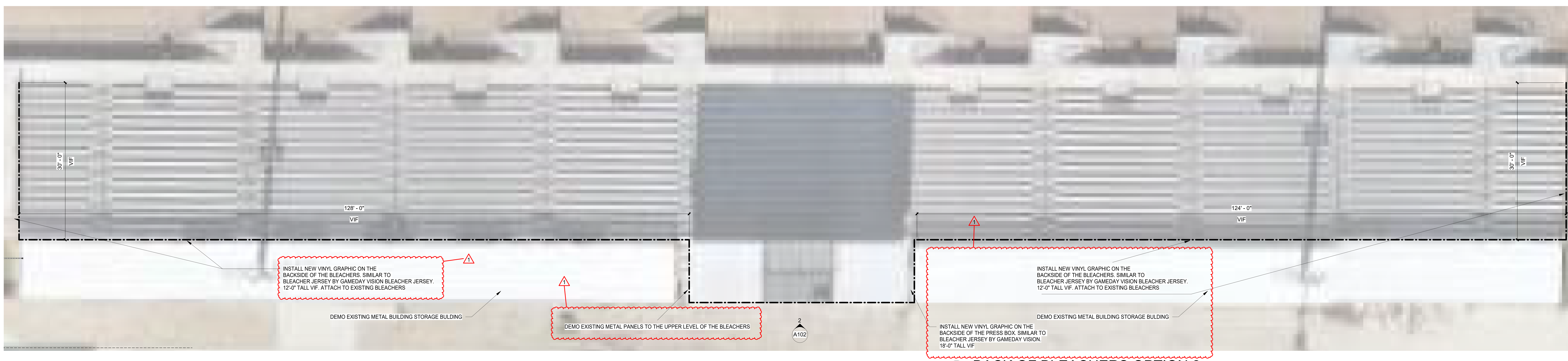
BRADLEY THOMAS VAUGHAN — No. 12400527 — STATE OF INDIANA — REGISTERED PROFESSIONAL ENGINEER

NO.	DATE	REVISIONS	BY	APPR.
1	07/08/2025	ADDENDUM NO. 1	BTV	CJI
2				
3				
4				
5				
6				
7				
8				
9				

SHEET 500



2 BACK OF BLEACHERS
SCALE: 1/8" = 1'-0" REF. 1 / A102



1 BACK OF BLEACHERS OPTION 2
SCALE: 1/8" = 1'-0"

LANCER ASSOCIATES ARCHITECTURE
145 N EAST STREET
INDIANAPOLIS, IN 46204

SUNMAN-DEARBORN COMMUNITY SCHOOLS
ECHS RESTROOM/CONCESSSIONS
1 TROJAN ROAD
ST LEON, IN 47012

REGISTERED NO. 880133 STATE OF INDIANA ARCHITECT

REVISIONS:

#	Date	Desc.
1	07-08-2025	ADD#1

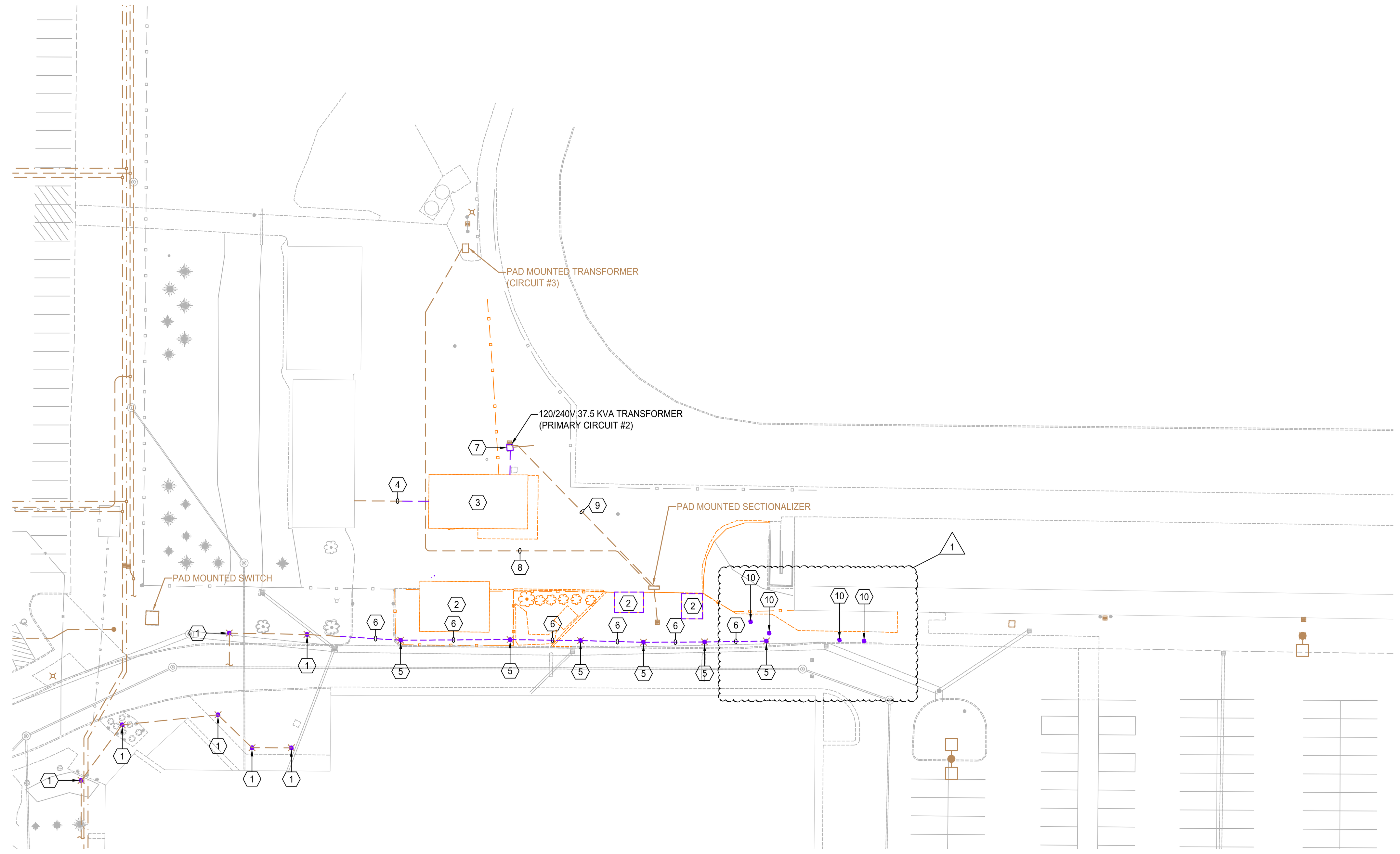
100%CD

PROJECT:	#23138
DATE:	5/16/2024
DRAWN BY:	Author

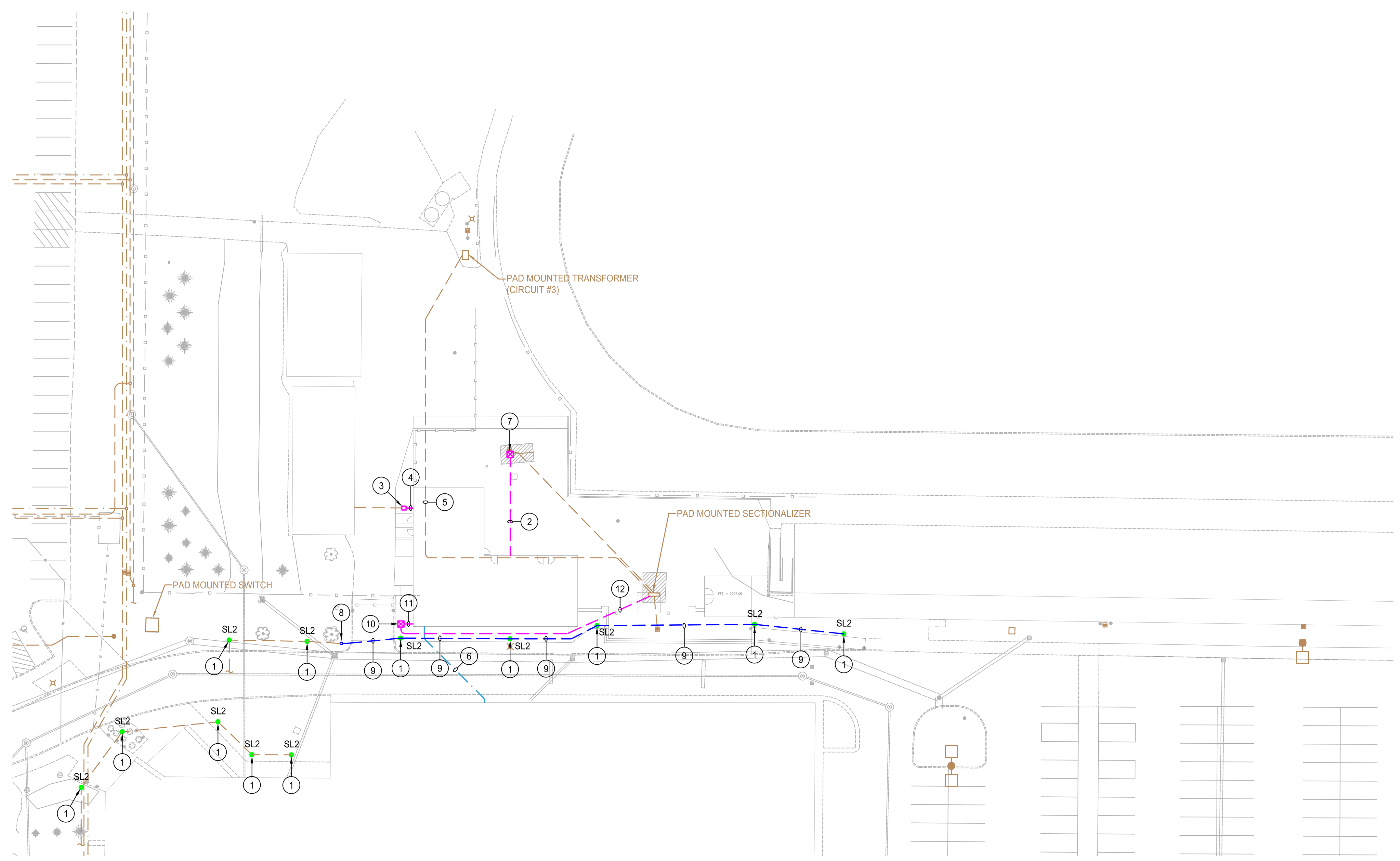
FLOOR PLAN - FIRST FLOOR - BLEACHERS

N
TRUE NORTH

A102



1 PARTIAL ELECTRICAL DEMOLITION SITE PLAN
SCALE: 1" = 40'-0"



2 PARTIAL ELECTRICAL SITE PLAN
SCALE: 1" = 40'-0"

DEMOLITION PLAN NOTES

1. REMOVE POLE BASE, POLE, AND FIXTURE HEAD. EXISTING BRANCH CIRCUITRY SHALL REMAIN TO BE EXTENDED TO NEW LIGHT FIXTURES.
2. DISCONNECT BRANCH CIRCUIT SERVING BUILDING. REMOVE CONDUIT AND CONDUCTORS BACK TO SOURCE.
3. DISCONNECT PANELBOARD LOCATED IN CONCESSION STAND TO ALLOW FOR DEMOLISHING OF BUILDING. REMOVE SECONDARY BACK TO PAD MOUNTED TRANSFORMER. EXISTING FEEDER SERVING EXISTING MAINTENANCE BUILDING SHALL BE PULLED BACK AND JUNCTION IN A IN-GROUND BOX TO BE EXTENDED TO THE NEW PANELBOARD IN NEW CONCESSION STAND BUILDING.
4. EXISTING FEEDER SERVING MAINTENANCE BUILDING TO BE JUNCTION AND BE CONNECTED TO NEW PANELBOARD IN NEW CONCESSION STAND BUILDING.
5. REMOVE POLE BASE, POLE, FIXTURE HEAD AND ASSOCIATED CONDUCTORS AND CONDUIT BACK TO SOURCE.
6. REMOVE EXISTING BRANCH CIRCUIT BACK TO POINT INDICATED AND JUNCTION TO BE EXTENDED TO NEW LIGHTING LAYOUT.
7. DISCONNECT AND REMOVE EXISTING PAD MOUNTED TRANSFORMER AND ASSOCIATED PAD. EXISTING PRIMARY SHALL REMAIN TO BE EXTENDED TO NEW TRANSFORMER.
8. PROTECT EXISTING MEDIUM VOLTAGE FEEDER FROM SECTIONALIZER TO TRANSFORMER DURING CONSTRUCTION.
9. BASE BID: PROTECT EXISTING MEDIUM VOLTAGE FEEDER FROM SECTIONALIZER TO TRANSFORMER DURING CONSTRUCTION.

   ALTERNATE BID: REMOVE CONDUIT AND ASSOCIATED MEDIUM VOLTAGE CABLE BACK TO PAD MOUNTED SECTIONALIZER.
10. REMOVE BOLLARD, BASE AND ASSOCIATED CONDUCTORS AND CONDUIT BACK TO SOURCE.

PLAN NOTES

1. PROVIDE AND INSTALL NEW POLE BASE, POLE AND FIXTURE IN APPROXIMATE LOCATION SHOWN. EXTEND EXISTING BRANCH CIRCUIT, AS REQUIRED TO CONNECT NEW FIXTURE.
2. BASE BID: PROVIDE AND INSTALL 2"C, 3-#4/0, FROM PAD MOUNTED TRANSFORMER TO NEW PANELBOARD LOCATED IN CONCESSIONS STAND.

   ALTERNATE BID #2 :PROVIDE AND INSTALL 2-1/2"C, 3-#500KCMIL, FROM PAD MOUNTED TRANSFORMER TO NEW PANELBOARD LOCATED IN CONCESSIONS STAND.
3. ROUTE 1-1/2"C,3-#1,1-#6G FROM IN-GROUND BOX TO NEW PANELBOARD LOCATED IN CONCESSION TO SERVE EXISTING MAINTENANCE BUILDING.
4. PROVIDE AND INSTALL 12"X12" IN-GROUND PULL BOX WITH OPEN BOTTOM TO SERVE FEEDER FOR PANELBOARD IN MAINTENANCE BUILDING. EQUAL TO PG SERIES. LID SHALL BE MARKED "POWER". CONTRACTOR SHALL BUTT SPLICE AND HEAT SHRINK WRAP NEW CONDUCTORS TO EXISTING FEEDER SERVING THE EXISTING MAINTENANCE BUILDING TO ROUTE TO CONCESSION STAND PANELBOARD.
5. CONTRACTOR SHALL PROTECT EXISTING MEDIUM VOLTAGE CABLING DURING CONSTRUCTION.
6. PROVIDE AND INSTALL ONE (1) 1" CONDUIT WITH 6-STRANDS OF OS2 OPTICAL FIBER AT -24" BELOW GRADE FROM CONCESSION STAND TELECOMMUNICATION RACK TO THE HIGH SCHOOL AND TERMINATE IN TELECOMMUNICATION RACK TRG. CONDUIT SHALL ROUTE IN TRENCH WITH WATER PIPING FROM HIGH SCHOOL.
7. BASE BID: PROVIDE AND INSTALL NEW 50 KVA SINGLE PHASE TRANSFORMER (PRIMARY: 12470GY/7200, SECONDARY:120/240V) IN SAME LOCATION AS DEMOLISHED TRANSFORMER. CONTRACTOR SHALL PROVIDE NEW BOX PAD TO MOUNT NEW TRANSFORMER. EXTEND EXISTING PRIMARY CABLING, AS REQUIRED, TO CONNECT TO NEW TRANSFORMER.

   ALTERNAT BID #2: PROVIDED AND INSTALL NEW 75 KVA SINGLE PHASE TRANSFORMER (PRIMARY: 12470GY/7200, SECONDARY:120/240V) IN SAME LOCATION AS DEMOLISHED TRANSFORMER. CONTRACTOR SHALL PROVIDE NEW BOX PAD TO MOUNT NEW TRANSFORMER. EXTEND EXISTING PRIMARY CABLING, AS REQUIRED, TO CONNECT TO NEW TRANSFORMER.
8. PROVIDE AND INSTALL 12"X12" IN-GROUND PULL BOX WITH OPEN BOTTOM TO SERVE SITE LIGHTING CIRCUIT(S). EQUAL TO PG SERIES. LID SHALL BE MARKED "LIGHTING". CONTRACTOR SHALL BUTT SPLICE AND HEAT SHRINK WRAP NEW CONDUCTORS TO EXISTING TO REMAIN BRANCH CIRCUIT.
9. PROVIDE AND INSTALL 2-#8,1-#8G IN 1" RNC AT -24" BELOW GRADE TO SERVE SITE FIXTURE(S).
10. ALTERNATE BID #1A: PROVIDE AND INSTALL NEW 50 KVA SINGLE PHASE TRANSFORMER (PRIMARY: 12470GY/7200, SECONDARY:120/240V) IN NEW LOCATION. CONTRACTOR SHALL PROVIDE NEW BOX PAD TO MOUNT NEW TRANSFORMER.

    ALTERNATE BID #1B: PROVIDE AND INSTALL NEW 75 KVA SINGLE PHASE TRANSFORMER (PRIMARY: 12470GY/7200, SECONDARY:120/240V) IN NEW LOCATION. CONTRACTOR SHALL PROVIDE NEW BOX PAD TO MOUNT NEW TRANSFORMER.
11. ALTERNATE BID #1A: PROVIDE AND INSTALL 2"C, 3-#4/0, FROM PAD MOUNTED TRANSFORMER TO NEW BASE BID PANELBOARD IN CONCESSIONS STAND.

    ALTERNATE BID #1B:PROVIDE AND INSTALL 2-1/2"C, 3-#500KCMIL, FROM PAD MOUNTED TRANSFORMER TO NEW ALTERNATE #2 PANELBOARD IN CONCESSIONS STAND.
12. ALTERNATE BID #1A & 1B: PROVIDE AND INSTALL 2-#2 15KV CABLES IN 2" CONDUIT FROM SECTIONALIZER TO NEW PAD MOUNTED TRANSFORMER.

LANCER ASSOCIATES ARCHITECTURE
145 N. EAST ST.
INDIANAPOLIS, IN 46204

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SUNMAN-DEARBORN COMMUNITY SCHOOLS
ECHS RESTROOM/CONCESSIONS
1 TROJAN ROAD

REVISIONS:

#	Date	Desc.
1	07/08/25	ADDENDUM #1

100% CONSTRUCTION DOCUMENTS

PROJECT: #23138
DATE: 06-04-2025
DRAWN BY: RHA

PARTIAL ELECTRICAL SITE PLAN

N TRUE NORTH

E101

PRIMARY JOB # 25727