

**ADDENDUM
NO. 02**

March 16, 2026

**Clark-Pleasant WCHS Phase 5
300 E Main St.
Whiteland, IN 46184**

TO: ALL BIDDERS OF RECORD

This Addendum forms a part of and modifies the Bidding Requirements, Contract Forms, Contract Conditions, the Specifications, and the Drawings dated January 29, 2026, by Lancer Associates of Architects. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 2-1 through ADD 2 - 2 and attached Lancer Associates of Architects, Addendum No. 02, March 13, 2026, consisting of 9 pages and 27 drawings.

A. SPECIFICATION SECTION 01 12 00 – MULTIPLE CONTRACT SUMMARY

A. Bid Category No. 1 – GENERAL TRADES

Delete the following specification in its entirety:

01 52 20 Tree and Plant Protection

Add the following specification:

01 56 39 Tree Protection

Add the following clarifications:

14. The General Trade contractor is to provide dumpsters for all contractors throughout all phases of the project except for the removal of the existing turf at the football field.
15. All permanent signage will be procured under the General Trades signage allowance.

Revise the following clarifications:

12. The General Trades contractor shall be responsible for relocating the 12 x 10' tennis barn during the construction phase and shall demolish and dispose of at the end of construction.

C. Bid Category No. 3 – ELECTRICAL & TECHNOLOGY

Add the following clarifications:

3. The Electrical Contractor is responsible for all work associated with the removal and relocation of the existing scoreboard headend rack/equipment as noted on sheet 210.

D. Bid Category No. 4 – SYNTHETIC TURF

Add the following clarifications:

2. The Synthetic Turf contractor is responsible for the removal and disposal of the football turf and related material. This includes any dumpster/disposal fees.

ADDENDUM NO. TWO

**PROJECT: CLARK-PLEASANT COMMUNITY SCHOOL CORP.
WHITELAND COMM. HIGH SCHOOL ADDITION
PHASE 5**

PROJECT NUMBER: 22130

DATE OF ADDENDUM: MARCH 13ST, 2026



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

QUESTIONS

Q:What size grab bars are needed? Specification 102813 does not indicate size nor do the drawings. should I proceed with standard 18", 36", 42"?

a. What size grab bars are needed in the ambulatory stall in Women's RR T101?

A: Yes, provide standard grab bars. Provide (2) 42" grab bars in ambulatory stalls

Q: What size mirrors are needed for this project? Specification 102813 does not indicate size nor do the drawings.

A: Provide 18x36 mirrors

Q: There is a specification 102113 Plastic Toilet Compartments indicating the toilet compartments to be plastic. When you reference the Finish legend on A720 under Miscellaneous TP-1 indicated Bobrick Phenolic material. Please confirm what is to be provided plastic or phenolic.

A: Provide plastic toilet partitions

Q: The lockers within C47 and C33 on drawing A101NA are those be single tier or double tier or mixed banks? The drawings do not indicate what is needed here nor do the specs. The drawings do tell me that the lockers within T108 & T107 are to be 50/50 double tier and single tier mixed bank.

A: In rooms C47 and C33 provide single tier lockers

Q: For the stainless-steel trim at the pass thru openings at the concession stand, I am wanting to confirm if the Stainless-Steel Jamb Trim and Head Trim is to be included with the 083314 specification or if this is to be included with the 123616 specifications? Both specs do not mention anything about the stainless-steel trim.

A: Provide within the 12 36 13 specs

Q: Softball Press Box shown on sheet A101T has a plan note 1 which state's to "Clear Seal existing split face CMU to 10'0" and on sheet A201 the elevations for the softball press box have plan note 6 which states' to "Paint existing split face CMU. Is the existing CMU on the softball press box to be clear sealed or painted?"

A: Paint the existing CMU

Q: Is Comprehensive an acceptable provider of premade cables?

A: Yes, comprehensive is an acceptable manufacturer for premade AV cables.

Q: The Project Manual lists Loudspeaker Type 1 as the JBL CBT-70J-1. However, the drawing of the speaker on T003 seems to show JBL CBT 70J-1 + 70JE-1. Can you clarify which is correct?

A: The basis of design for the tennis loudspeakers shall be the JBL CBT 70J-1 + 70JE-1 extension column. The diagram on T202 accurately reflects this. We will get this corrected in addendum #2.

Q: Will the General Trades package be responsible for independent procurement of an Indiana State Construction Design Release for the press box or bleacher structures since these are delegate design features?

A: Yes, the contractor will be responsible for the bleachers. Architect will submit for the building projects

Q: Can a more complete detail be provided in the drawings for how the chicken wire shown at the underside of trusses is to be installed?

A: Attach Chicken wire to the underside of the wood trusses and suspend from above where it is needed

Q: Can EnPlast Shockdrain KDA 780 be approved for use on the project?

A: The Landscape Architect has reviewed the submitted information on the product. While the testing data conforms to the specified standards, Context's last two (2) installations using this pad have had revealed misaligned perforations. Numerous perforations were located on the sides or tops of the domes which appeared to limit effective drainage. We have no problem with the product itself so long as the quality control of perforations is resolved.

Q: Where can we find the requirements for site exterior concrete?

A: Refer to Specification 32 13 13 'Concrete Paving' for concrete relating to exterior flatwork, plazas, curbs, and accessible ramps. Refer to Specification 03 30 01 'Site Cast-in-Place Concrete' for exterior, non-building walls and footings.

Q: How many field groomers are required to be provided with this project?

A: The contractor is to provide one (1) field groomer as listed in Specification 32 92 16 'Synthetic Turf Field Construction – Diamond Sports'. Please note that if organic infill is selected, the provided field groomer is to be acceptable for that application.

Q: Is there attic stock for the synthetic turf infill required for this project?

A: There is no requirement to provide sand or crumb rubber infill attic stock. The contractor shall in their alternate bid for organic infill to provide organic infill attic stock material (either a pallet or a single oversized bag) at the conclusion of the project for their future use.

Q: Why can I find the seeding requirements for the project?

A: Please refer to Specification 32 92 00 'Turf and Grasses' for common lawn area seeding requirements.

Q: Where can I find the requirements for the athletic barrier netting?

A: Please refer to Specification 32 33 00 'Site Furnishing'.

Q: Can you clarify the P06 tag west of the varsity softball bleacher on sheet L101?

A: That tag has been revised to P08 and is pointing to a support pole for the backstop tension net system. Please refer to the reissued sheet with this addendum.

Q: Where can I find the requirements for the athletic barrier netting?

A: Please refer to Specification 32 33 00 'Site Furnishing'.

Q: Where can I find the requirements of the batting cage netting?

A: Please refer to Specification 11 68 33.33 'Baseball and Softball Field Equipment'.

Q: Do the control joints in site concrete need to be tooled or can they be cut?

A: Site concrete control joints may be sawcut.

Q: What fencing is the gate south of the softball fields between the masonry columns to be?

A: That gate is anticipated to be black vinyl chain-link to match adjacent fencing.

Q: Are approved bleacher manufacturers allowed to submit their manufactured press boxes or do they need to be approved separately for press box construction?

A: Given the tight coordination needed between bleachers and press boxes, manufacturers that have been approved for bleachers may submit their accompanying press boxes on the project. Please note that all press boxes shall comply with requirements of Specification 13 12 26 'Press Box Construction'; including, but not limited to size, finishes, colors, and electrical requirements.

Q: What is the material for the precast caps on the masonry backstop walls and dugouts?

A: Walls caps may be precast stone or limestone. Contractor to submit material samples for approval during the construction.

Q: Are the backstop walls to be standard smooth face CMU or colored split face to match the dugout?

A: CMU are to be smooth face along both sides of the backstop wall.

Q: Where can I find the requirements for the athletic barrier netting?

A: Please refer to Specification 32 33 00 'Site Furnishing'.

Q: Can you clarify the requirements for the warranties of the synthetic turf systems?

A: A sample warranty document has been provided to illustrate the warranty expectations for all the synthetic turf fields. Please refer to Specification 32 18 13a 'Synthetic Turf Warranty'.

Q: Can you clarify the requirements for the warranties of the synthetic turf systems?

A: A sample warranty document has been provided to illustrate the warranty expectations for all the synthetic turf fields. Please refer to Specification 32 18 13a 'Synthetic Turf Warranty'.

Q: Can you clarify what the requirements are for the concrete slab under the baseball and softball bleachers?

A: Concrete slabs underneath baseball and softball bleachers may be bid per detail 3 'Heavy Duty Concrete' on sheet L600. Installed concrete slab must be installed per bleacher manufacturer's recommendations.

CLARIFICATIONS

1. Delete pages showing E&D bleachers and pressbox from addendum 1. E&D is still an approved equal

SPECIFICATIONS

1. Spec Section: 07 7616
Spec Title: Concrete Rooftop Paver System
Add Hanover Architectural Products as an approved equal
2. Spec Section 27 41 16 – INTEGRATED AUDIO VIDEO SYSTEMS AND EQUIPMENT
 - a. Updated Part 1.1.D table of contents. Changed "Broadcast" to "Announcer". Added a "Type 1" designation to the AV equipment rack and "AV Equipment Rack Type 2"
 - b. Changed "Broadcast" to "Announcer" in Part 2.2
 - c. Removed quantity designations from Part 2.3.A.2.a. Refer to the AV diagrams for required quantities.
 - d. Added the designation of "line level" to Part 2.5.A.2
 - e. Changed "RECEIVER" to "INTERFACE" in Part 2.6.A.6
 - f. Changed "690" to "928" in Part 2.10.A.1
 - g. Added "+ 70JE-1 System" to Part 2.15.A.11.a
 - h. Changed "owner" to "architect" in Part 2.16.A.8
 - i. Changed "owner" to "architect" in Part 2.16.A.8
 - j. Updated Part 2.19.A.2 to include additional requirements. Changed loudspeaker type in Part 2.19.A.5
 - k. Added "Type 1" to Part 2.22. Changed "16" to "minimum 14" in Part 2.22.A.2. Updated Part 2.22.A.6 to include additional requirements

- I. Added Part 2.23 AV EQUIPMENT RACK TYPE 2
 - m. Updated loudness level requirements for all systems to minimum 85 dBA and no more than 100 dBA. Updated Part 3.2.B.1.h, Part 3.2.B.2.h, and Part 3.2.B.3.h
3. Spec Section 03 30 01
 - a. 2.1 Section 2.6.D.1 of Specification 03 30 01 'Site Cast-in-Place Concrete' has been updated to read "Compressive Strength (28 Days): 4,500 psi."
4. Spec Section 07 27 26

Spec Title: Air/Water Resistive Barrier

Add Barritech VP as an approved equal
5. Specification Section 237423.16 Packaged, Indirect-fired Outdoor Heating only Makeup Air Units
 - A. Add Captive Aire as an acceptable manufacturer
6. Spec Section 32 13 13
 - a. 2.2 Section 1.2H.1 of Specification 32 13 13 'Concrete Paving' has been updated to read "Compressive Strength (28 Days): 4,500 psi."
7. Spec Section 32 18 13
 - a. 2.3 The following manufacturers have been pre-approved as vendors to Section 2.1.A.5 of Specification 32 18 13 'Synthetic Turf Replacement':
 - A. AstroTurf
 - B. SprinTurf
 - C. FieldTurf USA Inc
8. Spec Section 32 18 13
 - a. 2.4 The following products have been approved as equal to Section 2.3.A of Specification 32 18 13 'Synthetic Turf Replacement':
 - A. Brock SP14XL
 - B. EnPlast Shockdrain 780 Conditionally Approved. See response to approval in Addenda #2 Questions and Answers above.
9. Spec Section 32 18 13a

- a. Specification 32 18 13a 'Synthetic Turf Warranty' has been added to the Project.

DRAWINGS REVISIONS:

1. Title Sheet (sheet 100):
 - o Revised to include new Fire Line Plan & Profiles (sheet 709).
2. Utility Plan (sheet 401):
 - o Revised to include 12" pipe connection to Str. No. 202 from existing storm.
3. Water Plan (sheet 403):
 - o Revised to include four 6"~45° vertical restrained bends for fire line lowering at one (1) existing storm sewer crossing.
 - o Revised fire line length tags based on add vertical bends.
 - o Revised to include detail for fire line lowering at storm and/or sanitary crossings.
 - o Revised fire hydrant layout and tag to indicate that an MJ adapter and plug is required.
4. Water Plan (sheet 404):
 - o Revised to include eight 6"~45° vertical restrained bends for fire line lowering at two (2) proposed storm sewer crossings.
 - o Revised fire line length tags based on add vertical bends.
 - o Revised fire hydrant layout and tag to indicate that an MJ adapter and plug is required.
5. Storm Plan & Profiles (sheet 702)
 - o Revised to include 12" pipe connection to Str. No. 202 from existing storm.
6. Fire Line Plan & Profile (sheet 709)
 - o Sheet added to show plan and profile of fire lines and additional vertical bends for storm sewer crossings.
7. L101 SITE MATERIALS PLAN
 - A. Extents of synthetic turf at varsity softball field have been updated.
 - B. Pole location for varsity softball backstop netting clarified.

8. L600 SITE DETAILS

- A. Concrete structural reinforcement has been revised in detail 4 'Heavy Duty Concrete'.

9. L601 SITE DETAILS

- A. Dimension in Detail 1 'Backstop Wall – Flattened Elevation – Junior Varsity Baseball' have been updated.

10. The concrete paving psi has been updated on multiple details to align with the updated specifications. Those revised details are as follows:

- A. Sheet L600- Details 1, 3, 4, 9, 10, 13, 14, and 15.
- B. Sheet L601- Details 7, and 9.
- C. Sheet L604- Detail 2.
- D. Sheet L605- Detail 3.

11. Sheet Numbers A103.1FS – A103.6FS

Sheet Titles: Football Grandstands

Replace Sheets with the attached

12. Sheet Number A103.7FS

Sheet Title: Football Grandstands

Add the sheet in its entirety

13. SHEET TD001 – SECURITY DEMOLITION SITE PLAN

- a. Removed high school key plan from sheet.

14. SHEET T001 – TECHNOLOGY SITE PLAN

- a. Removed high school key plan from sheet.

15. SHEET T003 – TENNIS LOUDSPEAKER SITE PLAN

- a. Added graphical representation and note to clarify loudspeaker aiming table.

16. SHEET T100 – TENNIS & SOFTBALL FLOOR PLANS

- a. Removed high school key plan from sheet.
- b. Added graphical representation and note to clarify loudspeaker aiming table.
- c. Updated AV elevation number 2 to include a 35 RU wall mounted equipment rack. Updated size of pull box and number of conduits feeding wall mounted equipment rack.

17. SHEET T101 – BASEBALL & FOOTBALL PRESS BOX PLANS / ELEVATIONS

- a. Removed high school key plan from sheet.
- b. Added graphical representation and note to clarify loudspeaker aiming table.

18. SHEET T201 – TELECOM / AV RACK ELEVATIONS

- a. Updated TENNIS BUILDING T104 RACK ELEVATION number 2 to a 35 RU equipment rack. Added rack drawers.
- b. Updated JV / VARSITY SOFTBALL RACK ELEVATION number 3. Added rack drawer, reduced RU space for owner provided UPS from 4 to 2. Added rack vent.
- c. Updated VARSITY BASEBALL PRESS BOX RACK ELEVATION number 4. Added rack drawer, reduced RU space for owner provided UPS from 4 to 2.
- d. Updated JV BASEBALL PRESS BOX RACK ELEVATION number 5. Added rack drawer, reduced RU space for owner provided UPS from 4 to 2.

19. SHEET T202 – AV DIAGRAMS

- a. Changed “BROADCAST” to “ANNOUNCER” in AV diagram number 2 JV / VARSITY SOFTBALL FIELD AV DIAGRAM and number 3 JV / VARSITY BASEBALL FIELD AV DIAGRAM

20. SHEET T302 – TECHNOLOGY / SECURITY DETAILS

- a. Updated scaling on JV / VARSITY BASEBALL LOUDSPEAKER MOUNTING DETAIL number 1.

Attachments:

Spec Sections: 27 41 16, 033001, 321313, 321813, 321813a, 321824

- 1) Drawing : 100, 401, 403, 404, 702, 709, L101, L600, L601, L604, L605, A103.1FS, A103.2FS, A103.3FS, A103.4FS, A103.5FS, A103.6FS, A103.7FS, E601, TD001, T001, T003, T100, T101, T201, T202, T302

End of Addendum 2

SECTION 03 30 01 – SITE CAST-IN-PLACE CONCRETE

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. Site cast-in-place concrete walls and back-up walls.
 2. Site cast-in-place foundations for concrete walls, back-up walls, and site amenity features.
 3. Site cast-in-place concrete stairs.
 4. Structural support and reinforcing for a variety of conditions within Plans.
 5. Please note that separate, yet similar, specification information may exist for A-Series Architectural Plans, when applicable.
- B. Related Sections include the following:
1. Division 31 Section "Earth Moving" for additional subgrade preparation and related information.
 2. Division 04 Sections for all site brick, site stone, and cast stone masonry.
 3. Division 07 Section "Site Wall Joint Sealants" for wall joints.
 4. Division 32 Sections "Concrete Paving" and "Decorative Concrete Paving" for all pedestrian walks and flatwork.

1.3 ACTION SUBMITTALS

- A. In addition to Product Data, submit design mixes and the following for each concrete mix:
1. Shop Drawings detailing fabrication, bending, and placement.
 2. Material certificates signed by product manufacturers certifying that product complies with requirements.

1.4 QUALITY ASSURANCE

- A. Comply with ACI 301, "Specification for Structural Concrete," and ACI 117, "Specifications for Tolerances for Concrete Construction and Materials."
1. Installer Qualifications: An experienced installer who has completed concrete Work similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
 2. Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products complying with ASTM C 94 requirements for production facilities and equipment.

PART 2 - PRODUCTS

2.1 STEEL REINFORCEMENT

- A. As follows:
1. Reinforcing Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.
 2. Plain-Steel Wire: ASTM A 82, as drawn.
 3. Plain-Steel Welded Wire Fabric (when applicable): ASTM A 185, flat sheets.

2.2 CONCRETE MATERIALS

A. As follows:

1. Portland Cement: ASTM C 150, Type I, gray. Supplement with Fly Ash: ASTM C 618, Class C or F.
2. Aggregate: ASTM C 33, uniformly graded, from a single source throughout the project.
 - a. Maximum Coarse-Aggregate Size: 1 inch nominal.
 - b. Fine Aggregate: Free of materials with deleterious reactivity to alkali in cement.
3. Water: ASTM C 94 and potable.

2.3 ADMIXTURES

A. Air-Entraining Admixture: ASTM C 260.

B. Chemical Admixtures: Provide admixtures certified by manufacturer to be compatible with other admixtures and that will not contribute water-soluble chloride ions exceeding those permitted in hardened concrete. Do not use calcium chloride or admixtures containing calcium chloride.

1. Water-Reducing Admixture: ASTM C 494, Type A.
2. Retarding Admixture: ASTM C 494, Type B.
3. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.
4. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
5. High-Range, Water-Reducing and Retarding Admixture: ASTM C 494, Type G.
6. Plasticizing and Retarding Admixture: ASTM C 1017, Type II.
7. Synthetic Fiber (when applicable): Fibrillated or monofilament polypropylene fibers engineered and designed for use in concrete, complying with ASTM C 1116, Type III, 1/2 to 1-1/2 inches (13 to 38 mm) long.
8. Internal Cure (E5): ASTM C 494, Type S.

2.4 RELATED MATERIALS (when applicable)

A. As follows:

1. Flexible Waterstops: Rubber, CE CRD-C 513, or PVC, CE CRD-C 572.
2. Vapor Retarder: ASTM E 1745, Class C, not less than 7.8 mils (0.18 mm) thick; or polyethylene sheet, ASTM D 4397, not less than 10 mils (0.25 mm) thick.
3. Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber, or ASTM D 1752, cork or self-expanding cork.
4. Bonding Agent: ASTM C 1059, Type II, non-redispersible, acrylic emulsion or styrene butadiene.
5. Epoxy-Bonding Adhesive: ASTM C 881, two-component epoxy resin, of type, class, and grade to suit requirements.

2.5 CURING MATERIALS

A. As follows:

1. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
2. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. (305 g/sq. m) dry.
3. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
4. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B.
5. Clear, Waterborne, Membrane-Forming Curing and Sealing Compound: ASTM C 1315, Type 1, Class A.
6. Internal Curing Compound: E5 Internal Cure, 4 fl. Oz. per 100 lbs. of cementitious material.

2.6 CONCRETE MIXES

- A. Prepare design mixtures for each type and strength of concrete, proportioned on the basis of laboratory trial mixture or field test data, or both, according to ACI 301.
- B. Cementitious Materials: Use fly ash, to reduce the total amount of portland cement, which would otherwise be used, by not less more 20 percent.
- C. Admixtures: Use admixtures according to manufacturer's written instructions.
 - 1. Use water-reducing, high-range water-reducing, or plasticizing admixture in concrete, as required, for placement and workability.
 - 2. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions.
 - 3. Use water-reducing admixture in pumped concrete, concrete for heavy-use industrial slabs and parking structure slabs, concrete required to be watertight, and concrete with a water-cementitious materials ratio below 0.50.
- D. Site Concrete Footings: Proportion normal-weight concrete mixture as follows:
 - 1. **Minimum Compressive Strength: 4,500 psi at 28 days.**
 - 2. Maximum Water-Cementitious Materials Ratio: 0.58.
 - 3. Slump Limit: 5 inches, plus or minus 1 inch.
 - 4. Air Content: Optional.
- E. Exterior Concrete: As indicated within Division 32 - 'Concrete Paving'

2.7 SYNTHETIC FIBERS (when applicable)

- A. Uniformly disperse in concrete mix at manufacturer's recommended rate, but not less than 1.5 lb/cu. yd. (0.90 kg/cu. m).

2.8 READY-MIXED CONCRETE

2.9 PROJECT-SITE MIXING

- A. Measure, batch, and mix concrete materials and concrete according to ASTM C 94. Mix concrete materials in appropriate drum-type batch machine mixer.

2.10 Skate Deterrent

- A. Basis of Design:
 - 1. Model D 135-8 as manufactured by Skatestoppers, El Cajon, CA 92020. Phone 619-447-6374 or approved equal prior to bidding. Equally space along walls at approx. 36" O.C. and at least 12" from end of wall.

PART 3 - EXECUTION

3.1 INSTALLATION

- A. Ensure subgrade to support concrete footings and foundations has been compacted to achieve 95% SPD, unless otherwise indicated. Coordinate testing to demonstrate compliance according to the provisions of the Specifications.

- B. Design, construct, erect, shore, brace, and maintain formwork, according to ACI 301, to support vertical, lateral, static, and dynamic loads, and construction loads that might be applied, until concrete structure can support such loads.
- C. Place and secure anchorage devices and other embedded items required for adjoining work that is attached to or supported by cast-in-place concrete. Use Setting Drawings, templates, diagrams, instructions, and directions furnished with items to be embedded.
- D. Leave formwork that supports weight of concrete in place until concrete has achieved 28-day design compressive strength.
- E. Comply with ACI 318 (ACI 318M), ACI 301, and recommendations in ACI 347R for design, installation, and removal of shoring and reshoring.

3.2 DEWATERING

- A. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
- B. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
 - 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
 - 2. Install a dewatering system to keep subgrades dry and convey ground water away from excavations. Maintain until dewatering as required.
 - 3.

3.3 VAPOR RETARDER (when applicable)

- A. Place, protect, and repair vapor-retarder sheets according to ASTM E 1643. Do not cut or puncture vapor retarder. Repair damage and reseal vapor retarder before placing concrete.

3.4 STEEL REINFORCEMENT

- A. Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement.

3.5 JOINTS AND WATERSTOPS

- A. Locate and install waterstops, construction joints, isolation joints, and contraction joints per industry standards.

3.6 CONCRETE PLACEMENT

- A. Deposit concrete continuously and avoid segregation. Deposit concrete in forms in horizontal layers no deeper than 24 inches (600 mm), avoiding cold joints.
 - 1. Consolidate concrete with mechanical vibrating equipment.
 - 2. Screed and initial-float concrete floors and slabs using bull floats or darbies to form a uniform and open-textured surface plane, free of humps or hollows, before excess moisture or bleedwater appears on the surface. Do not further disturb slab surfaces before starting

- finishing operations.
3. Comply with ACI 306.1 for cold-weather concrete placement.
 4. Place concrete according to recommendations in ACI 305R when hot-weather conditions exist.
- B. Finish formed surfaces as follows:
1. Apply rough-formed finish, defined in ACI 301, to concrete surfaces indicated or not exposed to public view.
 2. Apply smooth-formed finish, defined in ACI 301, to concrete surfaces indicated and exposed to public view or to be covered with a coating or covering material applied directly to concrete, such as waterproofing, dampproofing, veneer plaster, or painting.
 - a. Do not apply rubbed finish to smooth-formed finish.
- 3.7 CONCRETE PROTECTION AND CURING
- A. Protect concrete from excessive cold or hot temperatures. Comply with ACI 306.1 for cold-weather protection and with recommendations in ACI 305R for hot-weather protection during curing. All costs related to summer or winter conditions shall be the responsibility of the Contractor as part of achieving the project schedule.
1. Apply evaporation retarder to unformed concrete surfaces if hot, dry, or windy conditions cause excessive moisture loss.
 2. Begin curing after finishing concrete but not before free water has disappeared from concrete surface.
 3. Cure formed and unformed concrete for at least seven days by moisture curing, moisture-retaining-cover curing, or curing compound.
 4. Cure and seal floors and slabs with a curing and sealing compound according to manufacturer's written instructions.
- 3.8 TESTING AGENCY
- A. Contractor will engage a qualified independent testing and inspecting agency to sample materials, perform tests, and submit test reports during concrete placement. Tests shall be performed according to ACI 301.
- 3.9 DEFECTIVE CONCRETE
- A. Repair and patch defective areas when approved by Landscape Architect. Remove and replace concrete that cannot be repaired and patched to Landscape Architect's satisfaction.
- END OF SECTION 03 30 01

SECTION 27 41 16 - INTEGRATED AUDIO VIDEO SYSTEMS AND EQUIPMENT

PART 1 - GENERAL

1.1 SCOPE OF WORK

- A. This section includes the minimum requirements for the installation, configuration, and training of the audio visual components as depicted on the Drawings and required by these specifications.
- B. These Specifications, together with the Drawings accompanying them, are intended to depict the installation requirements necessary to support this Project. Contractor shall furnish materials shown and/or called for on the Drawings but not mentioned in the Specifications, or vice versa, that are necessary for the installation and support of communications cabling, whether or not specifically called for in both. In addition, Contractor shall provide incidental equipment and materials required for the completion of systems included in this contract whether or not specified or shown on the drawings.
- C. All required cabling infrastructure including back boxes and conduit to support the AV systems are provided and installed by others. Contractor is required to provide, install, test, and configure all cabling, equipment, and AV systems as described within this specification and as shown on the T-series drawings.
- D. This section includes minimum requirements for the following:
 - 1. Announcer Microphone
 - 2. **Announcer** Microphone Boom Arm
 - 3. Microphone Switch
 - 4. Bluetooth Interface
 - 5. Audio Transmitter
 - 6. Audio Receiver
 - 7. Volume Control
 - 8. AV Network Switch
 - 9. Wireless Microphone System
 - 10. Wireless Microphone Antenna Distribution System
 - 11. DSP Input Expander
 - 12. Digital Signal Processor
 - 13. Power Amplifier Type 1
 - 14. Power Amplifier Type 2
 - 15. Loudspeaker Type 1
 - 16. Loudspeaker Type 2
 - 17. Loudspeaker Type 3
 - 18. Speaker Rigging Components
 - 19. Loudspeaker Mounting Sled
 - 20. Power Sequencing System
 - 21. Power Conditioner
 - 22. AV Equipment Rack **Type 1**
 - 23. **AV Equipment Rack Type 2**
 - 24. AV Equipment Rack Blanks
 - 25. AV Equipment Rack Vents
 - 26. AV Equipment Rack Shelves
 - 27. AV Equipment Rack Drawers

1.2 QUALITY ASSURANCE

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

1. ANSI - American National Safety Institute
 2. ASTM - American Society of Testing and Materials
 3. EIA - Electronics Industries Association
 4. FCC - Federal Communications Commission
 5. NEMA - National Electrical Manufacturer's Association
 6. OSHA - Occupational Safety and Health Administration
 7. NEC - National Electric Code.
 8. NFPA - National Fire Protection Association.
 9. IEEE - Institute of Electrical and Electronics Engineers.
 10. ISO - International Standards Organization.
 11. UL - Underwriters Laboratories
 12. Davis and Davis, Sound System Engineering (2nd Edition), Howard W. Sams, 1987
 13. Giddings, Audio System Design and Installation (ASDI), Howard W. Sams, 1990
- B. All cable and equipment shall be installed in a neat and workmanlike manner. All methods of construction that are not specifically described or indicated in the contract documents shall be subject to the control and approval of the Design 27 Project Manager. Equipment and materials shall be of the quality and manufacturer indicated. The equipment specified is based upon the acceptable manufacturers listed. Where "Or equal" is stated, equipment shall be equivalent in every way to that of the equipment specified and subject to approval.
- C. Materials and work specified herein shall comply with the requirements of the local Authority Having Jurisdiction.
- D. Contractor should have the following qualifications:
1. Experienced in the installation of systems similar in complexity and scale to those included within the scope of work. If requested, the Contractor shall provide the names, locations, and points of contact for at least three installations of the type and complexity specified herein.
 2. Within the last two (2) years, installed an audio-visual system with similar equipment and functionality.
 3. Have at least one (1) person on staff with CTS-I certification.
- 1.3 SUBMITTALS
- A. As part of this specification section, Contractor shall be responsible for providing the following submittals.
1. Manufacturer Product Data
 2. Pre-Installation Shop Drawings
 3. User Interface Submittal
 4. As-Built Drawings
 5. Configuration files and Source Code
- B. Manufacturer Product Data - The Contractor shall provide manufacturers' catalog sheets, specifications, and installation instructions for all products to be installed within the scope of work. This is to verify that the submitted components comply with the Contract Documents. Submittals shall be formatted as follows.
1. Submit only products that appear in this section or that are required for a complete installation relating to the products in this section. Submission of products from multiple sections will be cause for rejection of submittal without review and subject to reformatting and resubmittal by Contractor.

2. Each product intended to be used shall be included one time only. Do not submit similar products multiple times.
 3. Submittal shall include an index with page(s) listed in order of specification within corresponding section, with subsection number and generic name correlated to product submitted. Sheet index and/or product data sheets organized alphabetically, randomly or in any manner which does not match the specification order will be cause for rejection of submittal without review and subject to reformatting and resubmittal by Contractor.
 4. Following index sheet, include Manufacturer specification sheet stapled in order of properly organized index.
 - a. Where multiple products exist on a single sheet, Contractor shall clearly indicate, whether with highlight, arrow, PDF stamp, etc. the product intending to be used.
 - b. Failure to indicate specific product to be used will be cause for marking submittal Revise and Resubmit.
- C. Pre-Installation Shop Drawings – Prior to the start of field work the Contractor shall provide pre-installation shop drawings noting the intended installation means and methods for this scope of work. This is to ensure the Contractor understands the scope of work and to provide the field installation teams with all information necessary for successful implementation.
1. Drawings shall be created using modeling software, such as Autodesk AutoCAD. In addition, they shall be exported in PDF format for review by the designer and Owner.
 2. Drawings shall contain floor plans, RCPs (if applicable), section views, and details illustrating equipment location, including but not limited equipment racks, IR amplifiers, projection screens, connection panels, flat panel displays, and loudspeakers. Drawings shall be at no less than 1/8"=1'-0" scale.
 3. Detailed wiring diagrams showing the interconnection between equipment devices. This shall include cable labeling, cable types, connector types and termination details, wiring color codes, and equipment manufacturer and models. Note cabling provided by Others. Diagrams included as part of Construction Documents are included to convey design intent and are not acceptable for use in Pre-Installation Shop Drawings and will be cause for rejection.
 4. Loudspeaker, video projector, projector lift, and projection screen mounting details, including hardware type, material, and load capacity. For all equipment mounted overhead, mounting details and design calculations shall be signed and sealed by a professional structural engineer currently licensed to practice in the State of the work to be performed. The details included in the Construction Documents are included to convey design intent and are not acceptable for use in Pre-Installation Shop Drawings and will be cause for rejection.
 5. Dimensioned plate and panel details that are custom for the project. Details shall include dimensioned locations of components, component type, engraving information, bill of materials, and plate finish and color. If custom part numbers are generated by a manufacturer, they shall be included on the plate details.
 6. Rack elevations showing equipment layout within racks with dimensions. The Contractor shall allocate space in the rack for all equipment that will ultimately be installed within, including any and all Owner Furnished equipment.
 7. Wiring schedule showing the source and destination of wiring and indicating whether the wire is in conduit or cable tray.
- D. User Interface Submittals – The Contractor shall provide user interface submittals to convey the look and feel of user interfaces along with intended functionality. This is to ensure the Contractor understands the scope of work and to streamline the programming process prior to field installation.
1. Submit within 14 days of Pre-Installation Shop Drawing submittal.
 2. Submit individual PDF files with screenshots of touch panels to be configured for the project.

- a. In text below screenshot, describe what pressing each button will accomplish in the program.
 - b. Include both what users would experience in the room as well as on the touch panel. Ex. "Pressing Power On will turn on projector, lower projector screen and take users to the [SOURCES] page of touch panel.
 - c. Where identical buttons exist on multiple pages, describe their function only once.
3. If button panels with user replaceable or custom buttons are included in project scope, submit PDF screenshot of proposed button configuration.
 - a. In text below screenshot, describe what pressing each button will accomplish in the program.
- E. As-Built Drawings - The Contractor shall provide Final documentation noting the actual installed conditions for this scope of work. This is to provide the Owner with accurate historical data of the project for future reference. As-Built Drawings shall be submitted during project close-out for inclusion in the O&M manual. Submittals shall be formatted as follows.
1. Submit one (1) PDF set of redlined Contractor generated As-Built Drawings. The Owner reserves the right to request an electronic copy of the shop drawings in both Autodesk CAD (.DWG) format and PDF format.
 2. As-Built Drawings that utilize the Contract Documents as a base, shall be inclusive of all Published Addendums, ASIs, Accepted PCOs, PRs, SIs, etc. Changes made via RFI or Field Directive that were not published changes to the Contract Drawings shall be noted as such on the As-Builts with the noted RFI or FD #.
 3. All text notes included on As-Builts shall be easily legible on PDF. Handwritten notes that are not legible shall be replaced with PDF text.
 4. Include equipment manufacturer/model as installed in the field.
 5. Include revised functional diagrams based on those submitted and approved during the Pre-Installation Shop Drawing submittal.
- F. Configuration Files and Source Code – The Contractor shall provide the final equipment configuration files and Source Code installed on the project. These files shall be submitted concurrently with As-Built Drawings.
1. Include configuration files for all equipment, including but not limited to, digital signal processors, video switchers, control processors, amplifiers, etc. Owner notes that any changes made during the warranty period not completed by the Contractor will void the system warranty.
 2. Include any passwords that may have been created that are required to access equipment. Owner notes that any changes made during the warranty period not completed by the Contractor will void the system warranty.
 3. Contractor is not required to provide manufacturer software used for configuration.
 - a. Include any control processor source code in its uncompiled format. Owner notes that any changes made during the warranty period not completed by the Contractor will void the system warranty.

1.4 CLOSE-OUT DOCUMENTS

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

1. Provide the following for products incorporated into the final installation:
 - a. Manufacturer's data for each type of product. Include manufacturer's serial numbers within the list of product.
 - b. Each products Owner/Instruction Manual. Provide high quality copies where necessary, with all text legible and illustrations of equal resolution and sharpness as the original manual. Faxed copies or copies with portions of the information missing or smeared not acceptable.
2. Provide as-built drawings depicting what is actually incorporated within the project delivered as electronic files. All text within drawings shall be legible.
3. Provide recorded test reports of Contractor commissioning.
4. Prepare and provide a complete and typical procedure for the operation of the equipment as a system including:
 - a. Describe the operation of system capabilities.
 - b. Assume the intended reader of the manual to be technically inexperienced and unfamiliar with this facility.
5. Any other pertinent data generated during the project or required for future service.

1.5 DELIVERY, STORAGE, AND HANDLING

- A. Equipment and components shall arrive onsite properly protected and undamaged with containers, packaging and labels intact.
- B. Store, handle and protect materials and equipment in accordance with Manufacturer's recommendations.
- C. Store materials and equipment in dry, environmentally controlled space. Do not install equipment and materials until spaces are enclosed, watertight, and dry. Protect equipment from dust and other airborne materials.
- D. Provide additional protection during handling as necessary to prevent breaking, scraping, marring, or otherwise damaging products or surrounding areas.
- E. Protect all equipment and components that are to be installed within this project from theft, vandalism, and exposure to rain, freezing temperatures and direct sunlight.
- F. Protect installed equipment and components from damage and prevent use by unauthorized persons.

1.6 WARRANTY

- A. The Contractor shall warrantee the completed work for a period of one (1) year, from the date of acceptance of the work, to be free of defect in design, workmanship, or material.
- B. Contractor shall repair, adjust, and/or replace, whichever the Owner determines to be in its best interests, any defective equipment, materials, or workmanship, as well as such parts of the work damaged or destroyed by such defect, during the warranty period, at the Contractor's sole cost and expense. If parts or components need to be repaired, then a loaner will be supplied and installed until the part or component can be repaired and reinstalled.
- C. All service work shall be performed by manufacturer certified technicians.

- D. Contractor to provide Owner a phone number for technical support. All support calls shall be answered within twenty-four (24) hours. All repairs shall be underway within forty-eight (48) hours and completed (or loaner supplied) within seven (7) days.
- E. At the end of the warranty period, the Contractor shall complete one (1) site visit to evaluate the status of the audio-visual systems. All equipment within this scope of work found to be defective shall be replaced at no cost to the Owner.
- F. Guarantees of material, equipment, and workmanship running in favor of the Contractor shall be transferred and assigned to the Owner on completion of the work and acceptance of said work by the Owner.

PART 2 - PRODUCTS

2.1 ANNOUNCER MICROPHONE

- A. Announcer microphone shall meet or exceed the following specifications:

- 1. Shall have a sensitivity of -55dBV at 1Pa.
- 2. Shall have a frequency response of 50Hz – 16000Hz.
- 3. Shall have a maximum sound pressure level input of 132dB.
- 4. Shall be dynamic.
- 5. Shall have a shock mount.
- 6. Acceptable Manufacturers:
 - a. Shure MV7X
 - b. Or Equal

2.2 **ANNOUNCER** MICROPHONE BOOM ARM

- A. Broadcast microphone boom arm shall meet or exceed the following specifications:

- 1. Shall be desk mountable.
- 2. Shall support microphones weighing between 1.5 and 2.4 pounds.
- 3. Shall have a maximum horizontal reach of up to 32 inches.
- 4. Shall have a maximum vertical reach of up to 33 inches.
- 5. Shall have a desk insert mounting adapter.
- 6. Acceptable Manufacturers:
 - a. Rode PS1
 - b. Or Equal

2.3 MICROPHONE SWITCH

- A. Microphone switch shall meet or exceed the following specifications:

- 1. Shall have a switch.
- 2. Shall be capable of providing latching and momentary switching options.
 - a. **Whirlwind MICMUTE PX**
 - b. Or Equal

2.4 BLUETOOTH INTERFACE

A. Shall meet or exceed the following specifications:

1. Shall provide Bluetooth connectivity.
2. Shall support playback of WAV, MP3, and AAC files.
3. Shall have sync push button.
4. Shall have a minimum of one (1) twisted pair output.
5. Shall have a minimum of one (1) twisted pair pass through
6. Shall sum stereo audio to one (1) mono output.
7. Shall be capable of daisy-chaining up to three compatible modules
8. Shall be compatible with AUDIO RECEIVER.
9. Shall come in a single gang wall plate form factor.
10. Confirm color and finish with architect prior to procurement.
11. Acceptable Manufacturers:
 - a. RDL D-BT1A
 - b. Or Equal

2.5 AUDIO TRANSMITTER

A. Shall meet or exceed the following specifications:

1. Shall have one (1) XLR microphone input.
2. Shall have one (1) 3.5 mm stereo **line level** input summed to one (1) mono output.
3. Shall have a minimum of one (1) twisted pair output.
4. Shall have a minimum of one (1) twisted pair pass through
5. Shall be capable of daisy-chaining up to three compatible modules
6. Shall be compatible with AUDIO RECEIVER.
7. Shall come in a single gang wall plate form factor.
8. Confirm color and finish with architect prior to procurement.
9. Acceptable Manufacturers:
 - a. RDL D-TPS2AM
 - b. Or Equal

2.6 AUDIO RECEIVER

A. Shall meet or exceed the following specifications:

1. Shall have a minimum of one (1) twisted pair input.
2. Shall receive up to three (3) analog audio channels over compatible twisted pair cabling.
3. Shall provide a minimum of two (2) balanced mono analog audio outputs per twisted pair input.
4. Local power shall be capable of feeding all connected modules over compatible twisted pair cabling.
5. Contractor shall provide compatible power supply as required.
6. Shall be compatible with BLUETOOTH **INTERFACE** and AUDIO TRANSMITTER
7. Acceptable Manufacturers:
 - a. RDL TX-TPR2A
 - b. Or Equal

2.7 VOLUME CONTROL

- A. Volume controls shall meet or exceed the following specifications:
1. Shall have knob control with scale.
 2. Shall provide eight (8) buttons for input and output source selection.
 3. Shall operate over Ethernet communication.
 4. Confirm color and finish with architect prior to procurement.
 5. Acceptable Manufacturers:
 - a. BSS Audio EC-8BV
 - b. Provide Angled Surface Box FSR-DSKB-4G
 - c. Or Equal

2.8 AV NETWORK SWITCH

- A. Shall meet or exceed the following specifications:
1. Shall have quantity of Ethernet ports required to support audio-visual systems as shown on the T-series drawings.
 2. Shall be manageable.
 3. Shall be 1RU rack mountable.
 4. Acceptable Manufacturers:
 - a. NetGear M4250 Series
 - b. Or Equal

2.9 WIRELESS MICROPHONE SYSTEM

- A. Wireless microphone receivers shall meet or exceed the following specifications:
1. Shall utilize a 64 MHz bandwidth.
 2. Shall provide digital predictive switching for true diversity.
 3. Shall have up to 60 frequency presets available.
 4. Shall provide automatic frequency scanning.
 5. Transmitters and receivers shall utilize a metal housing.
 6. Coordinate operating frequency with local RF environment.
 7. Provide antenna distribution as required.
 8. Acceptable Manufacturers:
 - a. Shure QLXD4
 - b. Shure QLXD2/SM58
 - c. Shure QLXD1
 - d. Shure WL185M
 - e. Shure UA221
 - f. Shure UABIAS
 - g. Shure UA834WB
 - h. Shure UA8
 - i. Or Equal

2.10 WIRELESS MICROPHONE ANTENNA DISTRIBUTION SYSTEM

- A. Shall meet or exceed the following specifications:

1. Shall operate in the 470 MHz to **928** MHz radio frequency range
2. Shall have a minimum of one (1) BNC RF input per channel
3. Shall have a minimum of four (4) BNC RF outputs per channel
4. Shall have a minimum of four (4) DC power outputs for compatible wireless audio receivers
5. All BNC RF outputs and inputs shall have 50 ohm impedance
6. Shall have a metal housing.
7. Provide necessary adapters and accessories as required. Refer to the T-series AV diagrams for more information.
8. Shall have IP rated weather resistant enclosure.
9. Acceptable Manufacturers:
 - a. RF Venue DISTRO4
 - b. RFVenue CP Stage
 - c. Or Equal

2.11 DSP INPUT EXPANDER

- A. Shall meet or exceed the following specifications:

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

2.12 DIGITAL SIGNAL PROCESSOR

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

1. Shall be provided with input/output cards to provide a minimum of eight (8) inputs and eight (8) outputs.
2. Shall have the capability of accepting analog and digital input/outputs.
3. Shall provide an open architecture for signal routing.
4. Shall have control ports and logic outputs.
5. Control software to include, but not limited to: matrix mixers, limiters, duckers, gain adjustment, delay, parametric equalizers, crossovers, and compressors.
6. Acceptable Manufacturers:
 - a. BSS Audio BLU-160
 - b. Or Equal

2.13 POWER AMPLIFIER TYPE 1

- A. Shall meet or exceed the following specifications:

1. Shall have a minimum continuous power rating of 600 watts into an 8 ohm load per channel.
2. Shall provide two channels of amplification.
3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.

4. Shall have a maximum of 0.05% THD from 20Hz – 20000Hz.
5. Shall have a signal to noise ratio of at least 104dB.
6. Shall have a maximum input level of +35dBu.
7. Shall support ethernet control connectivity.
8. Acceptable Manufacturers:
 - a. Community ALC-404D
 - b. Crown Audio DCi 2|600N
 - c. Or Equal

2.14 POWER AMPLIFIER TYPE 2

A. Shall meet or exceed the following specifications:

1. Shall have a minimum continuous power rating of 1250 watts into an 8 ohm load per channel.
2. Shall provide four channels of amplification.
3. Shall provide protection of circuit components in the event of over-drive, output overload, or short circuits.
4. Shall have a maximum of 0.05% THD from 20Hz – 20000Hz.
5. Shall have a signal to noise ratio of at least 110dB.
6. Shall have a maximum input level of +35dBu.
7. Shall support ethernet control connectivity.
8. Acceptable Manufacturers:
 - a. Community ALC-1604D
 - b. Crown Audio DCi 4|1250N
 - c. Or Equal

2.15 LOUDSPEAKER TYPE 1

A. Shall meet or exceed the following specifications:

1. Shall be a beam steering coaxial configuration with a minimum sixteen (16) 1" tweeters and four (4) 5" LF drivers.
2. Shall include compatible extension module. Extension module shall have a minimum of four (4) 5" LF drivers.
3. Shall have a vertical coverage pattern of 45 degrees for medium throw applications and 25 degrees for long throw applications.
4. Shall have a minimum horizontal coverage pattern of 150 degrees.
5. Shall have a continuous power rating of no less than 500 W. Extension module shall have a continuous power rating of no less than 350 W.
6. Shall have a sensitivity of no less than 119 dB for music and 123 dB for speech. Compatible extension module shall have a sensitivity of no less than 90 dB full space.
7. Shall have a frequency response of 60 Hz – 20000 Hz \pm 3dB. Compatible extension module shall have a frequency response of 45 Hz – 700 Hz \pm 3dB.
8. Provide all necessary hardware and brackets required for installation.
9. Coordinate final color and finish with the architect prior to procurement.
10. Shall have a minimum IP55 rating.
11. Acceptable Manufacturers:
 - a. JBL CBT-70J-1 **+ 70JE-1 System**
 - b. JBL MTC-PC2
 - c. Or Equal

2.16 LOUDSPEAKER TYPE 2

- A. Loudspeakers shall meet or exceed the following specifications:
1. Shall be two-way coaxial configuration with one (1) 8" LF driver and one (1) 19mm HF exit driver.
 2. Shall have a coverage pattern of 90°H x 40° V.
 3. Shall have a continuous power rating of no less than 200W at 8 ohms.
 4. Shall have a sensitivity of no less than 97 dB.
 5. Shall have a frequency response of 100Hz – 16kHz ±5dB.
 6. Provide all necessary hardware and brackets required for installation.
 7. Shall be weather-resistant with IP 55W rating.
 8. Coordinate final color and finish with the **architect** prior to procurement.
 9. Acceptable Manufacturers:
 - a. Community R.25-94Z
 - b. Or Equal

2.17 LOUDSPEAKER TYPE 3

- A. Loudspeakers shall meet or exceed the following specifications:
1. Shall be two-way coaxial configuration with one (1) 8" LF driver, two (2) 60mm MF drivers, and one (1) 25mm HF exit driver.
 2. Shall have a coverage pattern of 90°H x 60° V.
 3. Shall have a continuous power rating of no less than 400W at 8 ohms.
 4. Shall have a sensitivity of no less than 98 dB.
 5. Shall have a frequency response of 80Hz – 16kHz ±5dB.
 6. Provide all necessary hardware and brackets required for installation.
 7. Shall be weather-resistant with IP 55W rating.
 8. Coordinate final color and finish with the **architect** prior to procurement.
 9. Acceptable Manufacturers:
 - a. Community R.35-3896
 - b. Or Equal

2.18 SPEAKER RIGGING COMPONENTS

- A. Contractor shall provide and install speaker rigging components as necessary to mount main loudspeakers as shown on the T-series drawings.
- B. Structural support members to have a safety factor of at least 5. Mounting hardware and wire rope to have a safety factor of 8. All fasteners to be graded and certified for use in the intended applications. Overhead suspension hardware shall comply with ASME B30.20 standards and all applicable local building and safety codes.
- C. Overhead suspension hardware must be of a type that includes product traceability controls.
- D. Rigging, mounting and support systems for loudspeakers shall be designed and sealed by a registered professional engineer licensed to practice in the State of Indiana. Once the systems are installed, the engineer shall physically inspect the methods and means used to verify compliance with the original design.

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

2.19 LOUDSPEAKER MOUNTING SLED

- A. Loudspeaker mounting sled shall meet or exceed the following specifications:
1. Provide all necessary hardware, brackets, and sandbags required for installation.
 2. JV Baseball and Varsity Baseball loudspeakers shall mount to LOUDSPEAKER MOUNTING SLED **or structural support system rated for the attached load.** Refer to Part 2.18 and the T-series drawings for **more information.**
 3. Rigging, mounting, and support systems for loudspeakers shall be designed and sealed by a registered professional engineer licensed to practice in the State of Indiana.
 4. Shall be constructed of hot dipped galvanized steel.
 5. Shall support the weight of Loudspeaker Type **3** with a safety factor of at least 5.
 6. Acceptable Manufacturers:
 - a. Electro-Mechanical Industries (EMI)
 - b. Or Equal

2.20 POWER SEQUENCING SYSTEM

- A. Contractor to provide and install a rack mounted power sequencing system within the equipment rack.
- B. Contractor to ensure all equipment is powered in the correct order to avoid audible pops and clicks from the audio-video system in response to power sequencing.
- C. Rack mounted power sequencing system shall meet or exceed the following specifications:
1. Shall include a sequencer with a minimum of six (6) sequenced outlets
 2. Shall provide remote triggering and notifications.
 3. Shall be capable of handling up to a 20 amp load.

4. Plug type shall be 5-20P.
5. Shall allow for adjustable start delay times.
6. Acceptable manufacturers:
 - a. Middle Atlantic PDS-620R
 - b. Or Equal

2.21 POWER CONDITIONER

A. Shall meet or exceed the following specifications:

1. Shall include nine (9) outlets.
2. Shall be capable of handling 20A circuits.
3. Shall be rack-mountable.
4. Reference AV diagrams for the required amount of power conditioners per AV equipment rack.
5. Acceptable Manufacturers:
 - a. Middle Atlantic PDX-920R
 - b. Furman PL-PRO DMC
 - c. Or equal

2.22 AV EQUIPMENT RACK TYPE 1

A. Shall meet or exceed the following specifications:

1. Shall have 24 units of available rack space.
2. Shall have **minimum 14-gauge steel construction with black textured powder coat finish.**
3. Shall have locking, vented doors, side panels, and fans.
4. Shall have an overall depth of 22" and useable depth of 20".
5. Shall be constructed to swing open for cabling access.
6. Shall have a large 12.5" x 12.5" knockout at the rear along with additional **conduit knockouts in the top and bottom of rack.**
7. Acceptable Manufacturers:
 - a. Middle Atlantic DWR-24-22
 - b. Or Equal

2.23 AV EQUIPMENT RACK TYPE 2

A. Shall meet or exceed the following specifications:

1. **Shall have 35 units of available rack space.**
2. **Shall have minimum 14-gauge steel construction with black textured powder coat finish.**
3. **Shall have locking, vented doors, side panels, and fans.**
4. **Shall have an overall depth of 22" and useable depth of 20".**
5. **Shall be constructed to swing open for cabling access.**
6. **Shall have a large 12.5" x 12.5" knockout at the rear along with additional conduit knockouts in the top and bottom of rack.**
7. **Acceptable Manufacturers:**
 - a. **Middle Atlantic DWR-35-22**
 - b. **Or Equal**

2.24 EQUIPMENT RACK BLANKS

- A. Contractor to provide equipment rack blanks where required as shown on T-series drawings.
- B. Equipment rack blanks shall meet or exceed the following specifications:
 - 1. Equipment rack blanks shall have a flanged construction.
 - 2. Equipment rack blanks shall be made of 1/16" thick aluminum.
 - 3. Equipment rack blanks shall have a black brushed and anodized finish.
 - 4. Provide rack blank sizes as required.
 - 5. Acceptable Manufacturers:
 - a. Middle Atlantic BL Series
 - b. Or Equal

2.25 EQUIPMENT RACK VENTS

- A. Contractor to provide equipment rack vents where required as shown on T-series drawings.
- B. Equipment rack vents shall meet or exceed the following specifications:
 - 1. Equipment rack vents shall have a flanged construction.
 - 2. Equipment rack vents shall be made of 16-gauge aluminum.
 - 3. Equipment rack vents shall have a black brushed and anodized finish.
 - 4. Provide rack vents as required.
 - 5. Acceptable Manufacturers:
 - a. Middle Atlantic VTP Series
 - b. Or Equal

2.26 EQUIPMENT RACK SHELVES

- A. Contractor to provide equipment rack shelves where required as shown on T-series drawings.
- B. Equipment rack shelves shall meet or exceed the following specifications:
 - 1. Shall have a flanged construction.
 - 2. Shall have 16-gauge steel construction with black textured powder coat finish.
 - 3. Shall have a minimum load capacity of 50 pounds.
 - 4. Provide rack shelf sizes as required.
 - 5. Acceptable Manufacturers:
 - a. Middle Atlantic U Series
 - b. Or Equal

2.27 EQUIPMENT RACK DRAWERS

- A. Contractor to provide equipment rack drawers where required as shown on T-series drawings.
- B. Equipment rack drawers shall meet or exceed the following specifications:
 - 1. Shall have a flanged construction.
 - 2. Shall have 16-gauge steel construction with black textured powder coat finish.

3. Shall have a minimum load capacity of 50 pounds.
4. Provide rack drawer sizes as required.
5. Acceptable Manufacturers:
 - a. Middle Atlantic UD Series
 - b. Or Equal

PART 3 - EXECUTION

3.1 GENERAL

- A. Coordinate incorporation of the Work specified herein with other project work so as to facilitate a cohesive final product.
- B. The installation recommendations contained within ASDI and Telecommunications Distribution Methods Manual are mandatory minimum standards and requirements.
- C. Mount equipment and enclosures plumb and level.
- D. Permanently installed equipment to be firmly and safely held in place. Design equipment supports to support loads imposed with a safety factor of at least five. Seismic bracing shall be installed on appropriate equipment where local codes require such installation.
- E. Verify all locations of equipment in all rooms with Owner's Representative, Owner, and Consultant.
- F. Follow all manufacturer requirements and recommendations for the installation of all AV equipment.

3.2 AUDIO CONTROL SYSTEM

- A. Digital volume controls shall be programmed to at a minimum switch between available audio sources and control zone selection of audio where applicable.
- B. All digital volume controls shall be programmed with a custom lockable pin code. System shall remain locked by default to prevent unwanted usage. Coordinate pin code for each touch panel and wireless controller with owner. Additional control system and room type functionality shall be programmed at a minimum as described below:
 1. VARSITY / JV BASEBALL PRESS BOX
 - a. Shall include one (1) digital volume control for system control, mounted in an angled surface box placed and free to move on the northeast countertop. Sources shall be selectable between the angled surface box announcer microphone input, the Bluetooth receiver, and both wireless microphones channels. Output volume control shall be selectable between the northeast loudspeaker and the southeast loudspeaker.
 - b. Shall include Bluetooth capabilities for audio connectivity and playback, mounted in the same angled surface box as the digital volume control.
 - c. Shall include one (1) 3.5mm analog audio connectivity and playback, mounted in the same angled surface box as the digital volume control.
 - d. Shall include one (1) XLR analog microphone level connection for an announcer microphone.

- e. Shall include one (1) additional analog audio connection location. The audio connection location shall include (1) XLR microphone level input connection and one (1) XLR line level output connection for additional connectivity. Audio connection location shall be located below the announcer location.
- f. Shall include wireless microphone package for voice and audio reinforcement.
- g. Coordinate the new network switch setup requirements with owner. Coordinate all additional AV traffic and protocols on the school's network with the owner prior to programming and commissioning.
- h. Shall include a refreshed audio system tuned for the surrounding bleachers and field. Contractor shall ensure loudspeaker coverage of **85** dBA at a minimum and no more than **100** dBA at a maximum based on the volume range configured on the digital volume control. All surrounding areas shall have consistent coverage no greater than ± 2 dB.

2. VARSITY / JV SOFTBALL PRESS BOX

- a. Shall include two (2) digital volume control for system controls, mounted in angled surface boxes placed and free to move on the northeast side countertop and southeast countertop. Sources shall be selectable between the angled surface box announcer microphone input, the Bluetooth receiver, and both wireless microphones channels. Output volume control shall be selectable between the varsity softball loudspeakers and the JV softball loudspeakers.
- b. Shall include Bluetooth capabilities for audio connectivity and playback, mounted in the same angled surface box as the digital volume control.
- c. Shall include one (1) 3.5mm analog audio connectivity and playback, mounted in the same angled surface box as the digital volume control.
- d. Shall include one (1) XLR analog microphone level connection for an announcer microphone.
- e. Shall include one (1) additional analog audio connection location. The audio connection location shall include (1) XLR microphone level input connection and one (1) XLR line level output connection for additional connectivity. Audio connection location shall be located below the announcer location.
- f. Shall include wireless microphone package for voice and audio reinforcement.
- g. Coordinate the new network switch setup requirements with owner. Coordinate all additional AV traffic and protocols on the school's network with the owner prior to programming and commissioning.
- h. Shall include a refreshed audio system tuned for the surrounding bleachers and field. Contractor shall ensure loudspeaker coverage of **85** dBA at a minimum and no more than **100** dBA at a maximum based on the volume range configured on the digital volume control. All surrounding areas shall have consistent coverage no greater than ± 2 dB.

3. TENNIS BUILDING

- a. Shall include one (1) digital volume control for system controls, located in a coach's office. Sources shall be selectable between the analog microphone input, both Bluetooth receivers, and both wireless microphones channels. Output volume control shall be selectable between the northwest courts, west courts, and southwest courts.
- b. Shall include Bluetooth capabilities for audio connectivity and playback, one located in the coach's office and one located on the mezzanine level.
- c. Shall include one (1) 3.5mm analog audio connectivity and playback, one located in the coach's office and one located on the mezzanine level.
- d. Shall include one (1) additional analog audio connection location. The audio connection location shall include (1) XLR microphone level input connection and one

(1) XLR line level output connection for additional connectivity. Audio connection location shall be located in the coach's office.

- e. Shall include wireless microphone package for voice and audio reinforcement.
- f. Coordinate the new network switch setup requirements with owner. Coordinate all additional AV traffic and protocols on the school's network with the owner prior to programming and commissioning.
- g. Shall include a refreshed audio system tuned for the surrounding bleachers and field. Contractor shall ensure loudspeaker coverage of **85** dBA at a minimum and no more than **100** dBA at a maximum based on the volume range configured on the digital volume control. All surrounding areas shall have consistent coverage no greater than ± 2 dB.

3.3 TRAINING

- A. After final completion, provide instruction to Owner designated personnel.
- B. Provide a minimum of eight (8) hours of training to the Owner. Training session(s) shall cover the following topics at a minimum:
 - 1. System Equipment Connectivity
 - 2. Device Configurations
 - 3. Operation, maintenance, and upgrade procedures.
- C. Training to be arranged with Owner personnel. Training schedule shall be coordinated with Owner personnel and their needs.
- D. Training to occur in maximum of 2-hour increments per personnel or groups of personnel.
- E. Training plan, timeline, and agenda shall be provided to Owner and signed off by Owner and Contractor.
- F. Warranty certificate and agreement shall be provided to Owner at initial training session.
- G. Provide a digital video copy of the training sessions.

3.4 SYSTEM ACCEPTANCE

- A. Contractor shall demonstrate to the Owner and Architect that all systems have been installed per the plans and specifications and that all programming functions, display functions, control functions and all interfaced equipment operate as expected.
- B. Contractor shall demonstrate to the Owner and Architect that all the end user staff has a working knowledge of how to operate the installed equipment and that the facilities staff also has a working knowledge of the troubleshooting methods for non-critical service problems.
- C. Contractor shall have a Delivery and Acceptance form signed by the Owner representative, agreeing that the installation is complete and its operation is acceptable except as noted on the Delivery and Acceptance form. This will also serve as the start of the warranty period.
- D. Contractor shall work with the General Contractor to complete all punch lists and work required to allow the General Contractor to close out the project in a timely manner. This will include but not limited to any work that would impact any final inspection for turnover of the building.

END OF SECTION 27 41 16

SECTION 32 13 13 – CONCRETE PAVING

1.1 GENERAL

- A. Scope of Work: The following Specification depicts application of concrete curbs and pedestrian flatwork. Refer to Plans and Details.
- B. Submittals: In addition to Product Data, submit design mixes for each concrete pavement mix.
 - 1. Submit material certificates signed by manufacturers certifying that each concrete material complies with requirements.
- C. Related Sections include the following:
 - 1. Division 31 Section "Earth Moving" for sub-grade preparation, grading and base course.
- D. Quality Assurance: Comply with ACI 301, "Specification for Structural Concrete" and INDOT Standard Specifications – Sections 502, 504, 505, 604, 702, and 703 unless modified by the requirements of the Contract Documents.
 - 1. Installer Qualifications: An experienced installer who has completed pavement work similar in material, design, and extent to that indicated for this Project and whose work has resulted in construction with a record of successful in-service performance.
 - 2. Manufacturer Qualifications: Manufacturer of ready-mixed concrete products complying with ASTM C 94 requirements for production facilities and equipment.
 - 3. Testing Agency Qualifications: Contractor will engage an independent testing agency qualified according to ASTM C1077 and ASTM E329 to conduct testing as documented by ASTM E548.
 - 4. Pre-installation Conference: Conduct conference at Project site.

1.2 PRODUCTS

- A. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, smooth exposed surfaces.
- B. Steel Reinforcement Materials:
 - 1. Plain-Steel Welded Wire Fabric: ASTM A 185, flat sheets; applicable at heavy-duty concrete areas.
 - 2. Reinforcement Bars: ASTM A 615/A 615M, Grade 60 (Grade 420), deformed.
 - 3. Joint Dowel Bars: Plain steel bars, ASTM A615/A615M, Grade 60 (Grade 420). Cut bars true to length with ends square and burr-free.
 - 4. Supports: Bolsters, chairs, spacers, and other devices for spacing, supporting, and fastening steel reinforcement; manufactured according to CRSI's "Manual of Standard Practice"
- C. Concrete Materials:
 - 1. Portland Cement: ASTM C 150, Type I or II
 - 2. Portland Limestone Cement: ASTM C 595, Type IL

- a. Cementitious Material Substitution: All carbon reduction products or methods shall be used in accordance with Section 502 of the INDOT Standard Specifications. Strategies for carbon reduction can vary. Methods for achieving targeted reduction include but are not limited to:
 - 1) Fly Ash: ASTM C 618, Class F or C.
 - 2) Ground Granulated Blast-Furnace Slag: ASTM C 989, Grade 100 or 120
 - 3) Carbon Reducing Additives
 - 4) Concrete Mix Carbon Sequestration
 - b. Cementitious material replacement shall comply with INDOT Standards.
 - 1) Maximum Portland cement reduction for fly ash replacement: 20 percent.
 - 2) Maximum Portland cement reduction for slag cement replacement: 30 percent.
 - 3) Maximum allowable amount silica fume shall be 3-7% of total cementitious content.
 - 4) Concrete Mixes shall not contain more than two SCMs.
 - 5) Allowable SCM percentage of total cementitious material shall be 25-40% by weight.
 - c. Contractor may use one or a combination of options to achieve the targeted carbon reduction.
3. Aggregate: ASTM C 33, uniformly graded, from a single source.
 4. Water: Potable.
- D. Admixtures certified by manufacturer to contain not more than 0.1 percent water-soluble chloride ions by mass of cement and to be compatible with other admixtures, as follows:
1. Air-Entraining Admixture: ASTM C 260.
 2. Water-Reducing Admixture: ASTM C 494, Type A.
 3. High-Range, Water-Reducing Admixture: ASTM C 494, Type F.
 4. Water-Reducing and Accelerating Admixture: ASTM C 494, Type E.
 5. Water-Reducing and Retarding Admixture: ASTM C 494, Type D.
 6. Internal Cure (E5): ASTM C 494, Type S.
- E. Curing Materials:
1. Absorptive Cover: AASHTO M 182, Class 2, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. (305 g/sq. m) dry.
 2. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet.
 3. Water: Potable.
 4. Evaporation Retarder: Waterborne, monomolecular film forming, manufactured for application to fresh concrete.
 5. Clear Solvent-Borne Liquid-Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B.
 6. Clear Waterborne Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B.
 7. White Waterborne Membrane-Forming Curing Compound: ASTM C 309, Type 2, Class B.
 8. Internal Curing Compound: E5 Internal Cure, 4 fl. Oz. per 100 lbs. of cementitious material.

- F. Joint Filler:
1. Preformed; non-extruding bituminous type (ASTM D 1751) or sponge rubber or cork (ASTM D 1752).
 2. Thickness: 1/2 inch.
 3. Backer rod: ASTM D 5249, Type 2, of a thickness and width required to control sealant depths, prevent bottom-side adhesion of sealant, and fill remainder of joint opening under sealant.
- G. Related Materials:
1. Expansion- and Isolation-Joint-Filler Strips: ASTM D 1751, asphalt-saturated cellulosic fiber, or ASTM D 1752, cork or self-expanding cork.
 2. Sealer: Provide and install penetrating sealer.
- H. Concrete Mixes: Prepare design mixes, proportioned according to ACI 211.1 and ACI 301, with the following properties:
1. **Compressive Strength (28 Days): 4,500 psi.**
 2. Maximum Water-Cementitious Materials Ratio: 0.50.
 3. Slump Limit: 4 inches (100 mm) average.
 4. Air Content: 4.5 to 7.5 percent.
- I. Synthetic Fibers: Uniformly disperse 3/4" to 1" length nylon fibers into concrete mix at manufacturer's recommended rate, but not less than 1 1/2 lb./cu. yd. (0.90 kg/cu. m).
- J. Penetrating Anti-Spalling Sealer (when applicable): Sealer shall be a siloxane-based compound which has a 92 percent chloride ion screen and a repellency factor of 92 percent when tested in accordance with NCHRP #244, Test Method. In addition, sealer-treated concrete must exhibit no scaling when exposed to 125 cycles of freezing and thawing. System shall conform to requirements with ASTM C957-81. Tests must be by an independent testing laboratory.
1. Products: Subject to compliance with requirements, provide products by one of the following:
 - a. Euco-Guard Vox (VOC Compliant) by Euclid Chemical Co.
 - b. Environseal by Hydrozo.
 - c. Saltguard WB by PROSOCO, Inc.
 - d. Aquapel Plus by L & M Construction Chemical Co
- K. Ready-Mixed Concrete: Comply with requirements and with ASTM C 94.
- L. Project-Site Mixing: Comply with requirements and measure, batch, and mix concrete materials and concrete according to ASTM C 94. Mix concrete materials in appropriate drum-type batch machine mixer.
- M. ADAAG Truncated Dome Warning Surfaces: Ramps shall receive ADA-compliant truncated dome warning metal plate to fully comply with INDOT standards.
1. Approved Manufacturers
 - a. Neenah Foundry
 - b. ADA Solutions LLC

1.3 EXECUTION

- A. Surface Preparation: Proof-roll prepared subbase, and remove loose material from surface.
- B. Forms: Set, brace, and secure edge forms, bulkheads, and intermediate screed guides for pavement to required lines, grades, and elevations.
- C. Reinforcement: Accurately position and support reinforcement, and secure against displacement. Set wire ties with ends directed into concrete.
 - 1. Install welded wire fabric in lengths as long as practicable; lap at least one full mesh, and lace splices with wire.
- D. Dewatering: Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.

Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.

- 1. Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
- 2. Install a dewatering system to keep subgrades dry and convey ground water away from excavations. Maintain until dewatering as required

1.4 JOINTS

- A. Align curb, gutter, and sidewalk joints.
- B. Place joint filler to separate paving from vertical surfaces and other components. Recess top of filler ½ inch for sealant placement.
- C. Provide joint backer materials that are non-staining, are compatible with joint substrates, sealants, primers and other joint fillers, and are approved for applications indicated by sealant manufacturer based upon field experience and laboratory testing.
 - a. Primers: Product recommended by joint sealant manufacturer where required for adhesion of sealant to joint substrates indicated, as determined from preconstruction joint- sealant-substrate tests and field tests
- D. Joint Sealant Products:
 - a. Type SL Silicone Sealant for Concrete: Single-component, low-modulus, neutral-curing, self-leveling silicone sealant complying with ASTM D 5893 for Type SL.
 - b. Multicomponent Low-Modulus Sealant for Concrete: Proprietary formulation consisting of reactive petropolymer and activator components producing a pourable, self-leveling sealant.
 - c. Subject to compliance with requirements, provide one of the following or approved equal prior to bidding:
 - 1) Type SL Silicone Sealant for Concrete: 890-SL; Dow Corning.
 - 2) Type SL Elastomeric Polyurethane Sealant for Concrete: SL-2 Sonolastic; Sonneborn.

E. Colors of Exposed Joint Sealants: Standard gray or as selected from manufacturer's standards.

F. Joint Tooling:

1. Saw cut contraction joints as soon as possible after slab finishing yet without dislodging aggregate. Cut 1/3 into depth of slab. Saw cut joints shall be used in conditions called out in plans and details, generally for straight-run patterns. All sawn joints to fully extend to building and vertical faces.

G. Space joints as indicated on plans. In cases where joint patterns are not represented in plan, use the following guidelines.

1. Maximum Spacing for Pavement Type

<u>Joint Type</u>	<u>Drives, Parking</u>	<u>Sidewalks, Plazas</u>
Control	20'	8' or plans
Expansion	40' or per plans	40' or per plans
Longitudinal	12' or Construction	--

H. Joints: Locate and install construction, isolation, contraction, and expansion joints as indicated in Plans. When information within Plans is unclear or not established, follow all ACI industry standards. Coordinate with the Landscape Architect prior to commencing work.

1.5 CONCRETE PLACEMENT

A. Comply with recommendations in ACI 304R for measuring, mixing, transporting, and placing concrete. Place concrete in a continuous operation within planned joints or sections.

1. Moisten subbase to provide a uniform dampened condition at time concrete is placed.
2. Consolidate concrete by mechanical vibrating equipment supplemented by hand-spading, rodding, or tamping according to recommendations in ACI 309R.
3. Screed and initial-float concrete surfaces with darby or bull float before excess moisture or bleed water appears on the surface.
4. Protect concrete from cold or hot weather during mixing, placing, and curing.

B. Evaporation Retarder: Apply to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb/sq. ft. x h (1 kg/sq. m x h) before and during finishing operations. Apply according to manufacturer's written instructions after placing, screeding, and bull floating or darbying concrete, but before float finishing.

C. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and the concrete surface has stiffened sufficiently to permit operations. Float surfaces to true planes with gaps below 10-foot- (3-m-) long, unlevelled straightedge not to exceed 1/4 inch (6 mm). Cut down high spots, and fill low spots. Refloat surface immediately to uniform granular texture.

1. Medium Textured Broom Finish: Provide a coarse finish by striating surface 1/16 inch deep with a stiff-bristled broom, perpendicular to line of traffic.

D. Curing: Begin curing after finishing concrete, but not before free water has disappeared from concrete surface. Cure concrete by one or a combination of the following methods:

1. Moisture cure concrete by water, continuous fog spray, continuously wet absorptive cover, or by moisture-retaining-cover curing. Keep surfaces continuously moist for not less than seven days.
 2. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. Recoat areas subjected to heavy rainfall within three hours after initial application. Maintain continuity of coating and repair damage during curing period.
- E. Anti-Spalling Sealer: All exterior slabs and walks, unless otherwise noted, shall be sealed with specified penetrating anti-spalling sealer. Surface preparation of slabs and sealer application shall be in strict accordance with directions of manufacturer. Field service shall be provided, upon 5 days notice, by manufacturer of sealant to assist contractor in obtaining maximum benefits of product under prevailing jobsite conditions. In addition, sealant representative shall attend the pre-installation conference with the Landscape Architect and contractor to discuss proper equipment and procedures.
- F. Remove and replace concrete pavement that is broken, damaged, or defective, or does not meet requirements in this Section.
- G. Immediately after placement, protect pavement from premature drying, excessive hot or cold temperatures, and mechanical injury. Note that poorly protected work will not be accepted by the Owner for any reason. Do not permit traffic over pavement for 14 days minimum after finishing, or longer as required to prevent damage.
- H. Maintain concrete pavement free of stains, discoloration, dirt, and other foreign material. Sweep concrete pavement not more than two days before date scheduled for Substantial Completion.
- 1.6 DEFECTIVE CONCRETE
- A. Repair and patch defective areas when approved by Landscape Architect. Remove and replace concrete that cannot be repaired and patched to Landscape Architect's satisfaction.

END OF SECTION

SECTION 32 18 13 – SYNTHETIC TURF REPLACEMENT

PART 1 – GENERAL

1.1 RELATED DOCUMENTS

- A. Drawings and general provisions of the Contract.

1.2 SUMMARY

- A. Work Includes:

1. New synthetic turf replacement for Varsity Football use:
 - a. Carpet Removal. The Vendor shall remove the existing carpet and infill ballast from the Owner's property and properly dispose of such materials off-site. Prior to disposal, confirm if the Owner desires any portions of the existing turf to repurpose elsewhere on campus.
 - b. Field Markings. All football game lines, yard line numbers, arrows, hash lines, sideline zones, logos, midfield markings, conference recognition, and donor recognition shall be provided as described in the Field Marking Intent Plan. See image below.
 - c. All markings shall fully comply with IHSA and NFHS standards. Coordinate all marking details during submittals at no additional charge to the Owner. Field Marking Intent Plans are provided for reference. Minor deviations during submittal coordination may occur as the Landscape Architect and Vendor finalize details.
 - d. Markings within the Base Proposal shall include:
 - i. Narrow "ghosted" yard lines expressed through the midfield logo and any similar conditions stipulated by NFHS and/or IHSA.
 - ii. Yard numerals in white with orange shadowing.
 - iii. All markings indicated or implied in the intent graphic in the Bid Documents
 - e. Grades. The current field rests on a 0.5% subgrade slope that is not anticipated to change in the course of turf replacement.
 - f. Concrete Curb and Perimeter Nailer. The Vendor shall anticipate re-use of the existing curb and replacement of the nailer as part of the Proposal Response.
 - g. Football Goals. Existing goals remain. Protect throughout construction.
 - h. Goalpost Pads. Existing pads remain. Protect throughout construction. Coordinate color selection and text for the pad with the Landscape Architect during submittals.
 - i. Infill. The Vendor shall provide and install all required ballast. Ballast shall be new media. 50/50 blend of rubber/sand shall be Base Bid. An Alternate Bid contemplates organic infill, such as Safeshell, Greenplay, NaturalCool, Brockfill, Smoothplay, CoolPlay, or other pre-approved products prior to bidding.
 - j. Field Grooming, Products, and Training. The Vendor shall conduct field grooming with his or her own equipment and forces until Substantial Completion is achieved. Prior to demobilizing from the site, the Vendor shall provide the Owner with a Field Groomer for their ongoing maintenance operations, then fully train and advise the Owner on proper maintenance procedures. See additional information within this Specification for additional coordination required.

- k. Shock Pad. See Paragraph 2.5 below.

B. Bidding Approach

Proposal Responses shall include turn-key labor and materials to deliver a fully functioning system as described within this Specification. Shop drawings and coordination of submittals shall be a requirement of the Vendor. All Testing and Warranties shall be included within all base responses.

C. Submittals

1. Bid Submittals

- a. List of similar projects completed by the Builder within the last two (2) years utilizing substantially similar turf product. Provide full Client contact information and details of the turf manufacturer and turf type.
- b. Identify any pending litigation involving either the synthetic turf manufacturer or Builder or both. Such documentation shall be provided confidentially to the Owner rather than the Design Team. Similarly, the Owner reserves the right to request insurance documentation and company financial reports from any Bidder or subcontractor performing work on-site as a means to evaluate capacity to perform the work.
- c. Identify the Foreman, Supervisor and Crew experience for the team executing this project installation. Include a list of completed projects in the last three (3) years by this specific team.
- d. Builder to provide independent laboratory testing data, such as Lisport testing or similar, to substantiate the comparative durability of the proposed synthetic system the other competing systems that may be offered for the Owner's consideration.
- e. Provide documentation of sources of infill materials. Local and regional sources are encouraged whenever possible.
- f. Samples: One sample box for each turf type used in overall project must be presented with each Respondent's bid.

2. Post-Bid Analysis

- A. Credentials: Qualifications and credentials are a critical component of determining the most responsive Bid for all athletic field construction. Provide a listing of previous field installations, including full Client contact information, within the sealed Bid submitted for this project. The successful Bidder shall demonstrate his or her experience, industry knowledge, specialized construction methods/techniques, and overall project approach.
- B. Bidding: Builders are advised that evaluating the most responsive Bid will include a combination of price, product type, credentials, and project approach. The Owner will review all materials, approach, credentials, and pricing within a Bidder's submission to determine which Bid is most responsive to the project goals and offers best value.

3. Pre-Construction Submittals

- a. Cut sheets and product samples for all products listed in Bid Submittals for Owner review and approval.
- b. Complete and detailed shop drawings from the Turf Manufacturer including layout of all components, parts and materials required for a complete synthetic system.
- c. Verification in writing provided to the Owner indicating no patent infringements have occurred in the Manufacturer's proposed synthetic system. The Owner and all his

design, construction, and administrative agents shall be held harmless by the Manufacturer with regard to any legal action relating to patent infringements.

- d. Staking of shall be under the full control of the Builder. The Builder shall utilize a registered surveyor to provide all necessary stakes, batter boards, lines, etc., to establish grades required and corresponding benchmarks. The cost of staking shall be included in the Base Bid. A digital record of the actual field as-built measurements shall be made for the Owner's archives in both AutoCAD and PDF format.

4. Post-Construction Submittals

- a. Provide Record Drawings of the completed installation. Submit Record Drawings for review by the Owner ten (10) days prior to Substantial Completion. Include the following:
 - 1) Underdrain locations and inverts.
 - 2) Location of primary seam locations on the synthetic turf installation.
 - 3) Operation & Maintenance Manuals.
 - 4) All warranty documents related to third-party coverage of base construction and synthetic turf, plus applicable coverage for field grooming equipment.

C. Quality Control

1. Turf Inspection: The Owner, the Owner's agents, and the Builder shall inspect all turf at the site prior to the start of any installation. Any damaged or defective items shall be rejected and subsequently replaced by the Builder.
2. Installed Turf: Installed turf shall be inspected for, but not limited to the following:
 - a. Acceptable seams
 - b. Uniformity of product and color
 - c. Surface bubbles
 - d. Field markings
 - e. Field edge installation
 - f. Pile height of each roll supplied shall be measured
 - g. Pile height in its finished position
 - h. Surface tension

Any products or materials that fail to meet the minimum requirements shall be rejected.

3. Manufacturer shall provide up to three (3) random samplings of the turf product obtained during the specific manufacturing process of this project's order. Verify that all carpet meets or exceeds the specifications prior to shipment to ensure installation delays are avoided.
4. Weather Conditions: Only install turf according to weather requirements provided by the Manufacturer. Review all installation requirements and product limitations with Owner and Landscape Architect prior to commencing work.
5. Workmanship: All seams and inlaid markings shall be flat, tight, and permanent with no separation or fraying.
6. Sourcing: No fibers or backing from Chinese sources will be accepted. Vendor shall provide verifiable Country of Origin certification for such materials.
7. Cushioning: The dynamic cushioning of the combined turf and infill material supplied shall not exceed the following criteria:
 - a. ASTM Test F355e- Average maximum value of GMAX 110 upon initial installation. A GMAX 160 may not be exceeded over the full warranty period.

- b. ASTM Test F3146- Average maximum value of HIC 1000 at 1.3 meters upon initial installation.
- c. ASTM Test F3189-
 - 1. Shock Absorption- Average value between 55-70% upon initial installation.
 - 2. Energy Restitution- Average value between 20-50% upon initial installation.
 - 3. Vertical Deformation- Average value between 5.5-11mm upon initial installation.
- d. The Builder shall engage a third-party testing agency acceptable to the Owner to perform both GMAX and HIC testing on an annual basis throughout the warranty period as part of the Base Bid. No fewer than six (6) tests shall be performed by each testing device during each testing visit to compile a diverse, random assessment of the field. Any failures or deficiencies shall be remedied by the Builder as warranty work at no cost to the Owner.

D. Warranties

1. Turf Warranty:

BASE WARRANTY: Within his or her Base Response, the Builder shall provide a third-party, fully insured, pre-paid, and enforceable Warranty for no less than (8) years from the date of Substantial Completion of the project. UV degradation, fiber strength, stability of the backing, tufted yarn and seam integrity, and all other related components of the synthetic turf system.

- a. All warranties shall be in writing and remain valid should the Manufacturer be acquired by another company prior to the conclusion of said warranty.
- b. Confirming warranty language shall be provided with each Respondent's bid. No pro-rated warranties shall be accepted.
- c. Warranty coverage shall be a single-source, third-party insured warranty from an A-Rated domestic insurance carrier. Letters of credit, financial statements, and related-party companies are not permissible. Per claim coverage shall meet or exceed \$5,000,000 in protection to the Owner.

ALTERNATE BID A WARRANTY: The Builder shall provide an additional two (2) years of extended warranty protection added to the conclusion of the insured 8-year warranty included within Base Bid. The Owner shall allow this portion of the warranty to be by-Manufacturer rather than third-party insured.

2. Related Definitions:

- a. "Base integrity" shall be considered the absence of rutting, heaving, settlement, ponding, or related planarity issues that affect proper and intended use of the facility.

3. Quality Assurance: The Builder shall make inspections of the fields on no less than a quarterly basis during the two (2) year period following Substantial Completion to monitor performance and condition of the system. Bidder shall commit to utilizing a Certified Field Builder (CFB) as credentialed by the American Sports Builders Association, to conduct the initial build and also perform future inspections. Each inspection shall be conducted with the Owner present. Document and submit notes, pictures and a formal inspection report each inspection to the Owner. Any proactive measures required of the Builder to keep the field in proper working order shall be remedied within ten (10) days of such inspections by the Builder and Owner.

3. Training: Train the Owner for proper maintenance and upkeep of the synthetic system to ensure the warranty remains in force. Include one (1) deep clean of the infill material of the synthetic field at the conclusion of the first year of service for the turf within the Base Bid. Schedule to suit the Owner's convenience.

5. Repair Response Time: The Builder shall provide response time commitments for the execution of warranty repairs for inside & outside play-critical zones.

PART 2 – PRODUCTS

2.1 Synthetic Turf Systems.

A. Varsity Football Field:

1. Dual-fiber System
 - A. Pile Weight: 52 oz. Dual fiber system without thatch is anticipated with combination of slit-film and monofilaments. Provide and demonstrate long-lasting, durable performance for a high school facility anticipating heavy usage. Provide data, micron ratings, and validation of yarn types for consideration by the Landscape Architect as part of the bid response.
2. Pile Height: Consistent 2" height throughout all areas of the playing field and safety zones.
3. Construction Method: Broadloom Tufted.
4. Tufting Gauge: 3/8" or as approved in submitted samples; stitch rate of 12 stitches per 3 inches. The Landscape Architect may choose to list systems on the Bid Form that vary in gauge.
5. Primary/Secondary Backing: 13 Pic Polybac / US80NW or equal Non-woven /18 Pic Polybac or as approved in submitted samples.
6. Secondary Coating: Minimum 26 oz. Urethane or as approved in submitted samples.
7. Total Product Weight: Aggregate of the face weight, coating and primary backing is intended to be in the 84oz to 86oz range.
8. Finished Roll Width: 180" Untrimmed.
9. Line Markings: In addition to the tufted lines and inlaid lines, the pile surface shall be suitable for both temporary and permanent line markings using paint specifically developed for this use and recommended by the turf manufacturer.
10. Seams: Seams shall be stitched. Any seaming shall include fabric recommended by synthetic turf manufacturer.
11. Overall Color Intent: Colors inside the playing area are anticipated to be a "mown-look" alternating color blend of 50% Field Green / 50% Lime Green with an adjoining 100% Field Green. Color outside the playing area are anticipated to be a consistent color as shown in the Field Marking Diagram. The Builder shall validate color fields and finalize color blends during submittal process at no additional cost to the Owner. See project illustrations.
12. Fill Requirement: 50/50 blend of rubber/silica sand. The Contractor shall accommodate minor changes at no additional expense to the Owner.
13. Fill Height: Owner shall require 1/2" to 3/4" exposed fiber throughout the duration of the warranty. The Landscape Architect may choose to list systems on the Bid Form that vary in fill weight.
14. Alternative Products. Should a Builder offer a voluntary alternate for the Owner's consideration, said system or product shall comply with all manufacturer recommendations for a high performance, durable use that meets or exceeds the requirements of this Specification.
15. **Pre-Approved Vendors: The following vendors have been Approved for the Product:**
 - a. **AstroTurf**
 - b. **SprinTurf**
 - c. **FieldTurf USA Inc.**

2.2 Perimeter Nailer:

- A. Nailer: 2x4 Composite Wood or Treated Wood nailers appropriate for this application, fastened with tapcon or ramset every 24" on center.

2.3 Shock Pad

- A. Shock Pads: ProPlay Sport20, Brock SP17, and Thermagreen Sportlite 20, are pre-approved products. Numerous equal products are acceptable and encouraged to be submitted during the bidding window for consideration. Coordinate grade transitions at perimeter curb edges to accommodate the thickness of the pad.

1. **The following shock pad products have been approved as equal for this Project:**
- a. **Brock SP14XL**
 - b. **EnPlast Shockdrain 780 Conditionally Approved. See response to approval in Addenda #2 Questions.**

PART 3 – EXAMINATION

- A. The Builder shall validate pre-existing subgrade conditions prior to commencing work. Ensure proof roll requirements are met for a fully functioning, durable system.
- B. Verify that all sub-base leveling is complete prior to installation.
- C. The completed grade of the base and perimeter nailer shall be verified by means of a laser and plotted on a 10-foot grid. The Bidder shall supply a third-party professional survey documenting the conditions to ensure full compliance with the specifications. Based upon the Builder's inspection of the topographical survey, the Builder shall fine grade the base suitably, including properly rolling and compacting the base to achieve a surface planarity within 1/4 " in 10-feet (+0, -1/4 "). OWNER, ENGINEER, OR BUILDER SHALL NOT APPROVE THE BASE FOR TOLERANCE TO GRADE WITHOUT OBTAINING THE TOPGRAPHICAL SURVEY.
- D. The compaction of the aggregate base shall be 95% or greater, according to the Modified Proctor procedure (ASTM D1557), and the surface tolerance shall not exceed 0-1/4 inch over 10 feet and 0-1/2" from design grade.
- E. The Builder shall field-test the permeability of the base prior to the installation of the turf. Initial testing may be self-performed by the Builder over no less than five (5) broad areas of the playing surface to ensure that no less than 16" per hour of permeability can be achieved for the finished synthetic system. Verify the means for the test with the Landscape Architect prior to beginning testing. Should such tests validate performance indicative of the third-party drainage testing, no additional reports or documentation will be required to commence with turf replacement. If questions remain regarding performance, the Owner reserves the right to request third-party validation.

PART 4 – INSTALLATION

- A. Install in accordance with Manufacturer's instructions. The Builder shall strictly adhere to the installation procedures outlined under this section. Any variance from these requirements must be accepted in writing, by the Manufacturer's onsite representative, and submitted to the Landscape Architect and Owner for approval. The Builder shall verify that any changes or deviations do not adversely affect performance or the warranty. Infill materials shall be approved by the Manufacturer and installed in accordance with the Manufacturer's standard procedures.
- B. The carpet rolls are to be installed directly over the properly prepared aggregate base or shock pad, as applicable. Extreme care should be taken to avoid disturbing the aggregate base, both in regard to compaction and planarity. It is suggested that a 2-5 ton static roller is

- on site and available to repair and properly compact any disturbed areas of the aggregate base.
- C. The full width rolls shall be laid out across the field. Turf shall be of sufficient length to permit full cross-field installation from edge to edge of play limits whenever practical. Utilizing state of the art seaming procedures, as approved through the shop drawing and submittal process, each roll shall be attached to the next.
 - D. Infill materials shall be applied in numerous thin lifts. The turf shall be brushed as the mixture is applied. The infill material shall be installed to a depth determined by the Manufacturer and approved in samples submitted during the bidding process.
 - E. Infill materials shall be installed to fill the voids between the fibers and allow the fibers to remain vertical and non-directional. Ensure all blended infill materials are fully homogenous.
 - F. The Bidder shall cooperate with the Owner to sequence work on and around the field.

END OF SECTION

SECTION 32 18 24 – TRACK SURFACING – POLYURETHANE SYSTEM

PART 1 - GENERAL

1.1 DESCRIPTION

- A. Base Bid: Furnish and install Beynon BSS 300, or equivalent Polyurethane bound running track surface consisting of SBR Rubber and polyurethane binder base course, EPDM and a poured in-place elastomeric polyurethane wearing course, and textured color protection layer, or approved equal prior to bidding, over on a properly prepared asphalt pavement surface. Include poly coatings on all asphalt surfaces including but not limited to the running track proper, the immediate track shoulder, D-zone high jump area, and runways for long jump and pole vault.
1. Running Track (9 Lanes) shall be 'Hertha Blue' in color with 'Mid Gray' exchange zones.
 2. D Zone and High Jump area to be 'Hertha Blue'.
 3. Long Jump and Pole Vault Runways and Pit Cover Lids to be 'Hertha Blue'.
 4. 'Color Protection Layer' (Hobart Texture or Similar)
- B. Alternate Bid: Provide a quote to furnish and install a Beynon BSS 1000 Track Surfacing System with Hobart Texture or equal approved by the Landscape Architect prior to bidding.

1.2 RELATED SECTIONS

- A. References
1. National Asphalt Pavement Association (NAPA)
 2. USA Track & Field (USATF)
 3. National Federation of State High School Associations (NFHS)
 4. International Association of Athletics Federation (IAAF)
 5. American Sports Builders Association (ASBA)

1.3 QUALITY ASSURANCE

- A. Concrete surface shall comply with all guidelines of the ASBA and NAPA for surface planarity and density.
- B. All liquid materials shall be from a single source and manufactured for the purpose of resilient track construction.
- C. The contractor shall record the batch number of each product used on the site and maintain it throughout the warranty period.
- D. The contractor shall provide the owner with an estimate of the volume and weight of each product to be used on site.
- E. The installer shall be an Authorized Applicator of the specified surface system.
- F. A manufacturer's representative shall be available to help resolve material issues.

1.4 SUBMITTALS

- A. Current material safety data sheets (MSDS) for all components.
- B. A certificate from the manufacturer of the binders, adhesives and coatings stating that all materials have been produced specifically for use in sports surfacing construction. All polyurethanes used must be manufactured by an ISO 9001 Certified company.
- C. A complete list of materials intended to be used in the construction of the running track system.
- D. Reference list from the installer of at least five (5) projects of similar scope completed in each of the past three (3) years in climates similar to this Project.
- E. Product substitution: If other than the product specified, the contractor shall submit at least seven (7) days prior to the bid date a complete type written list of proposed substitutions with sufficient data, drawings, samples and literature to demonstrate that the proposed substitution is of equal quality and utility to that originally specified. Information must include a QUV test of at least 1,000 hours and IAAF test information for the system to be installed.
- F. Substitute Product Performance: Should a substitute bid product be presented by a Vendor for consideration by the Landscape Architect, that system shall comply with all manufacturer recommendations for a high performance, durable system.

1.5 MATERIAL HANDLING AND STORAGE

- A. Store material in accordance with manufacturer's specifications and MSDS.
- B. Deliver products to the site in original, unopened containers with labels attached.
- C. All surfacing materials shall be non-flammable.

1.6 GUARANTEE

- A. The installer and the materials manufacturer shall supply a warranty covering labor and materials respectively. The warranty period shall be for no less than five (5) years, including all labor and materials, plus replacement of any striping or furnishings displaced by repairs.
- B. All test reports will be contracted directly by the Owner with the testing agency.

1.7 INSTALLER QUALIFICATIONS

- A. Installers shall be routinely engaged in the construction and surfacing of running tracks. Qualified respondents shall have at least five (5) successful projects of similar scope completed in each of the past three (3) years in climates similar to this Project. Provide reference information for all such clients to allow Brownsburg to call references.
- B. Installer shall be an authorized applicator of the specified system.

- C. Installer shall be an active builder member of the ASBA in good standing. The project superintendent shall be credentialed and current with all ASBA training.
- D. Provide written proof of bonding capacity for the total amount of the athletic surfacing, if subcontracted, upon the request of the Construction Manager.

1.8 MANUFACTURER QUALIFICATIONS

- A. Material supplier shall certify that the materials provided are manufactured specifically for construction and surfacing of running tracks.
- B. Manufacturer shall be an active member of the ASBA in good standing.

PART 2 - PRODUCT

2.1 MANUFACTURER AND MATERIALS

- A. Beynon BSS 300 or Equal System
 - 1. The identified manufacturer and system has been utilized as a basis for quality and execution of the athletic surfacing requirements. It is NOT intended to limit competition. Other manufacturers and installers are encouraged to submit qualifications and technical data to demonstrate equality of their system.
 - 2. Subject to compliance with all aspects of this specification, the following Pre-Identified installers may submit equivalent surfacing systems for consideration. Other companies will be reviewed on an as-requested basis up to ten (10) days prior to Bid Opening.
 - a. BEYNON TRACK SURFACES
 - 3. **The following products have been approved as equal for the Project.**
 - a. **Rekortan M**
- B. Track Surfacing Alternate:
 - 1. Beynon 1000 or Equal System.
 - 2. Contractor to provide within their bids a price to provide an upgraded track surfacing product. Track Surfacing Alternate Product shall comply with all applicable warranty and installation of this specification.
- C. Beynon BSS 300 Running Track Surface:
 - 1. Elastomeric Polyurethane
 - a. Two-component U.V. stabilized elastomeric polyurethane compounded from polyol and isocyanate components, based on one hundred percent (100%) Methylene Diphenyl Isocyanate (MDI). No Toluene Diisocyanate Isocyanate (TDI) will be allowed.
 - 2. EPDM Granulate
 - a. The EPDM granulates shall be approximately 1 to 3mm
 - b. The EPDM granulates and the U.V. stabilized elastomeric polyurethane shall be color matched.
 - 3. Base Course Rubber Granulate
 - a. Styrene Butadiene Rubber (SBR) processed ground to a graded size of 1-3mm.
 - b. A maximum of 82%, by weight of the paved-in-place base layer, of SBR will be allowed.

4. Single Component Polyurethane Binder
 - a. Single component polyurethane binder with a long cure time for use in paved mat specifications. A minimum of 18%, by weight of the paved-in-place base layer.
 5. Seal Coat
 - a. Two-component polyurethane pore sealer to use with paved rubber granule mats. The granular SBR and binder layer shall be sealed with the two-component polyurethane pore sealer. The application of EPDM dust is not allowed.
 6. Line Marking Paint
 - a. Single-component, moisture cured, aliphatic polyurethane paint.
- D. The installer will furnish the Landscape Architect with a proof of delivery that the correct volume of product has been provided. The installer will also verify that a sole manufacturer has supplied all binders and coatings.
- E. Track Surface Coloring:
1. Running Track Basis of Design:
 - a. Primary Color: 'Hertha Blue'.
 - b. Exchange Zones: 'Mid Gray'.
 2. D-zone and High Jump Basis of Design:
 - a. Primary Color: 'Hertha Blue'.
 3. Long Jump and Pole Vault Basis of Design
 - a. Runways: 'Hertha Blue'.
 4. Colors shall be chosen from manufacturer's full range of available colors during submittal process.
 5. Track Surface shall have a 'Color Protection Coating', such as a Hobart Texture as manufactured by Beynon Sports Surfaces, or equal, as reviewed and approved by the Landscape Architect prior to bidding.

PART 3 - EXECUTION

3.1 WEATHER LIMITATIONS

- A. Ambient and surface temperatures must be 50°F and rising and anticipated to remain above 50°F for 24 hours after completing application. Maximum temperature cannot exceed 105°F at any point during the a 24 hour period.
- B. Installation should not be conducted during rainfall or when rainfall is imminent.
- C. Do not apply when surface temperature is in excess of 140°F.
- D. Installation should not take place if adjacent or concurrent construction generates excessive dust, abrasives or any other by-product that would be harmful to the track material.

3.2 PREPARATION

- A. Protect existing pavements, synthetic turf, fencing, gates, and adjacent surfaces from damage.

- B. The entire subbase shall be clean and free of dirt, oil, grease or any other matter that could negatively affect adherence. Any dirt, construction debris etc. shall be pressure washed off prior to commencing with track coatings.
- C. The track surface subbase shall not vary from planned cross slope by more than +.2%, with a maximum lateral slope outside to inside of 1% to 2% for NFHS facilities (1% for NCAA or IAAF), and a maximum slope of 0.1% in any running direction. The finished concrete shall not vary under a 10' straight edge more than 1/8". The synthetic surfacing contractor must, in writing, accept the planarity of the receiving base.

3.3 RESILIENT SURFACE INSTALLATION

- A. Thickness
 - 1. The thickness of the BSS 300 Synthetic Track Surfacing System shall be 13mm.
- B. Base Course
 - The SBR granules and single component polyurethane binder shall be mixed together on site to regulate the ratio/quantity of SBR, not to exceed 82% in the base mat portion of the system. The single component polyurethane binder shall be mixed with the SBR rubber so that a minimum of 20%, by weight, exists in the final mixture. This mixture is then mechanically installed using the paver.
- C. Seal Coat
 - 1. The two-components of the polyurethane pore sealer are mixed at the prescribed ratio homogeneously with a suitable mixing device. The coating is squeegee applied to the base mat, making it impermeable.
- D. Wearing Course
 - 1. The 1 to 3mm EPDM granules shall be integrated into the elastomeric polyurethane to achieve the full depth of the 5 mm wearing course. The resilient embedded textured finish shall be a dense matrix of exposed EPDM granules. The homogeneous wearing course shall be applied in situ with the base course.

3.4 MARKING AND MEASUREMENTS

- A. Wait 72 hours after surface completion before applying line marking, unless otherwise approved by the surfacing installer.
 - 1. Locate and establish all control points and radii via a licensed Surveyor.
 - 2. Layout all lines and markings to tolerances set forth by ASBA, NFHS, and governing body requirements.
 - 3. Prepare all necessary drawings.
 - 4. Provide all computations and measurements in organized form.
 - 5. Establish all locations on the curves using a Transit or Theodolite capable of reading direct to 20 seconds.
 - 6. Identify all markings, where appropriate, by painting the identification directly onto the track surface in 4" letters just below or in front of each mark in the right-hand portion of the lane.
 - 7. Paint all of the large, 3' high, lane numbers in 'white' utilizing shadowed backgrounds. Confirm final paint colors during submittal process.

8. All lines shall receive sufficient paint to assure complete opacity and uniformity of color. Provide multiple coats until opacity is fully achieved.
9. Paints shall be used directly from original containers and shall be thinned only when hot temperatures dictate thinning for smooth applications.
10. Amount of paint used shall be as recommended by the manufacturer.
11. Line paint shall be fully compatible with the polyurethane coating system. All measurements shall be made by competent, experienced and qualified personnel utilizing accurate transit data.
12. The markings shall include all events and marks required or recommended by the National Federation of State High Schools, including all updates and rule changes that may be adopted prior to Substantial Completion.
13. Upon completion of the installation, the owner shall be supplied with all necessary computations and drawings as well as a letter of certification attesting to the accuracy of the markings.

END OF SECTION

SYNTHETIC TURF WARRANTY
Required Minimum Terms and Conditions

Contractor's Information _____
Company Name: _____
Company Address: _____
Point of Contact & Phone: _____

**THIS SIGNED FORM MUST BE ENCLOSED WITH YOUR SEALED BID PROPOSAL.
RESPONDENTS AGREE BY SUBMITTING A BID THAT THE TERMS AND CONDITIONS LISTED BELOW ARE BINDING
REQUIREMENTS THAT SHALL BE INCORPORATED INTO THE COI ISSUED BY YOUR THIRD-PARTY INSURER POST-AWARD.**

The Builder shall provide a fully pre-paid and insured third-party warranty enforceable for no less than (8) years from the date of Substantial Completion of the project. The warranty shall protect base integrity, drainage products and performance, UV degradation, fiber strength, stability of the backing, tufted yarn and seam integrity, and all other related components of the synthetic turf system.

- a. All warranties shall be in writing and remain valid regardless of whether the Manufacturer is acquired by another company or ceases business operations prior to the conclusion of the eight (8) year warranty period.
- b. Annually renewable policies are only acceptable if proof of an extended reporting period is provided. The Certificate of Insurance issuer shall attest, in writing, that the policy shall be effective and pre-paid for the full eight (8) year warranty period regardless of whether the Builder continues its annual premium payments during that period.
- c. "Base integrity" shall be defined as the absence of rutting, heaving, settlement, ponding, or related planarity issues that affect proper and intended use of the facility.
- d. Confirming warranty language shall be provided with each Respondent's bid. Late or incomplete documentation may be rejected.
- e. Warranty coverage shall be a single-source, third-party insured warranty from an A-Rated domestic insurance carrier. Letters of credit, financial statements, and related-party companies are not permissible. Per claim coverage shall meet or exceed \$5,000,000 in protection to the Owner.
- f. No limitations of usage, exclusions of high-wear areas, or pro-rated warranty terms shall be accepted. If costs apply to account for such risk, the Builder shall include those costs within their original bid.
- g. Builder agrees by submission of a response that warranty repairs inside play-critical zones shall be completed within 24-hours of notice of a defect from the Owner and within 72-hours of the same notice outside play-critical zones.

When applicable, the Builder shall provide an additional two (2) years of extended warranty protection added to the conclusion of the insured 8-year third-party warranty. The Owner shall allow this portion of the warranty to be Manufacturer-backed rather than third-party insured for Years 9 & 10. Coverage extents shall match the original terms of the eight (8) year policy.

Quality Control expectations of the Builder include, but are not limited to:

- 1. The Builder shall review and accept subgrade conditions prior to commencing base construction. Ensure proof roll requirements are met for a fully functioning, durable synthetic turf system to proceed.
- 2. The Builder shall ensure no fibers or backing from Chinese sources are utilized. Manufacturer shall provide verifiable Country of Origin certification for such materials.
- 3. The completed grade of the base and perimeter nailer shall be verified by means of a laser and plotted on a 10-foot grid. The Builder shall supply a third-party professional survey documenting the conditions and ensure full compliance with specifications.
- 4. Train the Owner for proper maintenance and upkeep of the synthetic system to ensure the warranty remains in force. Include one (1) deep clean of infill material at the conclusion of the first year of service for the turf. When applicable, provide required grooming equipment identified within the Contract Documents.
- 5. When dynamic cushioning of the combined turf and infill material applies, attenuation ratings shall not exceed average maximum value of GMAX 110, per ASTM Test F0355-23, upon initial installation. GMAX 160 may not be exceeded over full warranty period.
- 6. The Builder shall engage a third-party testing agency acceptable to the Owner to perform both GMAX and HIC testing on an annual basis throughout the full warranty period. No fewer than six (6) tests shall be performed by each testing device during each testing visit to compile a diverse, random assessment of the field. Any failures or deficiencies shall be remedied by the Builder as warranty work at no cost to the Owner. The Owner acknowledges that diamond sports, when applicable, do not traditionally mandate attenuation testing. However, they still anticipate Builder performing testing to ensure a record of field conditions can be tracked.
- 7. The Builder shall make inspections of the field(s) on no less than a quarterly basis during the two (2) year period following Substantial Completion to monitor performance and condition of the system. The Builder shall utilize a Certified Field Builder (CFB), as credentialed by the American Sports Builders Association, to conduct the initial build and to perform future inspections. Each inspection shall be conducted with the Owner and its consultants present. The Builder shall record and submit notes, pictures, and a formal inspection report to the Owner.

THIS DOCUMENT IS INTENDED TO SIMPLIFY COMMUNICATION OF THE OWNER'S EXPECTATIONS TO BIDDERS PRIOR TO RESPONDING. IT SHALL NOT IN ANY WAY RESTRICT THE OWNER'S ABILITY TO ENFORCE ADDITIONAL STIPULATIONS AND/OR REQUIREMENTS OF THE CONTRACT DOCUMENTS.

Contractor: _____
Authorizing Signature: _____
Print Name: _____
Title: _____
Date Signed: _____

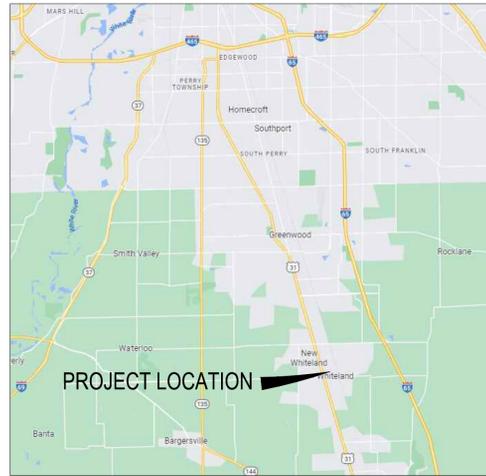
FINAL CONSTRUCTION PLANS

WHITELAND COMMUNITY HIGH SCHOOL

PHASE 5

300 E. MAIN STREET

WHITELAND, INDIANA



VICINITY MAP
NO SCALE



LOCATION MAP
NO SCALE

OWNER

CLARK-PLEASANT COMMUNITY
SCHOOL CORPORATION
50 CENTER STREET
WHITELAND, IN 46184
PHONE: (317) 535-3277
CONTACT: SAM ARNES
EMAIL: sarnes@cpcsc.k12.in.us

ENGINEER

CROSSROAD ENGINEERS, PC
115 N. 17TH AVENUE
BEECH GROVE, IN 46107
PHONE: (317) 780-1555
CONTACT: DEREK M. SNYDER
EMAIL: dsnyder@crossroadengineers.com

DIRECTORY PATH : R:\Adv\Uncor+Revised\Whiteland High School\Design\CAD\Plans\PHASE 5
 DATE/USER : 3/11/2026 4:47 PM / DSnyder

PLAN INDEX	
SHEET #	SUBJECT
100	TITLE SHEET
200	OVERALL TOPOGRAPHICAL SURVEY
201-206	TOPOGRAPHICAL SURVEY
207	OVERALL DEMOLITION PLAN
208-210	DEMOLITION PLAN
300	OVERALL SITE LAYOUT
400-402	UTILITY PLAN
403-405	WATER PLAN
500-502	GRADING PLAN
503	GRADING DETAILS
504	EMERGENCY FLOOD ROUTE
600	DRAINAGE PLAN
700-708	STORM PLAN AND PROFILES
709	FIRE LINE PLAN AND PROFILES
800	OVERALL EROSION CONTROL PLAN
801-803	EROSION CONTROL PLAN
804	STORMWATER POLLUTION PREVENTION PLAN
900-901	MISCELLANEOUS DETAILS

NOTE: SEE PLANS PREPARED BY CONTEXT DESIGN FOR SITE MATERIALS PLAN, SITE LAYOUT PLAN, SITE PLANTING PLAN, AND SITE DETAILS.

JOHNSON CO. LEGAL DRAIN NOTES

- NO STRUCTURES, OR IMPROVEMENTS SHALL BE PERMITTED WITHIN THE LEGAL DRAIN EASEMENT. ALL UTILITIES, BUILDINGS, STRUCTURES, PLANTINGS, CROPS, TREES, SHRUBS, AND WOODY VEGETATION GROWN WITHIN THE EASEMENT, OR ALONG THE LEGAL DRAIN ARE AT THE RISK OF OWNER AND SUBJECT TO REMOVAL WITH MINIMAL NOTICE, WITHOUT RESTITUTION, AND SUBJECT TO SPECIAL ASSESSMENT (IC 36-9-27-33).
- THIS SITE PLOTS BY SCALE AS BEING WITHIN A REGULATED WATERSHED. ANY AND ALL SITE IMPROVEMENTS WITHIN A REGULATED WATERSHED ARE SUBJECT TO REVIEW BY THE JOHNSON COUNTY DRAINAGE BOARD. ALL TRACTS WITHIN A REGULATED DRAIN WATERSHED ARE SUBJECT TO ASSESSMENTS FOR MAINTENANCE (IC 36-9-27-44), AND WHEN PRACTICABLE, RECONSTRUCTION (IC 36-9-27-51).
- NO CONSTRUCTION, OR IMPROVEMENTS SHALL IMPAIR OR NEGATIVELY IMPACT ANY PRIVATE DRAIN TILE (IC 36-9-27-2) KNOWN OR UNKNOWN. NO CONSTRUCTION, OR IMPROVEMENTS SHALL IMPAIR, IMPEDE, OR NEGATIVELY IMPACT, A NATURAL SURFACE WATERCOURSE (IC 36-9-27.4-3), WHEN ENCOUNTERED SAID TILE OR WATERCOURSE WILL BE DESIGNED, AND RE-ROUTED SO NOT TO IMPEDE, IMPAIR, OR NEGATIVELY IMPACT SURFACE OR SUBSURFACE WATER FLOW.
- PRIVATE TILES, AND MUTUAL DRAIN CONNECTIONS TO REGULATED DRAIN (IC 36-27-9-17). ALL CONNECTIONS, OR OUT-LETS INTO A REGULATED DRAIN ARE SUBJECT TO APPROVAL BY THE COUNTY SURVEYOR (S. 10*), OR THE JOHNSON COUNTY DRAINAGE BOARD (S. 11*). APPLICATIONS ARE AVAILABLE IN THE COUNTY SURVEYOR'S OFFICE AND SHOULD INCLUDE ALL MAPS, PLANS, SPECIFICATIONS, BONDING, EASEMENT VERBIAGE, APPLICATION FEES AND OWNERS STATEMENT OF WATER QUALITY (IC 36-27-9-23), PRIOR TO APPROVAL.

FLOODPLAIN BFE NOTE

THE BASE FLOOD ELEVATION (BFE) SHOWN FROM THE FEMA FLOOD MAPS FOR THIS SITE ARE FOR REFERENCE ONLY AND MAY NOT PRESENT THE TRUE EXTENTS OF THE FLOODPLAIN RELATIVE TO THE ACTUAL ON-SITE TOPOGRAPHY.



CROSSROAD ENGINEERS, PC
 THE ENGINEERING PROFESSION
 Development Consultants
INC. IN THE STATE OF INDIANA

SHEET 100

TITLE SHEET

WHITELAND HIGH SCHOOL PHASE 5

TEN
 CHECKED
 KLF
 DRAWN
 DMS

GJI
 APPR.
 DESIGNED
 DATE
 FEBRUARY 2, 2026



Derek M. Snyder

NO.	DATE	REVISIONS	BY	APPR.
1	02.09.26	REVISIONS FOR 100% CD SUBMITTAL	DMS	GJI
2	03.06.26	REVISIONS PER TAC COMMENTS RECEIVED 2/24/26 & ADDENDUM NO. 1	DMS	GJI
3	03.12.26	REVISIONS PER TAC COMMENTS RECEIVED 2/24/26 & ADDENDUM NO. 2	DMS	GJI



UTILITY PLAN

WHITELAND HIGH SCHOOL PHASE 5

JOB NO. _____ DRAWN BY KLF CHECKED BY TEN DESIGNED BY GJI

DATE FEBRUARY 2, 2026 APPR. BY _____



DATE _____

BY _____

REVISIONS

NO. _____

DATE _____

EXISTING LEGEND	
	POWER POLE
	POWER POLE W/RISER
	POWER POLE W/UGHT
	LIGHT POLE
	ELECTRIC METER
	ELECTRIC BOX
	YARD LIGHT
	GUIDE WIRE
	TELEPHONE MANHOLE
	TELEPHONE RISER
	WATER VALVE
	FIRE HYDRANT
	WELL
	WATER MANHOLE
	WATER METER
	GAS VALVE
	GAS VALVE
	CABLE TV RISER
	CLEANOUT
	SIGN
	MAILBOX
	STORM ROUND INLET
	STORM CURB INLET
	RIGHT-OF-WAY MARKER
	TREE, BUSH & STUMP
	TEMP. BENCHMARK
	MONUMENT FOUND
	CONTOURS
	PROPERTY LINE
	SECTION LINE
	RIGHT-OF-WAY
	EASEMENT
	ADJURER LINE
	PAVEMENT LINE
	FIELD LINE
	PRIVACY FENCE
	CHAINLINK FENCE
	SPLIT RAIL FENCE
	WIRE FENCE
	DITCH
	GAS LINE
	TELEPHONE LINE
	WATER LINE
	CABLE TV LINE
	ELECTRIC LINE
	OVERHEAD UTILITY LINE
	TREE LINE
	SANITARY SEWER W/MANHOLE
	STORM SEWER W/MANHOLE & END SECTION
	RIGHT-OF-WAY MARKER
	TREE, BUSH & STUMP
	TEMP. BENCHMARK
	MONUMENT FOUND
	ASPHALT
	BUILDING
	GRAVEL
	CONCRETE

PROPOSED LEGEND	
	PROPERTY LINE
	SECTION LINE
	FENCE LINE
	DITCH LINE
	SANITARY SEWER WITH MANHOLE
	SANITARY SEWER LATERAL WITH CLEANOUT
	STORM SEWER W/MANHOLE & END SECTION
	ELECTRIC LINE
	WATER LINE
	GAS LINE
	FIBER OPTIC LINE
	TEMPORARY CONSTRUCTION FENCE ON STANDS WITH SAND BAGS
	STORM MANHOLES
	STORM INLETS
	STORM CURB INLETS
	ELECTRIC HANDHOLE
	FIBER OPTIC HANDHOLE SIGN

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

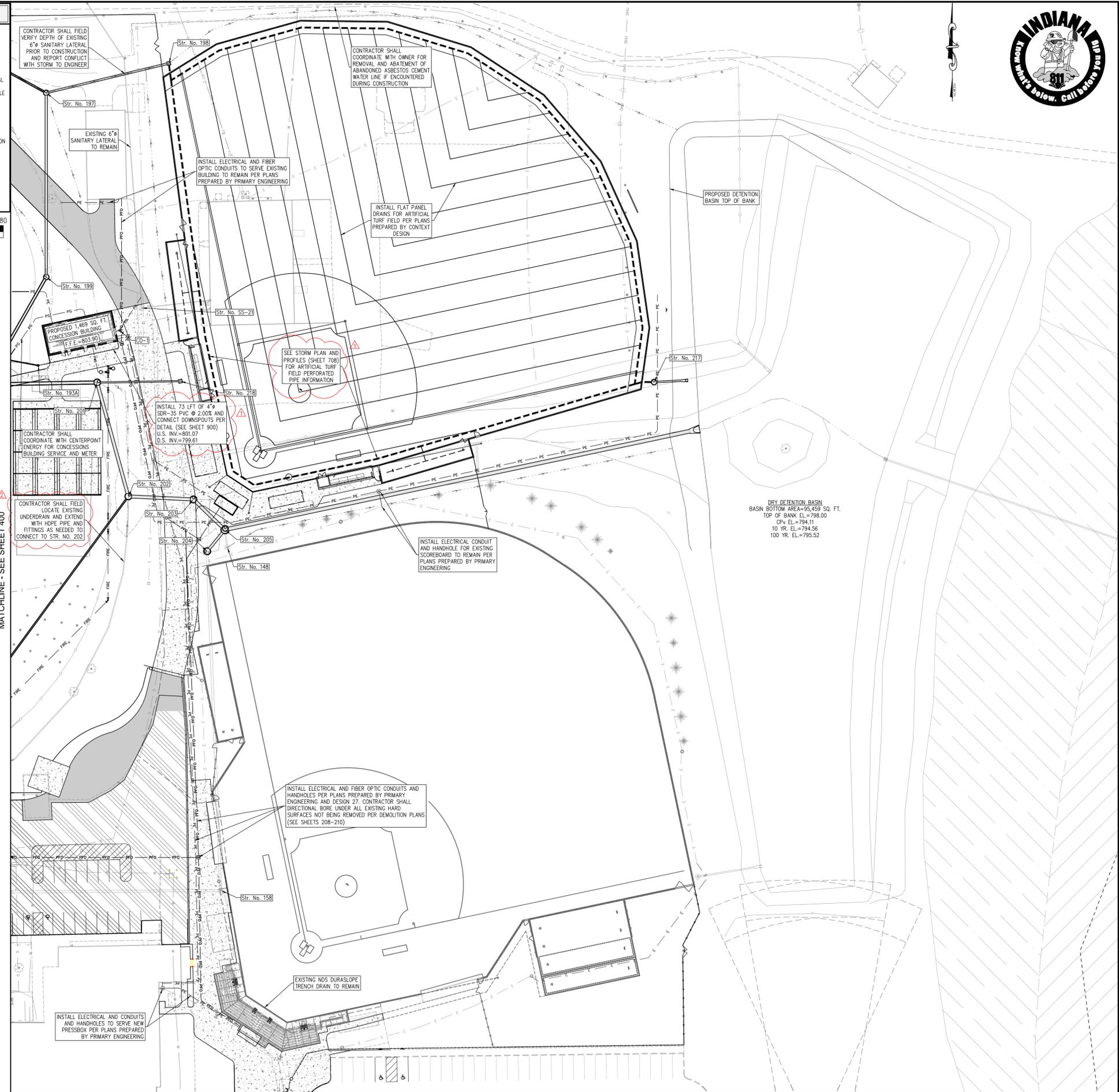
SANITARY SEWER LATERAL TABLE					
INSTALL SANITARY SEWER CLEANOUT AND SDR-35 PVC SANITARY LATERAL AS INDICATED BELOW. CONTRACTOR SHALL CONFIRM LATERAL CONNECTION LOCATIONS AND DEPTH/INVERT WITH PLUMBING PLAN.					
RUN	DIAMETER	LENGTH	SLOPE	U.S. INV.	D.S. INV.
CO-1	6"	32'	1.04%	799.88	799.54
					TYPE 2

NOTE:
1. CONTRACTOR SHALL CONNECT CO-1 TO EXISTING 6" LATERAL USING FERROX FLEXIBLE SADDLE TAP.
2. CONTRACTOR SHALL FIELD VERIFY EXISTING LATERAL ELEVATION PRIOR TO CONSTRUCTION AND REPORT DISCREPANCIES TO ENGINEER.

STORM SEWER STRUCTURE TABLE	STORM SEWER STRUCTURE TABLE	STORM SEWER STRUCTURE TABLE
STR. NO. 148 EXISTING STORM MANHOLE FURNISH AND INSTALL NEENAH R-2561 CASTING. CONNECT EXISTING 12" PIPE TO STR. NO. 205. RM=800.59 INV IN (12"-SW)=797.28 INV OUT (12"-N)=797.28	STR. NO. 158 EXISTING STORM MANHOLE. NO MODIFICATIONS REQUIRED. RM=803.67 INV IN (21"-W)=799.00 INV IN (4"-SE)=-3.38 INV OUT (21"-N)=799.00	STR. NO. 205 INSTALL TYPE 'C' MANHOLE WITH NEENAH R-2561 CASTING OR AN APPROVED EQUAL AND (1) CONCRETE PIPE END SECTION WITH ANNUAL GUARD AND 391 LFT OF 36" HDPE PIPE @ 0.20% RM=802.32 INV IN (30"-NW)=792.15 INV IN (24"-SW)=795.56 INV IN (12"-S)=797.11 INV OUT (36"-E)=791.65 DS INV=790.87
STR. NO. 158 EXISTING STORM MANHOLE. NO MODIFICATIONS REQUIRED. RM=803.67 INV IN (21"-W)=799.00 INV IN (4"-SE)=-3.38 INV OUT (21"-N)=799.00	STR. NO. 201 INSTALL TYPE 'I' MANHOLE WITH NEENAH R-1772 CASTING OR AN APPROVED EQUAL AND 96 LFT OF 30" HDPE PIPE @ 0.22% RM=801.59 INV IN (12"-E)=797.37 INV IN (30"-W)=792.94 INV OUT (30"-S)=792.84	STR. NO. 217 INSTALL TYPE 'C' MANHOLE WITH NEENAH R-1772 CASTING OR AN APPROVED EQUAL AND (1) CONCRETE PIPE END SECTION WITH ANNUAL GUARD AND 26 LFT OF 15" HDPE PIPE @ 1.48% RM=800.33 INV IN (15"-W)=795.48 INV OUT (15"-E)=795.38 DS INV=795.00
STR. NO. 193A INSTALL STORM SEWER CLEANOUT FOR ROOF DOWNSPOUT CONNECTION AND 32 LFT OF 4" PVC PIPE @ 2.00% RM=803.59 INV IN (4"-E)=799.61 INV OUT (4"-W)=799.61	STR. NO. 202 INSTALL MODIFIED TYPE 'I' MANHOLE WITH NEENAH R-4215-C CASTING OR AN APPROVED EQUAL AND 53 LFT OF 30" HDPE PIPE @ 0.30% RM=798.85 INV IN (30"-N)=792.63 INV IN (12"-SW)=794.39 INV IN (12"-S)=795.15 INV OUT (30"-E)=792.53	STR. NO. 218 INSTALL TYPE 'E' INLET WITH NEENAH R-4215-C CASTING OR AN APPROVED EQUAL AND 68 LFT OF 12" HDPE PIPE @ 1.50% RM=802.49 INV OUT (12"-W)=798.39
STR. NO. 197 INSTALL TYPE 'C' MANHOLE WITH NEENAH R-2561 CASTING OR AN APPROVED EQUAL AND 150 LFT OF 24" HDPE PIPE @ 0.25% RM=799.80 INV IN (15"-NW)=795.47 INV IN (18"-E)=794.95 INV OUT (24"-S)=794.45	STR. NO. 203 INSTALL TYPE 'I' MANHOLE WITH NEENAH R-1772 CASTING OR AN APPROVED EQUAL AND 36 LFT OF 30" HDPE PIPE @ 0.34% RM=803.04 INV IN (30"-W)=792.37 INV OUT (30"-SE)=792.27	SANITARY SEWER STRUCTURE TABLE STR. DATA STR. NO. SS-21 EXISTING SANITARY MANHOLE. INSTALL WATER TIGHT PVC PLUG ON EX. 4" PVC LATERAL FROM EAST AND ADJUST CASTING TO GRADE. (EX. RM=803.23) RM=803.49 INV IN (4"-E)=799.59 INV OUT (6"-N)=799.59
STR. NO. 198 INSTALL TYPE 'I' INLET WITH NEENAH R-4215-C CASTING OR AN APPROVED EQUAL AND 103 LFT OF 18" HDPE PIPE @ 0.30% RM=800.09 INV IN (15"-S)=795.51 INV OUT (18"-W)=795.26	STR. NO. 204 INSTALL TYPE 'C' MANHOLE WITH NEENAH R-1772 CASTING OR AN APPROVED EQUAL AND 23 LFT OF 24" HDPE PIPE @ 0.44% RM=801.55 INV IN (21"-S)=797.91 INV OUT (24"-NE)=796.66	

UTILITY NOTES

- 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.
- CONTRACTOR SHALL REFER TO THE ELECTRICAL SITE PLAN PREPARED BY PRIMARY ENGINEERING, INC. FOR SITE AND ATHLETIC FIELD LIGHTING LAYOUT, SPECIFICATIONS, AND ELECTRICAL SERVICE REQUIREMENTS.
- ALL STORM SEWER CASTINGS SHALL BE NPDES PHASE II COMPLIANT. CASTINGS SHALL BE MANUFACTURED WITH A STATEMENT SAYING: "DUMP NO WASTE, DRAINS TO RIVER" IN 1/2" RAISED LETTERS.
- ALL FIELD TILES DISTURBED DURING CONSTRUCTION MUST BE REPAIRED/CONNECTED TO NEW STORMWATER FACILITIES.
- CONTRACTOR SHALL COORDINATE CONSTRUCTION SEQUENCE WITH THE OWNER AND SKILLMAN CORPORATION AND MAINTAIN ACTIVE UTILITY SERVICES AT ALL TIMES. ALL TEMPORARY UTILITY SERVICE INTERRUPTIONS MUST BE APPROVED BY THE OWNER AND SKILLMAN CORPORATION PRIOR TO INSTALLATION OF IMPROVEMENTS.
- 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.
- CONTRACTOR SHALL CONFIRM SANITARY LATERAL LOCATIONS, DIAMETERS, AND INVERT ELEVATIONS EXISTING THE BUILDING WITH THE MEP PLANS PRIOR TO CONSTRUCTION.
- CONTRACTOR SHALL CONNECT ROOF DRAINS AND DOWNSPOUTS TO STORM STRUCTURES AS SHOWN. CONFIRM LOCATIONS AND DIAMETERS WITH THE ARCHITECTURAL PLANS PRIOR TO CONSTRUCTION.
- ALL MODIFICATIONS TO EXISTING NYLOPLAST DRAIN BASINS SHALL BE COMPLETED IN ACCORDANCE WITH THE MANUFACTURER'S DETAILS, SPECIFICATIONS, AND REQUIREMENTS.



MATCHLINE - SEE SHEET 400

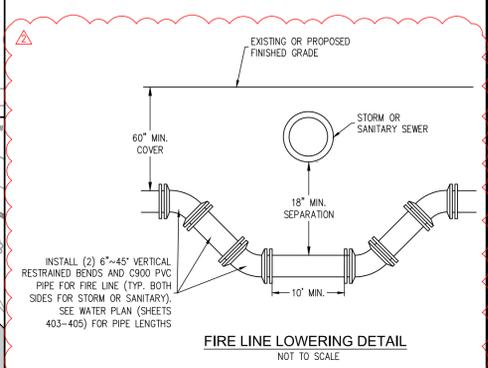
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WATER PLAN
WHITELAND HIGH SCHOOL PHASE 5

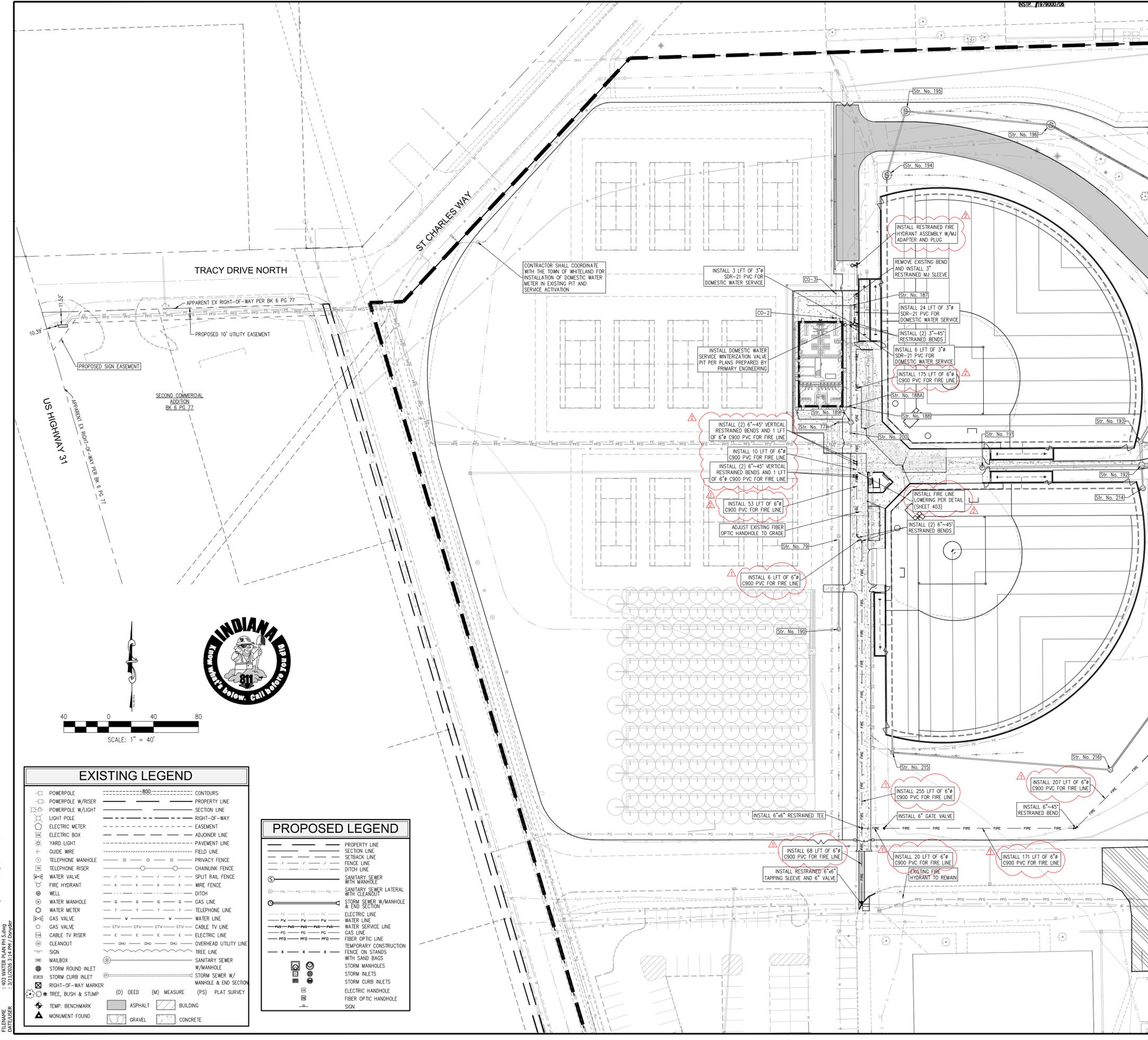


NO.	DATE	BY	REVISIONS
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2	03.06.26		REVISIONS PER TAC COMMENTS RECEIVED 2/24/26 & ADDENDUM NO. 1
3	03.12.26		REVISIONS PER TAC COMMENTS RECEIVED 2/24/26 & ADDENDUM NO. 2
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8			
9			

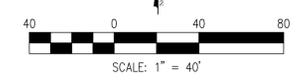


- WATER NOTES**
1. WATER LINE INSTALLATION AND MATERIALS SHALL CONFORM TO THE TOWN OF WHITELAND TYPICAL CONSTRUCTION GUIDELINES AND DETAILS. ALL WATER LINES SHALL BE INSTALLED WITH 5" MIN. OF COVER FROM FINISHED GRADE.
 2. TAPPING SLEEVES AND VALVES SHALL BE E.P. OR MUELLER H-615, H-616 OR STAINLESS STEEL SLEEVES. TAPPING VALVES SHALL BE 2360 SERIES BY MUELLER OR APC-2500.
 3. FIRE HYDRANT ASSEMBLIES SHALL BE SUPER CENTURION 250 HYDRANT BY MUELLER CO. WITH STORZ FITTING ON STEAMER WITH 5'-6" MIN. BURIAL DEPTH.
 4. ALL FITTINGS SHALL BE DUCTILE IRON (D.I.) WITH MECHANICAL JOINTS (M.J.) CONFORMING TO AWWA C-110, C-111, C-153, AND NSF-61. ALL WATER MAIN FITTINGS SHALL BE RESTRAINED IN ACCORDANCE WITH THE TOWN OF WHITELAND TYPICAL CONSTRUCTION GUIDELINES AND DETAILS.
 5. MEG-A-LUG RETAINER GLANDS BY ERBA IRON, INC., FIELD-LOK GASKETS, OR ONE BOLT RESTRAINED FITTINGS SHALL BE USED ON EACH SIDE OF FITTINGS WHERE THE WATER MAIN CHANGES DIRECTION.
 6. CONTRACTOR SHALL COORDINATE CONSTRUCTION SEQUENCE WITH THE OWNER AND SKILLMAN CORPORATION AND MAINTAIN ACTIVE UTILITY SERVICES AT ALL TIMES. ALL TEMPORARY UTILITY SERVICE INTERRUPTIONS MUST BE APPROVED BY THE OWNER AND SKILLMAN CORPORATION PRIOR TO INSTALLATION OF IMPROVEMENTS.
 7. CONTRACTOR SHALL FURNISH AND INSTALL DOMESTIC WATER METER PIT IN ACCORDANCE WITH THE TOWN OF WHITELAND STANDARDS AND PLUMBING PLANS PREPARED BY PRIMARY ENGINEERING. CONTRACTOR SHALL SUBMIT SHOP DRAWINGS OF THE PIT FOR REVIEW SHOWING ALL COMPONENTS INCLUDING, BUT NOT LIMITED TO, BACKFLOW PREVENTERS, METERS(S), FLANGES, AND VALVES. CONTRACTOR SHALL OBTAIN WRITTEN SHOP DRAWING APPROVAL FROM THE TOWN OF WHITELAND AND PRIMARY ENGINEERING PRIOR TO ORDERING MATERIALS.
 8. CONTRACTOR SHALL UTILIZE THE PIT DETAIL PROVIDED IN THESE PLANS (SEE MISCELLANEOUS DETAILS-SHEET 900) AS A GUIDE. HOWEVER, THE SPECIFIC PIT DIMENSIONS, DOMESTIC METER SIZES, VALVE SIZES, BACKFLOW PREVENTION DEVICES, MATERIALS, ETC. SHALL BE DETERMINED THROUGH COORDINATION WITH THE SUPPLIER, OWNER, PRIMARY ENGINEERING, AND TOWN OF WHITELAND.
 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.

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



MATCHLINE - SEE SHEET 404



EXISTING LEGEND

POWERPOLE	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
GUIDE 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
CABLE TV RISER	CABLE TV LINE
CLEANOUT	ELECTRIC LINE
SIGN	OVERHEAD UTILITY LINE
MAILBOX	TREE LINE
STORM ROUND INLET	SANITARY SEWER
STORM CURB INLET	W/MANHOLE
RIGHT-OF-WAY MARKER	STORM SEWER W/ MANHOLE & END SECTION
TREE, BUSH & STUMP	
TEMP. BENCHMARK	(D) DEED (M) MEASURE (PS) PLAT SURVEY
MONUMENT FOUND	

PROPOSED LEGEND

PROPERTY LINE	
SECTION LINE	
SETBACK LINE	
FENCE LINE	
DITCH LINE	
SANITARY SEWER WITH MANHOLE	
SANITARY SEWER LATERAL WITH CLEANOUT	
STORM SEWER W/MANHOLE & END SECTION	
ELECTRIC LINE	
WATER LINE	
WATER SERVICE LINE	
GAS LINE	
FIBER OPTIC LINE	
TEMPORARY CONSTRUCTION FENCE ON STANDS WITH SAND BAGS	
STORM MANHOLES	
STORM INLETS	
STORM CURB INLETS	
ELECTRIC HANDHOLE	
FIBER OPTIC HANDHOLE	
SIGN	

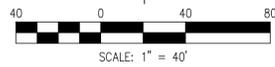
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EXISTING LEGEND

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

PROPOSED LEGEND

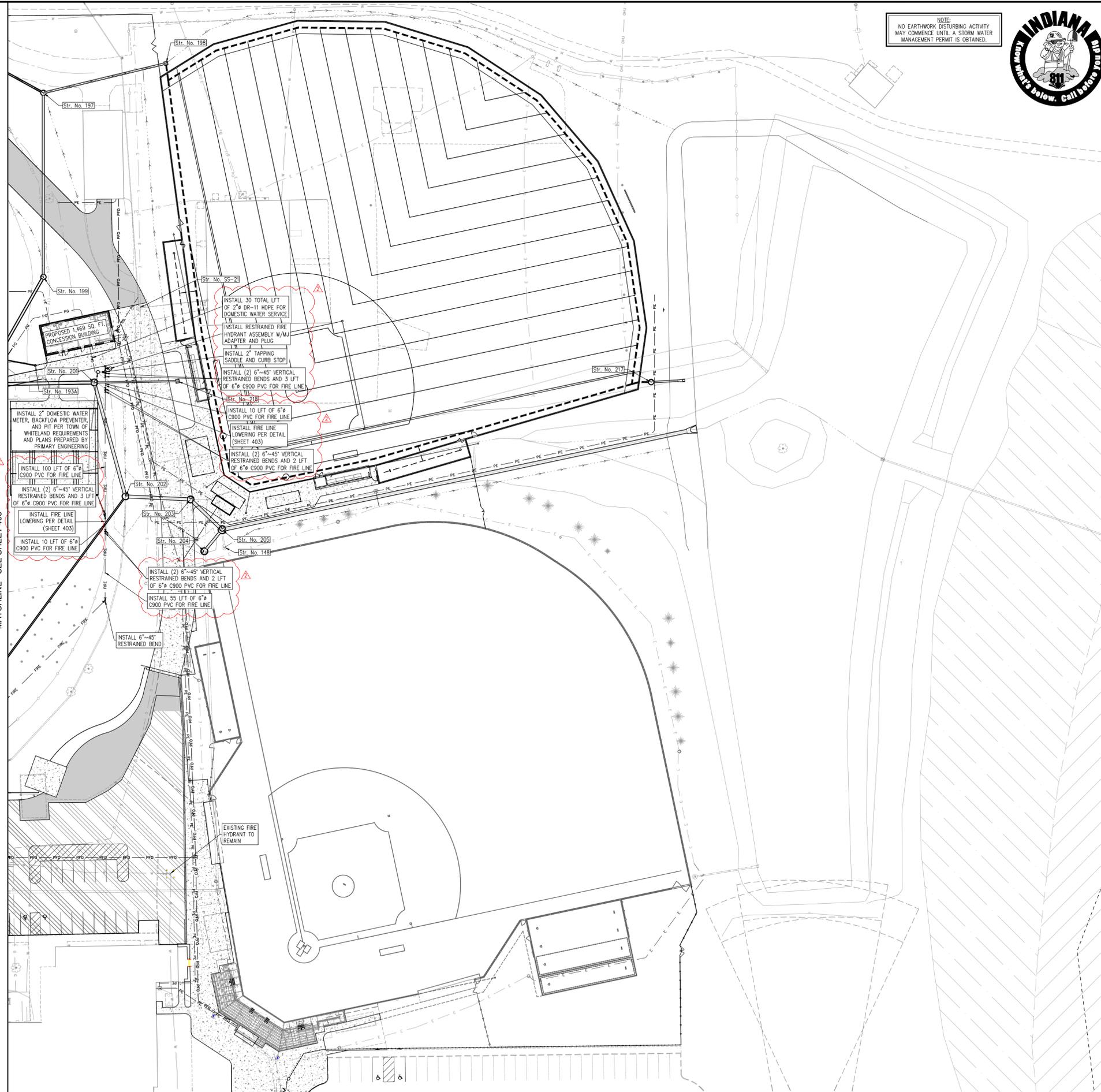
PROPERTY LINE	PROPERTY LINE
SECTION LINE	SECTION LINE
SETBACK LINE	SETBACK LINE
FENCE LINE	FENCE LINE
DITCH LINE	DITCH LINE
SANITARY SEWER WITH MANHOLE	SANITARY SEWER WITH MANHOLE
SANITARY SEWER LATERAL WITH CLEANOUT	SANITARY SEWER LATERAL WITH CLEANOUT
STORM SEWER W/MANHOLE & END SECTION	STORM SEWER W/MANHOLE & END SECTION
ELECTRIC LINE	ELECTRIC LINE
WATER SERVICE LINE	WATER SERVICE LINE
GAS LINE	GAS LINE
FIBER OPTIC LINE	FIBER OPTIC LINE
TEMPORARY CONSTRUCTION FENCE ON STANDS WITH SAND BAGS	TEMPORARY CONSTRUCTION FENCE ON STANDS WITH SAND BAGS
STORM MANHOLES	STORM MANHOLES
STORM INLETS	STORM INLETS
STORM CURB INLETS	STORM CURB INLETS
ELECTRIC HANDHOLE	ELECTRIC HANDHOLE
FIBER OPTIC HANDHOLE	FIBER OPTIC HANDHOLE
SIGN	SIGN



WATER NOTES

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3. FIRE HYDRANT ASSEMBLIES SHALL BE SUPER CENTURION 250 HYDRANT BY MUELLER CO. WITH STORZ FITTING ON STEAMER WITH 5'-6" MIN. BURIAL DEPTH.
4. ALL FITTINGS SHALL BE DUCTILE IRON (D.I.) WITH MECHANICAL JOINTS (M.J.) CONFORMING TO AWWA C-110, C-111, C-153, AND NSF-61. ALL WATER MAIN FITTINGS SHALL BE RESTRAINED IN ACCORDANCE WITH THE TOWN OF WHITELAND TYPICAL CONSTRUCTION GUIDELINES AND DETAILS.
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6. CONTRACTOR SHALL COORDINATE CONSTRUCTION SEQUENCE WITH THE OWNER AND SKILLMAN CORPORATION AND MAINTAIN ACTIVE UTILITY SERVICES AT ALL TIMES. ALL TEMPORARY UTILITY SERVICE INTERRUPTIONS MUST BE APPROVED BY THE OWNER AND SKILLMAN CORPORATION PRIOR TO INSTALLATION OF IMPROVEMENTS.
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MATCHLINE - SEE SHEET 403



MATCHLINE - SEE SHEET 405

NOTE:
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MAY COMMENCE UNTIL A STORM WATER
MANAGEMENT PERMIT IS OBTAINED.



CROSSBROAD ENGINEERS, P.C.
Professional Engineers
1111 North State Street
Whiteland, Indiana 46782
Phone: 317.226.5599
Fax: 317.226.5598
www.crossroadeng.com

WATER PLAN		JOB No.	DRAWN	KLF	CHECKED	TEN	DATE	FEBRUARY 2, 2026
WHITELAND HIGH SCHOOL PHASE 5		DESIGNED	DMS	APPR.	GJ	SHEET	404	



Derek M. Snyder

NO.	DATE	REVISIONS	BY
1	02.09.26	REVISIONS FOR 100% CD SUBMITTAL	DMS
2	03.06.26	REVISIONS PER TAC COMMENTS RECEIVED 2/24/26 & ADDENDUM NO. 1	GJ
3	03.12.26	REVISIONS PER TAC COMMENTS RECEIVED 2/24/26 & ADDENDUM NO. 2	GJ

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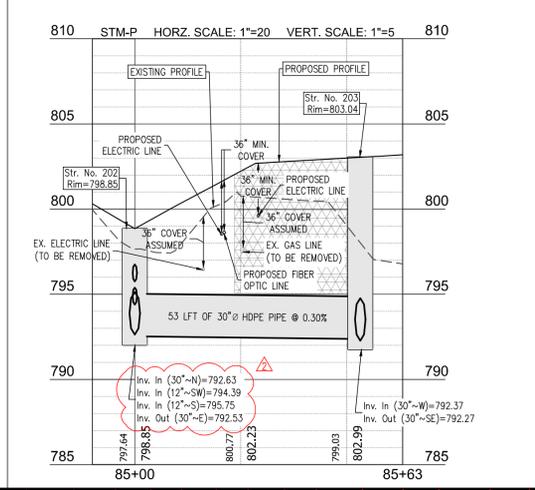
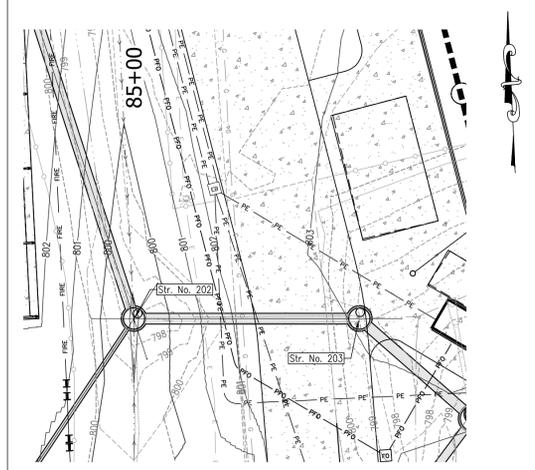
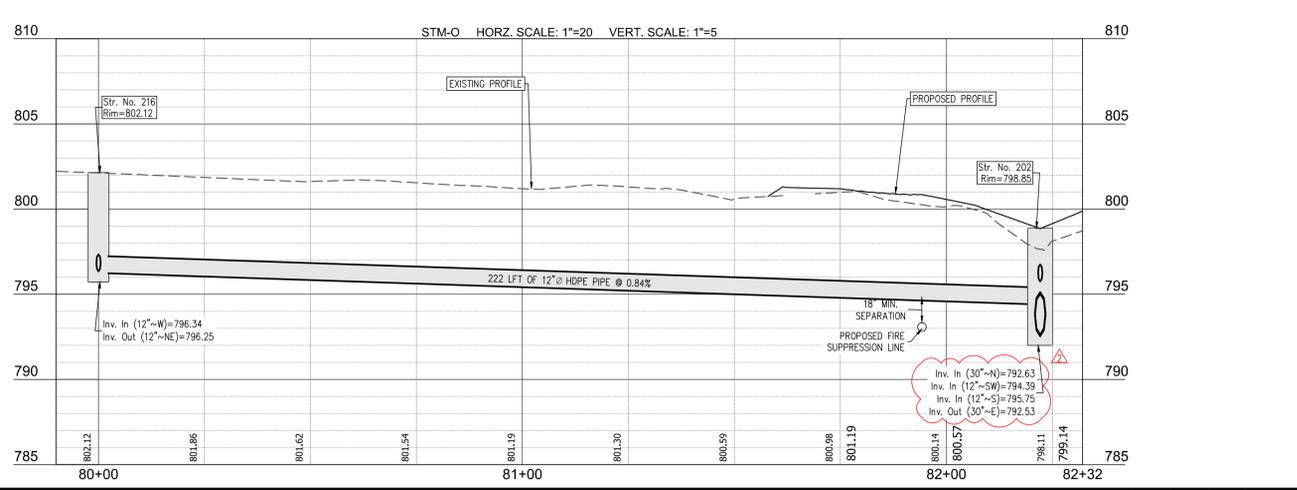
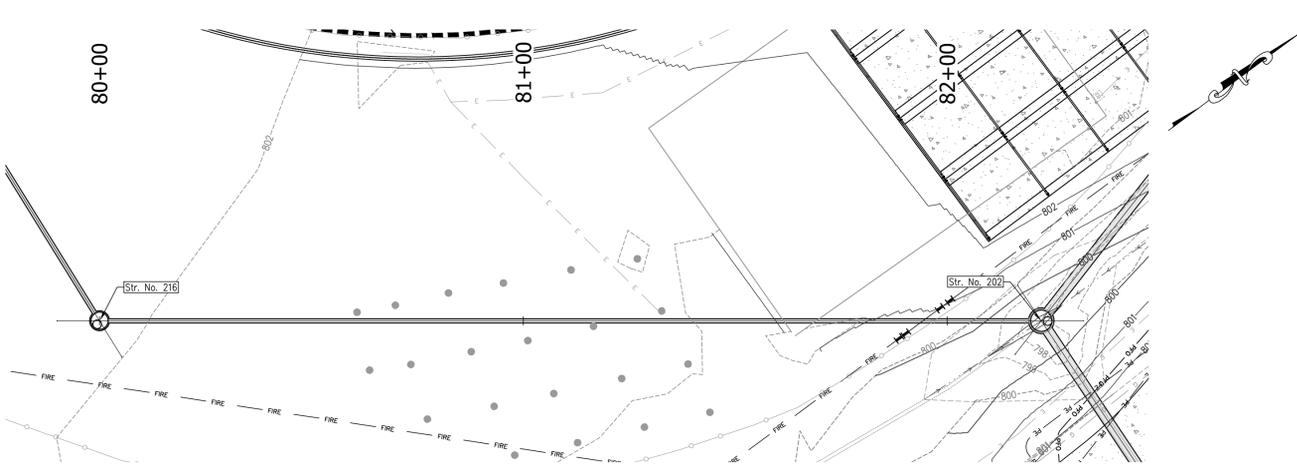
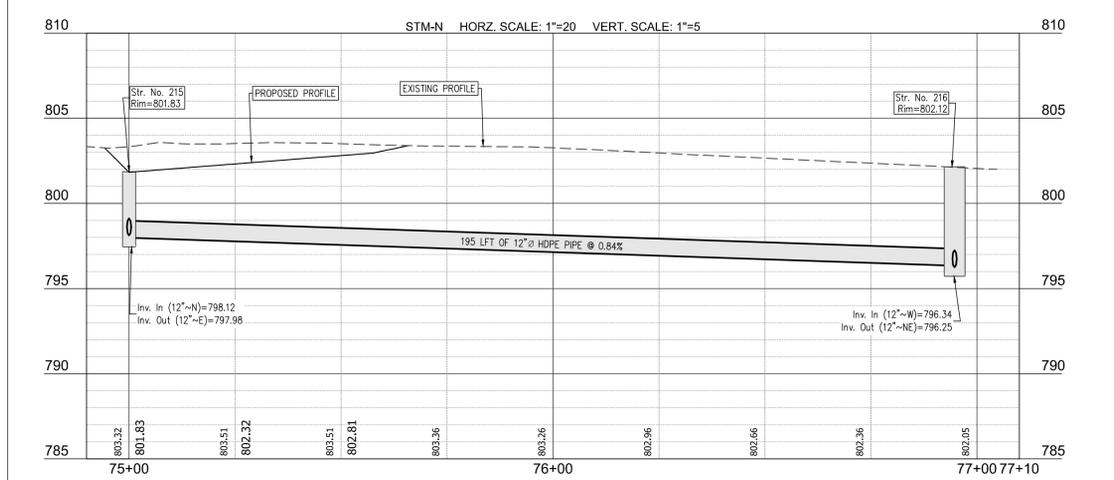
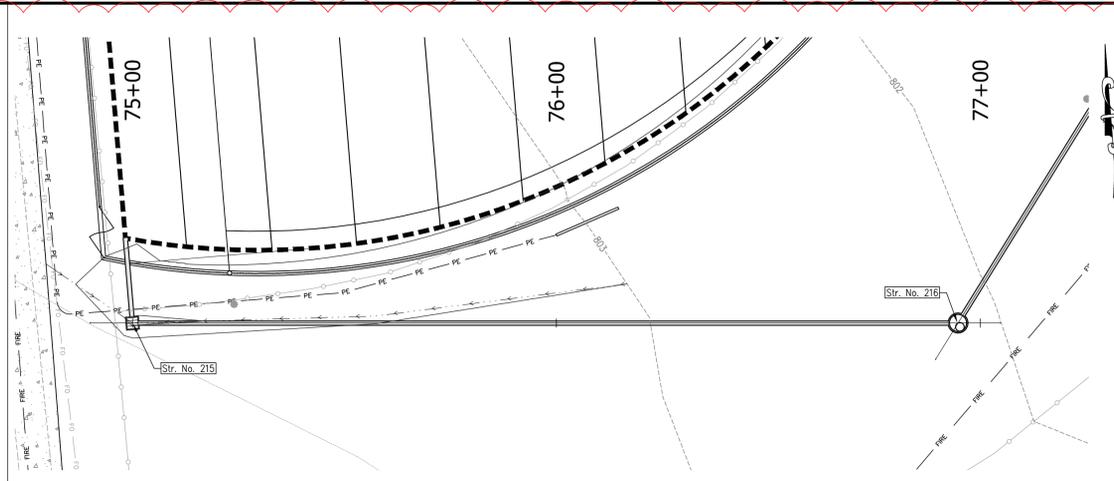
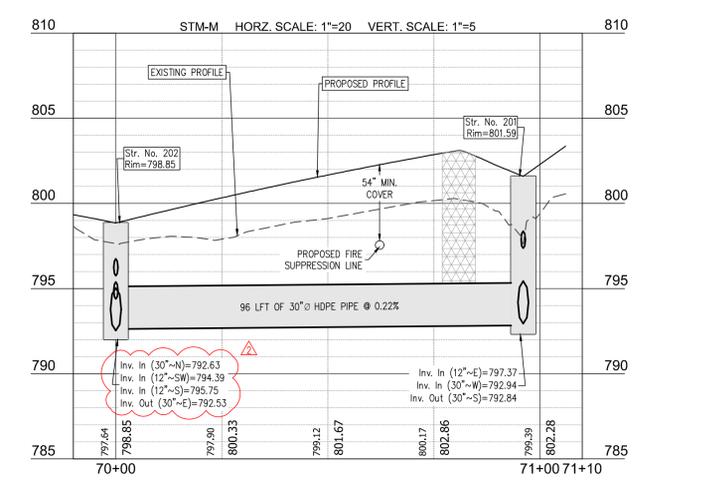
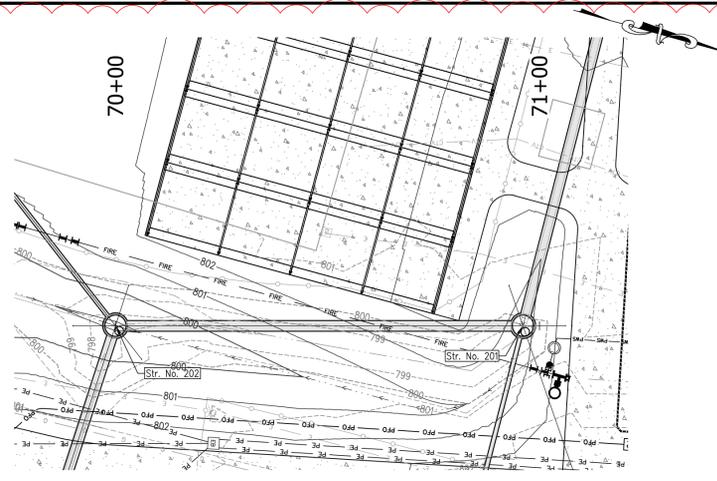
STORM PLAN AND PROFILES

WHITELAND HIGH SCHOOL PHASE 5

JOB No. DRAWN KLF CHECKED TEN GJI
 DATE FEBRUARY 2, 2026 APPR. DMS DESIGNED GJI

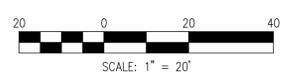


NO.	DATE	REVISIONS	BY	APPR.
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2	03.06.26	REVISIONS PER TAC COMMENTS RECEIVED 2/24/26 & ADDENDUM NO. 1	DMS	GJI
3	03.12.26	REVISIONS PER TAC COMMENTS RECEIVED 2/24/26 & ADDENDUM NO. 2	DMS	GJI

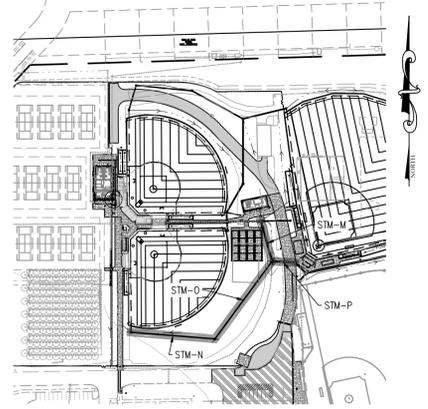


PROPOSED LEGEND

- PROPERTY LINE
- SECTION LINE
- SEBACK LINE
- FENCE LINE
- DITCH LINE
- SANITARY SEWER WITH MANHOLE
- SANITARY SEWER LATERAL WITH CLEANOUT
- STORM SEWER W/MANHOLE & END SECTION
- ELECTRIC LINE
- WATER LINE
- WATER SERVICE LINE
- GAS LINE
- FIBER OPTIC LINE
- TEMPORARY CONSTRUCTION FENCE ON STANDS WITH SAND BAGS
- STORM MANHOLES
- STORM INLETS
- STORM CURB INLETS
- ELECTRIC HANDHOLE
- FIBER OPTIC HANDHOLE
- SIGN



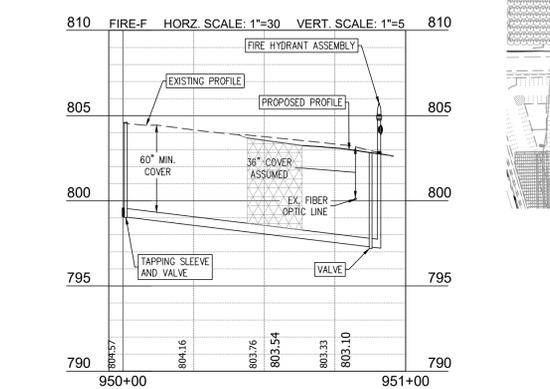
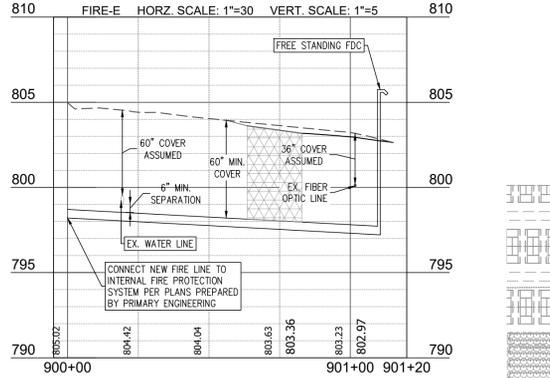
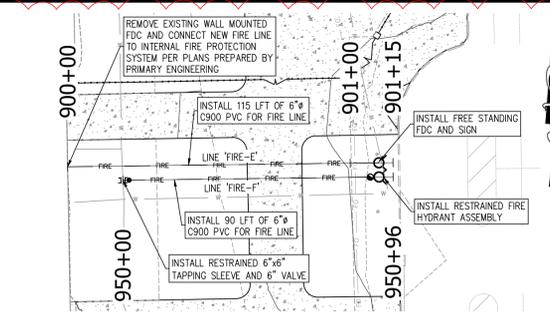
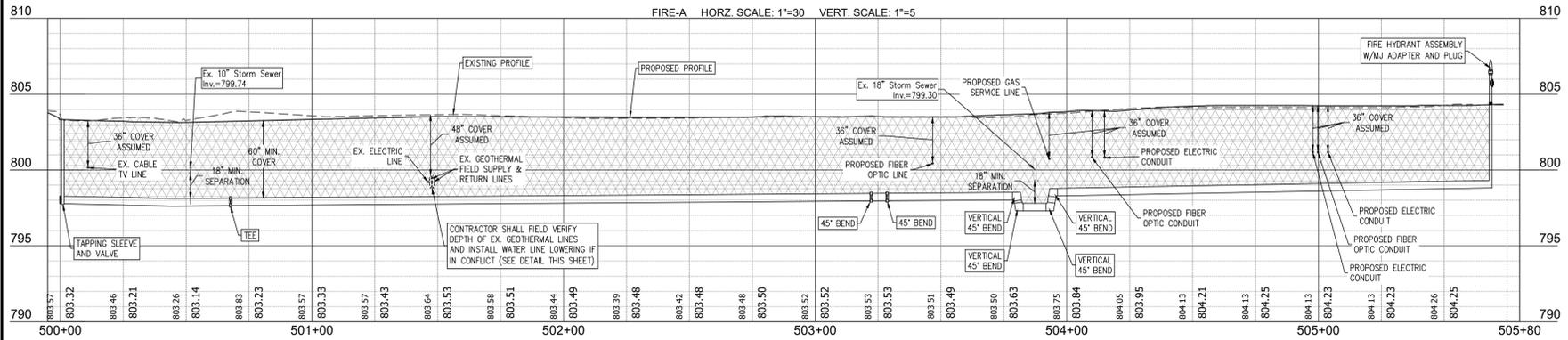
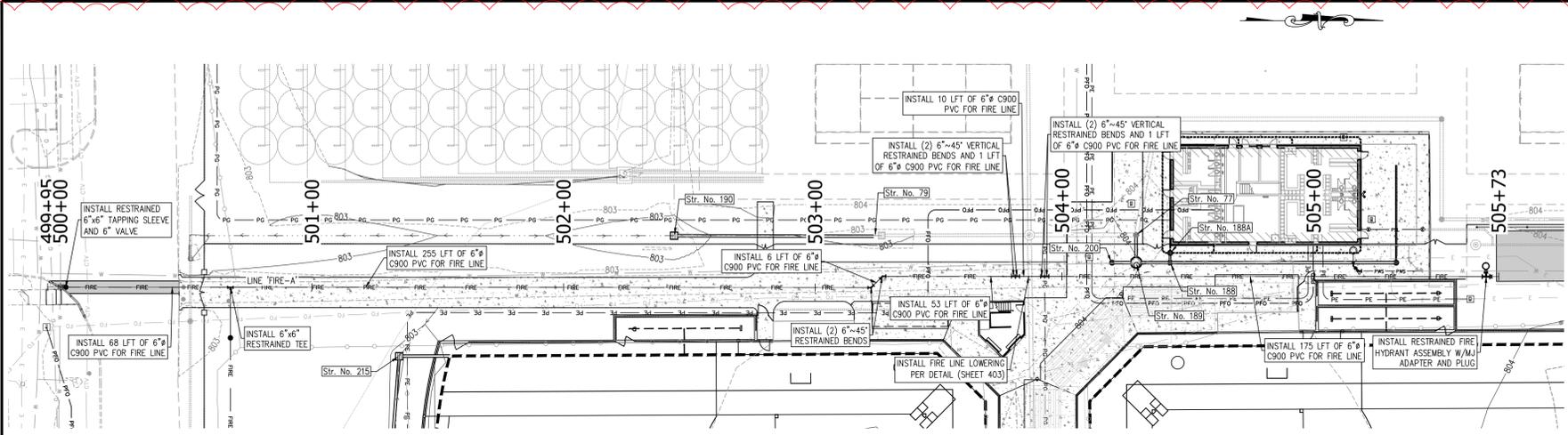
Denotes approximate limits of granular backfill to be compacted to 95% Proctor density in 6" max lifts



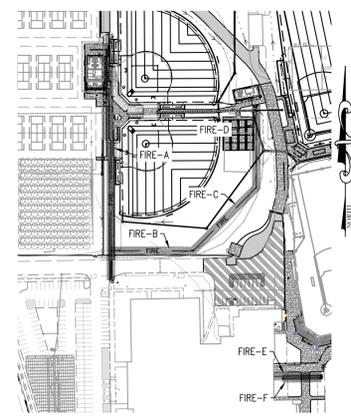
NOTE:
 NO EARTHWORK DISTURBING ACTIVITY MAY COMMENCE UNTIL A STORM WATER MANAGEMENT PERMIT IS OBTAINED.



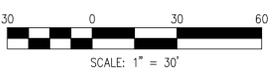
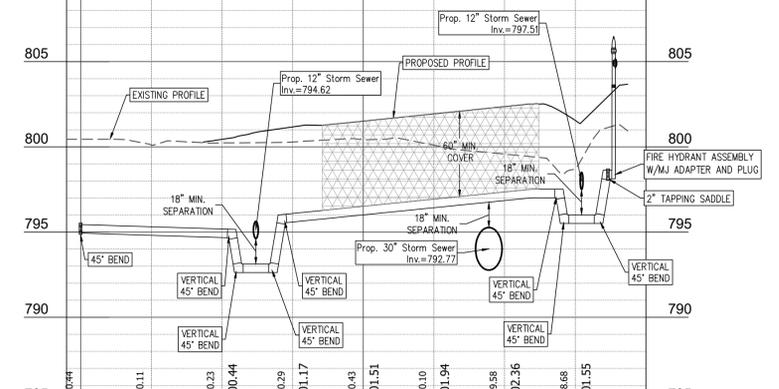
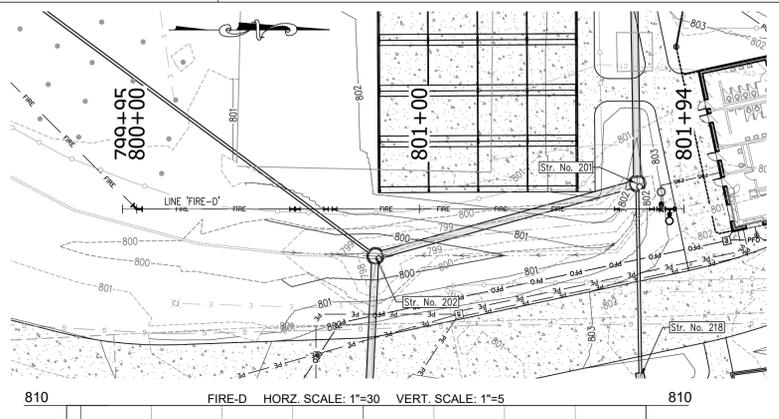
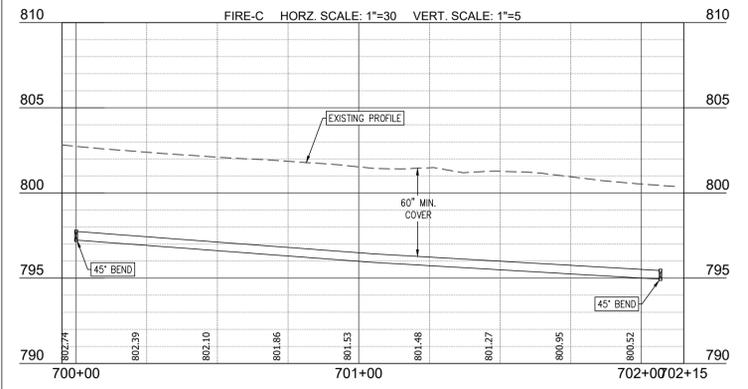
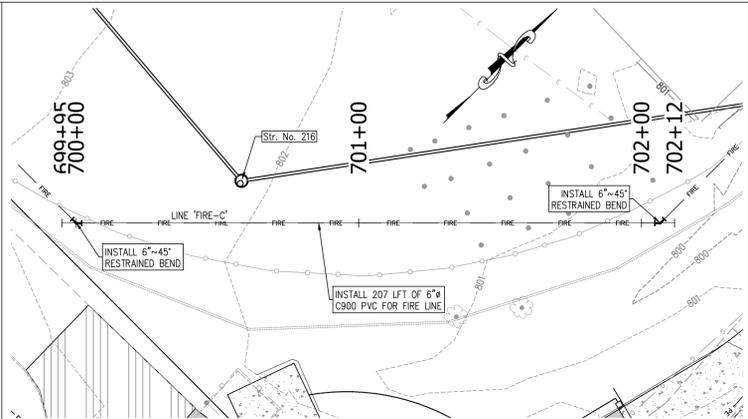
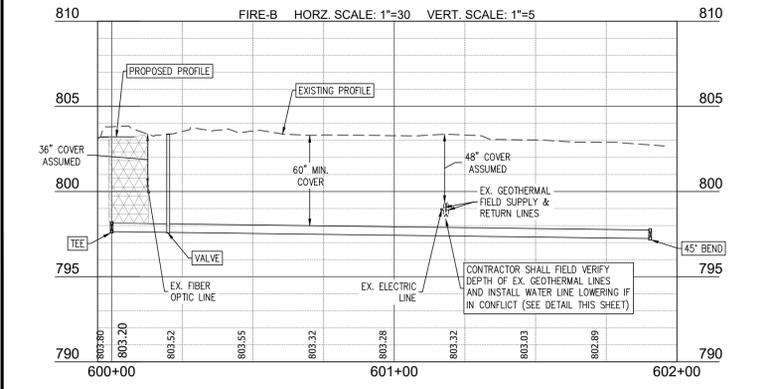
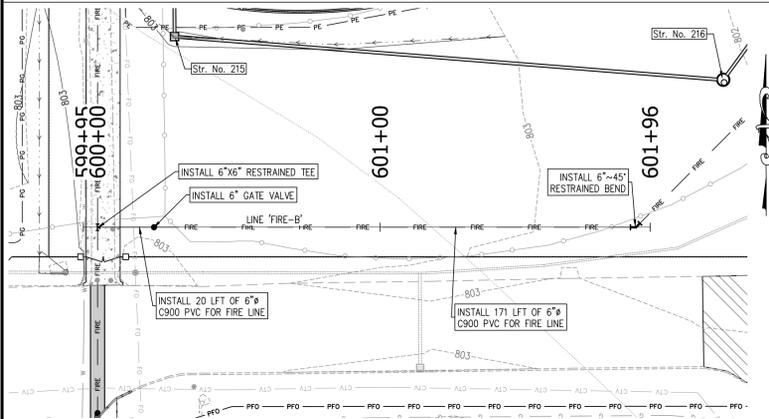
DIRECTORY PATH : R:\Active\Users\leaves\Whiteland High School\Design\CAD\Phase\PHASE 5
 DATE/USER : 2/11/2026 5:26 PM / Dszaydr



PROPOSED LEGEND	
	PROPERTY LINE
	SECTION LINE
	SETBACK LINE
	FENCE LINE
	DITCH LINE
	SANITARY SEWER WITH MANHOLE
	STORM SEWER W/MANHOLE & END SECTION
	ELECTRIC LINE
	WATER SERVICE LINE
	GAS LINE
	FIBER OPTIC LINE
	TEMPORARY CONSTRUCTION FENCE ON STANDS WITH SAND BAGS
	STORM MANHOLES
	STORM INLETS
	ELECTRIC HANDHOLE
	FIBER OPTIC HANDHOLE
	SIGN



KEYMAP
NO SCALE



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

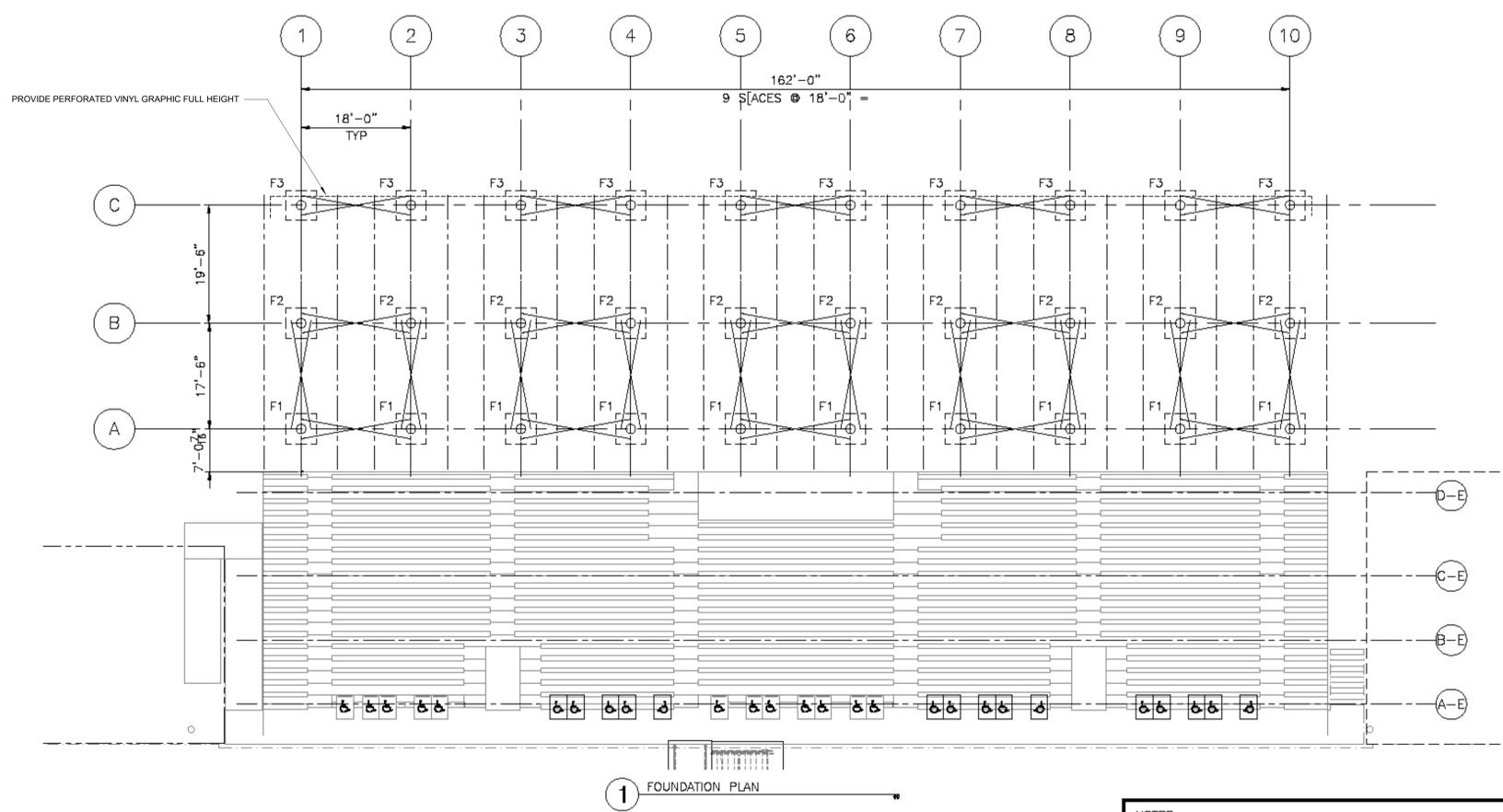
CROSSROAD ENGINEERS, P.C.
 Development Consultants
 114 N. 10th Street, Suite 200
 Indianapolis, IN 46204
 TEL: 317.633.1100
 FAX: 317.633.1101
 WWW: CROSSROADENGINEERS.COM

FIRE LINE PLAN AND PROFILES

WHITELAND HIGH SCHOOL PHASE 5

JOB NO.	DATE	DESIGNED	DRAWN	CHECKED	IN CHARGE
	FEBRUARY 2, 2026				

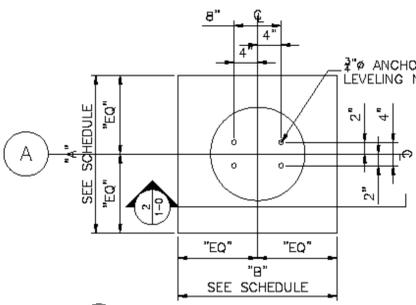
NO.	DATE	BY	REVISIONS
9			
8			
7			
6			
5			
4			
3	03.12.26		REVISIONS PER TAC COMMENTS RECEIVED 2/24/26 & ADDENDUM NO. 2
2	03.06.26		REVISIONS PER TAC COMMENTS RECEIVED 2/24/26 & ADDENDUM NO. 1
1	02.09.26		REVISIONS FOR 100% CD SUBMITTAL



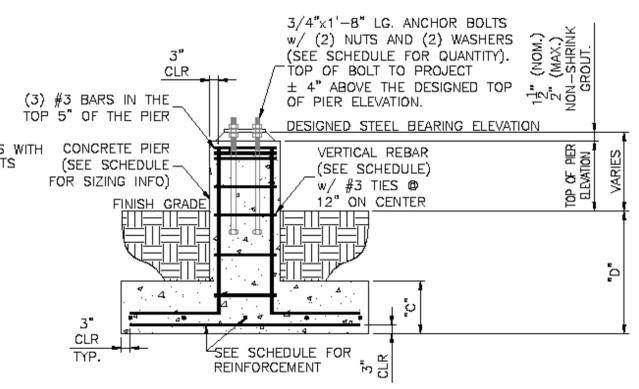
1 FOUNDATION PLAN

NOTES:

1. THE ELEVATION OF THE TOP OF THE CONCRETE PIER IS DESIGNED TO BE 1 1/2" BELOW THE STEEL BEARING ELEVATION. TOLERANCES FOR THE TOP OF CONCRETE PIER SHALL BE +/- 1/8". THE CONCRETE INSTALLER IS RESPONSIBLE FOR NON-SHRINK GROUTING.
- THE TOP OF CONCRETE MAY BE RAISED TO MATCH THE STEEL BEARING ELEVATION AT THE INSTALLER'S DISCRETION. INSTALLER IS THEN RESPONSIBLE FOR ANY ADJUSTMENTS.
2. ALL COLUMN ANCHOR BOLTS MUST HAVE A 4" PROJECTION (+/- 1/8") ABOVE THE TOP OF PIER ELEVATION.
3. MAXIMUM HORIZONTAL TOLERANCE OF ANCHOR BOLT PLACEMENT SHALL BE 1/8".
4. ALL UNDERGROUND UTILITIES ARE TO BE LOCATED AND MARKED DURING REVIEW PROCESS PRIOR TO FOUNDATION EXCAVATION. DANT CORP. SHALL NOT BE RESPONSIBLE FOR DAMAGE TO UNDERGROUND UTILITIES.
5. MINIMUM FOOTING DEPTH IS DETERMINED BY STATE AND LOCAL BUILDING CODES.
6. SOIL BEARING PRESSURE IS TO BE DETERMINED BY SOILS ENGINEER.



1 ANCHOR BOLT LAYOUT
PLAN OF FOOTING & PIER (F1)



2 SECTION THRU FOUNDATION

MARK	FOOTING SCHEDULE				REINFORCING EA. WAY	SIZE	REINFORCING	# OF ANCHORS	SIZE OF ANCHORS	ANCHOR BOLT TEMPLATE NO.
	"A"	"B"	"C"	"D"						
F1	X	X	X	X	#5@12"O.C.	18"φ	4 #5 BARS	4	1/2"x1'-8" HWY HEX HEAD GR36	0055517
F2	X	X	X	X	#5@12"O.C.	18"φ	4 #5 BARS	4	1/2"x1'-8" HWY HEX HEAD GR36	0055517

REV.	DATE	BY	CHKD.	DESC.
2	03-13-2025			ADDENDUM 2
1				

100% CONSTRUCTION DOCUMENTS
PROJECT: #22130
DATE: 03/09/2025
DRAWN BY: Author

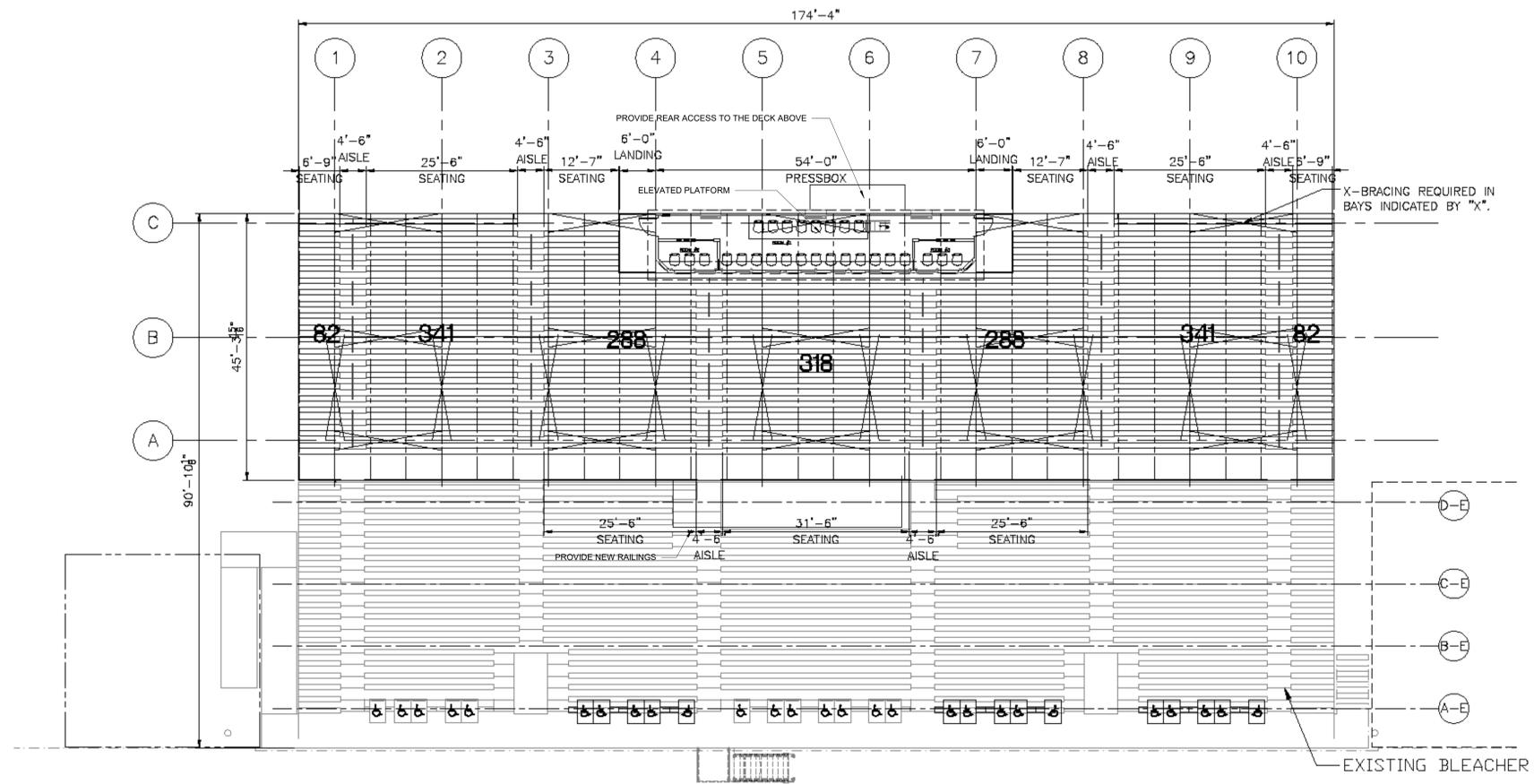
FOOTBALL GRANDSTANDS

2 ADDITIONAL SEATING BLEACHER

ROWS 20	ELEVATION 42"
RISE 8	RUN 24
DECK SYSTEM -	CLOSED
DECK FINISH -	MILL
BENCH SEATING CAPACITY	1740
CHAIR SEATING CAPACITY	0
WHEELCHAIR SEATING CAPACITY	0
COMPANION SEATING CAPACITY	0
TOTAL SEATING CAPACITY	1740

1 EXISTING BLEACHER

ROWS 20	ELEVATION 42"
RISE 8	RUN 24
DECK SYSTEM -	CLOSED
DECK FINISH -	MILL
BENCH SEATING CAPACITY	1684
CHAIR SEATING CAPACITY	0
WHEELCHAIR SEATING CAPACITY	12
COMPANION SEATING CAPACITY	12
TOTAL SEATING CAPACITY	1708



1 SEATING PLAN

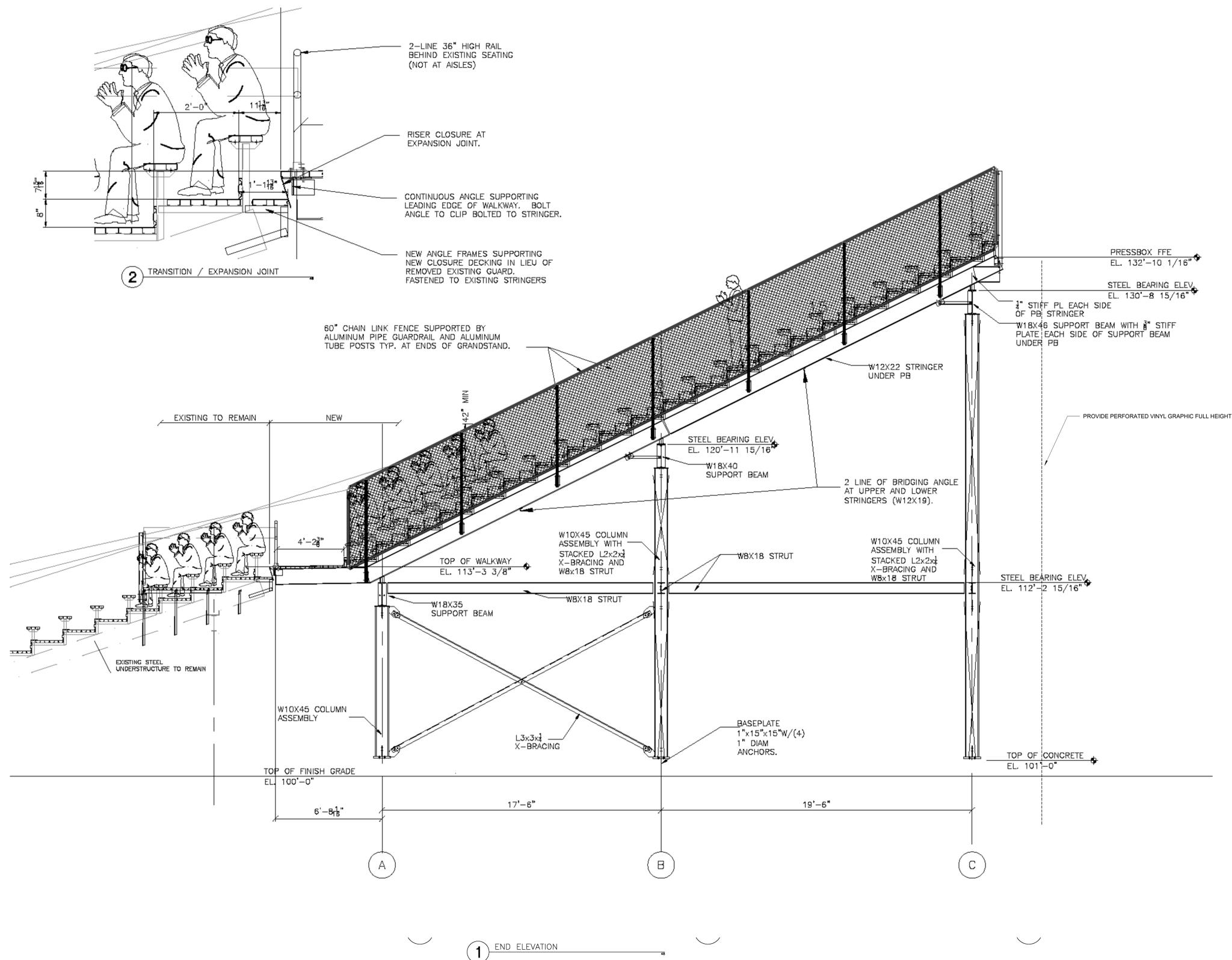
ROWS 20	ELEVATION 159.38
RISE 12	RUN 24
DECK SYSTEM -	WELDED
DECK FINISH -	SSRD
BENCH SEATING CAPACITY	1740
CHAIR SEATING CAPACITY	0
WHEELCHAIR SEATING CAPACITY	15
COMPANION SEATING CAPACITY	15
TOTAL SEATING CAPACITY	1770

REVISIONS:

#	DATE	DESCRIPTION
2	03-13-2025	ADDENDUM 2
1		

100% CONSTRUCTION DOCUMENTS
 PROJECT: #22130
 DATE: 03/09/2025
 DRAWN BY: Author

FOOTBALL GRANDSTANDS



2 TRANSITION / EXPANSION JOINT

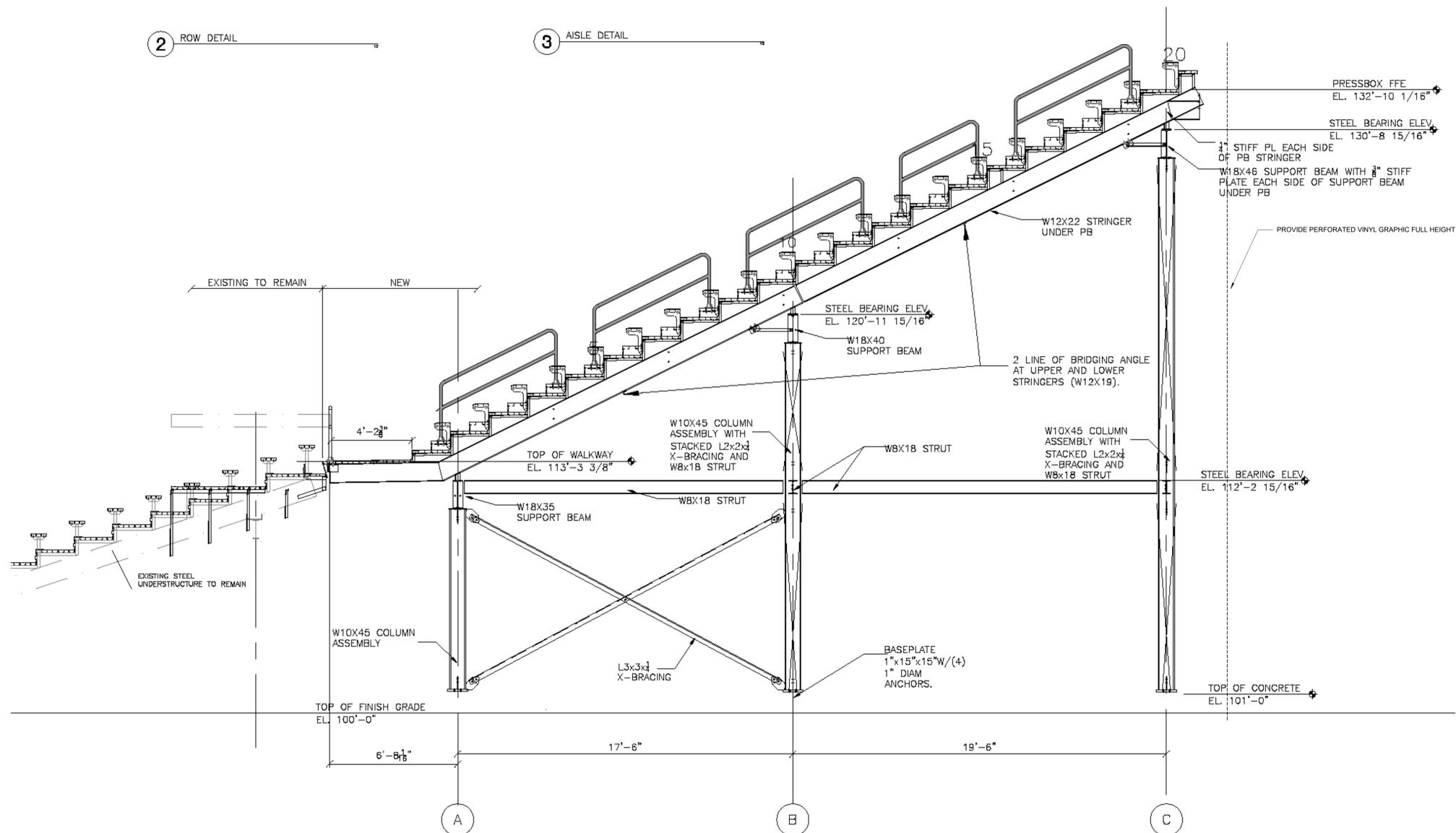
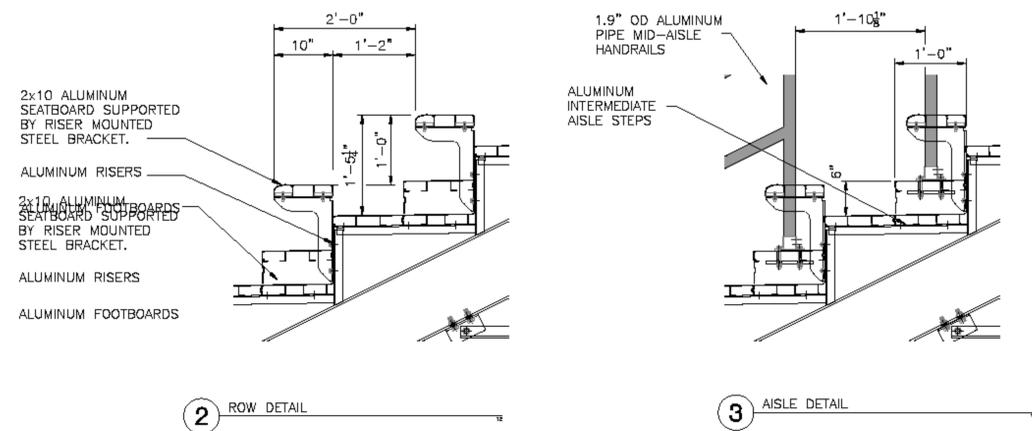
1 END ELEVATION

REVISIONS:

#	DATE	DESCRIPTION
2	03-13-2023	ADDENDUM 2

100% CONSTRUCTION DOCUMENTS
 PROJECT: #22130
 DATE: 03/09/2023
 DRAWN BY: Author

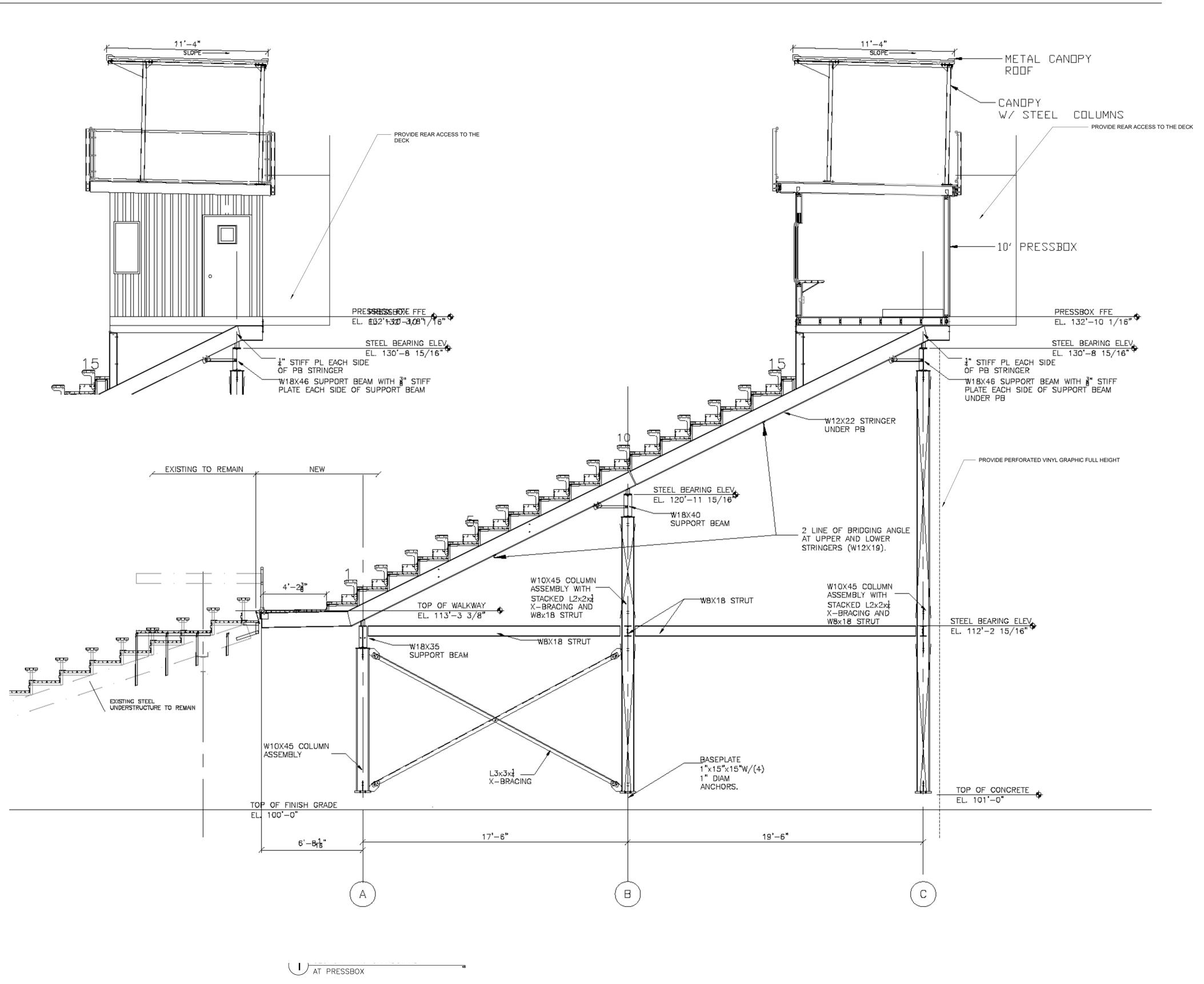
FOOTBALL GRANDSTANDS



REVISIONS:	NO.	DATE	BY	CHKD.
	2	03-13-2025	ADDENDUM 2	

100% CONSTRUCTION DOCUMENTS
 PROJECT: #22130
 DATE: 03/09/2025
 DRAWN BY: Author

FOOTBALL GRANDSTANDS



REVISIONS:	NO.	DATE	BY	CHKD.
	2	03-13-2023	ADDENDUM 2	

100% CONSTRUCTION DOCUMENTS

PROJECT: #22130
 DATE: 03/09/2023
 DRAWN BY: Author

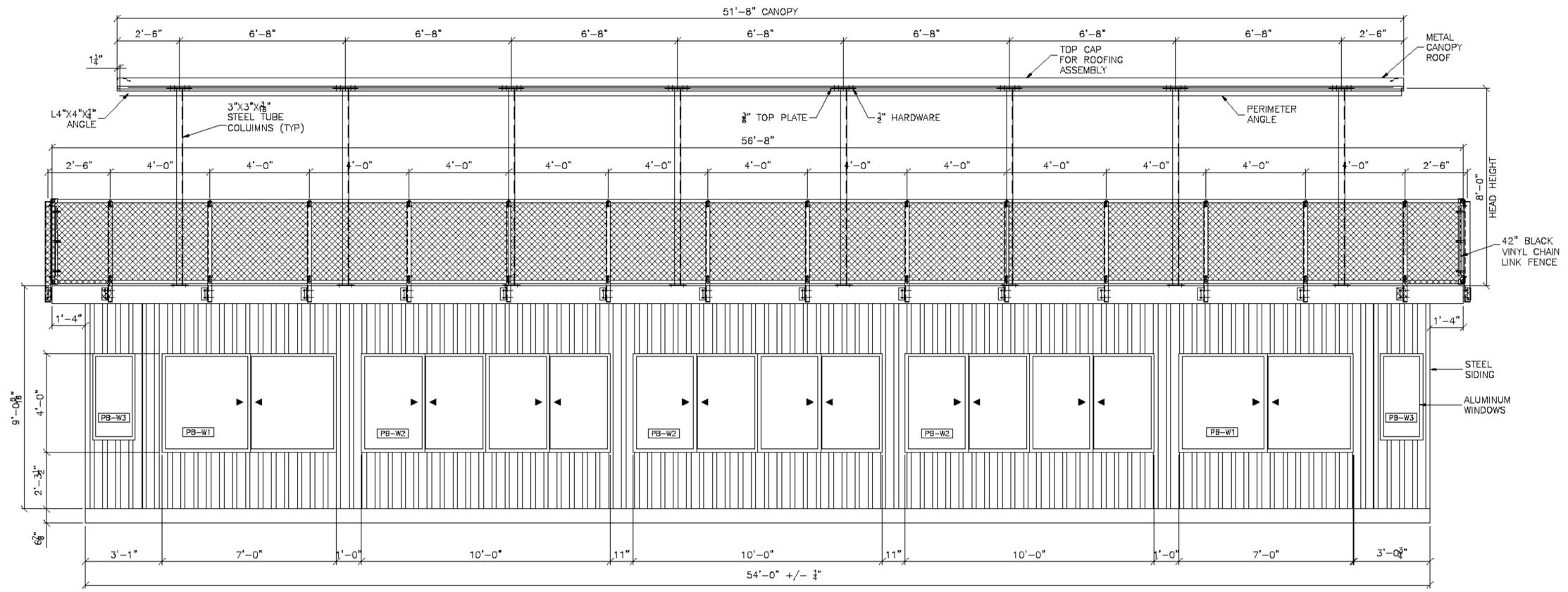
FOOTBALL GRANDSTANDS

A103.5FS

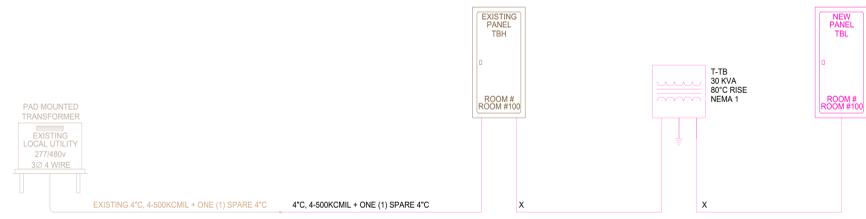
REVISIONS:	#	DATE	DESCRIPTION
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100% CONSTRUCTION DOCUMENTS
 PROJECT: #22130
 DATE: 03/09/2025
 DRAWN BY: Author

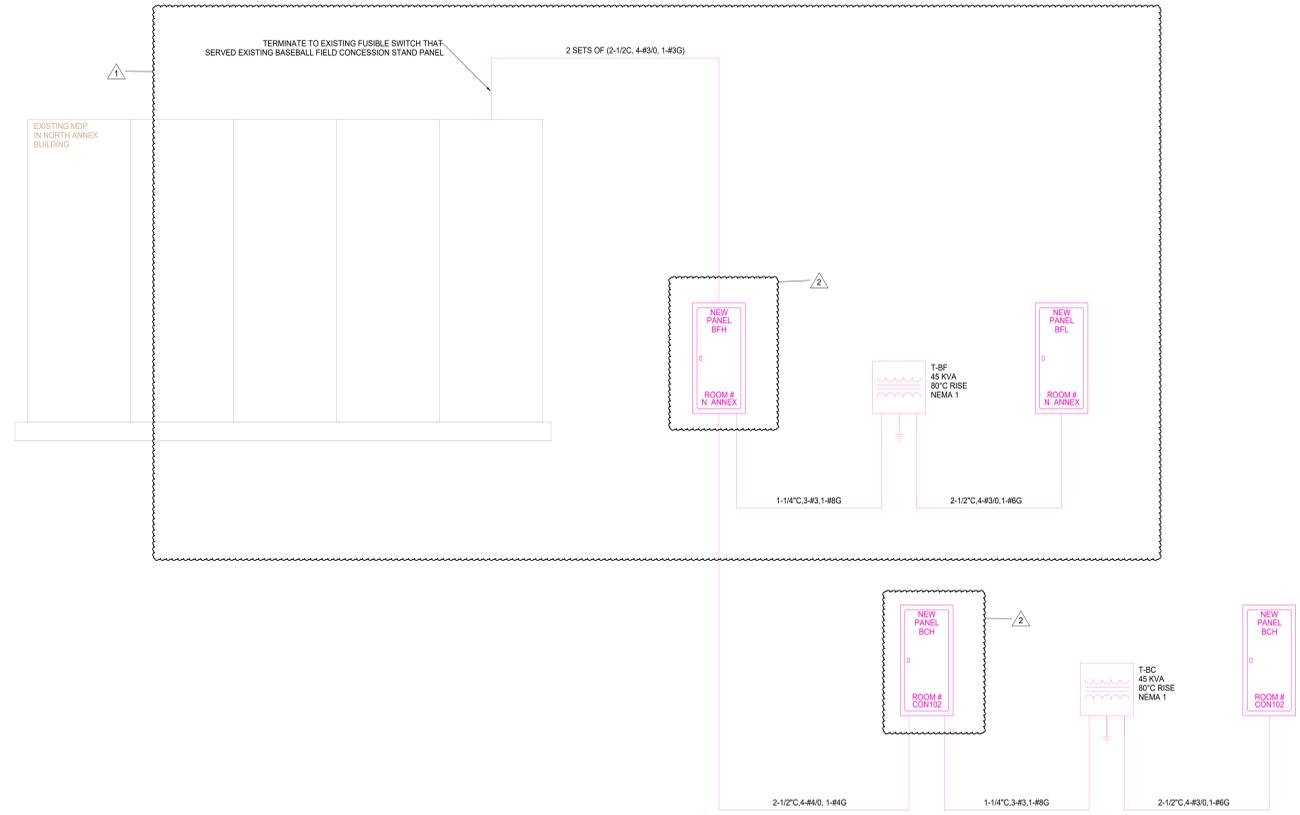
FOOTBALL GRANDSTANDS



1 FRONT ELEVATION SCALE: 1/2" = 1'-0"



1 SERVICE ENTRANCE AND DISTRIBUTION DIAGRAM - TENNIS FACILITY
NOT TO SCALE



2 DISTRIBUTION DIAGRAM - BASEBALL FIELD & BASEBALL CONCESSIONS
NOT TO SCALE



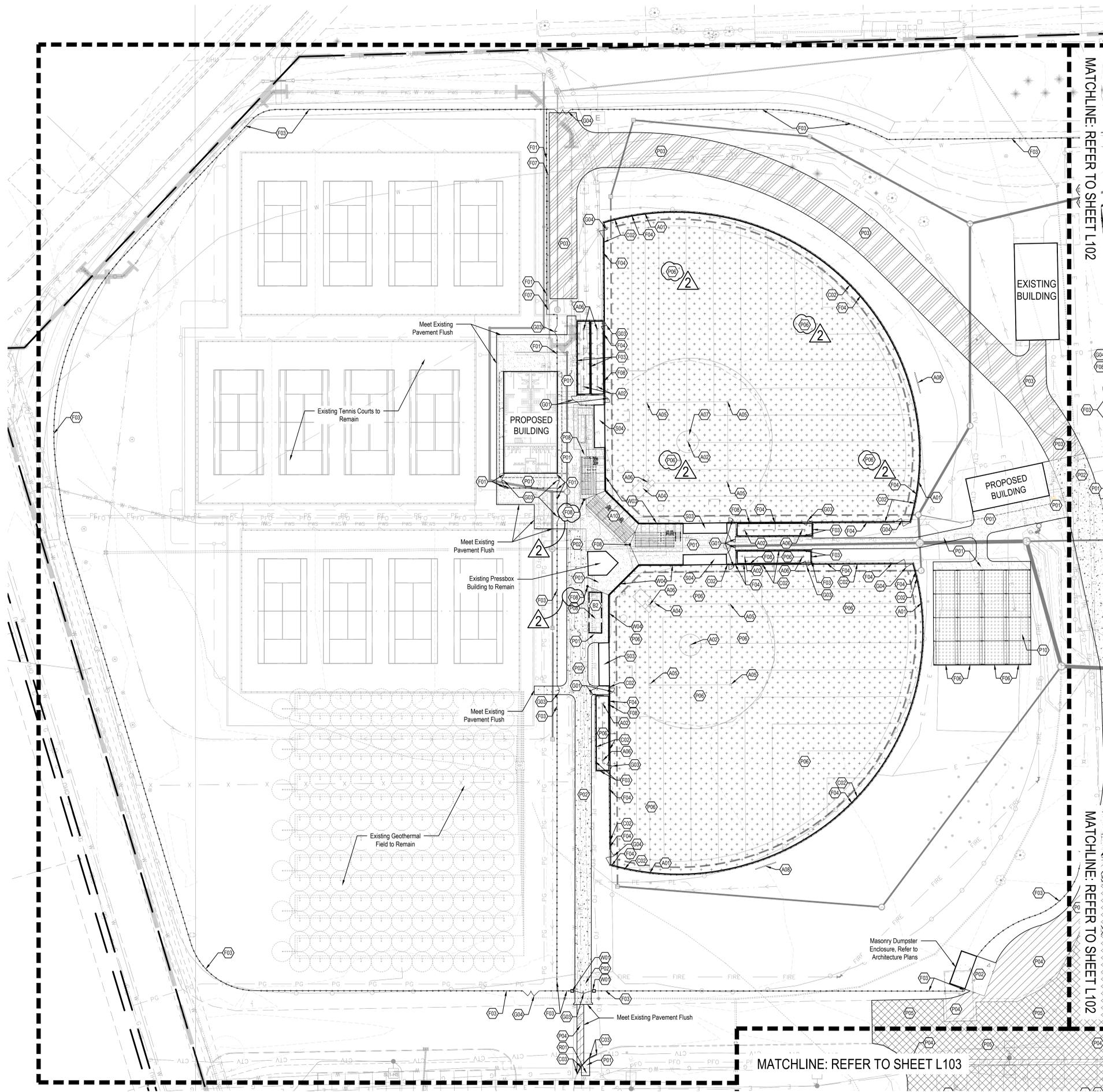
IF THE WHITE IS PRINTED RED OR IS NOT SHOWN IN COLOR, THE SET OF PRINTS IS NOT REPRESENTING ALL LINE TYPES. PLEASE CONTACT PRIMARY ENGINEERING FOR INSTRUCTIONS ON HOW TO OBTAIN A FULL COLOR SET OF PRINTS.
PLOT DATE/TIME: 03/16/2026 8:58:29 AM



#	Date	Desc.
1	03/06/2026	ADDENDUM #1
2	03/16/2026	ADDENDUM #2

100% CONSTRUCTION DOCUMENTS
PROJECT: #22130
DATE: 03/09/2026
DRAWN BY: SBA

SERVICE ENTRANCE AND DISTRIBUTION DIAGRAMS



ATHLETIC COMPONENTS	
KEY	DESCRIPTION / REFERENCE
(A01)	FOUL POLE, ORANGE, REFER TO SITE DETAIL 7L601 AND SPEC. 11 88 33.33
(A02)	PITCHING RUBBER REFER TO SPEC. 32 91 16
(A03)	BASEBALL BATTERS BOX REFER TO DETAIL 12L600
(A04)	SOFTBALL BATTERS BOX REFER TO DETAIL 11L600
(A05)	BASE REFER TO SPEC. 32 91 16
(A06)	HOME PLATE REFER TO SPEC. 32 91 16
(A07)	TURF PITCHERS MOUND REFER TO SPEC. 32 91 16
(A08)	SCOREBOARD OWNER PROVIDED
(A09)	BASEBALL BLEACHER WITH PRESS BOX (APPROXIMATELY 500 SEATS) REFER TO SPEC. 13 34 30 AND 13 22 26
(A10)	VARSITY SOFTBALL BLEACHER (APPROXIMATELY 300 SEATS) REFER TO SPEC. 13 34 30
CURBS	
KEY	DESCRIPTION / REFERENCE
(C01)	PERIMETER NAILED CURB REFER TO SITE DETAIL 8L600
(C02)	PERIMETER NAILED CURB WITH FENCING REFER TO SITE DETAIL 10L600
(C03)	STRAIGHT CONCRETE CURB REFER TO SITE DETAIL 8L606
RELOCATED BLEACHERS	
KEY	DESCRIPTION / REFERENCE
(B1)	RELOCATED BLEACHER PER CIVIL DEMOLITION PLANS
(B2)	RELOCATED BLEACHER PER CIVIL DEMOLITION PLANS
(B3)	RELOCATED BLEACHER PER CIVIL DEMOLITION PLANS
(B4)	RELOCATED BLEACHER PER CIVIL DEMOLITION PLANS
FENCING	
KEY	DESCRIPTION / REFERENCE
(F01)	6'-0" HT. CHAIN-LINK FENCE, VINYL COATED, BLACK, REFER TO SPEC. 32 31 13
(F02)	6'-0" HT. ORNAMENTAL FENCE, BLACK, REFER TO SPEC. 32 31 13
(F03)	6'-0" HT. CHAIN-LINK FENCE, VINYL COATED, BLACK, REFER TO SPEC. 32 31 13
(F04)	6'-0" HT. CHAIN-LINK FENCE WITH ORANGE TOPRAIL, VINYL COATED, BLACK, REFER TO SPEC. 32 31 13
(F05)	4'-0" HT. CHAIN-LINK FENCE, BLACK, REFER TO SPEC. 32 31 13
(F06)	BASEBALL BATTING CAGE NETTING REFER TO SPEC. 11 88 33.33
(F07)	BARRIER NETTING REFER TO SPEC. 32 33 00
SITE FURNISHINGS	
KEY	DESCRIPTION / REFERENCE
(F08)	BACKSTOP TIE-BACK POST, REFER TO SITE DETAIL 14L600 AND SPEC. 11 88 33.33
(F09)	STEEL PIPE BOLLARD WITH CONCRETE FILL REFER TO SITE DETAIL 15L600
GATES	
KEY	DESCRIPTION / REFERENCE
(G01)	SINGLE LEAF SWING GATE, 4'-0" OPENING, MATCH HEIGHT OF ADJACENT FENCING, REFER TO SPEC. 32 31 13
(G02)	DOUBLE LEAF ORNAMENTAL SWING GATE, 8'-0" OPENING, MATCH HEIGHT OF ADJACENT FENCING, REFER TO SPEC. 32 31 13
(G03)	DOUBLE LEAF CHAIN-LINK SWING GATE, 8'-0" OPENING, MATCH HEIGHT OF ADJACENT FENCING, REFER TO SPEC. 32 31 13
(G04)	DOUBLE LEAF CHAIN-LINK SWING GATE, 12'-0" OPENING, MATCH HEIGHT OF ADJACENT FENCING, REFER TO SPEC. 32 31 13
(G05)	VEHICULAR SLIDING GATE, 20'-0" OPENING, REFER TO SPEC. 32 31 13
PAVEMENTS	
KEY	DESCRIPTION / REFERENCE
(P01)	CONCRETE, STANDARD DUTY, REFER TO DETAILS 13L600 AND SPEC. 32 13 13
(P02)	CONCRETE, HEAVY DUTY REFER TO DETAILS 24L600 AND SPECIFICATION 32 13 13
(P03)	LIGHT DUTY ASPHALT PAVEMENT, REFER TO SITE DETAIL 5L606 AND CIVIL SPECIFICATIONS
(P04)	HEAVY DUTY ASPHALT PAVEMENT, REFER TO SITE DETAIL 6L606 AND CIVIL SPECIFICATIONS
(P05)	MILL AND OVERLAY PAVEMENT, REFER TO SITE DETAIL 7L606 AND CIVIL SPECIFICATIONS
PAVEMENTS, SPECIALTY	
KEY	DESCRIPTION / REFERENCE
(P06)	SYNTHETIC TURF - BASEBALL & SOFTBALL FIELDS, REFER TO SITE DETAIL 5L600 AND SPEC. 32 91 16
(P07)	TRACK PAVEMENT, MILL & RESURFACE, REFER TO SITE DETAILS 6L600 AND SPEC. 32 18 23
(P08)	BLEACHER PAD CONCRETE, REFER TO BLEACHER MANUFACTURER FOR REQUIREMENTS
(P09)	GRANUL SURFACING, REFER TO SITE DETAIL 8L601
(P10)	SYNTHETIC TURF ON CONCRETE, STANDARD DUTY, REFER TO SITE DETAILS 10L600 AND SPEC. 32 91 16 (2 1/2" BATTING TUNNELS)
(P11)	TRACK PAVEMENT, REFER TO SITE DETAIL 7L600 AND SPEC. 32 18 23
(P12)	TRACK PAVEMENT, RESURFACE, REFER TO SPEC. 32 18 23
RAMPS	
KEY	DESCRIPTION / REFERENCE
(R01)	ONE WAY DIRECTIONAL CURB RAMP, REFER TO SITE DETAIL 16L606 AND CIVIL SPECIFICATIONS
(R02)	PERPENDICULAR CURB RAMP, REFER TO SITE DETAIL 23L606 AND CIVIL SPECIFICATIONS
SITE STRUCTURES	
KEY	DESCRIPTION / REFERENCE
(S01)	JUNIOR VARSITY BASEBALL DUGOUT FIRST BASE SIDE, REFER TO SITE DETAILS 15L602 AND SPEC. 32 91 16
(S02)	JUNIOR VARSITY BASEBALL DUGOUT THIRD BASE SIDE, REFER TO SITE DETAILS 16L602 AND 2, AND 4L603 AND SPEC. 32 91 16
(S03)	VARSITY AND JUNIOR VARSITY SOFTBALL DUGOUT FIRST BASE SIDE, EXISTING DUGOUT TO REMAIN
(S04)	VARSITY AND JUNIOR VARSITY SOFTBALL DUGOUT THIRD BASE SIDE, EXISTING DUGOUT TO REMAIN
(S05)	STAIR, 2-STEP, WITH HANDRAILS, REFER TO SITE DETAIL 38L605 AND SPEC. 05 52 13 AND 03 30 01
WALLS	
KEY	DESCRIPTION / REFERENCE
(W01)	MASONRY PER REFER TO SITE DETAILS 38L605 & 2-3L604 FOR ORNAMENTAL FENCE ATTACHMENT AND MASONRY FILL
(W02)	JUNIOR VARSITY BASEBALL MASONRY BACKSTOP WALL WITH NETTING, REFER TO SITE DETAILS 38L605 AND 12L601
(W03)	VARSITY SOFTBALL MASONRY BACKSTOP WALL WITH NETTING, REFER TO SITE DETAIL 13L600 AND 3-4L601
(W04)	JUNIOR VARSITY SOFTBALL MASONRY BACKSTOP WALL WITH NETTING, REFER TO SITE DETAIL 13L600 AND 5-6L601
(W05)	WALL, 2'-0" WIDE BRICK WALL, REFER TO SITE DETAILS 9L601 AND 4L606

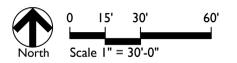
CLARK-PLEASANT COMMUNITY SCHOOL CORP.
WHITELAND COMM. HIGH SCHOOL ADDITION
300 E MAIN ST, WHITELAND, IN 46184

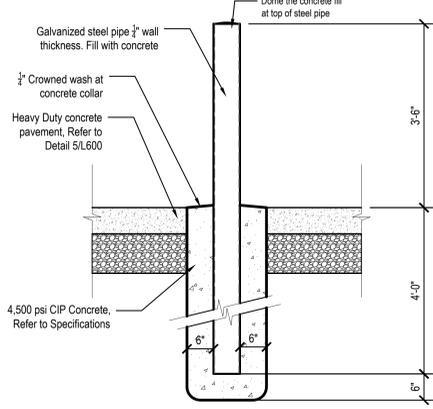
LANCER ASSOCIATES ARCHITECTURE
context DESIGN
9525 Lancer Lane East, Dyer, Indiana, IN 46106
 317-485-6900 | www.context-design.com

L101

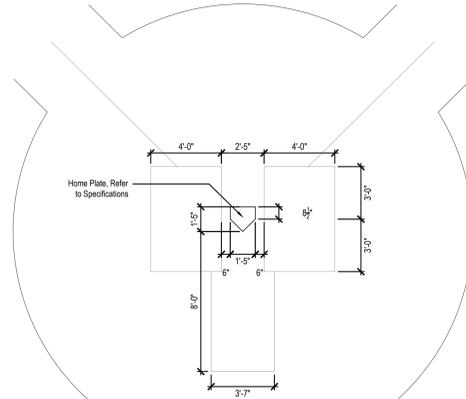
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 DATE: 02-09-2025
 DRAWN BY: MA, CH

SITE MATERIALS PLAN

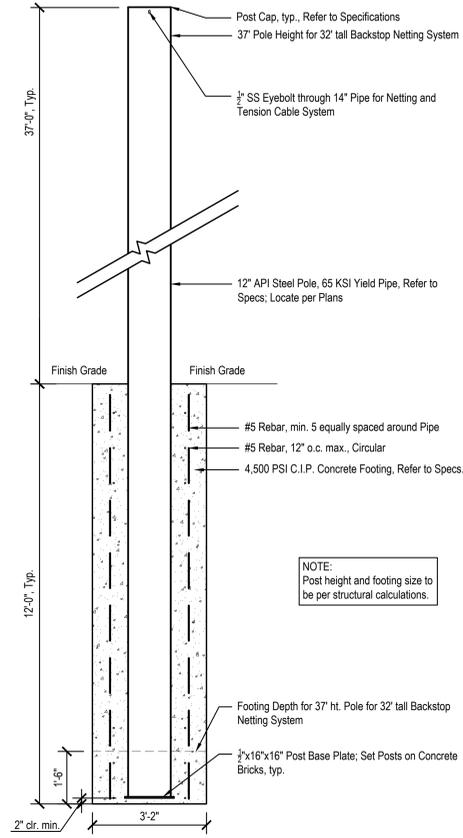




15 STEEL PIPE BOLLARD WITH CONCRETE FILL
Scale: 3/4" = 1'-0"

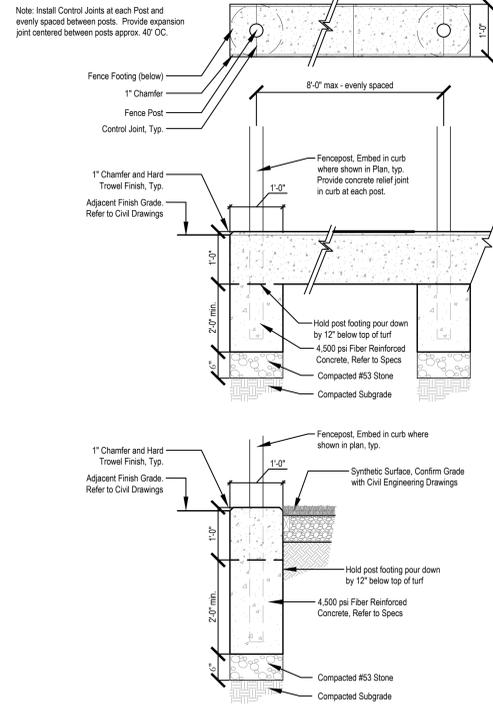


12 BASEBALL BATTERS BOX
Scale: 1/4" = 1'-0"

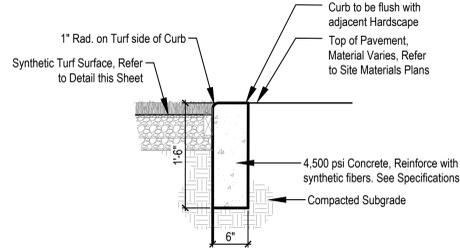


14 BACKSTOP TIE-BACK POST NETTING SYSTEM
Scale: 1/2" = 1'-0"

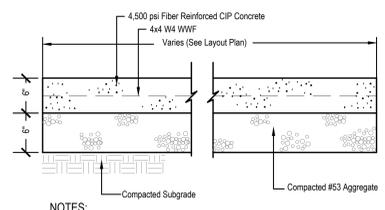
11 BATTER BOX - SOFTBALL
Scale: 1/4" = 1'-0"



10 PERIMETER CURB NAILER WITH FENCING AT SYNTHETIC FIELDS
Scale: 3/4" = 1'-0"

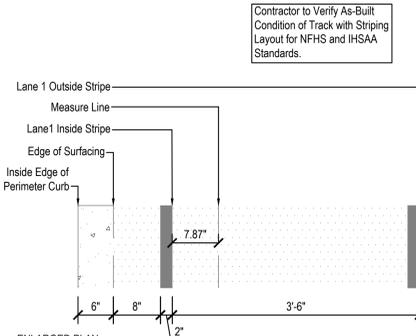


9 FLUSH PERIMETER NAILER CURB
1" = 1'-0"

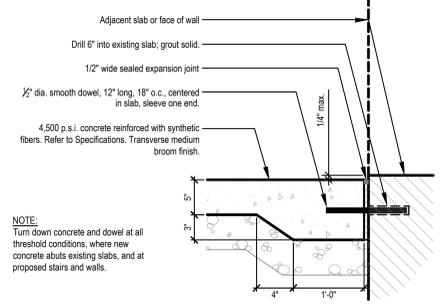


NOTES:
1. Control joints, expansion joints and edges of sidewalks indicated as hand-tooled shall be dressed after each finishing operation.
2. Provide expansion joints at intersection with another sidewalk, between walks and building slabs, and at other points as indicated on the drawings.
3. Refer to plan drawings for locations of control and expansion joints.

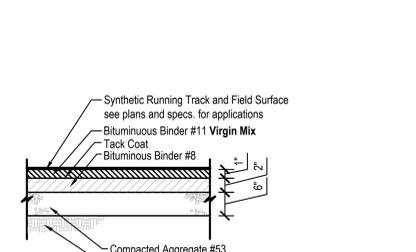
4 HEAVY DUTY CONCRETE
Not to Scale



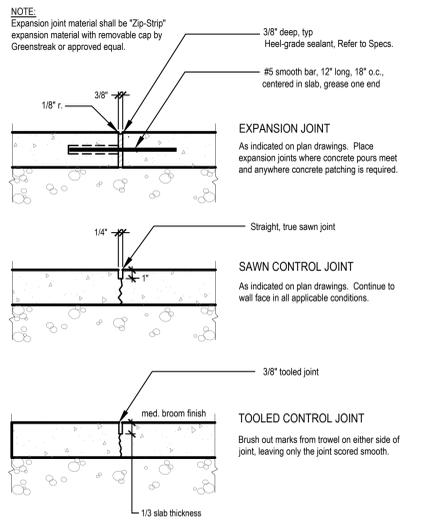
8 PROTOTYPICAL TRACK LAYOUT AND LANE STRIPING
Scale: 1" = 1'-0"



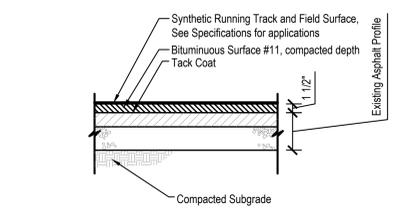
3 DOWELS IN CONCRETE
Scale: 1" = 1'-0"



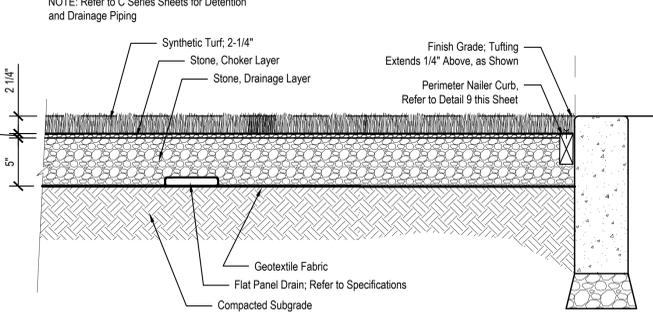
7 TRACK PAVEMENT - ASPHALT BASE
Not to Scale



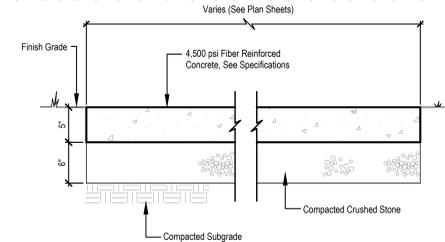
2 CONCRETE JOINTING
Not to Scale



6 TRACK PAVEMENT - MILL & RESURFACE
Not to Scale

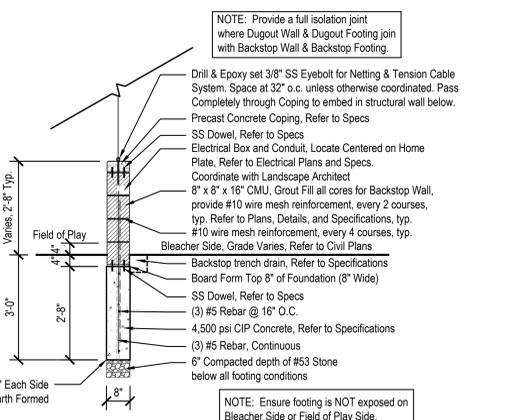


5 SYNTHETIC TURF - TYPICAL SECTION
Scale: 1-1/2" = 1'-0"

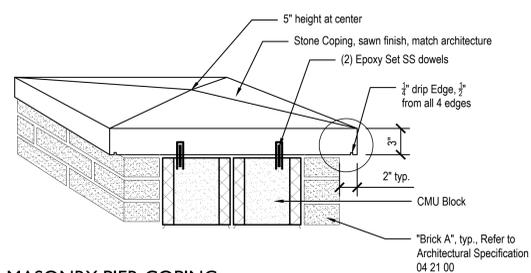
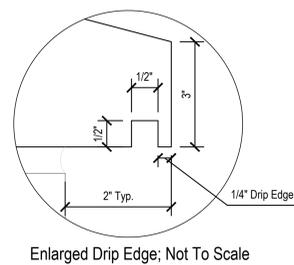
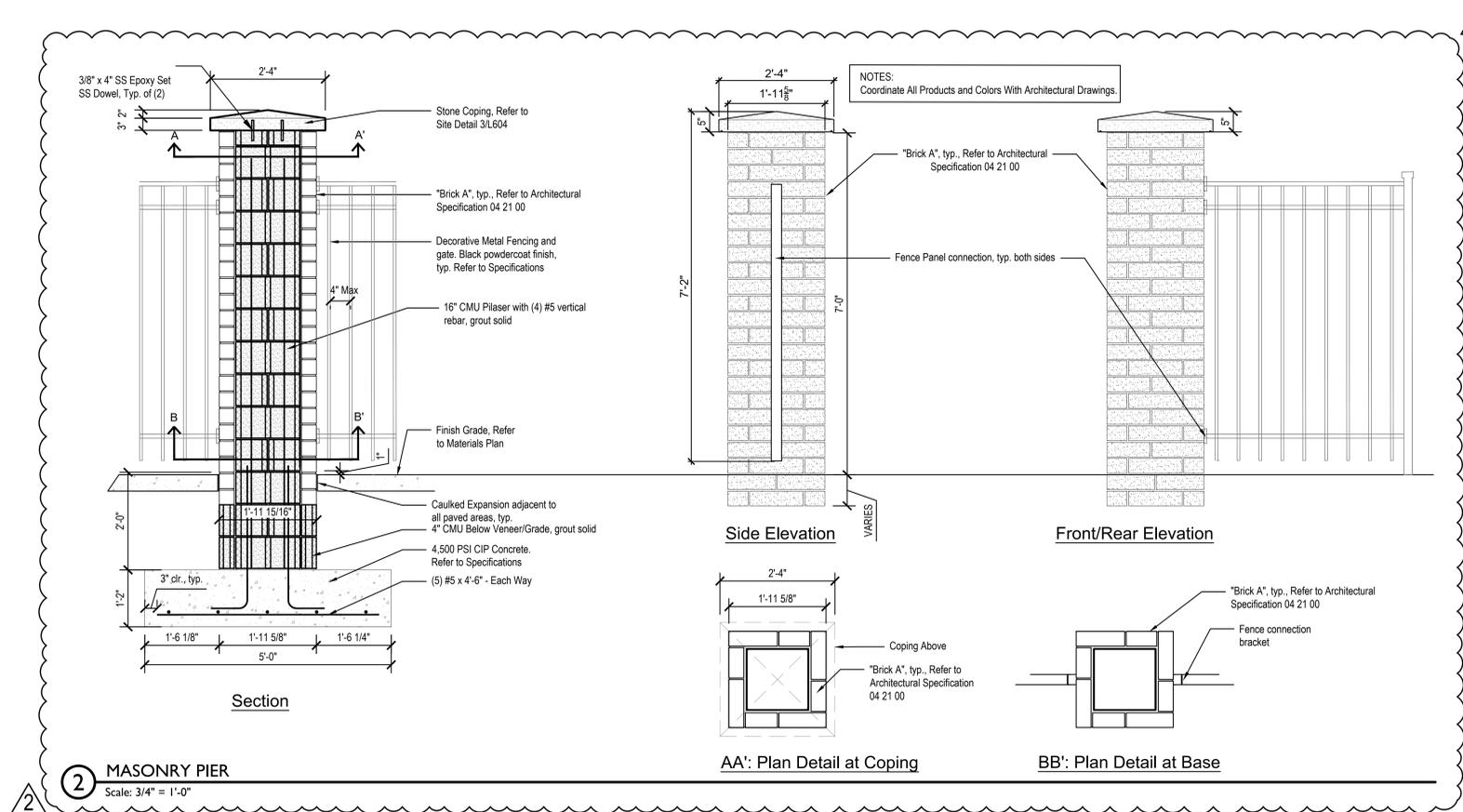


NOTES:
1. Control joints, expansion joints and edges of sidewalks indicated as hand-tooled shall be dressed after each finishing operation.
2. Provide expansion joints at intersection with another sidewalk, between walks and building slabs, and at other points as indicated on the drawings.
3. Refer to plan drawings for locations of control and expansion joints.

1 CONCRETE PAVEMENT
Not to scale

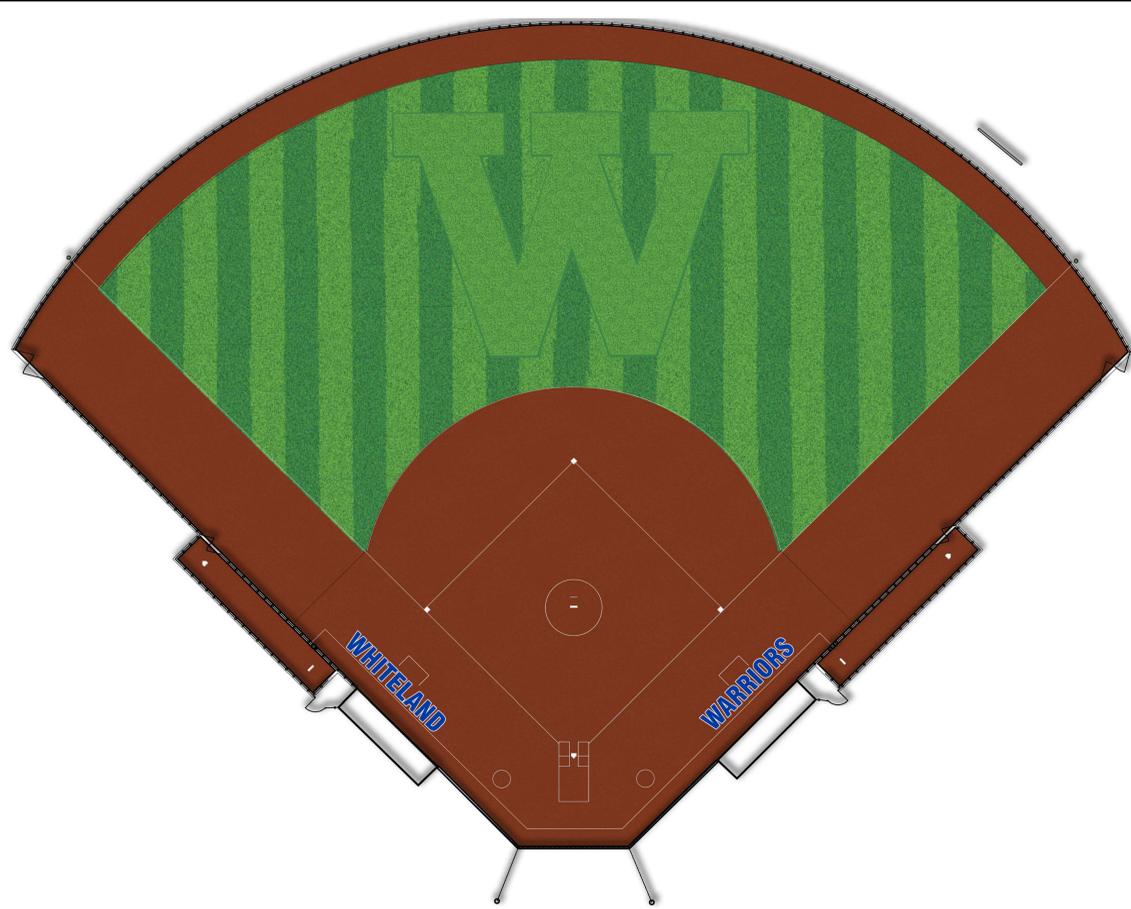


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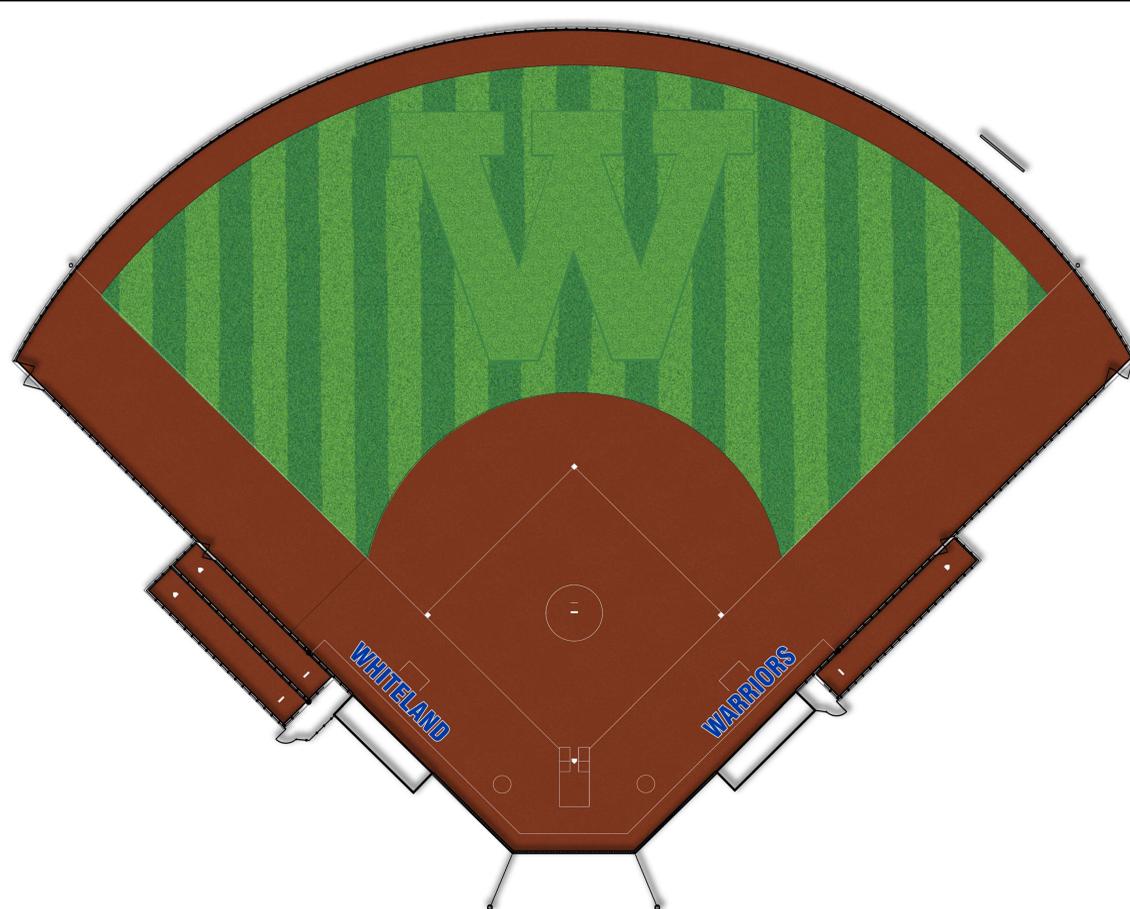


3 MASONRY PIER COPING
Scale: 1 1/2" = 1'-0"

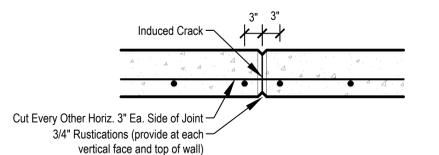




6 JUNIOR VARSITY SOFTBALL SYNTHETIC TURF FIELD MARKING INTENT
Not to scale



2 VARSITY SOFTBALL SYNTHETIC TURF FIELD MARKING INTENT
Not to scale

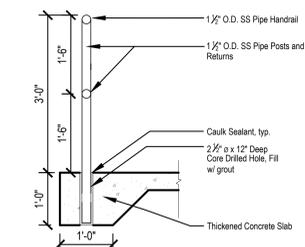


Note:
1. Wall Joints occur every 20'.

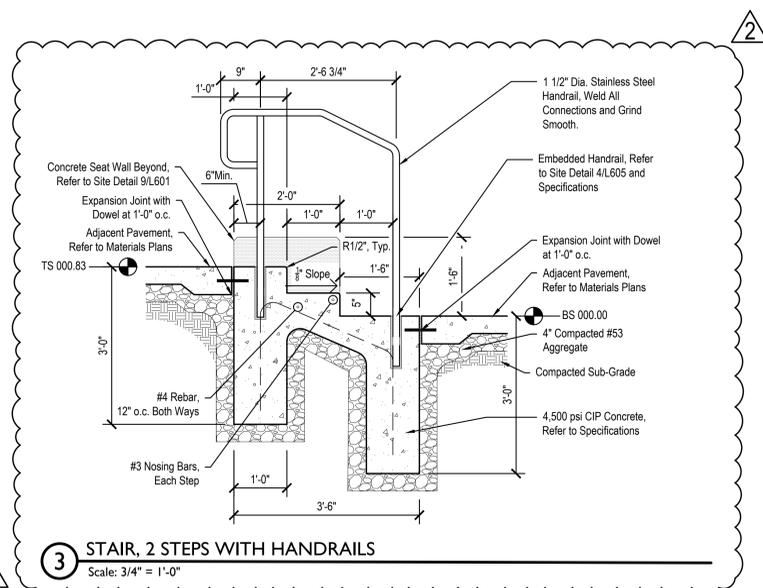
Provide Expansion Joint at angle changes in wall & between pours at nearest joint line shown.

5 SITE WALL CONTROL JOINT DETAIL
Scale: 1"=1'-0"

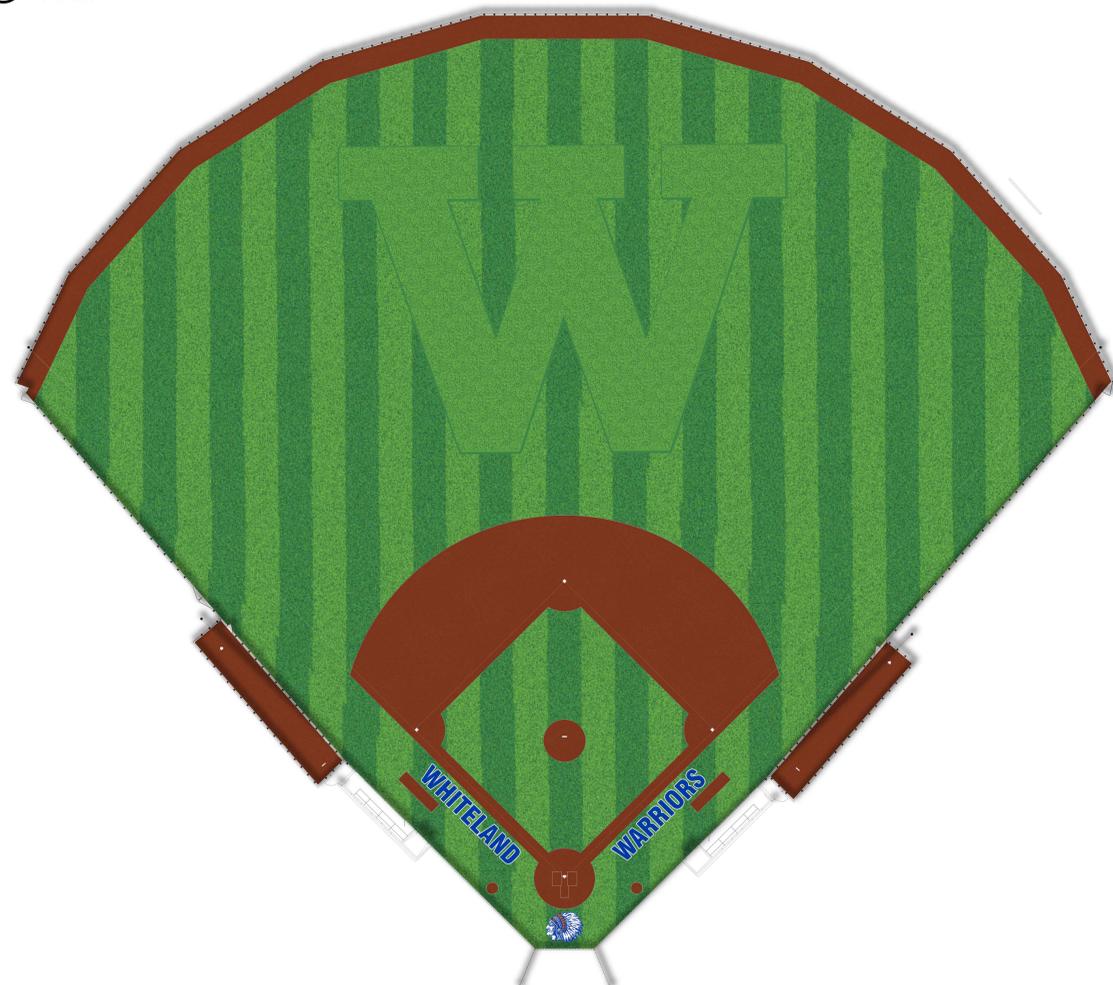
- NOTES:**
1. Maintain handrail height at a constant 36" above walking surface along ramp condition.
 2. Miter cut, weld clean, and grind smooth all visible metal connections. Turn handrail back into posts at 90 degrees and weld connection at end conditions.
 3. Submit shop drawings of all metal components to Landscape Architect for review prior to fabrication.
 4. All steel components shall be cleaned, primed, and painted as per Division 9 Specification - High Performance Coatings.



4 METAL HANDRAIL & EMBEDMENT
Scale: 3/4"=1'-0"



3 STAIR, 2 STEPS WITH HANDRAILS
Scale: 3/4"=1'-0"



1 JUNIOR VARSITY BASEBALL SYNTHETIC TURF FIELD MARKING INTENT
Not to scale



REVISIONS:	#	Date	Desc.
△	1	03/13/2026	Addendum 2

100% CONSTRUCTION DOCUMENTS
 PROJECT: #22130
 DATE: 02-09-2026
 DRAWN BY: KGP

TECHNOLOGY SITE PLAN

T001

GENERAL SITE PLAN NOTES

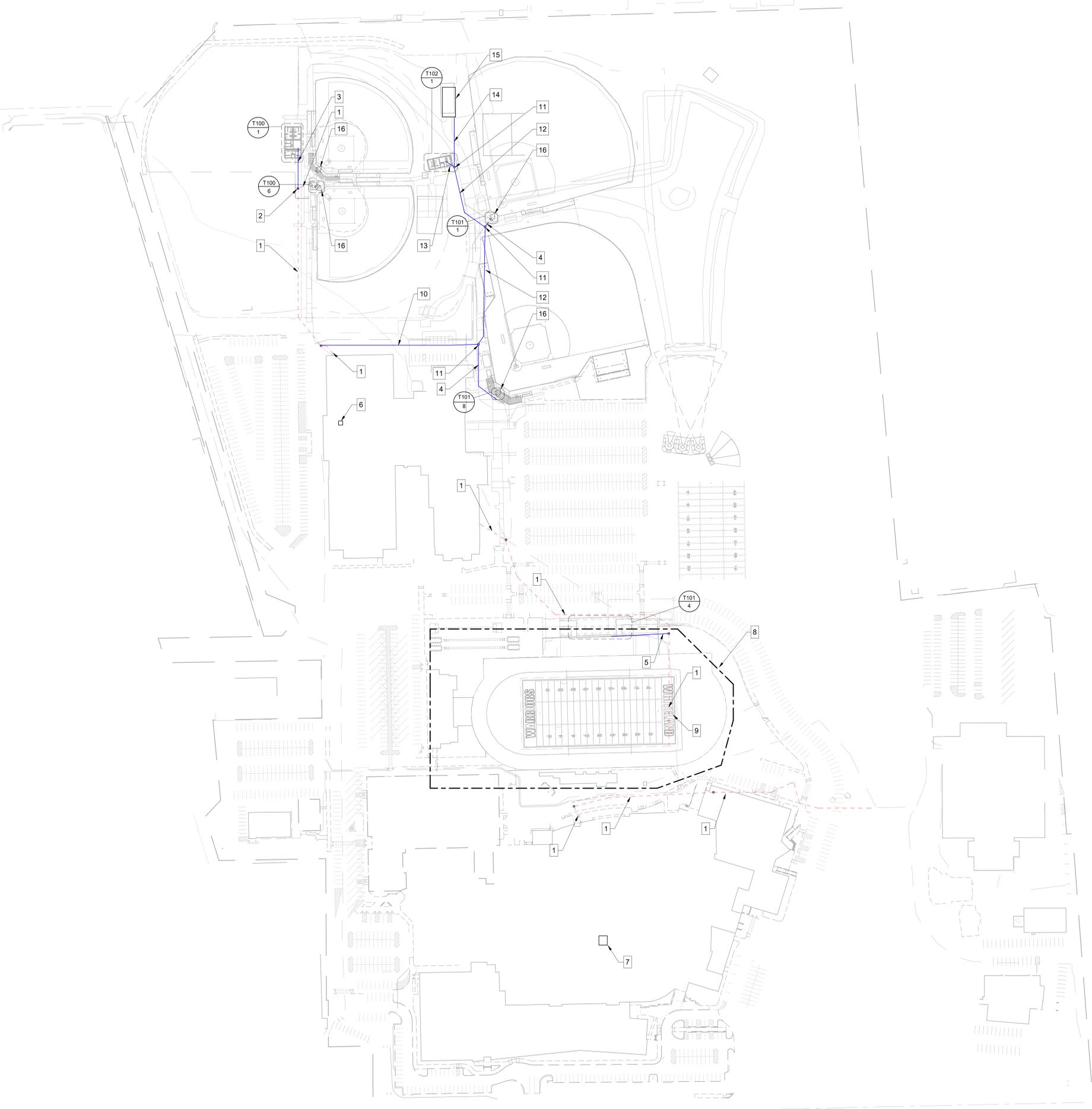
- A CONTRACTOR SHALL FURNISH AND INSTALL ALL CABLING AND PATHWAYS TO ENSURE A COMPLETE AND FUNCTIONAL SYSTEM FOR BACKBONE FIBER OPTIC AND COPPER CABLING.
- B ALL OUTDOOR RATED FIBER OPTIC AND COPPER CABLING SHALL BE FURNISHED AND INSTALLED ACCORDING TO THE DIVISION 27 SPECIFICATIONS.
- C ALL OSP CONDUIT AND PATHWAYS SHALL BE PROVIDED AND INSTALLED ACCORDING TO THE DIVISION 27 SPECIFICATIONS.
- D ALL EXISTING OSP CONDUITS AND CABLING SHALL REMAIN UNLESS OTHERWISE NOTED.
- E CONDUITS AND DUCTBANKS TO BE DEMOLISHED SHALL NOT BE DISTURBED UNTIL ALL EXISTING CABLING AND CIRCUITS ARE RELOCATED TO NEW CONDUITS AND DUCTBANKS.
- F EXISTING CONDUIT AND DUCTBANKS TO BE DEMOLISHED SHALL BE SEALED, CAPPED, AND MADE WATER TIGHT AS TO PREVENT WATER ENTERING BACK INTO THE BUILDING.
- G ALL CONDUIT BENDS SHALL HAVE A MINIMUM BEND RADIUS OF 10 TIMES THE INTERNAL DIAMETER OF THE CONDUIT. THE MINIMUM BEND RADIUS FOR ALL 4" CONDUITS SHALL BE 48".
- H CONTRACTOR SHALL MAINTAIN A MINIMUM 24" SEPARATION FROM THE TELECOM DUCTBANK AND PATHWAY FROM EMI SOURCES. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 36" SEPARATION FROM ALL OTHER UTILITIES.
- I REFER TO CIVIL DRAWINGS FOR ALL FINAL ROUTES AND REQUIREMENTS.

SITE PLAN LEGEND

- - - EXISTING PATHWAY
- NEW PATHWAY
- ▽ ROUGH-IN LOCATION

SHEET NOTES

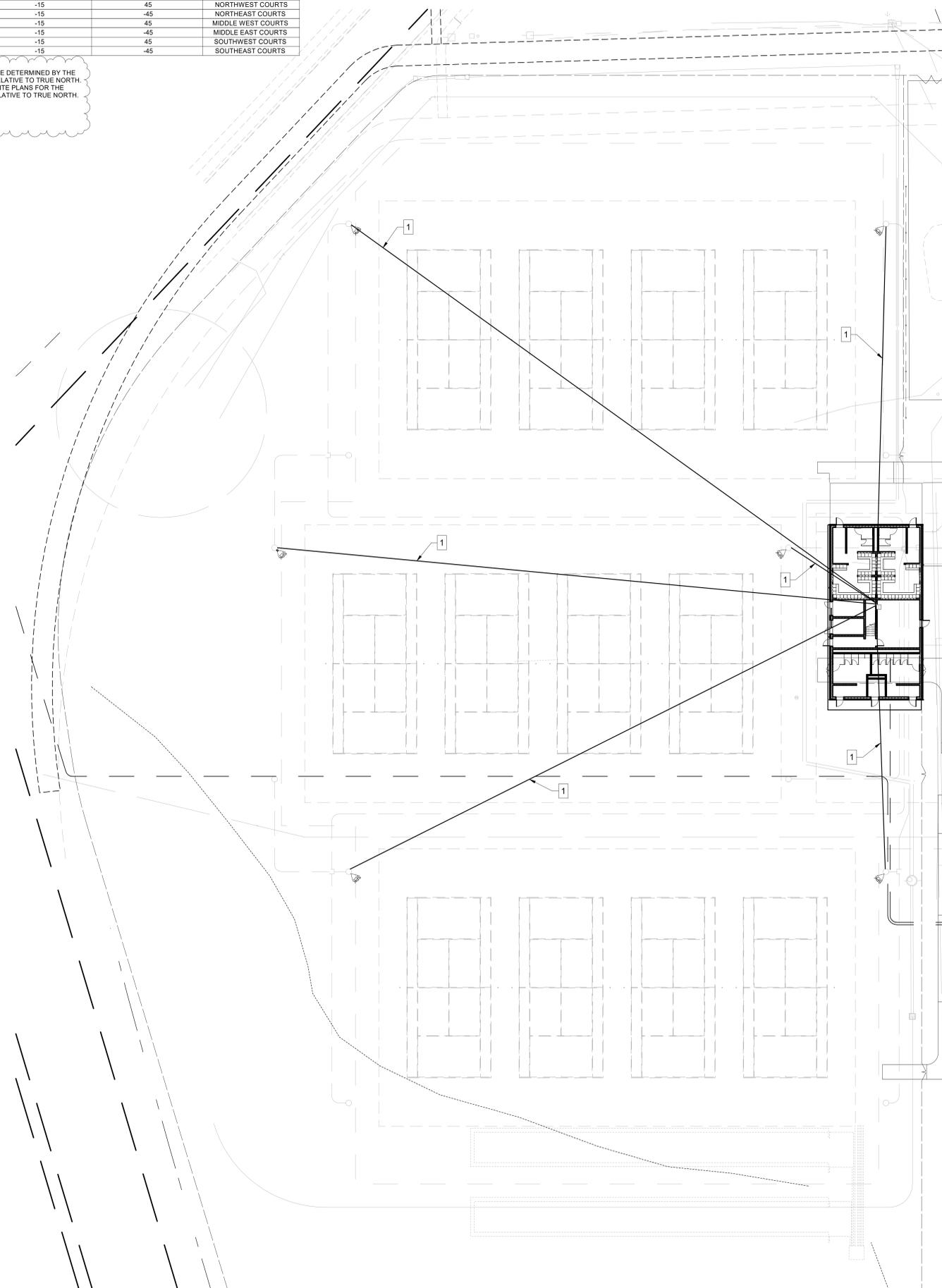
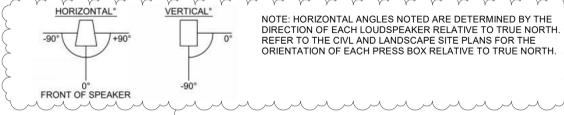
- 1 EXISTING PATHWAY TO REMAIN AND BE MODIFIED AS REQUIRED TO ACCOMMODATE NEW TELECOM CABLING. REFERENCE TELECOM RISER CABLING DIAGRAM ON SHEET T200 FOR ADDITIONAL INFORMATION.
- 2 EXISTING HANDHOLE TO REMAIN AND BE MODIFIED AS REQUIRED TO ACCOMMODATE NEW PATHWAY(S).
- 3 NEW (1) - 2" GRC CONDUIT FROM EXISTING HANDHOLE TO NEW TENNIS BUILDING. CONDUITS SHALL BE ROUTED WITH NEGATIVE SLOPE AWAY FROM BUILDING. REFERENCE SHEET T100 FOR ADDITIONAL INFORMATION.
- 4 NEW (1) - 2" SCH. 40 CONDUIT FROM NEW HANDHOLE TO EACH BASEBALL PRESS BOX. CONDUIT SHALL BE ROUTED UP PRESS BOX STRUCTURE AND PENETRATE UNDERSIDE OF BUILDING AT LOCATION OF TELECOM RACK. PROVIDE PROPERLY SIZED LB FITTING TO ENTER BUILDING.
- 5 NEW (1) - 2" SCH. 40 CONDUIT FROM EXISTING HANDHOLE TO NEW FOOTBALL PRESS BOX. CONDUIT SHALL BE ROUTED UP PRESS BOX STRUCTURE AND PENETRATE UNDERSIDE OF BUILDING AT LOCATION OF TELECOM RACK. PROVIDE PROPERLY SIZED LB FITTING TO ENTER BUILDING.
- 6 APPROXIMATE LOCATION OF EXISTING NORTH BUILDING MDF.
- 7 APPROXIMATE LOCATION OF EXISTING HIGH SCHOOL MDF D103.
- 8 CONTRACTOR SHALL REMOVE ABANDONED SOUND SYSTEM COMPONENTS FOR EXISTING FOOTBALL FIELD. ALL COMPONENTS TIED INTO THE NEW VIDEO BOARD SOUND SYSTEM SHALL REMAIN. EXISTING TELECOM RACK AND HEADEND RACK SERVING VIDEO BOARD AND MISCELLANEOUS PERIPHERAL DEVICES SHALL BE REMOVED AND REINSTALLED WITHIN NEW PRESS BOX. CONTRACTOR SHALL BE RESPONSIBLE FOR EXTENDING EXISTING CABLING AS REQUIRED TO RECONNECT DEVICES. CONTRACTOR SHALL SCHEDULE MEETING WITH OWNER TO WALK SITE AND VERIFY WHICH SPEAKERS AND COMPONENTS SHALL BE REMOVED PRIOR TO COMMENCEMENT OF WORK. TURN OVER ALL EQUIPMENT TO OWNER ONCE REMOVED.
- 9 EXISTING HANDHOLE RUNNING UNDER FOOTBALL FIELD / TRACK MAY HAVE BLOCKAGE OR PORTIONS WHERE PULLING CABLING MAY BE DIFFICULT DUE TO A POTENTIAL CRUSHED PORTION OF THE PATHWAY. IF NEW CABLING CANNOT BE PULLED THROUGH EXISTING CONDUIT NOTIFY CONSTRUCTION MANAGER IMMEDIATELY AND SUBMIT FORMAL RFI FOR TRACKING.
- 10 NEW (2) - 3" SCH. 40 CONDUITS FROM EXISTING HANDHOLE TO NEW HANDHOLE.
- 11 NEW HANDHOLE SIZED 24" x 36" x 24" AT A MINIMUM.
- 12 NEW (2) - 3" SCH. 40 CONDUITS.
- 13 NEW (1) - 2" SCH. 40 CONDUIT FROM HANDHOLE TO BUILDING.
- 14 NEW (1) - 2" SCH. 40 CONDUIT FROM NEW HANDHOLE TO EXISTING STORAGE BUILDING. CONDUIT SHALL BE ROUTED UP SIDE OF BUILDING AND PENETRATE BUILDING AT LOCATION OF TELECOM RACK. PROVIDE PROPERLY SIZED LB FITTING TO ENTER BUILDING.
- 15 REFERENCE SHEET T201 FOR ADDITIONAL INFORMATION. CONTRACTOR SHALL PROVIDE AND INSTALL NEW WALL MOUNTED TELECOM EQUIPMENT CABINET WITHIN EXISTING STORAGE BUILDING. SITE CONDUIT SHALL TERMINATE WITHIN TELECOM EQUIPMENT CABINET. VERIFY FINAL LOCATION OF CABINET WITHIN STORAGE BUILDING WITH OWNER PRIOR TO CONDUIT ROUTING.
- 16 ROUGH-IN LOCATION. REFERENCE DETAIL #3 ON SHEET T301 FOR ADDITIONAL INFORMATION.



2 TECHNOLOGY SITE PLAN
 1" = 100'-0"

LOUDSPEAKER AIMING TABLE

LIGHT POLE ID	LOUDSPEAKER TYPE	APPROX. MOUNTING HEIGHT (FEET)	VERTICAL ANGLE (DEG.)	HORIZONTAL ANGLE (DEG.)	AREA COVERED
T1	1	30	-15	45	NORTHWEST COURTS
T2	1	30	-15	-45	NORTHEAST COURTS
T5	1	30	-15	45	MIDDLE WEST COURTS
T6	1	30	-15	-45	MIDDLE EAST COURTS
T9	1	30	-15	45	SOUTHWEST COURTS
T10	1	30	-15	-45	SOUTHEAST COURTS



- GENERAL SITE PLAN NOTES**
- CONTRACTOR SHALL FURNISH AND INSTALL ALL CABLING AND PATHWAYS TO ENSURE A COMPLETE AND FUNCTIONAL SYSTEM FOR BACKBONE FIBER OPTIC AND COPPER CABLING.
 - ALL OUTDOOR RATED FIBER OPTIC AND COPPER CABLING SHALL BE FURNISHED AND INSTALLED ACCORDING TO THE DIVISION 27 SPECIFICATIONS.
 - ALL OSP CONDUIT AND PATHWAYS SHALL BE PROVIDED AND INSTALLED ACCORDING TO THE DIVISION 27 SPECIFICATIONS.
 - ALL EXISTING OSP CONDUITS AND CABLING SHALL REMAIN UNLESS OTHERWISE NOTED.
 - CONDUITS AND DUCTBANKS TO BE DEMOLISHED SHALL NOT BE DISTURBED UNTIL ALL EXISTING CABLING AND CIRCUITS ARE RELOCATED TO NEW CONDUITS AND DUCTBANKS.
 - EXISTING CONDUIT AND DUCTBANKS TO BE DEMOLISHED SHALL BE SEALED, CAPPED, AND MADE WATER TIGHT AS TO PREVENT WATER ENTERING BACK INTO THE BUILDING.
 - ALL CONDUIT BENDS SHALL HAVE A MINIMUM BEND RADIUS OF 10 TIMES THE INTERNAL DIAMETER OF THE CONDUIT. THE MINIMUM BEND RADIUS FOR ALL 4" CONDUITS SHALL BE 48".
 - CONTRACTOR SHALL MAINTAIN A MINIMUM 24" SEPARATION FROM THE TELECOM DUCTBANK AND PATHWAY FROM EMI SOURCES. CONTRACTOR SHALL MAINTAIN A MINIMUM OF 36" SEPARATION FROM ALL OTHER UTILITIES.
 - REFER TO CIVIL DRAWINGS FOR ALL FINAL ROUTES AND REQUIREMENTS.

- TENNIS LOUDSPEAKER SITE PLAN LEGEND**
- POLE MOUNTED SPEAKER LOCATION

- SHEET NOTES**
- (1) - 2" UNDERGROUND SCH 40, CONDUIT ROUTED FROM LIGHT POLE TO TENNIS BUILDING WALL MOUNTED EQUIPMENT ENCLOSURE FOR LOUDSPEAKER CABLING. CONTRACTOR SHALL COORDINATE FINAL PATHWAY ROUTE WITH CIVIL AND LANDSCAPE CONTRACTOR PRIOR TO INSTALLATION. REFER TO CIVIL, ELECTRICAL, AND LANDSCAPE DRAWINGS FOR MORE INFORMATION.

LANCER ASSOCIATES ARCHITECTURE
 427 S. COLLEGE AVE
 INDIANAPOLIS, IN 46203

DESIGN 27 TECHNOLOGY & ACoustics
 1650 E. 49TH ST.
 INDIANAPOLIS, IN 46205
 317.536.8000
 DESIGN27.COM

CLARK-PLEASANT COMMUNITY SCHOOL CORP.
WHITELAND COMM. HIGH SCHOOL PHASE 5
 300 E MAIN ST, WHITELAND, IN 46184

Bicsi
 REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
 Michael Furnish
 BICSI ID # 396848
 EXPIRES 12-31-27

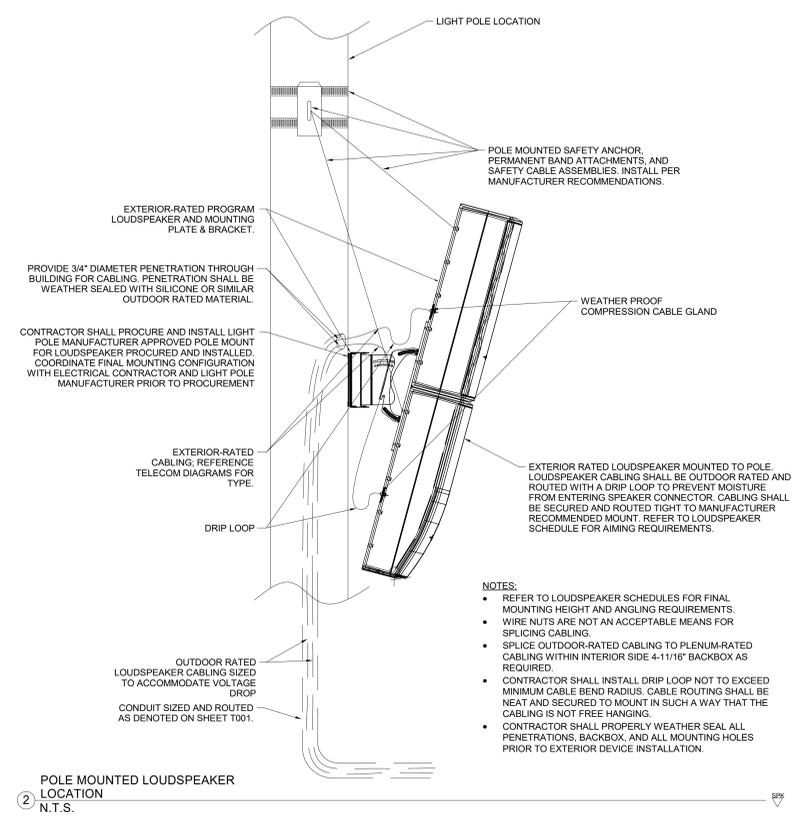
REVISIONS:

#	Date	Disc.
1	10/13/2026	Addendum 2

100% CONSTRUCTION DOCUMENTS
 PROJECT: #22130
 DATE: 02-09-2026
 DRAWN BY: MRF

TENNIS LOUDSPEAKER SITE PLAN

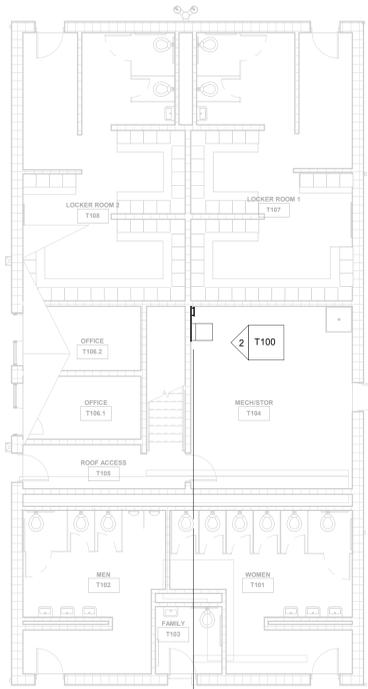
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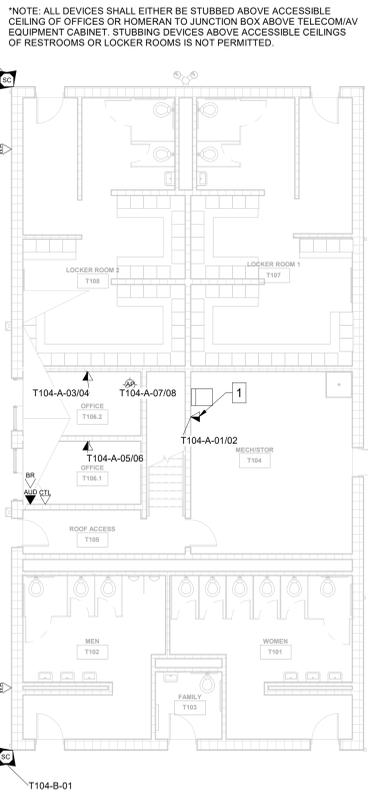
POLE MOUNTED LOUDSPEAKER LOCATION
 N.T.S.

- NOTES:**
- REFER TO LOUDSPEAKER SCHEDULES FOR FINAL MOUNTING HEIGHT AND ANGLING REQUIREMENTS.
 - WIRE NUTS ARE NOT AN ACCEPTABLE MEANS FOR SPLICING CABLING.
 - SPLICE OUTDOOR-RATED CABLING TO PLENUM-RATED CABLING WITHIN INTERIOR SIDE 4-11/16" BACKBOX AS REQUIRED.
 - CONTRACTOR SHALL INSTALL DRIP LOOP NOT TO EXCEED MINIMUM CABLE BEND RADIUS. CABLE ROUTING SHALL BE NEAT AND SECURED TO MOUNT IN SUCH A WAY THAT THE CABLING IS NOT FREE HANGING.
 - CONTRACTOR SHALL PROPERLY WEATHER SEAL ALL PENETRATIONS, BACKBOX, AND ALL MOUNTING HOLES PRIOR TO EXTERIOR DEVICE INSTALLATION.

TENNIS LOUDSPEAKER SITE PLAN
 3/164" = 1'-0"

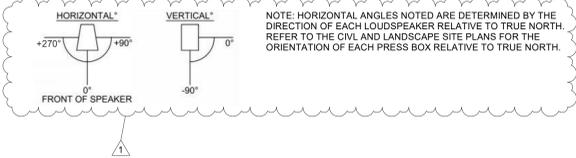


1 FIRST FLOOR TENNIS BUILDING DISTRIBUTION PLAN
1/8" = 1'-0"

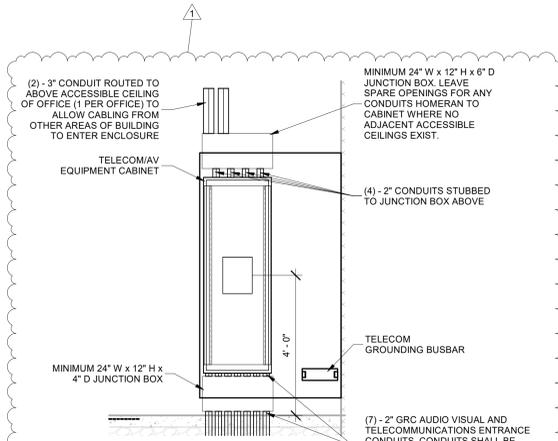


3 FIRST FLOOR TENNIS BUILDING TECHNOLOGY PLAN
1/8" = 1'-0"

LOUDSPEAKER TYPE	APPROX. MOUNTING HEIGHT (FEET)	VERTICAL ANGLE (DEG.)	HORIZONTAL ANGLE (DEG.)	AREA COVERED
2	18'6"	-20	0	JV BLEACHERS
2	18'6"	-15	90	JV DUGOUT
2	18'6"	-20	120	VARSITY BLEACHERS
3	18'6"	-10	180	VARSITY BLEACHERS



NOTE: HORIZONTAL ANGLES NOTED ARE DETERMINED BY THE DIRECTION OF EACH LOUDSPEAKER RELATIVE TO TRUE NORTH. REFER TO THE CIVIL AND LANDSCAPE SITE PLANS FOR THE ORIENTATION OF EACH PRESS BOX RELATIVE TO TRUE NORTH.

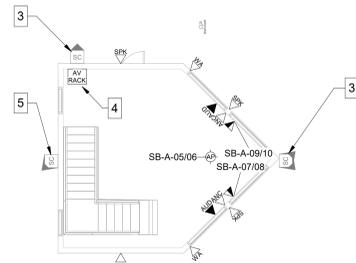


2 TENNIS BUILDING RACK ELEVATION
1/2" = 1'-0"

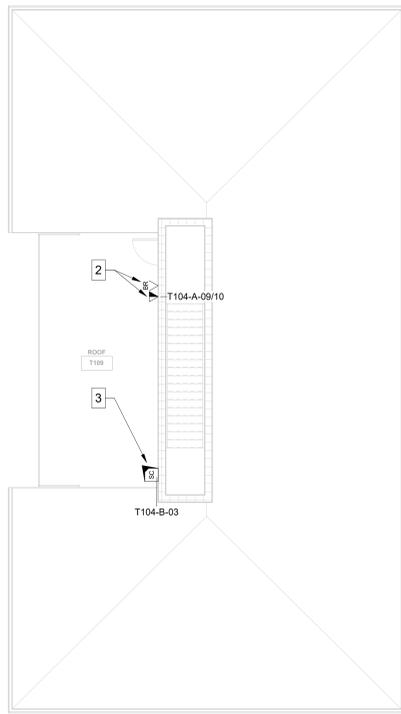
5 FIRST FLOOR JV / VARSITY SOFTBALL PRESS BOX PLAN
1/8" = 1'-0"

ROOM NUMBER	TELECOM ROOM	DATA PORTS	LABEL	COMMENTS
EXT	T104	1	T104-B-01	REFER TO SECURITY CAMERA SCHEDULE
EXT	T104	1	T104-B-02	REFER TO SECURITY CAMERA SCHEDULE
T104	T104	2	T104-A-01/02	DATA LOCATION
T106	T104	2	T104-A-03/04	DATA LOCATION
T106	T104	2	T104-A-05/06	DATA LOCATION
T108	T104	2	T104-A-07/08	WIRELESS ACCESS POINT - CEILING MOUNTED
T109	T104	2	T104-A-09/10	DATA LOCATION
T109	T104	1	T104-B-03	REFER TO SECURITY CAMERA SCHEDULE
Grand total		13		

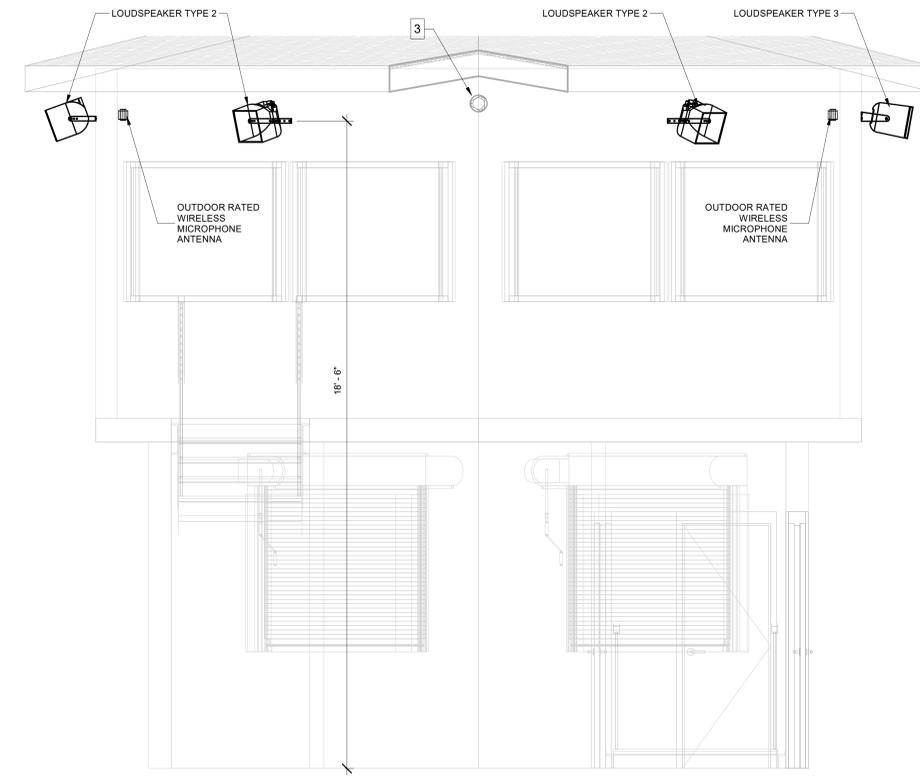
ROOM NUMBER	TELECOM ROOM	DATA PORTS	LABEL	COMMENTS
EXT	SOFTBALL PRESS BOX	2	SB-A-01/02	WIRELESS MICROPHONE ANTENNA LOCATION
EXT	SOFTBALL PRESS BOX	2	SB-A-03/04	WIRELESS MICROPHONE ANTENNA LOCATION
EXT	SOFTBALL PRESS BOX	1	SB-B-01	REFER TO SECURITY CAMERA SCHEDULE
EXT	SOFTBALL PRESS BOX	1	SB-B-02	REFER TO SECURITY CAMERA SCHEDULE
EXT	SOFTBALL PRESS BOX	1	SB-B-03	REFER TO SECURITY CAMERA SCHEDULE
S101	SOFTBALL PRESS BOX	2	SB-A-05/06	WIRELESS ACCESS POINT - CEILING MOUNTED
S101	SOFTBALL PRESS BOX	2	SB-A-07/08	DATA LOCATION
S101	SOFTBALL PRESS BOX	2	SB-A-09/10	DATA LOCATION
Grand total		13		



6 SECOND FLOOR JV / VARSITY SOFTBALL PRESS BOX PLAN
1/8" = 1'-0"



4 SECOND FLOOR TENNIS BUILDING TECHNOLOGY PLAN
1/8" = 1'-0"



7 JV / VARSITY SOFTBALL PRESS BOX ELEVATION - FRONT
1/2" = 1'-0"

- ### GENERAL PATHWAYS NOTES
- ALL CABLING SHALL BE TERMINATED IN THE ER/TR NOTED IN THE TELECOM SCHEDULES.
 - CONTRACTOR SHALL SUPPLY ALL CONDUIT, BOXES, AND CABLE TRAY AS REQUIRED TO ENSURE ALL TRANSMISSION MEDIA IS FULLY SUPPORTED FROM ALL DEVICES LOCATIONS TO THE POINT OF TERMINATION.
 - ALL TELECOM PATHWAY SYSTEMS SHALL BE INDEPENDENTLY SUPPORTED FROM AND ATTACHED TO THE BUILDING STRUCTURE.
 - ALL TELECOM PATHWAY SYSTEMS SHALL BE COMPLETELY AND PROPERLY LABELED AS REQUIRED IN REFERENCED STANDARDS.
 - CONDUIT SYSTEMS SHALL BE PROVIDED FOR ALL PATHWAYS IN INACCESSIBLE CEILING SPACES AND WHERE EXPOSED TO PUBLIC VIEW. ALL CONDUIT SYSTEMS THROUGHOUT THE BUILDING SHALL INCLUDE PROPERLY SIZED SLEEVED PENETRATIONS WITH BUSHINGS THROUGH ALL BARRIERS.
 - ALL TELECOM OUTLET BOXES SHALL BE A MINIMUM 4-1/16" SQUARE BOX NO LESS THAN 2-1/8" DEEP WITH A MINIMUM 1-1/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING UNLESS NOTED OTHERWISE WITHIN THE T-SERIES DRAWINGS.
 - CORRIDOR CABLE TRAY SHALL BE PROVIDED AS REQUIRED BY THE CONTRACT DRAWINGS. REFER TO DIVISION 27 SPECIFICATIONS FOR ADDITIONAL PRODUCT DETAILS AND REQUIREMENTS.
 - CONTRACTOR SHALL NOT EXCEED 40% FILL RATIO WITHIN ANY CONDUIT MEANT FOR TELECOMMUNICATIONS CABLING.
 - CONTRACTOR SHALL CALCULATE FILL RATIOS BASED ON ACTUAL CATEGORY 6 CABLING USED. TYPICAL FILL RATIOS FOR CATEGORY 6 CABLE ARE SHOWN HERE FOR REFERENCE PURPOSES ONLY:
1" EMT = 6 CABLES;
1-1/4" EMT = 13 CABLES;
2" EMT = 35 CABLES;
3" EMT = 90 CABLES;
4" EMT = 150 CABLES.
 - CONDUIT RUNS SHALL NOT EXCEED 100 FEET WITHOUT A PULLING POINT AND SHALL NOT INCLUDE MORE THAN TWO 90° BENDS BETWEEN PULLING POINTS. IF THE PATH OF THE CONDUIT RUN REQUIRES BENDS EXCEEDING A TOTAL OF 180°, INSTALLATION OF AN APPROPRIATELY SIZED JUNCTION BOX IS REQUIRED.
 - CONTRACTOR SHALL PROVIDE PROPERLY RATED FIRE STOP SYSTEMS FOR ALL CONDUIT AND/OR CABLE TRAY ENTERING THE TELECOMMUNICATIONS ROOMS. EACH CONTRACTOR IS RESPONSIBLE FOR SEALING PENETRATIONS AFTER EACH SCOPE OF WORK IS COMPLETED.
 - CONTRACTOR SHALL PROVIDE FIRE STOPS TO SEAL ALL PENETRATIONS THROUGH FLOORS, WALLS, STAIRS, AND ELEVATORS AS NECESSARY TO MEET CODE REQUIREMENTS. FIRE STOPS SHALL BE PROVIDED IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS.

- ### GENERAL HORIZONTAL CABLING NOTES
- MINIMUM CATEGORY 6 (6A FOR WAPS) COMPLIANT 4-PAIR UNSHIELDED TWISTED PAIR (UTP) ALL HORIZONTAL CABLING MUST BE FLENUM RATED.
 - CONTRACTOR SHALL PROVIDE A DOCUMENTED MANUFACTURER CERTIFIED SOLUTION INCLUDING THE MINIMUM PERFORMANCE AND APPLICATIONS WARRANTY.
 - PAINTING OF THE STRUCTURED CABLING WILL VOID THE WARRANTY. ENSURE PROPER COORDINATION WITH PAINTING CONTRACTOR SO THAT ALL STRUCTURED CABLING IS PROTECTED PRIOR TO ANY PAINTING.
 - PROVIDE A MINIMUM 10 FOOT MAINTENANCE LOOP ON EACH HORIZONTAL CABLING RUN. MAINTENANCE LOOPS SHALL BE STORED ABOVE ACCESSIBLE CEILING, IN CABLE TRAY, AND IN TELECOMMUNICATION ROOM CABLE TRAY. CABLING ABOVE CEILING SHALL BE SUSPENDED FROM APPROPRIATE SUPPORTS AND SHALL NOT TOUCH THE CEILING.
 - ALL PIN/PAIR ASSIGNMENTS SHALL BE T568B.
 - REFER TO SPECIFICATION SECTION 27.15.13 FOR CABLE JACKET COLOR REQUIREMENTS.
 - LABELING SHALL BE COMPLETED AS DEFINED IN THE CONTRACT DOCUMENTS AND SHALL BE COORDINATED WITH THE OWNER.
 - PROVIDE ALL TELECOMMUNICATION OUTLETS AS SHOWN ON THE DRAWINGS AND AS REQUIRED TO PROVIDE CONNECTIONS FOR EACH DEVICE SHOWN ON THE DRAWINGS.
 - ALL TESTING OF HORIZONTAL CABLING SHALL BE COMPLETED AS DIRECTED BY THE PROJECT SPECIFICATIONS. ALL CABLING MUST BE TESTED AND CERTIFIED TO THE APPLICABLE STANDARDS.

- ### TECHNOLOGY LEGEND
- ▼ DATA LOCATION
 - ⊕ WIRELESS ACCESS POINT - CEILING MOUNTED
 - ⊕ WIRELESS ACCESS POINT - EXTERIOR WALL MOUNTED
 - ⊕ AV CONTROL LOCATION
 - ⊕ ANNOUNCER CONNECTION LOCATION
 - ⊕ AUDIO CONNECTION LOCATION
 - ⊕ WIRELESS MICROPHONE ANTENNA LOCATION
 - ⊕ LOUDSPEAKER LOCATION
 - ⊕ SECURITY CAMERA - WALL MOUNTED
 - ⊕ BLUETOOTH RECEIVER LOCATION

- ### SHEET NOTES
- DATA LOCATION TO SERVE BAS CONTROLS. VERIFY FINAL LOCATION WITH CONSTRUCTION MANAGER PRIOR TO ROUGH-IN.
 - DEVICE SHALL BE PROVIDED WITH A NEMA RATED WEATHERPROOF FLIP-UP COVER.
 - REFER TO SECURITY CAMERA SCHEDULE ON SHEET T002 FOR SECURITY CAMERA INFORMATION.
 - EXTEND EXISTING TELECOM DEMARC WITHIN BUILDING TO NEW TECHNOLOGY RACK LOCATION.
 - EXISTING PIZ HOME VIEW TO BE RECONFIGURED. CONFIRM FIELD-OF-VIEW WITH THE OWNER.

LANCER ASSOCIATES ARCHITECTURE
427 S. COLLEGE AVE
INDIANAPOLIS, IN 46203

DESIGN 27 TECHNOLOGY ASSOCIATES
1630 E. 49TH ST.
INDIANAPOLIS, IN 46205
317.536.8000
DESIGN27.COM

CLARK-PLEASANT COMMUNITY SCHOOL CORP.
WHITELAND COMM. HIGH SCHOOL PHASE 5
300 E MAIN ST, WHITELAND, IN 46184

REGISTERED COMMUNICATIONS DISTRIBUTION DESIGNER
Bicsi
Michael Furnish
BICSI ID # 386848
EXPIRES 12-31-27

REVISIONS:	#	Date	Desc.
	1	03/13/2026	Addendum 2

100% CONSTRUCTION DOCUMENTS

PROJECT: #22130
DATE: 02-09-2026
DRAWN BY: MRF

TENNIS & SOFTBALL FLOOR PLANS

T100

VARSITY BASEBALL TELECOM SCHEDULE				
ROOM NUMBER	TELECOM ROOM	DATA PORTS	LABEL	COMMENTS
EXT	VARSITY BASEBALL	1	VB-B-01	REFER TO SECURITY CAMERA SCHEDULE
PRESS BOX	VARSITY BASEBALL	2	VB-A-01/02	WIRELESS ACCESS POINT - CEILING MOUNTED
PRESS BOX	VARSITY BASEBALL	2	VB-A-03/04	DATA LOCATION
PRESS BOX	VARSITY BASEBALL	2	VB-A-05/06	DATA LOCATION
PRESS BOX	VARSITY BASEBALL	2	VB-A-07/08	DATA LOCATION
PRESS BOX	VARSITY BASEBALL	2	VB-A-09/10	DATA LOCATION
Grand total		11		

JV BASEBALL TELECOM SCHEDULE				
ROOM NUMBER	TELECOM ROOM	DATA PORTS	LABEL	COMMENTS
EXT	JV BASEBALL	1	JV-B-01	REFER TO SECURITY CAMERA SCHEDULE
PRESS BOX	JV BASEBALL	2	JV-A-01/02	WIRELESS ACCESS POINT - CEILING MOUNTED
PRESS BOX	JV BASEBALL	2	JV-A-03/04	DATA LOCATION
PRESS BOX	JV BASEBALL	2	JV-A-05/06	DATA LOCATION
PRESS BOX	JV BASEBALL	2	JV-A-07/08	DATA LOCATION
PRESS BOX	JV BASEBALL	2	JV-A-09/10	DATA LOCATION
Grand total		12		

FOOTBALL TELECOM SCHEDULE				
ROOM NUMBER	TELECOM ROOM	DATA PORTS	LABEL	COMMENTS
EXT	FOOTBALL PRESS BOX	2	FB-A-01/02	WIRELESS ACCESS POINT - WALL MOUNTED
EXT	FOOTBALL PRESS BOX	2	FB-A-03/04	WIRELESS ACCESS POINT - WALL MOUNTED
EXT	FOOTBALL PRESS BOX	1	FB-A-29	REFER TO SECURITY CAMERA SCHEDULE
EXT	FOOTBALL PRESS BOX	1	FB-A-30	REFER TO SECURITY CAMERA SCHEDULE
EXT	FOOTBALL PRESS BOX	1	FB-A-31	REFER TO SECURITY CAMERA SCHEDULE
PRESS BOX	FOOTBALL PRESS BOX	2	FB-A-05/06	DATA LOCATION
PRESS BOX	FOOTBALL PRESS BOX	2	FB-A-07/08	DATA LOCATION
PRESS BOX	FOOTBALL PRESS BOX	2	FB-A-09/10	DATA LOCATION
PRESS BOX	FOOTBALL PRESS BOX	2	FB-A-11/12	DATA LOCATION
PRESS BOX	FOOTBALL PRESS BOX	2	FB-A-13/14	DATA LOCATION
PRESS BOX	FOOTBALL PRESS BOX	2	FB-A-15/16	DATA LOCATION
PRESS BOX	FOOTBALL PRESS BOX	2	FB-A-17/18	DATA LOCATION
PRESS BOX	FOOTBALL PRESS BOX	2	FB-A-19/20	DATA LOCATION
PRESS BOX	FOOTBALL PRESS BOX	2	FB-A-21/22	WIRELESS ACCESS POINT - CEILING MOUNTED
PRESS BOX	FOOTBALL PRESS BOX	2	FB-A-23/24	DATA LOCATION
PRESS BOX	FOOTBALL PRESS BOX	2	FB-A-25/26	DATA LOCATION
PRESS BOX	FOOTBALL PRESS BOX	2	FB-A-27/28	WIRELESS ACCESS POINT - CEILING MOUNTED
Grand total		31		

GENERAL PRE-ENGINEERED PRESS BOX NOTES

A FLOOR PLANS ON SHEET ARE FOR BIDDING PURPOSES ONLY. FINAL PRE-ENGINEERED BUILDING LAYOUT TO BE DETERMINED AND VERIFIED IN SHOP DRAWING SUBMITTAL. VERIFY FINAL DESIGN WITH PRESS BOX MANUFACTURER.

B DATA SHOWN AT SEATING LOCATIONS SHALL BE INSTALLED WITHIN DUAL WIREMOLD 5400 SERIES RACEWAY RACKWAY INSTALLED BY OTHERS.

GENERAL PATHWAYS NOTES

A ALL CABLING SHALL BE TERMINATED IN THE ERTR NOTED IN THE TELECOM SCHEDULES.

B CONTRACTOR SHALL SUPPLY ALL CONDUIT, BOXES, AND CABLE TRAY AS REQUIRED TO ENSURE ALL TRANSMISSION MEDIA IS FULLY SUPPORTED FROM ALL DEVICE LOCATIONS TO THE POINT OF TERMINATION.

C ALL TELECOM PATHWAY SYSTEMS SHALL BE INDEPENDENTLY SUPPORTED FROM AND ATTACHED TO THE BUILDING STRUCTURE.

D ALL TELECOM PATHWAY SYSTEMS SHALL BE COMPLETELY AND PROPERLY LABELED AS REQUIRED IN REFERENCED STANDARDS.

E CONDUIT SYSTEMS SHALL BE PROVIDED FOR ALL PATHWAYS IN INACCESSIBLE CEILING SPACES AND WHERE EXPOSED TO PUBLIC VIEW. ALL CONDUIT SYSTEMS THROUGHOUT THE BUILDING SHALL INCLUDE PROPERLY SIZED SLEEVED PENETRATIONS WITH BUSHINGS THROUGH ALL BARRIERS.

F ALL TELECOM OUTLET BOXES SHALL BE A MINIMUM 4-1/16" SQUARE BOX NO LESS THAN 2-1/8" DEEP WITH A MINIMUM 1-1/4" CONDUIT STUBBED ABOVE ACCESSIBLE CEILING UNLESS NOTED OTHERWISE WITHIN THE T-SERIES DRAWINGS.

G CORRIDOR CABLE TRAY SHALL BE PROVIDED AS REQUIRED BY THE CONTRACT DRAWINGS. REFER TO DIVISION 27 SPECIFICATIONS FOR ADDITIONAL PRODUCT DETAILS AND REQUIREMENTS.

H CONTRACTOR SHALL NOT EXCEED 40% FILL RATIO WITHIN ANY CONDUIT MEANT FOR TELECOMMUNICATIONS CABLING.

I CONTRACTOR SHALL CALCULATE FILL RATIOS BASED ON ACTUAL CATEGORY 6 CABLE USED. TYPICAL FILL RATIOS FOR CATEGORY 6 CABLE ARE SHOWN HERE FOR REFERENCE PURPOSES ONLY:
 1" EMT = 6 CABLES;
 2" EMT = 15 CABLES;
 3" EMT = 35 CABLES;
 4" EMT = 90 CABLES;
 6" EMT = 150 CABLES.

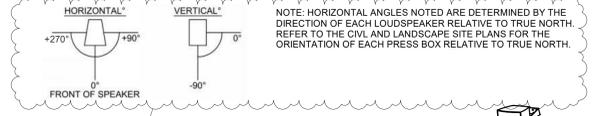
J CONDUIT RUNS SHALL NOT EXCEED 100 FEET WITHOUT A PULLING POINT AND SHALL NOT INCLUDE MORE THAN TWO 90° BENDS BETWEEN PULLING POINTS. IF THE PATH OF THE CONDUIT RUN REQUIRES BENDS EXCEEDING A TOTAL OF 180°, INSTALLATION OF AN APPROPRIATELY SIZED JUNCTION BOX IS REQUIRED.

K CONTRACTOR SHALL PROVIDE PROPERLY RATED FIRE STOP SYSTEMS FOR ALL CONDUIT AND/OR CABLE TRAY ENTERING THE TELECOMMUNICATIONS ROOMS. EACH CONTRACTOR IS RESPONSIBLE FOR SEALING PENETRATIONS AFTER EACH SCOPE OF WORK IS COMPLETED.

L CONTRACTOR SHALL PROVIDE FIRE STOPS TO SEAL ALL PENETRATIONS THROUGH FLOORS, WALLS, STAIRS, AND ELEVATORS AS NECESSARY TO MEET CODE REQUIREMENTS. FIRE STOPS SHALL BE PROVIDED IN ACCORDANCE WITH ALL APPLICABLE CODES AND STANDARDS.

LOUDSPEAKER AIMING TABLE

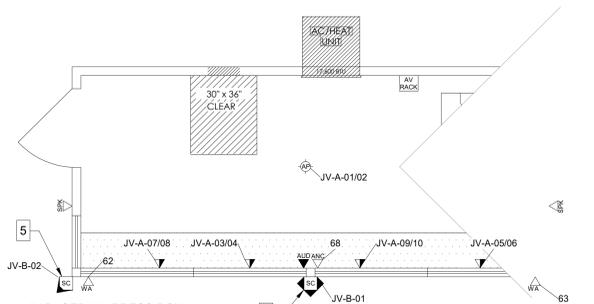
LOUDSPEAKER TYPE	APPROX. MOUNTING HEIGHT (FEET)	VERTICAL ANGLE (DEG.)	HORIZONTAL ANGLE (DEG.)	AREA COVERED
3	18'	-15	90	BLEACHERS (NORTH)
3	18'	-15	200	BLEACHER (EAST)



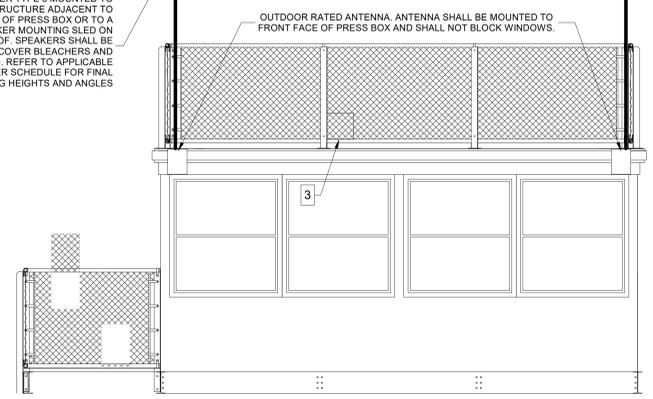
LOUDSPEAKER TYPE 3 MOUNTED TO PRESS BOX STRUCTURE ADJACENT TO FRONT FACE OF PRESS BOX OR TO A LOUDSPEAKER MOUNTING SLED ON PRESS BOX ROOF. SPEAKERS SHALL BE AIMED TO COVER BLEACHERS AND FIELD. REFER TO APPLICABLE LOUDSPEAKER SCHEDULE FOR FINAL MOUNTING HEIGHTS AND ANGLES.

OUTDOOR RATED ANTENNA. ANTENNA SHALL BE MOUNTED TO FRONT FACE OF PRESS BOX AND SHALL NOT BLOCK WINDOWS.

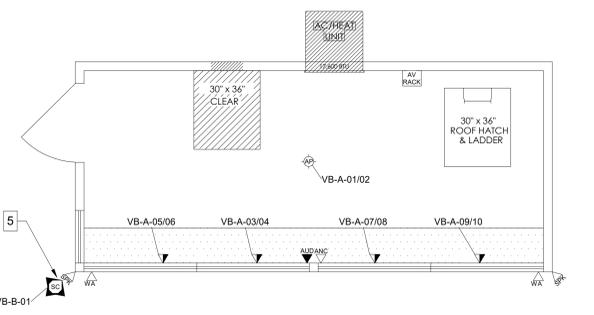
LOUDSPEAKER TYPE 3 MOUNTED TO PRESS BOX STRUCTURE ADJACENT TO FRONT FACE OF PRESS BOX OR TO A LOUDSPEAKER MOUNTING SLED ON PRESS BOX ROOF. SPEAKERS SHALL BE AIMED TO COVER BLEACHERS AND FIELD. REFER TO APPLICABLE LOUDSPEAKER SCHEDULE FOR FINAL MOUNTING HEIGHTS AND ANGLES.



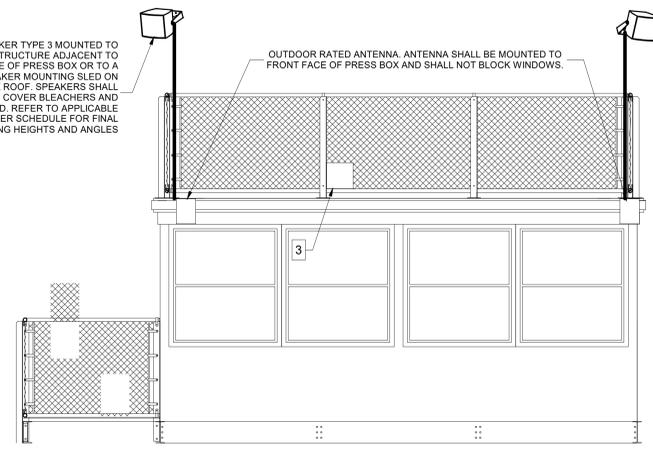
1 JV BASEBALL PRESS BOX TECHNOLOGY FLOOR PLAN
3/8" = 1'-0"



2 JV BASEBALL PRESS BOX AV ELEVATION - FRONT
3/8" = 1'-0"



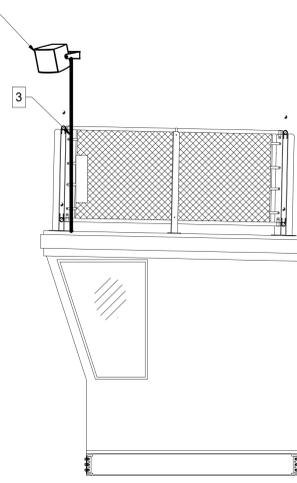
8 VARSITY BASEBALL PRESS BOX TECHNOLOGY PLAN
3/8" = 1'-0"



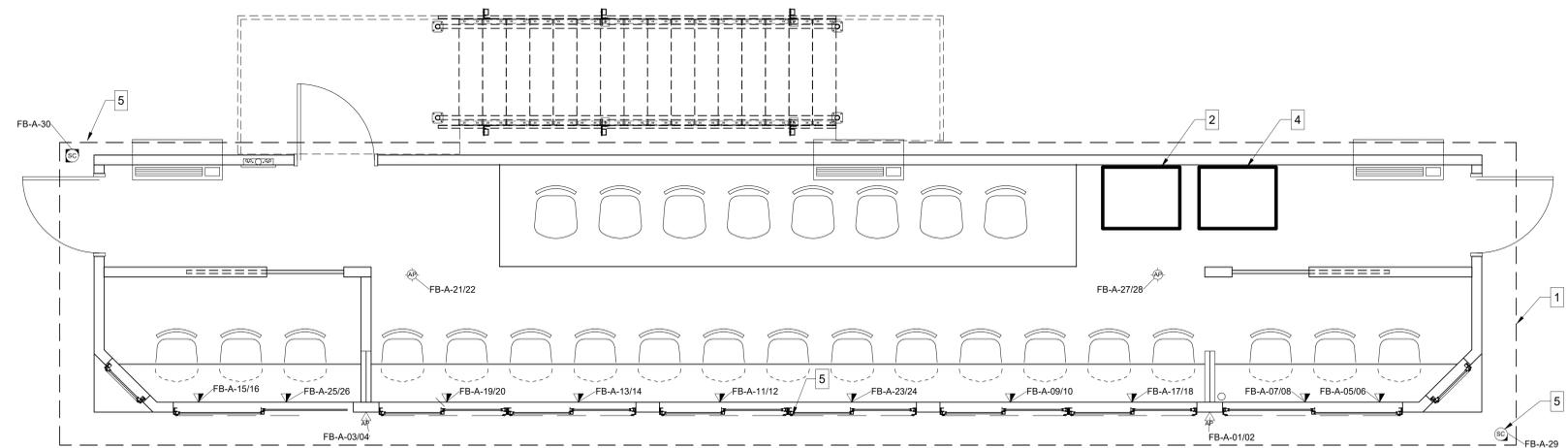
6 VARSITY BASEBALL PRESS BOX - FRONT ELEVATION
3/8" = 1'-0"

LOUDSPEAKER TYPE 3 MOUNTED TO PRESS BOX STRUCTURE ADJACENT TO FRONT FACE OF PRESS BOX OR TO A LOUDSPEAKER MOUNTING SLED ON PRESS BOX ROOF. SPEAKERS SHALL BE AIMED TO COVER BLEACHERS AND FIELD. REFER TO APPLICABLE LOUDSPEAKER SCHEDULE FOR FINAL MOUNTING HEIGHTS AND ANGLES.

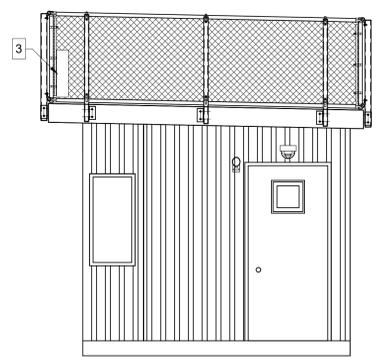
9 JV BASEBALL PRESS BOX - SIDE ELEVATION
3/8" = 1'-0"



3 VARSITY BASEBALL PRESS BOX - SIDE ELEVATION
3/8" = 1'-0"



4 FOOTBALL PRESS BOX - PLAN
3/8" = 1'-0"



5 FOOTBALL PRESS BOX - SIDE ELEVATION
3/8" = 1'-0"

GENERAL HORIZONTAL CABLING NOTES

A MINIMUM CATEGORY 6 (6A FOR WAPS) COMPLIANT 4-PAIR UNSHIELDED TWISTED PAIR (UTP) ALL HORIZONTAL CABLING MUST BE PLENUM RATED.

B CONTRACTOR SHALL PROVIDE A DOCUMENTED MANUFACTURER CERTIFIED SOLUTION INCLUDING THE MINIMUM PERFORMANCE AND APPLICATIONS WARRANTY.

C PAINTING OF THE STRUCTURED CABLING WILL VOID THE WARRANTY. ENSURE PROPER COORDINATION WITH PAINTING CONTRACTOR SO THAT ALL STRUCTURED CABLING IS PROTECTED PRIOR TO ANY PAINTING.

D PROVIDE A MINIMUM 10 FOOT MAINTENANCE LOOP ON EACH HORIZONTAL CABLING RUN. MAINTENANCE LOOPS SHALL BE STORED ABOVE ACCESSIBLE CEILING, IN CABLE TRAY, AND IN TELECOMMUNICATION ROOM CABLE TRAY. CABLING ABOVE CEILING SHALL BE SUSPENDED FROM APPROPRIATE SUPPORTS AND SHALL NOT TOUCH THE CEILING.

E ALL PIN/PAIR ASSIGNMENTS SHALL BE T568B.

F REFER TO SPECIFICATION SECTION 27 15 13 FOR CABLE JACKET COLOR REQUIREMENTS.

G LABELING SHALL BE COMPLETED AS DEFINED IN THE CONTRACT DOCUMENTS AND SHALL BE COORDINATED WITH THE OWNER.

H PROVIDE ALL TELECOMMUNICATION OUTLETS AS SHOWN ON THE DRAWINGS AND AS REQUIRED TO PROVIDE CONNECTIONS FOR EACH DEVICE SHOWN ON THE DRAWINGS.

I ALL TESTING OF HORIZONTAL CABLING SHALL BE COMPLETED AS DIRECTED BY THE PROJECT SPECIFICATIONS. ALL CABLING MUST BE TESTED AND CERTIFIED TO THE APPLICABLE STANDARDS.

TECHNOLOGY LEGEND

- ▼ DATA LOCATION
- ⊙ WIRELESS ACCESS POINT - CEILING MOUNTED
- ⊙ WIRELESS ACCESS POINT - EXTERIOR WALL MOUNTED
- ⊙ AV CONTROL LOCATION
- ⊙ ANNOUNCER CONNECTION LOCATION
- ⊙ AUDIO CONNECTION LOCATION
- ⊙ WIRELESS MICROPHONE ANTENNA LOCATION
- ⊙ LOUDSPEAKER LOCATION
- ⊙ SECURITY CAMERA - WALL MOUNTED
- ⊙ BLUETOOTH RECEIVER LOCATION

SHEET NOTES

1 EXISTING HEADEND RACK SERVING EXISTING VIDEO BOARD AND MISCELLANEOUS PERIPHERAL DEVICES SHALL BE REINSTALLED WITHIN NEW PRESS BOX. CONTRACTOR SHALL BE RESPONSIBLE FOR EXTENDING EXISTING CABLING AS REQUIRED TO RECONNECT DEVICES. VERIFY FINAL INSTALL LOCATION OF ALL EXISTING EQUIPMENT WITH OWNER.

2 APPROXIMATE LOCATION WHERE EXISTING TELECOM RACK FROM OLD FOOTBALL PRESS BOX SHALL BE REINSTALLED. VERIFY FINAL INSTALL LOCATION WITH OWNER PRIOR TO INSTALLATION.

3 PROVIDE OUTDOOR RATED NEMA ENCLOSURE AT A MINIMUM TO SERVE AS PASS THROUGH FOR FIBER AND DATA PATCH CORD CABLING TO BE UTILIZED FOR BROADCASTING ON AN AS-NEEDED BASIS. ENCLOSURE SHALL BE PIPED WITH (1) - 2" CONDUIT TO TELECOM EQUIPMENT RACK BELOW. PENETRATION SHALL BE WEATHER SEALED. VERIFY PENETRATION THROUGH ROOF WITH PRESS BOX MANUFACTURER.

4 EXISTING SCOREBOARD HEADEND RACK/EQUIPMENT SHALL BE RELOCATED FROM EXISTING PRESS BOX TO NEW PRESS BOX. ALL EXISTING CABLING SHALL BE EXTENDED TO NEW HEADEND LOCATION. VERIFY FINAL LOCATION AND ALL EQUIPMENT TO BE RELOCATED WITH OWNER.

5 REFER TO SECURITY CAMERA SCHEDULE ON SHEET 1002 FOR SECURITY CAMERA INFORMATION.

CLARK-PLEASANT COMMUNITY SCHOOL CORP.
 WHITELAND COMM. HIGH SCHOOL PHASE 5
 300 E MAIN ST, WHITELAND, IN 46184



REVISIONS:

#	Date	Desc.
1	10/13/2026	Addendum 2

100% CONSTRUCTION DOCUMENTS

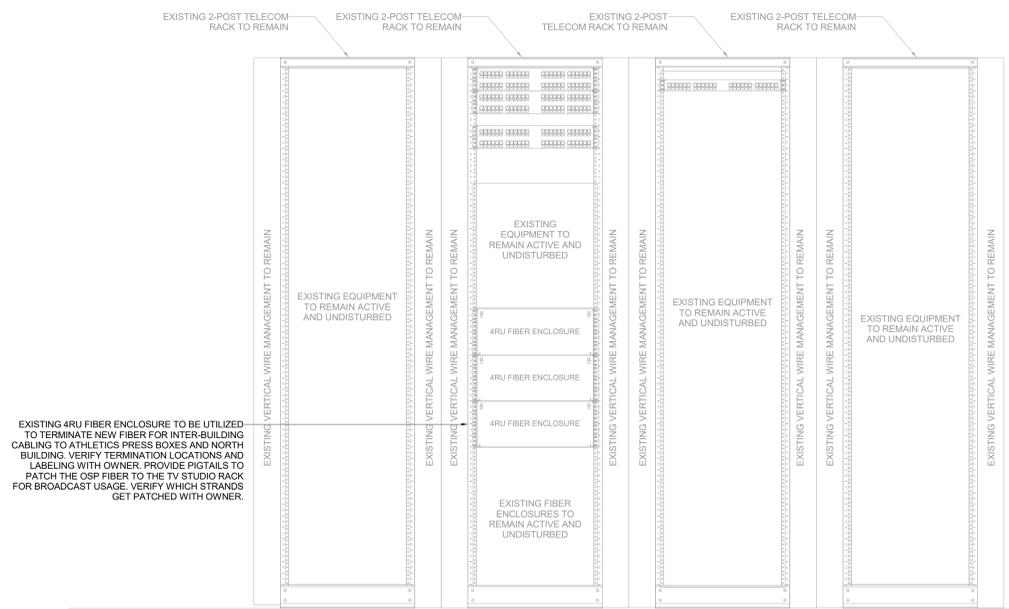
PROJECT: #22130
 DATE: 02-09-2026
 DRAWN BY: MRF

BASEBALL & FOOTBALL PRESS BOX PLANS / ELEVATIONS

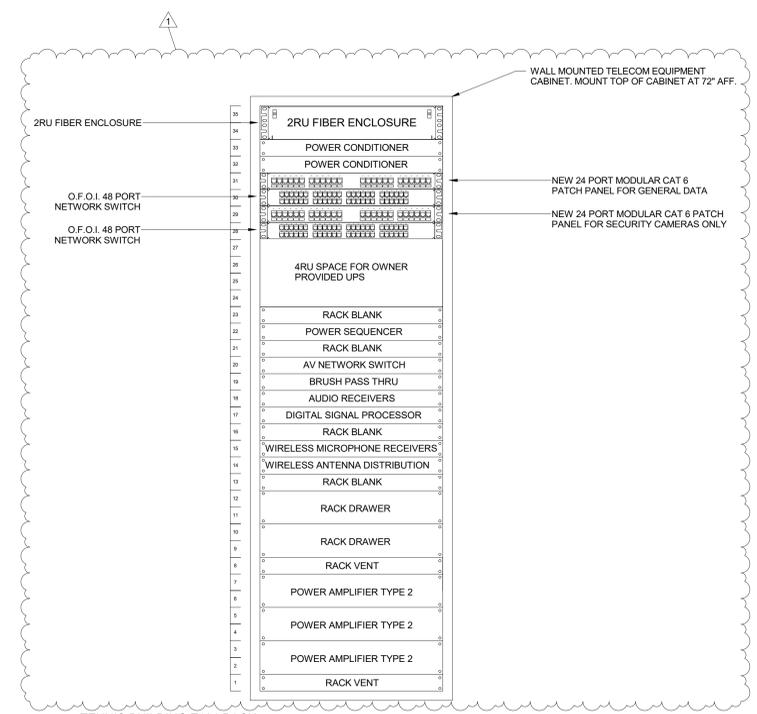
T101

LANCER ASSOCIATES ARCHITECTURE
 427 S. COLLEGE AVE
 INDIANAPOLIS, IN 46203

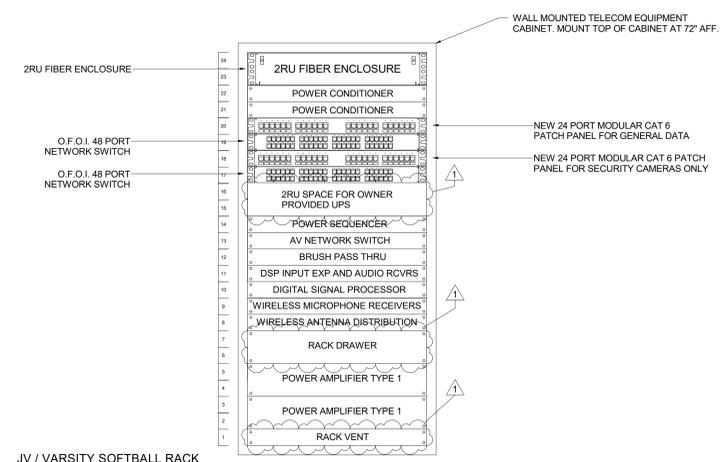




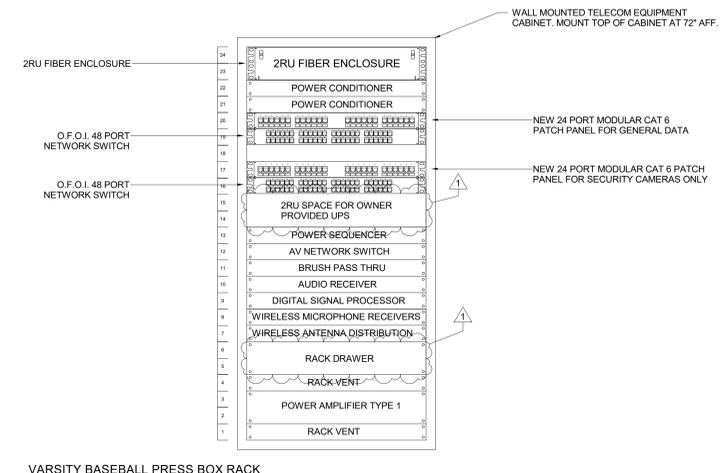
1 MDF D103 RACK ELEVATION
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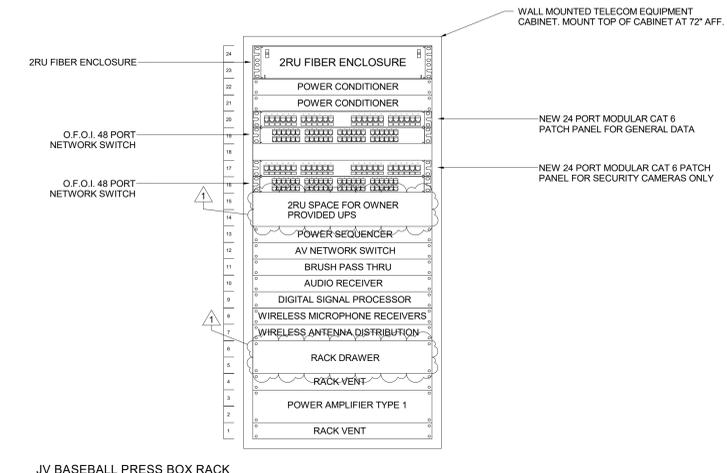
2 TENNIS BUILDING T104 RACK ELEVATION
 N.T.S.



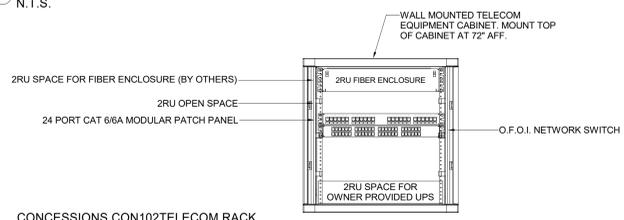
3 JV / VARSITY SOFTBALL RACK ELEVATION
 N.T.S.



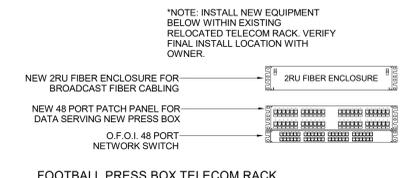
4 VARSITY BASEBALL PRESS BOX RACK ELEVATION
 N.T.S.



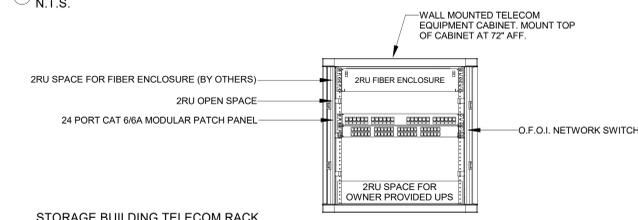
5 JV BASEBALL PRESS BOX RACK ELEVATION
 N.T.S.



6 CONCESSIONS CON102 TELECOM RACK ELEVATION
 N.T.S.



7 FOOTBALL PRESS BOX TELECOM RACK ELEVATION
 N.T.S.

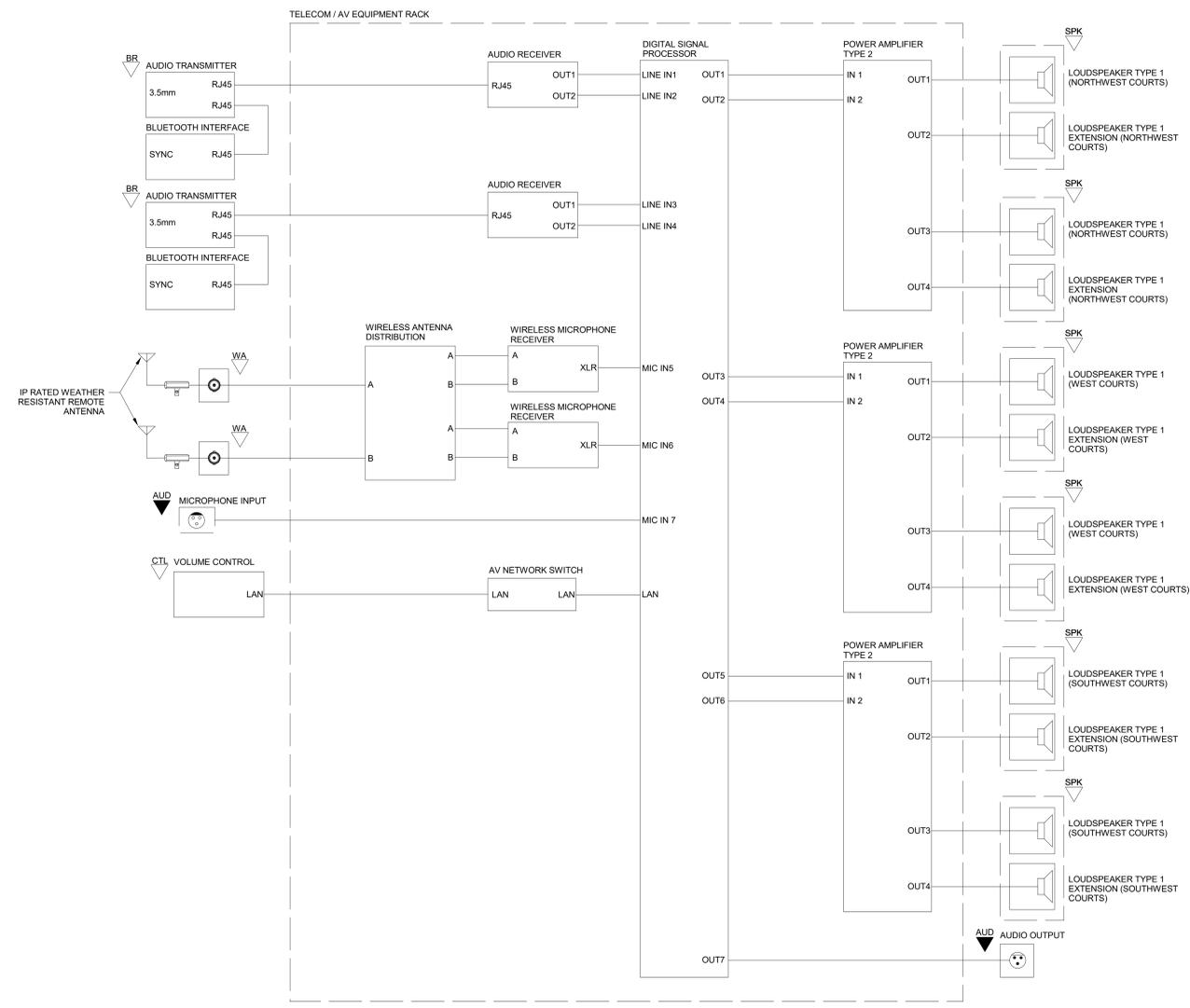


8 STORAGE BUILDING TELECOM RACK ELEVATION
 N.T.S.

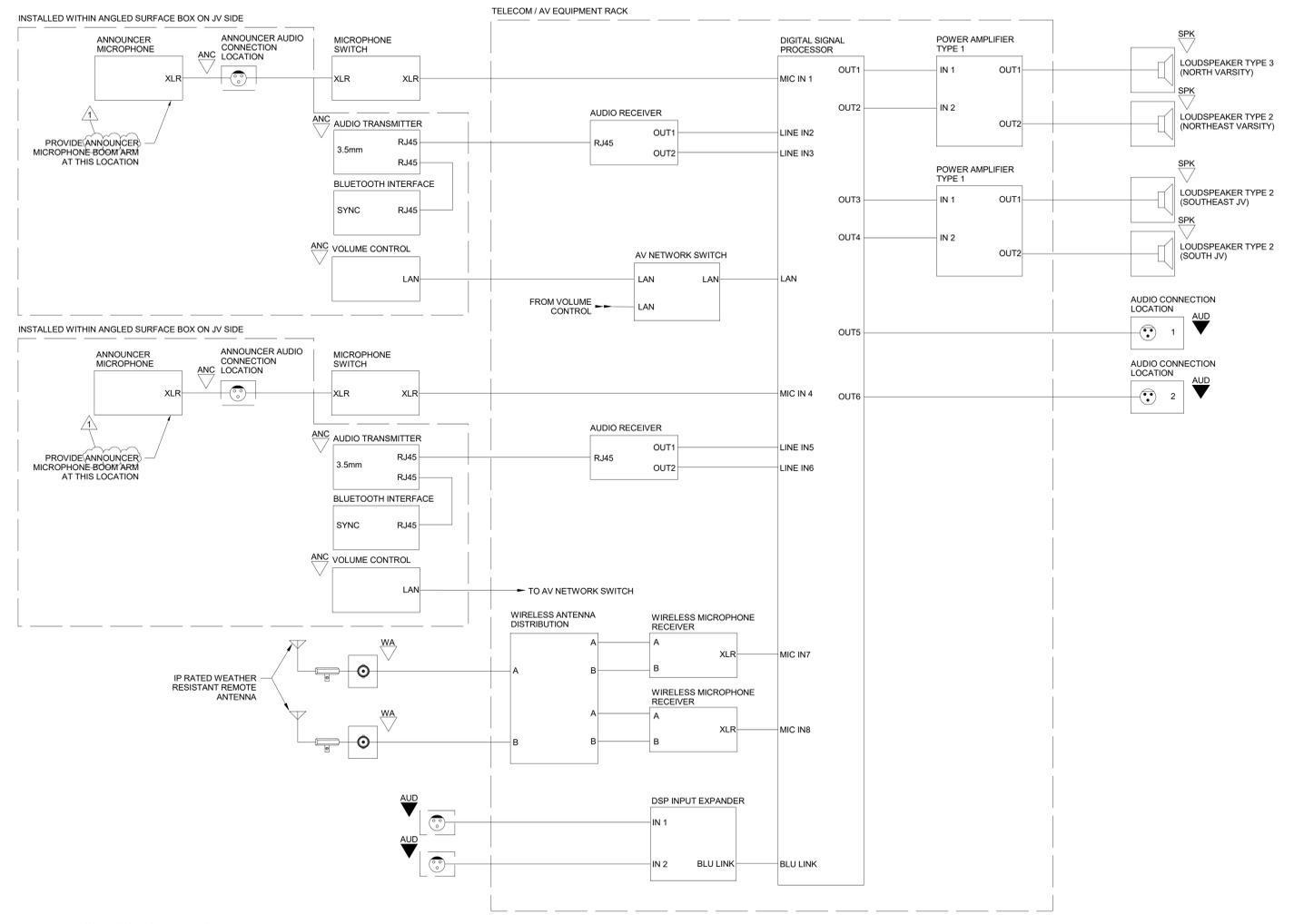
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	1	10/13/2026	Addendum 2

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 PROJECT: #22130
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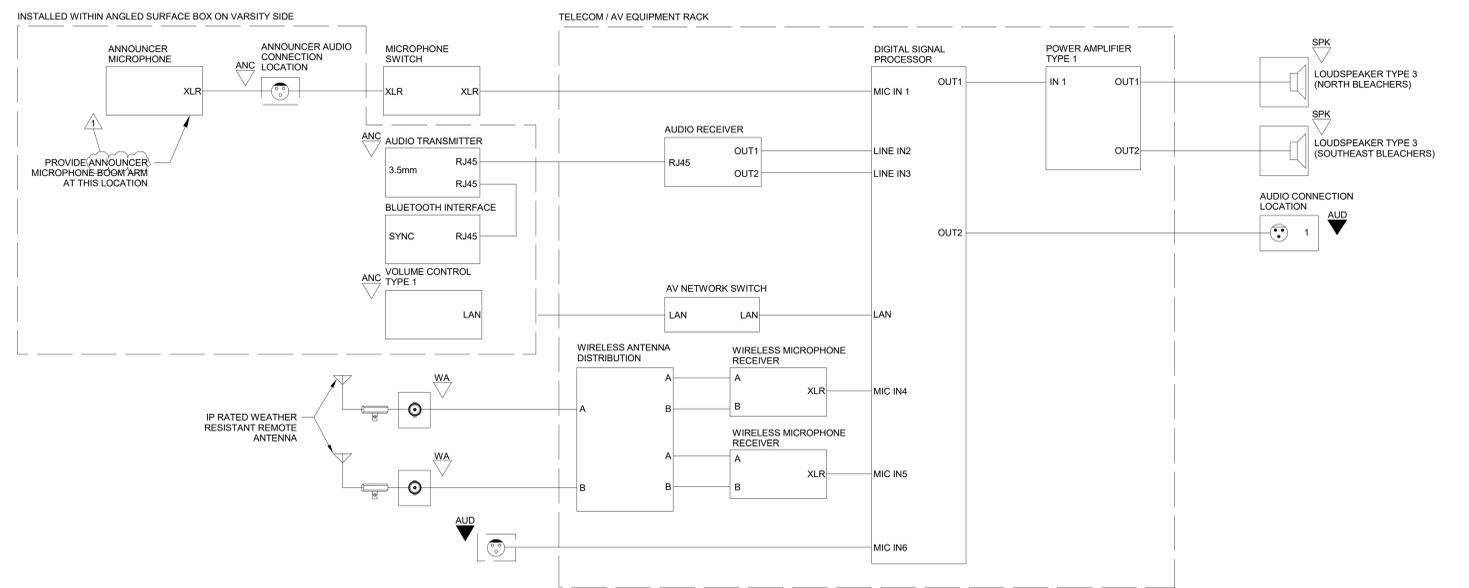
AV DIAGRAMS



1 TENNIS BUILDING AV DIAGRAM
 N.T.S.



2 JV / VARSITY SOFTBALL FIELD AV
 DIAGRAM
 N.T.S.

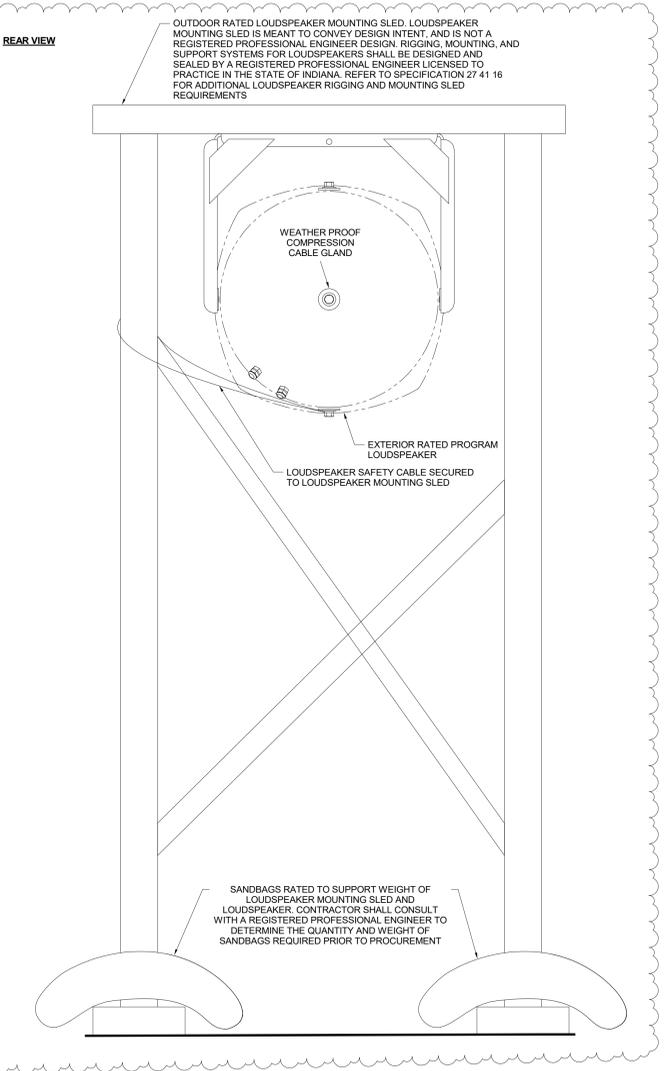
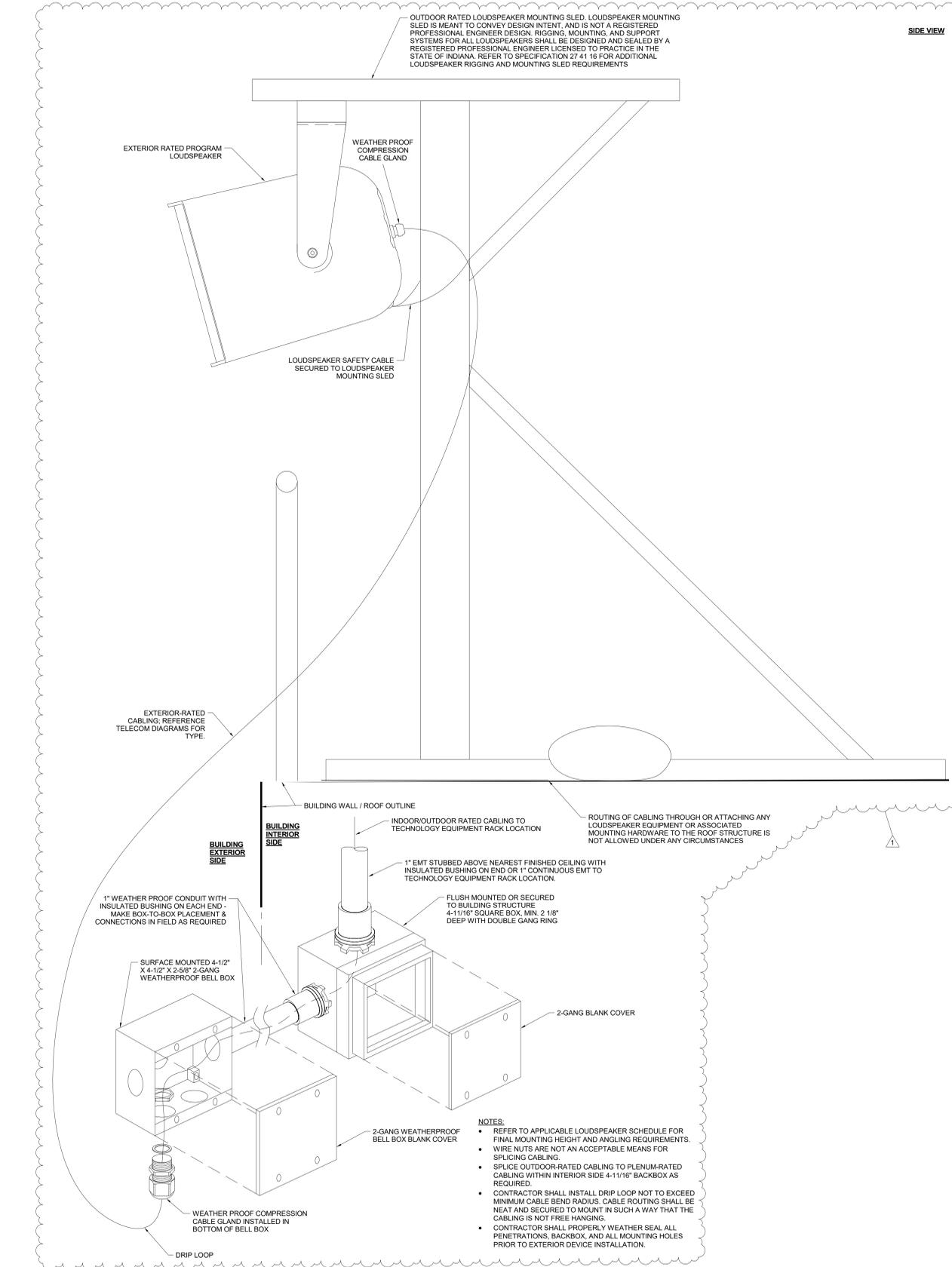


3 JV / VARSITY BASEBALL FIELD AV
 DIAGRAM
 N.T.S.

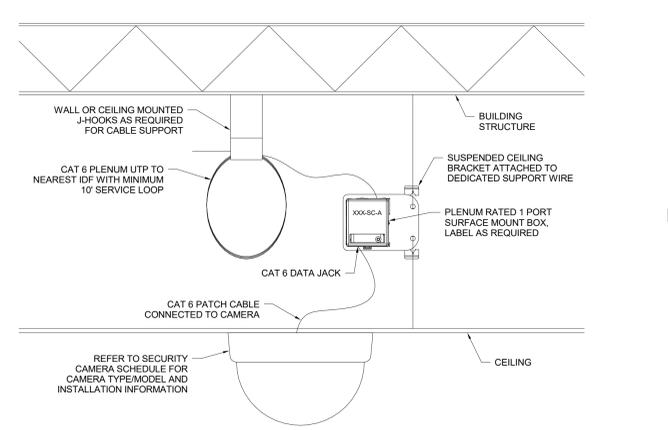
REVISIONS:	#	Date	Desc.
	1	03/13/2026	Addendum 2

100% CONSTRUCTION DOCUMENTS	
PROJECT:	#22130
DATE:	02-09-2026
DRAWN BY:	MRF

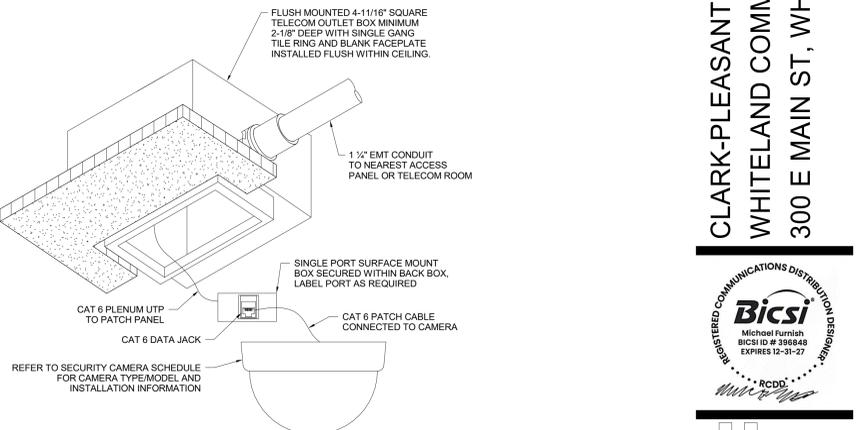
TECHNOLOGY / SECURITY DETAILS



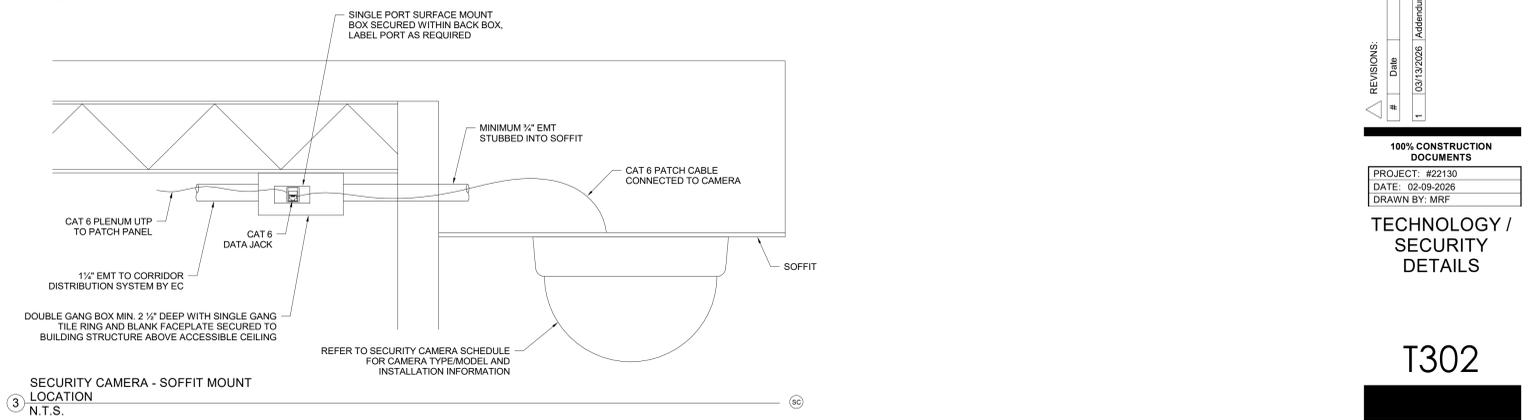
- NOTES:**
- REFER TO APPLICABLE LOUDSPEAKER SCHEDULE FOR FINAL MOUNTING HEIGHT AND ANGLING REQUIREMENTS.
 - WIRE NUTS ARE NOT AN ACCEPTABLE MEANS FOR SPLICING CABLING.
 - SPLICE OUTDOOR-RATED CABLING TO PLENUM-RATED CABLING WITHIN INTERIOR SIDE 4-11/16" BACKBOX AS REQUIRED.
 - CONTRACTOR SHALL INSTALL DRIP LOOP NOT TO EXCEED MINIMUM CABLE BEND RADIUS. CABLE ROUTING SHALL BE NEAT AND SECURED TO MOUNT IN SUCH A WAY THAT THE CABLING IS NOT FREE HANGING.
 - CONTRACTOR SHALL PROPERLY WEATHER SEAL ALL PENETRATIONS, BACKBOX, AND ALL MOUNTING HOLES PRIOR TO EXTERIOR DEVICE INSTALLATION.



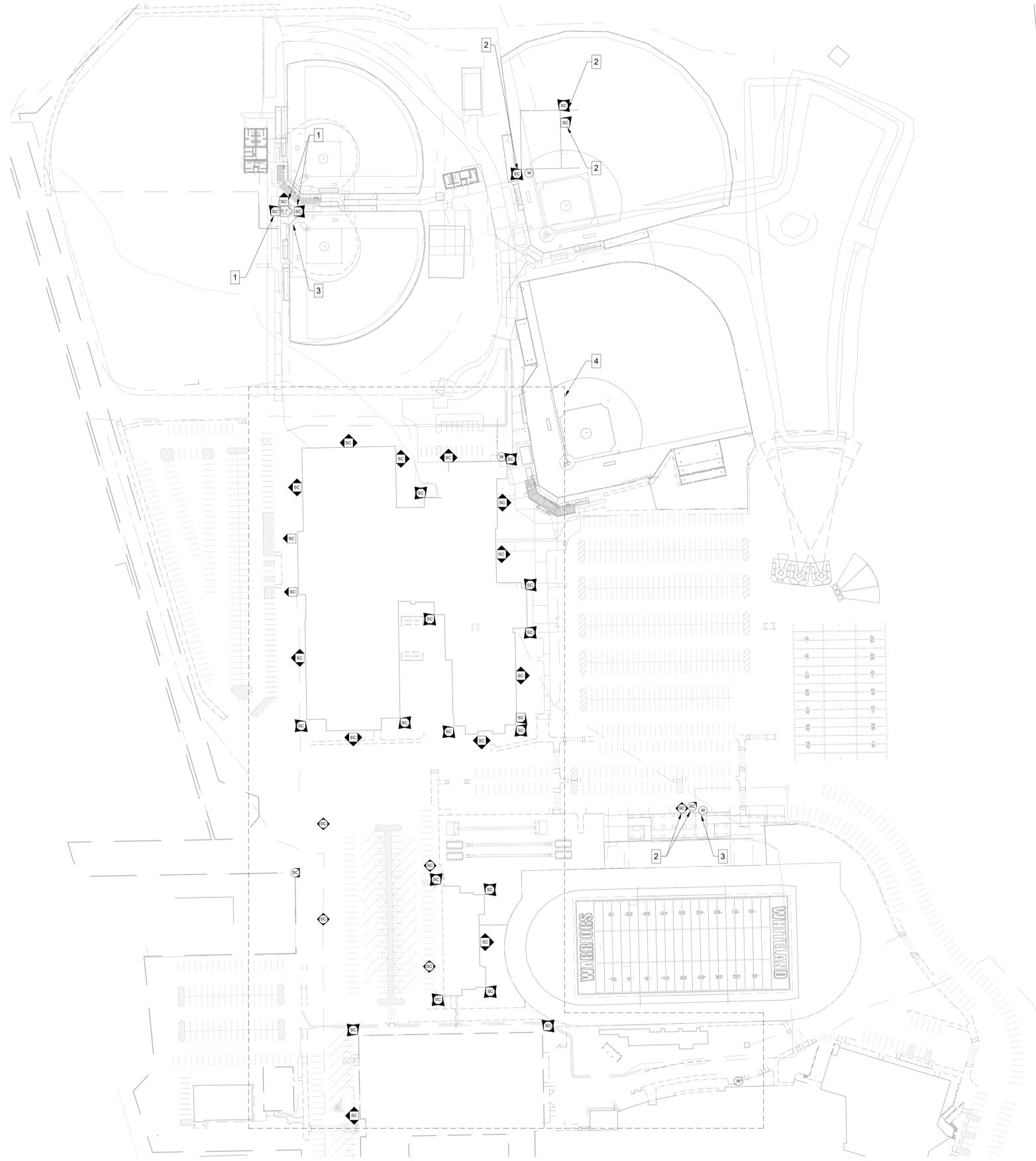
SECURITY CAMERA - CEILING MOUNTED
 N.T.S.



ACCESSIBLE CEILING
 GYPSUM CEILING
 N.T.S.



SECURITY CAMERA - SOFFIT MOUNT
 LOCATION
 N.T.S.



SECURITY SITE DEMOLITION NOTES

A CAMERAS AND WIRELESS DEVICES NOTED TO REMAIN IN PLACE SHALL REMAIN FULLY OPERATIONAL AND BE PROTECTED THROUGHOUT CONSTRUCTION. IN THE EVENT THAT DEMOLITION OR CONSTRUCTION ACTIVITY REQUIRES A CAMERA OR WIRELESS DEVICE TO BE TAKEN OFFLINE, CONTRACTOR SHALL PROVIDE WRITTEN NOTICE OF DOWNTIME NO FEWER THAN TWO (2) DAYS IN ADVANCE AND COORDINATE WITH THE OWNER TO DETERMINE REQUIREMENTS DURING OUTAGE.

B CAMERAS NOTED TO BE REMOVED FOR RE-INSTALLATION SHALL BE CAREFULLY REMOVED AND PROPERLY STORED BY THE CONTRACTOR UNTIL CAMERA CAN BE INSTALLED AT THE NEW LOCATION. CONTRACTOR SHALL PROVIDE WRITTEN NOTICE OF REMOVAL OF CAMERA NO FEWER THAN TWO (2) DAYS IN ADVANCE. ALL CABLING TO EXISTING CAMERA LOCATION SHALL BE REMOVED ENTIRELY. MOUNTING ACCESSORIES, IF UNDAMAGED, MAY BE RETAINED FOR USE AT NEW INSTALLATION LOCATION WHERE FEASIBLE. ACCESSORIES NOT RETAINED SHALL BE RETURNED TO THE OWNER.

C DEVICES NOTED TO BE REMOVED AND RETURNED TO OWNER SHALL BE CAREFULLY REMOVED ALONG WITH MOUNTING, POWER AND CONNECTIVITY ACCESSORIES, INVENTORIED, AND TURNED OVER TO THE OWNER WITHIN FIVE (5) DAYS OF REMOVAL. ALL CABLING TO EXISTING DEVICE LOCATION SHALL BE REMOVED ENTIRELY.

SECURITY DEMOLITION SITE PLAN LEGEND

SC SECURITY CAMERA - LIGHT POLE MOUNTED
 SC SECURITY CAMERA - WALL MOUNTED
 W WIRELESS TRANSMITTER

POLE MOUNT CAMERA LEGEND

SC	SC	SINGLE SENSOR CAMERA
SC	SC	DUAL SENSOR CAMERA
SC	SC	THREE SENSOR CAMERA
SC	SC	FOUR SENSOR CAMERA
SC		HEMISPHERIC LENS CAMERA

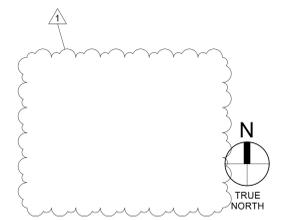
WALL MOUNT CAMERA LEGEND

SC	SC	SINGLE SENSOR CAMERA
SC	SC	DUAL SENSOR CAMERA
SC	SC	THREE / FOUR SENSOR CAMERA

SHEET NOTES

- EXISTING SECURITY CAMERA TO REMAIN. PROTECT IN PLACE THROUGHOUT CONSTRUCTION.
- EXISTING SECURITY CAMERA TO BE CAREFULLY REMOVED AND PROPERLY STORED FOR RE-INSTALLATION.
- EXISTING WIRELESS TRANSMITTER/RECEIVER TO REMAIN. PROTECT IN PLACE THROUGHOUT CONSTRUCTION.
- EXISTING SECURITY CAMERAS AND WIRELESS DEVICES TO REMAIN WITHIN THIS AREA. PROTECT IN PLACE THROUGHOUT CONSTRUCTION.

1 SECURITY SITE DEMOLITION PLAN
 1" = 80'-0"



REVISIONS:

#	Date	Desc.
1	03/13/2026	Addendum 2

100% CONSTRUCTION DOCUMENTS
 PROJECT: #22130
 DATE: 02-09-2026
 DRAWN BY: KGP

SECURITY DEMOLITION SITE PLAN

TD001