# ADDENDUM NO. 03

**February 24, 2025**

**Kalamazoo Public Schools – Loy Norrix Hogh School Athletics**
**606 East Kilgore Road**
**Kalamazoo, MI 49001**

## 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 25, 2025, by TowerPinkster. Acknowledge receipt of the Addendum in the space provided on the Bid Form. Failure to do so may subject the Bidder to disqualification.

This Addendum consists of Pages ADD 3-3 through ADD 3-3 and TowerPinkster Addendum No. 03, dated February 21, 2025, consisting of 76 pages.

### A. SPECIFICATION SECTION 00 00 20 TABLE OF CONTENTS

**Add**

| | | |
|---|---|---|
| Section | 02 41 13 | Demolition |
| Section | 02 41 19 | Selective Structure Demolition |
| Section | 03 31 00 | Site Clearing |
| Section | 10 21 13 | Toilet Compartments – Add 3 |
| Section | 10 28 00 | Toilet, Bath, And Laundry Accessories – Add 3 |
| Section | 32 18 09 | Synthetic turf-Batting Cage |
| Section | 32 92 27 | General Lawn Restoration |
| Section | 32 92 30 | Lawn |

### B. SPECIFICATION SECTION 00 31 00 – BID FORM

1. See attached updated Bid Form.

## C. SPECIFICATION SECTION 00 43 50 – SUBCONTRACTORS AND PRODUCTS LIST

A. BID CATEGORY NO. 01 GENERAL TRADES

**Add:**

| | | |
|---|---|---|
| Section | 10 21 13 | Toilet Compartments – Add 3 |
| Section | 10 28 00 | Toilet, Beth, And Laundry Accessories – Add 3 |

B. BID CATEGORY NO. 02 SITEWORK

**Add:**

| | | |
|---|---|---|
| Section | 02 41 13 | Demolition |
| Section | 02 41 19 | Selective Structure Demolition |
| Section | 03 31 00 | Site Clearing |
| Section | 32 92 27 | General Lawn Restoration |
| Section | 32 92 30 | Lawn |

C. BID CATEGORY NO. 03 SYNTHETIC TURF

**Add:**

| | | |
|---|---|---|
| Section | 32 18 09 | Synthetic turf-Batting Cage |

## D. SPECIFICATION SECTION 01 12 00 – MULTIPLE CONTRACT SUMMARY

**Paragraph 3.03 BID CATEGORIES**

A. BID CATEGORY NO. 01 GENERAL TRADES

Add the following Specification

| | | |
|---|---|---|
| Section | 10 21 13 | Toilet Compartments – Add 3 |
| Section | 10 28 00 | Toilet, Bath, And Laundry Accessories – Add 3 |

Add the following Clarification

1. The General Trades contractor is responsible for installing temporary enclosures and protections at windows, doors, and coiling doors in press boxes during finishing work. Additionally, they must provide temporary HVAC systems to maintain appropriate temperature and humidity levels throughout the finishing process.

B. BID CATEGORY NO. 02 SITEWORK

Add the following Specification

| | | |
|---|---|---|
| Section | 02 41 13 | Demolition |
| Section | 02 41 19 | Selective Structure Demolition |
| Section | 03 31 00 | Site Clearing |
| Section | 32 92 27 | General Lawn Restoration |
| Section | 32 92 30 | Lawn |

Add the following Clarification

1. Sitework is responsible for installing the drain line for the goal post access box shown on 3/L521.
2. Sitework increase Allowance to $30,000.

C. BID CATEGORY NO. 03 SYNTHETIC TURF

Add the following Specification

| | | |
|---|---|---|
| Section | 32 18 09 | Synthetic turf-Batting Cage |

D. BID CATEGORY NO. 04 ASPHALT PAVING

Add the following Clarification

1. Asphalt Paving is to provide paving of asphalt base course in the Spring and of asphalt top coarse in the Fall (see schedule), with sweeping, washing and preparation of base course before top coarse.

**E. SPECIFICATION SECTION 01 21 00 Contract Allowance**

1. Increase Sitework Allowance to $30,00.

**F. SPECIFICATION SECTION 01 32 00 – SCHEDULES AND REPORTS**

**a. 1.03 GUIDELINE SCHEDULE**

**Add:**

1. See Guideline Schedule attached.

**G. Refer to the attached Request For Information summary, Pre-Bid RFI No. 01 though 12 are included.**

**TABLE OF CONTENTS**

**INTRODUCTORY INFORMATION**



**DIVISION 0 - BIDDING REQUIREMENTS, CONTRACTOR FORMS AND CONDITIONS OF THE CONTRACT**



**DIVISION 1 - GENERAL REQUIREMENTS**

**DIVISION 06 – WOOD, PLASTICS, AND COMPOSITES**



**DIVISION 07 THERMAL AND MOISTURE PROTECTION**



**DIVISION 08 – OPENINGS**



**DIVISION 09 – FINISHES**



**DIVISION 10 – SPECIALTIES**



**DIVISION 11 – EQUIPMENT**

**DIVISION 33 – UTILITIES**



END OF SECTION 00 00 20

(Amended for Kalamazoo Public Schools)

**CONTRACTOR'S BID FOR PUBLIC WORKS**

# Kalamazoo Public Schools
# Loy Norrix High School Athletics
(Kalamazoo Public Schools)
**(Kalamazoo County, MI)**

**PART I**

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

BIDDER (firm) _____

Address _____ P.O. Box _____

City/State/Zip _____
Telephone Number _____ Email Address: _____
Person to contact regarding this Bid: _____
Pursuant to notices given, the undersigned offers to furnish labor and materials necessary to complete the construction work for:

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

of public works project, **Loy Norrix High School Athletics**, in accordance with Plans and Specifications prepared by **TowerPinkster**, **242 East Kalamazoo Avenue, Kalamazoo, MI 49007**, as follows:

BASE BID

For the sum of _____
(sum in words)

_____ DOLLARS ($_____)
(sum in figures)

****FOR ACCOUNTING PURPOSED *ONLY*, STATE THE COSTS FOR THE FOLLOWING ITEMS****

A. ALTERNATE NO. 01: State the cost to provide Baseball Outfield: Solid Panel "Batter's Eye" as outlined in Spec Section 11 68 38.

$_____ Football Scoreboard and Video Board at Loy Norrix

$_____ Play Clocks at Loy Norrix

$_____ Baseball Scoreboard at Loy Norrix

$_____ Football Scoreboard and Video Board at Kalamazoo Central

$_____ Play Clocks at Kalamazoo Central

**FOR ACCOUNTING PURPOSES ONLY**

The undersigned acknowledges receipt of the following Addenda:

Receipt of Addenda No.(s) _____

The undersigned acknowledges receipt of the following Addenda:

Receipt of Addenda No.(s)_____

PROPOSAL TIME

Bidder agrees that this Bid shall remain in force for a period of one hundred and twenty (120) consecutive calendar days from the due date, and Bids may be accepted or rejected during this period. Bids not accepted within said one hundred and twenty (120) consecutive calendar days shall be deemed rejected.

Attended pre-bid conference YES _____ NO

Has visited the jobsite YES _____ NO

**The Bidder must attach to this bid, the sworn and notarized affidavit (attached at the end of this Bid Form) disclosing any familial relationship between the Owner or an employee of the bidder and any member of the District's Board or the Superintendent of the District.**

The Bidder has reviewed the Guideline Schedule in Section 01 32 00 and the intent of the schedule can be met. _____ YES _____ NO

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

Bidder has included:

| | | |
|---|---|---|
| DBE: | YES _____% | NO _____ |
| MBE: | YES _____% | NO _____ |
| WBE: | YES _____% | NO _____ |
| VBE: | YES _____% | NO _____ |

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

ALTERNATE BIDS

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

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

Alternate Bid No. 01 – State the cost to provide Synthetic Turf Fiel Graphics as indicated on drawing sheets L 513.1 and L 513.2

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

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

UNIT PRICES

Unit Price No. 1 – Supplemental Excavation & Satisfactory Soil Fill:

1. Description: Unit price for the removal of unforeseen unsatisfactory soil and replacement with satisfactory soil, according to Section 31 2000 "Earth Moving."
2. Unit of Measurement: 100 Cubic yards of soil excavated, based on in-place surveys of volume before and after removal.

_____$/Per Cubic Yard

Unit Price No. 2 - Supplemental Excavation & Engineered Fill:

1. Description: Unit price for the removal of unforeseen unsatisfactory soil and replacement with engineered fill, according to Section 31 2000 "Earth Moving."
2. Unit of Measurement: 100 Cubic yards of soil excavated, based on in-place surveys of volume before and after removal

_____$/Per Cubic Yard

NON-COLLUSION AFFIDAVIT

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

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

OATH AND AFFIRMATION

I affirm under the penalties of perjury that the foregoing facts and information are true and correct to the best of my knowledge and belief.

Dated at _____this _____ day of _____, 20___.

_____
(Name of Organization)

By _____
(Title of Person Signing)

ACKNOWLEDGEMENT

STATE OF_____)
) SS:
COUNTY OF _____ )

_____ being duly sworn, deposes and says that

he is _____of the above _____
(Title) (Name of Organization)

and that the statements contained in the foregoing Bid, certification and Affidavit are true and correct.

Subscribed and sworn to before me this _____ day of _____ , 20 ___ .

_____
Notary Public

My Commission Expires:_____

County of Residence: _____

## PART II

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

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

## SECTION I EXPERIENCE QUESTIONNAIRE

1. What public works projects has your organization completed?

| Contract Amount | Class of Work | When Completed | Name and Address of Owner |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

2. What public works projects has your organization now in process of construction:

| Contract Amount | Class of Work | When Completed | Name and Address of Owner |
|---|---|---|---|
| | | | |
| | | | |
| | | | |

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

_____

_____

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

_____

_____

_____

## SECTION II PLAN AND EQUIPMENT QUESTIONNAIRE

1. Explain your plan or layout for performing proposed Work.

2. If you intend to sublet any portion of the Work, state the name and address of each subcontractor, equipment to be used by the subcontractor, and whether you expect to require a bond.

3. What equipment do you intend to use for the proposed Project?

4. Have you made contracts or received offers for all materials within prices used in preparing your proposal? _____ yes _____ no.

## SECTION III OATH AND AFFIRMATION

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

IN TESTIMONY WHEREOF, The Bidder has hereunto set his hand this

_____ day of _____ , 20 _____ .

Bidder:_____

IN TESTIMONY WHEREOF, The Bidder (a firm) have hereunto set their hands this

_____ day of _____, 20_____.

Firm Name: _____

By:_____

Individual names:_____

IN TESTIMONY WHEREOF, The Bidder (a corporation) has caused this proposal to be signed by its President and Secretary and affixed its corporate seal this_____ day of _____ , 20 _____.
Name of Corporation:

President: _____
Secretary:_____

ACKNOWLEDGEMENT

STATE OF_____)
) SS:
COUNTY OF_____)

_____ being duly sworn, deposes and says that

he is _____ of the above _____
(Title) (Name of Organization)

and that the answers to the questions in the foregoing questionnaires and all statements therein contained are true and correct.

Subscribed and sworn to before me this_____ day of _____, 20 ___.

_____
Notary Public

My Commission Expires: _____
County of Residence: _____

**AFFIDAVIT OF BIDDER - FAMILIAL DISCLOSURE**

The undersigned, the Owner or authorized officer of _____ (the 'Bidder'), pursuant to the familial disclosure requirement provided in the _____ (the 'School District') advertisement for construction bids, hereby represent and warrant, except as provided below, that no familial relationships exist between the Owner(s) or any employee of _____ and any member of the Board of Education of the School District or the Superintendent of the School District.

List any Familial Relationships:

**BIDDER:**

_____

By: _____

Its: _____

STATE OF MICHIGAN )
)ss.
COUNTY OF _____ )

This instrument was acknowledged before me on the _____ day of _____, 20__, by _____.

_____
, Notary Public

_____ County, Michigan

My Commission Expires: _____

Acting in the County of: _____

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

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

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

**BIDDER:**

_____

By: _____

Its: _____

STATE OF MICHIGAN )
)ss.
COUNTY OF _____ )

This instrument was acknowledged before me on the _____ day of _____, 20__, by _____.

_____
, Notary Public

_____ County, Michigan

My Commission Expires: _____

Acting in the County of: _____

END OF SECTION 00 31 00

## SECTION 00 43 50 - SUBCONTRACTORS AND PRODUCTS LIST

PART 1 - GENERAL

### 1.01 DESCRIPTION

A. The two (2) low responsive Bidders in each Bid Category shall furnish electronically, the following Subcontractors and Products List to the Construction Manager within **two (2) working days (48 hrs.)** of bid opening, unless submitted with Bid. . The blanks appropriate to the Bid Category(ies) on which they bid shall be completed.

1. The Owner and Architect shall have the right to select any material or equipment named in the Specifications for any particular item where the Bidder either fails to list same or lists more than one name for the item in question.
2. It is intended that this list will show the manufacturer and supplier of major items of work that will be subcontracted and to whom.

### 1.02 INSTRUCTIONS FOR SUBCONTRACTORS AND PRODUCTS LISTS

A. Each Bidder shall submit a copy of his list of subcontractors and manufacturers of products and equipment proposed for work indicated as required above.

B. The list shall be submitted on forms provided and shall be completely executed. "As Specified" or "With Equipment" type of terminology will not be accepted.

C. Under "Subcontractor", insert the name of the firm which the Bidder proposes to have perform the respective work. If work will be done by the Prime Bidder and no subcontract will be awarded, state "By Own Forces".

D. Submission does not constitute acceptance for use of listed manufacturers' products. Materials and subcontractors are subject to the provisions of the General Conditions and "Standard of Product Acceptability" and must be formally reviewed and adjudged acceptable by the Architect/Engineer.

E. Engineer, Architect and Owner reserve the right to reject submissions of materials, work, or subcontractors that do not, in their opinion, meet the requirements of Drawings, Specifications or job conditions.

F. Materials and subcontractors used for work on the Project shall be in accordance with accepted material list.

1. The list is intended to assure use of materials and vendors acceptably equivalent to those specified and is not a substitution sheet or complete listing of required materials or services.

2. Substitutions for listed items will not be allowed, except when termed acceptable, in writing by the Architect/Engineer, provided that substitution will result in a cost savings to the Owner , determined by the Owner to be a better product,or is made necessary due to unavailability of listed item. Unavailability shall be confirmed in writing by manufacturer named on accepted list.

## 1.03 CIVIL AND ARCHITECTURAL WORK SUBCONTRACTORS AND PRODUCTS LIST

BID CATEGORY NO. 01 GENERAL TRADES

NAME OF BIDDER_____

The undersigned hereby submits the following Subcontractors and Products List which becomes a part of the undersigned Contract proposal. Subcontractor purchased material, equipment, and labor shall be under the direct management and control of the Prime Contractor. If a dual listing of manufacturers and subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice. State the XBE Designation.

CIVIL AND ARCHITECTURAL WORK

| Section | Description | $$$ | Subcontractor | Manufacturer |
|---|---|---|---|---|
| 01 21 00 | Allowances | | | |
| 01 51 10 | Temporary Electricity, Lighting and Warning Systems | | | |
| 01 51 30 | Temporary Heating, Ventilation and Cooling | | | |
| 01 51 50 | Temporary Water | | | |
| 01 51 80 | Temporary Fire Protection | | | |
| 01 52 10 | Construction Aids and Temporary Enclosures | | | |
| 01 53 10 | Fences (Temporary Security) | | | |
| 01 72 00 | Field Engineering | | | |
| 03 30 00 | Cast-In-Place Concrete | | | |

| Section | Description | $$$ | Subcontractor | Manufacturer |
|---|---|---|---|---|
| 03 30 53 | Concrete Turf Anchor | | | |
| 03 60 00 | Post Installed Anchors | | | |
| 04 20 00 | Unit Masonry | | | |
| 05 50 00 | Metal Fabrications | | | |
| 05 51 19 | Metal Grating Stairs | | | |
| 05 52 13 | Pipe And Tube Railings | | | |
| 06 10 00 | Rough Carpentry | | | |
| 06 10 50 | Turf Wood Nailer | | | |
| 06 15 33 | Patio Decking | | | |
| 06 16 00 | Sheathing | | | |
| 07 19 00 | Water Repellents | | | |
| 07 25 00 | Weather Barriers | | | |
| 07 31 13 | Asphalt Shingles | | | |
| 07 42 93 | Soffit Panels | | | |
| 07 46 46 | Fiber-Cement Siding | | | |
| 07 54 23 | Thermoplastic Polyolefin (Tpo) Roofing | | | |
| 07 62 00 | Sheet Metal Flashing And Trim | | | |
| 07 71 00 | Roof Specialties | | | |
| 07 92 00 | Joint Sealants | | | |
| 08 31 13 | Access Doors And Frames | | | |
| 08 33 13 | Coiling Counter Doors | | | |
| 08 41 13 | Aluminum-Framed Entrances And Storefronts | | | |
| 08 51 13 | Aluminum Windows | | | |
| 08 71 00 | Door Hardware | | | |

| Section | Description | $$$ | Subcontractor | Manufacturer |
|---|---|---|---|---|
| 08 80 00 | Glazing | | | |
| 09 29 00 | Gypsum Board | | | |
| 09 65 13 | Resilient Base And Accessories | | | |
| 09 68 13 | Tile Carpeting | | | |
| 09 91 13 | Exterior Painting | | | |
| 09 91 23 | Interior Painting | | | |
| 09 96 00 | High-Performance Coatings | | | |
| 10 21 13 | Toilet Compartments – Add 3 | | | |
| 10 28 00 | Toilet, Bath, And Laundry Accessories – Add 3 | | | |
| 10 75 16 | Ground-Set Flagpoles | | | |
| 11 68 34 | Football Goal Post | | | |
| 11 68 36 | Portable Soccer & Lax Goals | | | |
| 11 68 38 | Baseball Equipment | | | |
| 11 68 40 | Field Event Construction | | | |
| 11 68 42 | Protective Netting System | | | |
| 11 68 43 | Exterior Scoreboard | | | |
| 12 36 16 | Metal Countertops | | | |
| 13 34 20 | Manufactured Band Tower Structure | | | |
| 13 35 15 | Bleachers | | | |
| 22 05 00 | Common Work Results For Plumbing | | | |
| 22 05 19 | Meters And Gages For Plumbing Piping | | | |

| Section | Description | $$$ | Subcontractor | Manufacturer |
|---|---|---|---|---|
| 22 05 23 | General Duty Valves For Plumbing Piping | | | |
| 22 05 29 | Hangers And Supports For Plumbing Piping And Equipment | | | |
| 22 05 53 | Identification For Plumbing Piping And Equipment | | | |
| 22 07 00 | Plumbing Insulation | | | |
| 22 11 16 | Domestic Water Piping | | | |
| 22 11 19 | Domestic Water Piping Specialties | | | |
| 22 13 16 | Sanitary Waste And Vent Piping | | | |
| 22 13 19 | Sanitary Waste Piping Specialties | | | |
| 22 33 00 | Electric Domestic Water Heaters | | | |
| 22 40 00 | Plumbing Fixtures | | | |
| 23 05 00 | Common Work Results For HVAC | | | |
| 23 05 13 | Common Motor Requirements For HVAC Equipment | | | |
| 23 05 29 | Hangers And Supports For HVAC Piping And Equipment | | | |
| 23 05 53 | Identification For HVAC Piping And Equipment | | | |
| 23 05 93 | Testing, Adjusting, And Balancing For HVAC | | | |
| 23 31 13 | Metal Ducts | | | |
| 23 33 00 | Air Duct Accessories | | | |

| Section | Description | $$$ | Subcontractor | Manufacturer |
|---|---|---|---|---|
| 23 34 23 | HVAC Power Ventilators | | | |
| 23 37 13 | Diffusers, Registers, And Grilles | | | |
| 23 82 39 | Unit Heaters | | | |
| 26 05 00 | Common Work Results For Electrical | | | |
| 26 05 19 | Low-Voltage Electrical Power Conductors And Cables | | | |
| 26 05 26 | Grounding And Bonding For Electrical Systems | | | |
| 26 05 29 | Hangers And Supports For Electrical Systems | | | |
| 26 05 33 | Raceways And Boxes For Electrical Systems | | | |
| 26 05 43 | Underground Ducts And Raceways For Electrical Systems | | | |
| 26 05 44 | Sleeves And Sleeve Seals For Electrical Raceways And Cabling | | | |
| 26 05 53 | Identification For Electrical Systems | | | |
| 26 09 23 | Lighting Control Devices | | | |
| 26 27 26 | Wiring Devices | | | |
| 26 51 00 | Interior Lighting | | | |
| 26 56 00 | Exterior Lighting | | | |
| 27 5114 | PA System - Single Point Speaker | | | |
| 27 5119 | Field Utility Boxes | | | |
| 32 13 13 | Concrete Paving | | | |

| Section | Description | $$$ | Subcontractor | Manufacturer |
|---|---|---|---|---|
| 32 13 73 | Concrete Joints | | | |
| 32 31 13 | Chain Link Fences And Gates | | | |
| 32 31 30 | Chain Fence - Vinyl | | | |

| Name of Bidder: | Date: |
|---|---|
| Address: | |
| City/State/Zip: | |
| Telephone: | |
| By: | |

BID CATEGORY NO. 02 SITEWORK

NAME OF BIDDER_____

The undersigned hereby submits the following Subcontractors and Products List which becomes a part of the undersigned Contract proposal. Subcontractor purchased material, equipment, and labor shall be under the direct management and control of the Prime Contractor. If a dual listing of manufacturers and subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice. State the XBE Designation.

CIVIL AND ARCHITECTURAL WORK

| **Section** | **Description** | **$$$** | **Subcontractor** | **Manufacturer** |
|---|---|---|---|---|
| 01 21 00 | Allowances | | | |
| 01 53 20 | Tree and Plant Protection | | | |
| 01 53 30 | Barricades | | | |
| 01 55 00 | Access Roads and Parking Areas | | | |
| 01 56 20 | Dust Control | | | |
| 01 56 80 | Erosion Control | | | |
| 01 72 00 | Field Engineering | | | |
| 02 41 13 | Demolition | | | |
| 02 41 19 | Selective Structure Demolition | | | |
| 03 31 00 | Site Clearing | | | |
| 32 18 09 | Synthetic turf-Batting Cage | | | |
| 31 15 00 | Site Clearing | | | |
| 31 20 00 | Earth Moving | | | |
| 31 20 10 | Earthwork - Athletics | | | |
| 31 32 19 | Geotextile Fabric | | | |
| 32 11 23 | Aggregate Drainage Layer | | | |
| 32 18 22 | Infield Mix - Red Clay | | | |

| Section | Description | $$$ | Subcontractor | Manufacturer |
|---|---|---|---|---|
| 32 18 31 | Shot Put Material | | | |
| 32 32 23 | Concrete Segmental Retaining Wall | | | |
| 32 84 00 | Underground Irrigation System | | | |
| 32 91 19 | Topsoil | | | |
| 32 92 00 | Turfs And Grasses | | | |
| 32 92 23 | Lawns – Sod | | | |
| 32 92 27 | General<br>Lawn Restoration | | | |
| 32 92 30 | Lawn | | | |
| 33 10 00 | Water Utilities | | | |
| 33 30 00 | Sanitary Sewerage Utilities | | | |
| 33 41 00 | Storm | | | |
| 33 44 13 | Manholes, Catch Basins, and Similar Structures (Baseball) | | | |
| 33 46 00 | SubDrainage Systems - Sand | | | |
| 33 46 05 | SubDrainage Systems - Peastone | | | |
| 33 46 10 | SubDrainage Systems - Bypass Drainage | | | |
| 33 46 15 | SubDrainage Systems - Turf Draintile | | | |

| | |
|---|---|
| Name of Bidder: | Date: |
| Address: | |
| City/State/Zip: | |
| Telephone: | |
| By: | |

BID CATEGORY NO. 03 SYNTHETIC TURF

NAME OF BIDDER_____

The undersigned hereby submits the following Subcontractors and Products List which becomes a part of the undersigned Contract proposal. Subcontractor purchased material, equipment, and labor shall be under the direct management and control of the Prime Contractor. If a dual listing of manufacturers and subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice. State the XBE Designation.

CIVIL AND ARCHITECTURAL WORK

| **Section** | **Description** | **$$$** | **Subcontractor** | **Manufacturer** |
|---|---|---|---|---|
| 01 21 00 | Allowances | | | |
| 32 18 09 | Synthetic turf-Batting Cage | | | |
| 32 18 18 | Synthetic Turf | | | |
| 32 18 52 | Performance Shock Pad | | | |

| Name of Bidder: | Date: |
|---|---|
| Address: | |
| City/State/Zip: | |
| Telephone: | |
| By: | |

BID CATEGORY NO. 04 ASPHALT PAVING

NAME OF BIDDER_____

The undersigned hereby submits the following Subcontractors and Products List which becomes a part of the undersigned Contract proposal. Subcontractor purchased material, equipment, and labor shall be under the direct management and control of the Prime Contractor. If a dual listing of manufacturers and subcontractors is herein made, it is understood the Architect/Engineer (not the Contractor) will select the manufacturer or subcontractor of his choice. State the XBE Designation.

CIVIL AND ARCHITECTURAL WORK

| **Section** | **Description** | **$$$** | **Subcontractor** | **Manufacturer** |
|---|---|---|---|---|
| 01 21 00 | Allowances | | | |
| 32 12 16 | Asphalt Paving | | | |
| 32 17 23 | Pavt Marking | | | |

| Name of Bidder: | Date: |
|---|---|
| Address: | |
| City/State/Zip: | |
| Telephone: | |
| By: | |

END OF SECTION 00 43 50

## SECTION 01 12 00 - MULTIPLE CONTRACT SUMMARY

PART 1 GENERAL

### 1.01 RELATED DOCUMENTS

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

### 1.02 SUMMARY

A. The intent of this Section is to indicate the Work required by the Contractors and to provide information regarding the duties, responsibilities, and cooperation required by the Contractors, with similar requirements for the subcontractors and suppliers.

B. Owners right to maintain current operations

C. Occupancy requirements

D. Work by Owner

E. Permits, fees, and notices

F. Labor and materials

G. Verifications of existing dimensions

H. Project security

I. Coordination of work

J. Time of commencement and completion

K. Schedule of contract responsibilities

### 1.03 WORK UNDER SEPARATE CONTRACTS

A. Prime Contracts are defined to include the following contracts described in the Schedule of Contract Responsibilities included hereinafter; and each is recognized to be a major part of the project, with Work to be performed concurrently and in close coordination with Work of other Prime Contracts.

B. The "Contract Documents," as defined in the General Conditions, include "the Drawings." Although Drawings are grouped and identified by classification of the Work, Contractors shall be responsible for their Work as specified herein and as

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

C. Separate prime contracts will be awarded as per the **"Schedule of Contract Responsibilities"** (see Part 3 – Execution). Contractors shall include Work required by the Specifications and Drawings for each contract area defined in the Schedule.

D. Work for the complete construction of the Project will be under multiple prime contracts with the Owner. The Construction Manager will manage the construction of the Project.

E. Each Contractor shall be responsible for demolition and disposal of existing items relative to his Contract.

## 1.04 ADMINISTRATIVE RESPONSIBILITIES OF PRIME CONTRACTORS AND CM

A. The Construction Manager shall be responsible for the maintenance of the Construction Schedule and management of every phase of the Work.
   1. Each Contractor shall read the Specifications and Drawings for other separate Contracts for fixed equipment and the like to be incorporated or attached or built in to the Work; and familiarize himself with the requirements and responsibilities of other Contracts to enable the required coordination and supervision.
   2. Each Contractor shall also familiarize himself with other items to be incorporated into the Work including equipment and Work by the Owner.
   3. Each Contractor shall cooperate with the Construction Manager in notifying him when the Work is at a stage to require the services of other Contractors and shall notify the Construction Manager in the event that such other Contractors do not carry out their responsibilities in connection with such notification.

B. Contractors shall cooperate with and assist the Construction Manager in the preparation of construction progress and procedures, schedule of product deliveries, and their effect on the overall project progress and completion. Other Contractors shall cooperate in getting their Work and the Work of their subcontractors completed according to the schedule as prepared and maintained by the Construction Manager. Each Contractor shall immediately notify the Construction Manager of a delay in delivery of products or the scheduled date of completion that may affect the total progress of construction.

C. The Owner will furnish the topographical survey, either as a part of these Drawings or separately, giving the general topographical lines existing at the site and the property lines.

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

## 1.05 PRIME CONTRACTORS USE OF PREMISES

A. General: During the construction period, the Prime Contractors jointly shall have full use of the premises for construction operations, including use of the site. Each Prime Contractor's use of the premises is limited only by the Owner's right to perform work or to retain other Contractors on portions of the Project.

## 1.06 OWNERS RIGHT TO MAINTAIN OPERATIONS

A. During the course of this Project, normal and customary functions and operations must be maintained. The Contract Documents are intended to define a strict separation between the school activities of students and staff from the activities of the construction project.

B. The Construction Manager, Architect, and Owner will not tolerate any visible or audible actions initiated or responded to by any employees of Contractors on this Project toward any students, teachers, or staff members at the school system. Violators shall be promptly removed from the site.

C. The Owner intends to instruct students, teachers, and staff to refrain from communications with Contractor's personnel working on this Project. All communication with Owner and staff shall be through the Construction Manager.

D. Contractors must expend their best effort toward protection of the health, safety, and welfare of occupants on the Owner's property during the course of Work on this Project.

E. Contractors and Subcontractors shall be subject to such rules and regulations for the conduct of the Work as the Owner may establish. Employees shall be properly and completely clothed while working. Bare torsos, legs and feet will not be allowed. Possession or consumption of alcoholic beverages or drugs, tobacco or other noxious behavior on the site is strictly prohibited. Violators shall be promptly removed from the site. Smoking is not permitted on school property or within school buildings.

## 1.07 OCCUPANCY REQUIREMENTS

A. Full Owner Occupancy: The Owner will occupy the site and existing building during the entire construction period. Cooperate with the Owner during construction operations to minimize conflicts and facilitate Owner usage. Perform the Work so as not to interfere with the Owner's operations.

B. Partial Owner Occupancy: The Owner reserves the right to occupy and to place and install equipment in completed areas of the building prior to Substantial Completion, provided such occupancy does not interfere with completion of the Work. Such placing of equipment and partial occupancy shall not constitute acceptance of the total Work.

1. The Construction Manager will prepare a Certificate of Substantial Completion for each specific portion of the Work to be occupied prior to Owner occupancy.
2. Party which obtained general building permit shall obtain a Certificate of Occupancy from local building officials prior to Owner occupancy.
3. Prior to partial Owner occupancy, mechanical and electrical systems shall be fully operational. Required inspections and tests shall have been successfully completed. Upon occupancy, the Owner will operate and maintain mechanical and electrical systems serving occupied portions of the building.
4. Upon occupancy, the Owner will assume responsibility for maintenance and custodial service for occupied portions of the building.

## 1.08 WORK BY OWNER

A. The Owner intends to complete the following items of Work outside the provisions of these Contract Documents. Contractors shall not restrict or interfere with the Owner's right to the Project to accomplish this Work.

1. Equipment and furniture except as scheduled and specified under Divisions 11 and 12 and shown on the Drawings.
2. Items which may be deleted from Contracts for Work as required by the Contract Documents.
3. Existing school maintenance work.

4. The purchase and supplying of certain materials as noted in the Project Manual.
5. The Owner, under separate contract, shall provide removal of identified asbestos containing materials from the existing structure. The asbestos report is available through the Construction Manager upon request.
6. (List other items as may be applicable).

## 1.09 PERMITS, FEES, AND NOTICES

A. Bid Category No. 1 General Trades Contractor will secure the general building permit for the Owner. Each Contractor shall secure and pay for other permits, governmental fees, and licenses necessary for the proper execution and completion of the Contractors Work. Fees to relocate utilities on Owner's property shall be included in the bid of the Contractor doing the relocation.
   1. The Owner shall pay for the cost of the Building Permit.
   2. State filing fees for plan approval are the responsibility of the Owner and will be paid by the Owner.

B. Utility Tie-Ins: Shall be arranged with local utility company and other involved parties for minimum interruption of service.

C. Shutdowns of existing systems shall be limited to minimum time required and scheduled with other involved parties. Provide 2 days written notice of shutdown to Construction Manager and Owner.

D. Inspections of installed work shall be performed by the governing authority as arranged for by the Contractor. Work shall not be covered until approved.

E. Each Contractor shall give notices and comply with laws, ordinances, rules, regulations, and orders of public authorities bearing on the performance of his Work. If a Contractor observes that the Contract Documents are at variance therewith, he shall promptly notify the Construction Manager in writing, and necessary changes shall be adjusted by appropriate notification. If a Contractor performs Work knowing it to be contrary to such laws, ordinances, rules, and regulations, and without such notice to the Construction Manager, he shall assume full responsibility therefore and shall bear the costs attributable thereto.

## 1.10 LABOR AND MATERIALS

A. Unless otherwise specifically noted, the Contractor shall provide and pay for labor, materials, equipment, tools, construction equipment and machinery, water, heat, utilities, transportation, and other facilities and services necessary for the proper execution and completion of his Work, whether temporary or permanent and whether or not incorporated or to be incorporated in the Work.

B. Each Contractor shall enforce strict discipline and good order among his employees or other persons carrying out Work of his Contract and shall not permit employment of unfit person or persons or anyone not skilled in the task assigned to them.

C. Prime Contractors must furnish a letter to the Construction Manager, stating that Contractor shall not assign any of its employees, agents or other individuals to perform any services in the District's facilities or program sites if that individual:
1. Is listed on the Michigan Sex Offender Registry, www.mipsor.state.mi.us.
2. Is listed on the Federal Sex Offender Registry www.nsopw.gov.
3. Has not passed a 5-50 drug screen, testing negative for the following drugs:
   a. Amphetamines
   b. Methamphetamines
   c. Cocaine
   d. Codeine
   e. Methadone
   f. Morphine
   g. Phencyclidine (PCP)
   h. Marijuana

D. ID Stickers will be issued by The Skillman Corporation upon receipt of verification from the Contractor that the employee/subcontractor employee or independent contractor has a satisfactory record to work on the Project. Stickers will be numbered and numbers assigned to each worker to be worn on their hardhat. It is the Contractor's responsibility to maintain a record of contractor's name assigned each number and provide to The Construction Manager upon request.

E. Consistent with Michigan law, possession or consumption of drugs on school property will promptly be reported to the local police. Consumption of alcoholic beverages or tobacco or other noxious behavior on school owned property is strictly prohibited. Violators shall be promptly removed from the site. Smoking is not permitted on school property or within school buildings.

## 1.11 CUTTING AND PATCHING

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

## 1.12 VERIFICATIONS OF EXISTING DIMENSIONS

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

## 1.13 PROJECT SECURITY

A. Each Prime Contractor shall take all reasonable precautions to prevent injury, damage or loss to people and property in, on and adjacent to the project. This shall

include not only their own work or property but that of other contractors and the Owner.

B. If deemed necessary by The Construction Manager a project wide security program may be developed for the purpose of preventing damage or loss at the project site or property adjacent thereto. Once accepted by the Owner, contractors shall comply.

## 1.14 SCHEDULE OF CONTRACT RESPONSIBILITIES - SCOPE

A. Contractors shall submit their proposals based on the work included under each contract area as listed herein. Include Work necessary for a complete project, as shown on the Drawings and called for in the Specifications.

B. Questions concerning the phasing or "Schedule of Contract Responsibilities" should be directed to the Construction Manager, who will be the interpreter and be responsible for this Schedule of Contract Responsibilities and Contract Breakdown, prior to submitting proposals and during construction.

C. The requirements of Division 1 are a part of the Work of each and every contract area. The Contractor for any one contract area shall be familiar with the Work and requirements of all other contract areas.

D. Certain Specification Sections describe Work to be performed under several contract areas. (Example: 06 10 00 - Rough Carpentry.) Provide Work of this nature as required for each contract area whether or not enumerated in the Schedule of Contract Responsibilities.

E. The following contract areas are broken down by Specifications Section conforming basically to the CSI format.

F. The Drawings and Specifications as furnished for each of the Contracts is for the convenience of the Contractor in preparing a proposal for this Project. However, each Contractor is responsible to review the complete set of Drawings and Specifications to assure that Work required to be installed to complete his phase of the Work is included in his proposal. This "Schedule of Contract Responsibilities" is a definition of the work as it is to be bid in separate contracts. Where a specific item of Work is not defined, but is normally inherent to a trade, or is included in the scope of the applicable technical revision, it will be the responsibility of that Contractor to include the Work in his proposal.

G. This "Schedule of Contract Responsibilities" is to aid each Contractor in defining the Scope of Work to be included in his proposal. However, omissions from this "Schedule of Responsibilities" do not relieve the Contractor from including in his proposal that Work which will be required to complete his Contract. Each Contractor should read the "Schedule of Contract Responsibilities" completely to familiarize himself with the Work of other Contractors that may have Work in

adjacent areas and to coordinate the interfacing problems that may occur as the work is assembled and constructed.

H. Where specific Work is to be completed under a particular phase of the Project and the Work is wholly or partially completed by other trades because of the type of work involved or jurisdictional trade agreements, the Contractor will be responsible to subcontract the Work as necessary to complete the Work included in his Contract. No delay in the Work will be allowed due to the failure of the Contractor to subcontract related work required by jurisdictional trade agreements.

## 1.15 COORDINATION OF WORK

A. Each Contractor is responsible to coordinate his Work with the Work of other trades and other Contractors and requirements of the school system. The Contractor must make space allowances for Work of other Contractors, provide necessary openings where indicated or implied by the Drawings and Specifications. Each Contractor is responsible to protect his own Work.

## 1.16 TIME OF COMMENCEMENT AND COMPLETION

A. The Contractor shall commence work within ten (10) days after being notified in writing to proceed and shall complete the Work within the time limitations established in the Form of Agreement.
   1. It is anticipated that construction will start within **103** calendar days after receipt of bids.
   2. Construction shall be complete within **300** consecutive calendar days, or earlier, after Notice to Proceed.

PART 2 PRODUCTS (Not Used)

## PART 3 EXECUTION

## 3.01 SCHEDULE OF CONTRACT RESPONSIBILITIES

## 3.02 GENERAL REQUIREMENTS

A. PROVIDED BY OWNER THROUGH THE CONSTRUCTION MANAGER

| | | |
|---|---|---|
| Section | 01 32 00 | Schedules and Reports |
| Section | 01 45 00S | Masonry Inspection Report |
| Section | 01 45 10 | Testing Laboratory Services |
| Section | 01 51 60 | Temporary Sanitary Facilities |
| Section | 01 52 60 | Rubbish Container |
| Section | 01 53 10 | Fences (Temporary Security) |
| Section | 01 57 60 | Project Signs |
| Section | 01 59 10 | Project Office |
| Section | 01 71 50 | Final Cleaning |

B. PROVIDED BY ALL CONTRACTORS AS APPLICABLE

| | | |
|---|---|---|
| Section | 01 12 00 | Multiple Contract Summary |
| Section | 01 2 300 | Alternates |
| Section | 01 25 00 | Contract Modification Procedures |
| Section | 01 28 00 | Schedule of Values |
| Section | 01 29 00 | Applications for Payment |
| Section | 01 31 00 | Project Meetings |
| Section | 01 32 00 | Schedules and Reports |
| Section | 01 33 00 | Submittal Procedures |
| Section | 01 45 10 | Testing Laboratory Services (Paragraph 1.05) |
| Section | 01 50 50 | Temporary Facilities and Controls |
| Section | 01 54 60 | Environment Protection |
| Section | 01 54 80 | Utility Protection |
| Section | 01 56 30 | Water Control |
| Section | 01 56 90 | Housekeeping & Safety |
| Section | 01 59 20 | Offices and Sheds |
| Section | 01 60 00 | Product Requirements |
| Section | 01 72 50 | Work Layout |
| Section | 01 73 10 | Cutting and Patching |
| Section | 01 77 00 | Contract Closeout |

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

**Autodesk Build** is replacing **PlanGrid**. **Autodesk Build** does not require users to purchase a license. **Contractors** will be invited to the project and required to use this tool. **Autodesk Build** will be used as the **Current Set** and **As-Built Record Drawings.** Additionally, it will be used to track **Issues** for **Safety**, **QA/QC**, **Non-Compliance Issues**, **Work Completion List** and **Punch List**.

C. PROVIDED BY DESIGNATED CONTRACTORS

| | | |
|---|---|---|
| Section | 01 21 00 | Allowances |
| Section | 01 51 10 | Temporary Electricity, Lighting, Warning Systems |
| Section | 01 51 30 | Temporary Heating, Ventilation and Cooling |
| Section | 01 51 50 | Temporary Water |
| Section | 01 51 80 | Temporary Fire Protection |
| Section | 01 52 10 | Construction Aids and Temporary Enclosures |
| Section | 01 53 20 | Tree and Plant Protection |
| Section | 01 53 30 | Barricades |
| Section | 01 55 00 | Access Roads and Parking Areas |
| Section | 01 56 20 | Dust Control |
| Section | 01 56 80 | Erosion Control |
| Section | 01 72 00 | Field Engineering |

## 3.03 BID CATEGORIES

A. BID CATEGORY NO. 1 – GENERAL TRADES

General Requirements in Paragraph 3.02.B above.

| | | |
|---|---|---|
| Section | 01 21 00 | Allowances |
| Section | 01 51 10 | Temporary Electricity, Lighting and Warning Systems |
| Section | 01 51 30 | Temporary Heating, Ventilation and Cooling |
| Section | 01 51 50 | Temporary Water |
| Section | 01 51 80 | Temporary Fire Protection |
| Section | 01 52 10 | Construction Aids and Temporary Enclosures |
| Section | 01 53 10 | Fences (Temporary Security) |
| Section | 01 72 00 | Field Engineering |
| Section | 03 30 00 | Cast-In-Place Concrete |
| Section | 03 30 53 | Concrete Turf Anchor |
| Section | 03 60 00 | Post Installed Anchors |
| Section | 04 20 00 | Unit Masonry |
| Section | 05 50 00 | Metal Fabrications |
| Section | 05 51 19 | Metal Grating Stairs |
| Section | 05 52 13 | Pipe And Tube Railings |
| Section | 06 10 00 | Rough Carpentry |
| Section | 06 10 50 | Turf Wood Nailer |
| Section | 06 15 33 | Patio Decking |
| Section | 06 16 00 | Sheathing |
| Section | 07 19 00 | Water Repellents |
| Section | 07 25 00 | Weather Barriers |
| Section | 07 31 13 | Asphalt Shingles |
| Section | 07 42 93 | Soffit Panels |
| Section | 07 46 46 | Fiber-Cement Siding |
| Section | 07 54 23 | Thermoplastic Polyolefin (Tpo) Roofing |
| Section | 07 62 00 | Sheet Metal Flashing And Trim |
| Section | 07 71 00 | Roof Specialties |
| Section | 07 92 00 | Joint Sealants |
| Section | 08 31 13 | Access Doors And Frames |
| Section | 08 33 13 | Coiling Counter Doors |
| Section | 08 41 13 | Aluminum-Framed Entrances And Storefronts |
| Section | 08 51 13 | Aluminum Windows |
| Section | 08 71 00 | Door Hardware |
| Section | 08 80 00 | Glazing |
| Section | 09 29 00 | Gypsum Board |
| Section | 09 65 13 | Resilient Base And Accessories |
| Section | 09 68 13 | Tile Carpeting |
| Section | 09 91 13 | Exterior Painting |
| Section | 09 91 23 | Interior Painting |
| Section | 09 96 00 | High-Performance Coatings |
| Section | 10 21 13 | Toilet Compartments – Add 3 |
| Section | 10 28 00 | Toilet, Bath, And Laundry Accessories – Add 3 |

| | | |
|---|---|---|
| Section | 10 75 16 | Ground-Set Flagpoles |
| Section | 11 68 34 | Football Goal Post |
| Section | 11 68 36 | Portable Soccer & Lax Goals |
| Section | 11 68 38 | Baseball Equipment |
| Section | 11 68 40 | Field Event Construction |
| Section | 11 68 42 | Protective Netting System |
| Section | 11 68 43 | Exterior Scoreboard |
| Section | 12 36 16 | Metal Countertops |
| Section | 13 34 20 | Manufactured Band Tower Structure |
| Section | 13 35 15 | Bleachers |
| Section | 22 05 00 | Common Work Results For Plumbing |
| Section | 22 05 19 | Meters And Gages For Plumbing Piping |
| Section | 22 05 23 | General Duty Valves For Plumbing Piping |
| Section | 22 05 29 | Hangers And Supports For Plumbing Piping And Equipment |
| Section | 22 05 53 | Identification For Plumbing Piping And Equipment |
| Section | 22 07 00 | Plumbing Insulation |
| Section | 22 11 16 | Domestic Water Piping |
| Section | 22 11 19 | Domestic Water Piping Specialties |
| Section | 22 13 16 | Sanitary Waste And Vent Piping |
| Section | 22 13 19 | Sanitary Waste Piping Specialties |
| Section | 22 33 00 | Electric Domestic Water Heaters |
| Section | 22 40 00 | Plumbing Fixtures |
| Section | 23 05 00 | Common Work Results For HVAC |
| Section | 23 05 13 | Common Motor Requirements For HVAC Equipment |
| Section | 23 05 29 | Hangers And Supports For HVAC Piping And Equipment |
| Section | 23 05 53 | Identification For HVAC Piping And Equipment |
| Section | 23 05 93 | Testing, Adjusting, And Balancing For HVAC |
| Section | 23 31 13 | Metal Ducts |
| Section | 23 33 00 | Air Duct Accessories |
| Section | 23 34 23 | HVAC Power Ventilators |
| Section | 23 37 13 | Diffusers, Registers, And Grilles |
| Section | 23 82 39 | Unit Heaters |
| Section | 26 05 00 | Common Work Results For Electrical |
| Section | 26 05 19 | Low-Voltage Electrical Power Conductors And Cables |
| Section | 26 05 26 | Grounding And Bonding For Electrical Systems |
| Section | 26 05 29 | Hangers And Supports For Electrical Systems |
| Section | 26 05 33 | Raceways And Boxes For Electrical Systems |
| Section | 26 05 43 | Underground Ducts And Raceways For Electrical Systems |
| Section | 26 05 44 | Sleeves And Sleeve Seals For Electrical Raceways And Cabling |
| Section | 26 05 53 | Identification for Electrical Systems |
| Section | 26 09 23 | Lighting Control Devices |

| | | |
|---|---|---|
| Section | 26 27 26 | Wiring Devices |
| Section | 26 51 00 | Interior Lighting |
| Section | 26 56 00 | Exterior Lighting |
| Section | 27 5114 | PA System - Single Point Speaker |
| Section | 27 5119 | Field Utility Boxes |
| Section | 32 13 13 | Concrete Paving |
| Section | 32 13 73 | Concrete Joints |
| Section | 32 31 13 | Chain Link Fences And Gates |
| Section | 32 31 30 | Chain Fence - Vinyl |

B. BID CATEGORY NO. 2 - SITEWORK

General Requirements in Paragraph 3.02.B above.

| | | |
|---|---|---|
| Section | 01 21 00 | Allowances |
| Section | 01 53 20 | Tree and Plant Protection |
| Section | 01 53 30 | Barricades |
| Section | 01 55 00 | Access Roads and Parking Areas |
| Section | 01 56 20 | Dust Control |
| Section | 01 56 80 | Erosion Control |
| Section | 01 72 00 | Field Engineering |
| Section | 02 41 13 | Demolition |
| Section | 02 41 19 | Selective Structure Demolition |
| Section | 03 31 00 | Site Clearing |
| Section | 32 18 09 | Synthetic turf-Batting Cage |
| Section | 31 15 00 | Site Clearing |
| Section | 31 20 00 | Earth Moving |
| Section | 31 20 10 | Earthwork - Athletics |
| Section | 31 32 19 | Geotextile Fabric |
| Section | 32 11 23 | Aggregate Drainage Layer |
| Section | 32 18 22 | Infield Mix - Red Clay |
| Section | 32 18 31 | Shot Put Material |
| Section | 32 32 23 | Concrete Segmental Retaining Wall |
| Section | 32 84 00 | Underground Irrigation System |
| Section | 32 91 19 | Topsoil |
| Section | 32 92 00 | Turfs And Grasses |
| Section | 32 92 23 | Lawns – Sod |
| Section | 32 92 27 | General Lawn Restoration |
| Section | 32 92 30 | Lawn |
| Section | 33 10 00 | Water Utilities |
| Section | 33 30 00 | Sanitary Sewerage Utilities |
| Section | 33 41 00 | Storm |
| Section | 33 44 13 | Manholes, Catch Basins, and Similar Structures (Baseball) |
| Section | 33 46 00 | SubDrainage Systems - Sand |
| Section | 33 46 05 | SubDrainage Systems - Peastone |
| Section | 33 46 10 | SubDrainage Systems - Bypass Drainage |
| Section | 33 46 15 | SubDrainage Systems - Turf Draintile |

C. BID CATEGORY NO. 3 – SYNTHETIC TURF

General Requirements in Paragraph 3.02.B above.

| | | |
|---|---|---|
| Section | 01 21 00 | Allowances |
| Section | 32 18 09 | Synthetic turf-Batting Cage |
| Section | 32 18 18 | Synthetic Turf |
| Section | 32 18 52 | Performance Shock Pad |

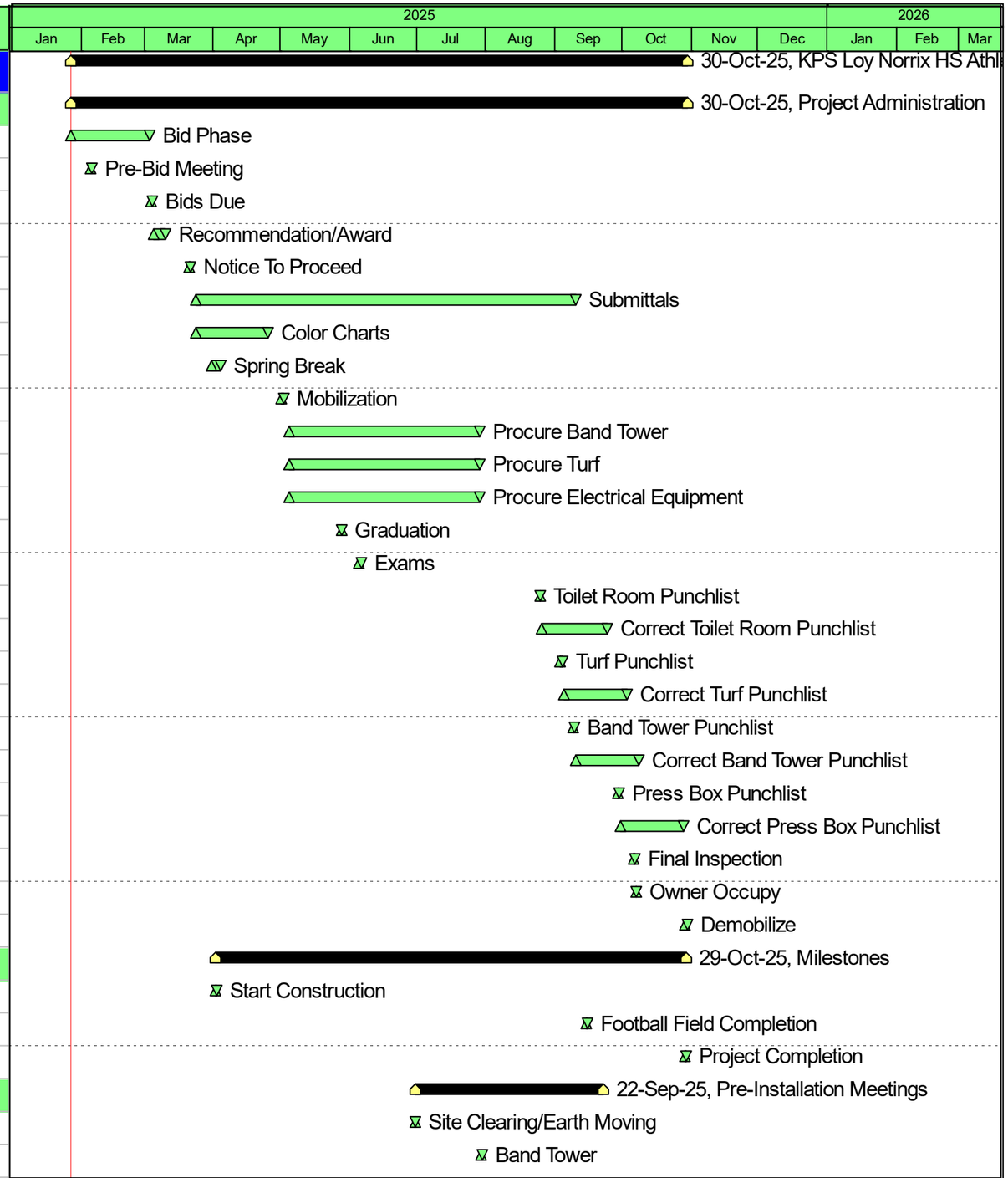
D. BID CATEGORY NO. 4 – ASPHALT PAVING

General Requirements in Paragraph 3.02.B above.

| | | |
|---|---|---|
| Section | 01 21 00 | Allowances |
| Section | 32 12 16 | Asphalt Paving |
| Section | 32 17 23 | Pavement Marking |

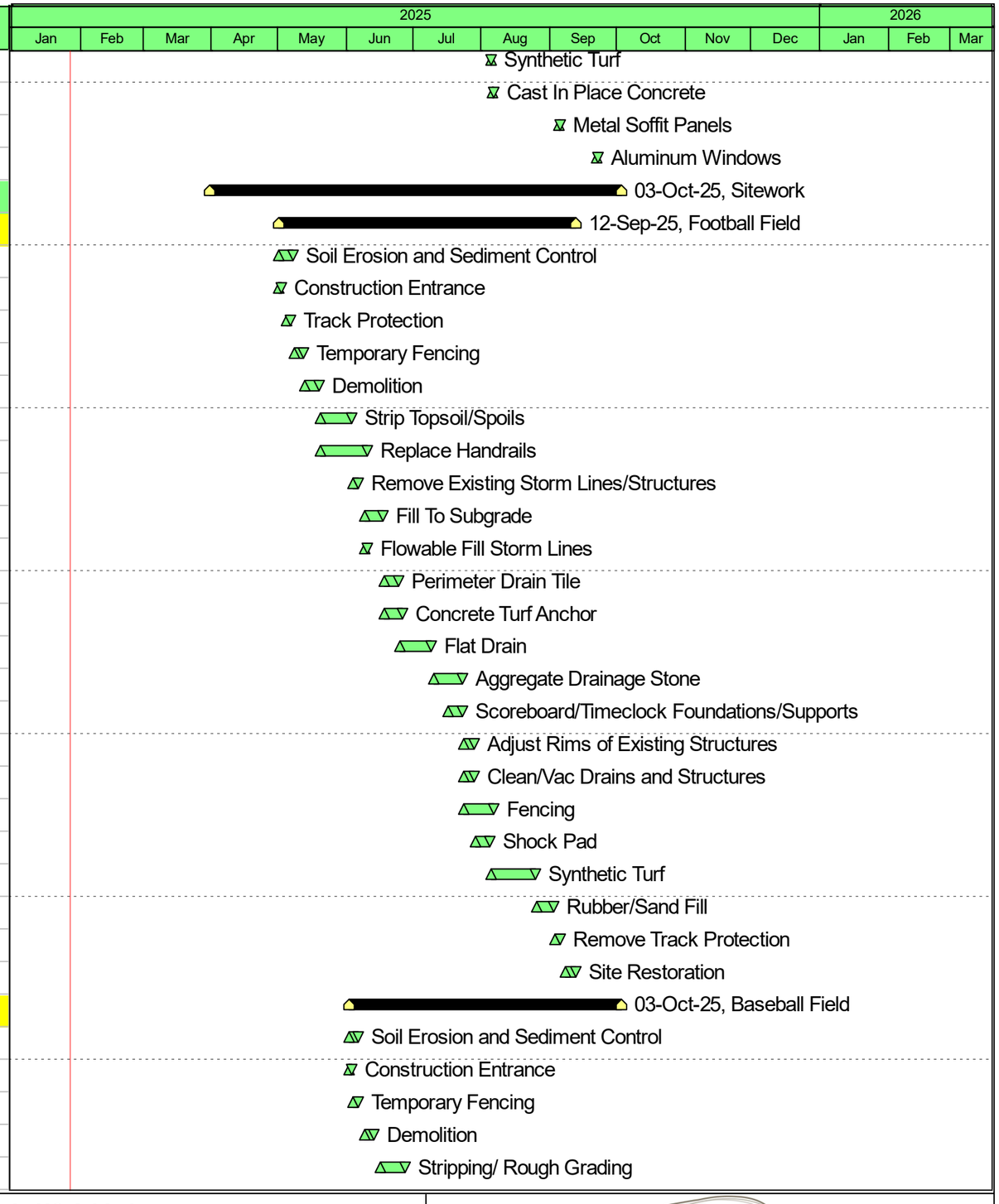
END OF SECTION 01 12 00

| Activity Name | Original Duration | Start | Finish |
|---|---|---|---|
| **KPS Loy Norrix HS Athletics** | 196 | 27-Jan-25 | 30-Oct-25 |
| **Project Administration** | 196 | 27-Jan-25 | 30-Oct-25 |
| Bid Phase | 26 | 27-Jan-25* | 03-Mar-25 |
| Pre-Bid Meeting | 1 | 05-Feb-25* | 05-Feb-25 |
| Bids Due | 1 | 04-Mar-25 | 04-Mar-25 |
| Recommendation/Award | 4 | 05-Mar-25 | 10-Mar-25 |
| Notice To Proceed | 1 | 21-Mar-25* | 21-Mar-25 |
| Submittals | 120 | 24-Mar-25 | 10-Sep-25 |
| Color Charts | 25 | 24-Mar-25 | 25-Apr-25 |
| Spring Break | 5 | 31-Mar-25* | 04-Apr-25 |
| Mobilization | 2 | 01-May-25 | 02-May-25 |
| Procure Band Tower | 60 | 05-May-25 | 29-Jul-25 |
| Procure Turf | 60 | 05-May-25 | 29-Jul-25 |
| Procure Electrical Equipment | 60 | 05-May-25 | 29-Jul-25 |
| Graduation | 1 | 28-May-25* | 28-May-25 |
| Exams | 2 | 05-Jun-25* | 06-Jun-25 |
| Toilet Room Punchlist | 1 | 25-Aug-25 | 25-Aug-25 |
| Correct Toilet Room Punchlist | 21 | 26-Aug-25 | 24-Sep-25 |
| Turf Punchlist | 2 | 03-Sep-25 | 04-Sep-25 |
| Correct Turf Punchlist | 21 | 05-Sep-25 | 03-Oct-25 |
| Band Tower Punchlist | 1 | 09-Sep-25 | 09-Sep-25 |
| Correct Band Tower Punchlist | 21 | 10-Sep-25 | 08-Oct-25 |
| Press Box Punchlist | 1 | 29-Sep-25 | 29-Sep-25 |
| Correct Press Box Punchlist | 21 | 30-Sep-25 | 28-Oct-25 |
| Final Inspection | 1 | 06-Oct-25 | 06-Oct-25 |
| Owner Occupy | 1 | 07-Oct-25 | 07-Oct-25 |
| Demobilize | 2 | 29-Oct-25 | 30-Oct-25 |
| **Milestones** | 148 | 02-Apr-25 | 29-Oct-25 |
| Start Construction | 1 | 02-Apr-25 | 02-Apr-25 |
| Football Field Completion | 1 | 15-Sep-25 | 15-Sep-25 |
| Project Completion | 1 | 29-Oct-25 | 29-Oct-25 |
| **Pre-Installation Meetings** | 59 | 30-Jun-25 | 22-Sep-25 |
| Site Clearing/Earth Moving | 1 | 30-Jun-25 | 30-Jun-25 |
| Band Tower | 1 | 30-Jul-25 | 30-Jul-25 |




Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

| Activity Name | Original Duration | Start | Finish |
|---|---|---|---|
| Synthetic Turf | 1 | 05-Aug-25 | 05-Aug-25 |
| Cast In Place Concrete | 1 | 06-Aug-25 | 06-Aug-25 |
| Metal Soffit Panels | 1 | 05-Sep-25 | 05-Sep-25 |
| Aluminum Windows | 1 | 22-Sep-25 | 22-Sep-25 |
| **Sitework** | 132 | 31-Mar-25 | 03-Oct-25 |
| **Football Field** | 94 | 01-May-25 | 12-Sep-25 |
| Soil Erosion and Sediment Control | 5 | 01-May-25* | 07-May-25 |
| Construction Entrance | 2 | 01-May-25* | 02-May-25 |
| Track Protection | 2 | 05-May-25 | 06-May-25 |
| Temporary Fencing | 3 | 08-May-25 | 12-May-25 |
| Demolition | 5 | 13-May-25 | 19-May-25 |
| Strip Topsoil/Spoils | 10 | 20-May-25 | 03-Jun-25 |
| Replace Handrails | 15 | 20-May-25 | 10-Jun-25 |
| Remove Existing Storm Lines/Structures | 3 | 04-Jun-25 | 06-Jun-25 |
| Fill To Subgrade | 7 | 09-Jun-25 | 17-Jun-25 |
| Flowable Fill Storm Lines | 2 | 09-Jun-25 | 10-Jun-25 |
| Perimeter Drain Tile | 5 | 18-Jun-25 | 24-Jun-25 |
| Concrete Turf Anchor | 7 | 18-Jun-25 | 26-Jun-25 |
| Flat Drain | 10 | 25-Jun-25 | 09-Jul-25 |
| Aggregate Drainage Stone | 10 | 10-Jul-25 | 23-Jul-25 |
| Scoreboard/Timeclock Foundations/Supports | 5 | 17-Jul-25 | 23-Jul-25 |
| Adjust Rims of Existing Structures | 3 | 24-Jul-25 | 28-Jul-25 |
| Clean/Vac Drains and Structures | 3 | 24-Jul-25 | 28-Jul-25 |
| Fencing | 10 | 24-Jul-25 | 06-Aug-25 |
| Shock Pad | 5 | 29-Jul-25 | 04-Aug-25 |
| Synthetic Turf | 15 | 05-Aug-25 | 25-Aug-25 |
| Rubber/Sand Fill | 5 | 26-Aug-25 | 02-Sep-25 |
| Remove Track Protection | 3 | 03-Sep-25 | 05-Sep-25 |
| Site Restoration | 5 | 08-Sep-25 | 12-Sep-25 |
| **Baseball Field** | 88 | 02-Jun-25 | 03-Oct-25 |
| Soil Erosion and Sediment Control | 5 | 02-Jun-25* | 06-Jun-25 |
| Construction Entrance | 2 | 02-Jun-25* | 03-Jun-25 |
| Temporary Fencing | 3 | 04-Jun-25 | 06-Jun-25 |
| Demolition | 5 | 09-Jun-25 | 13-Jun-25 |
| Stripping/ Rough Grading | 10 | 16-Jun-25 | 27-Jun-25 |

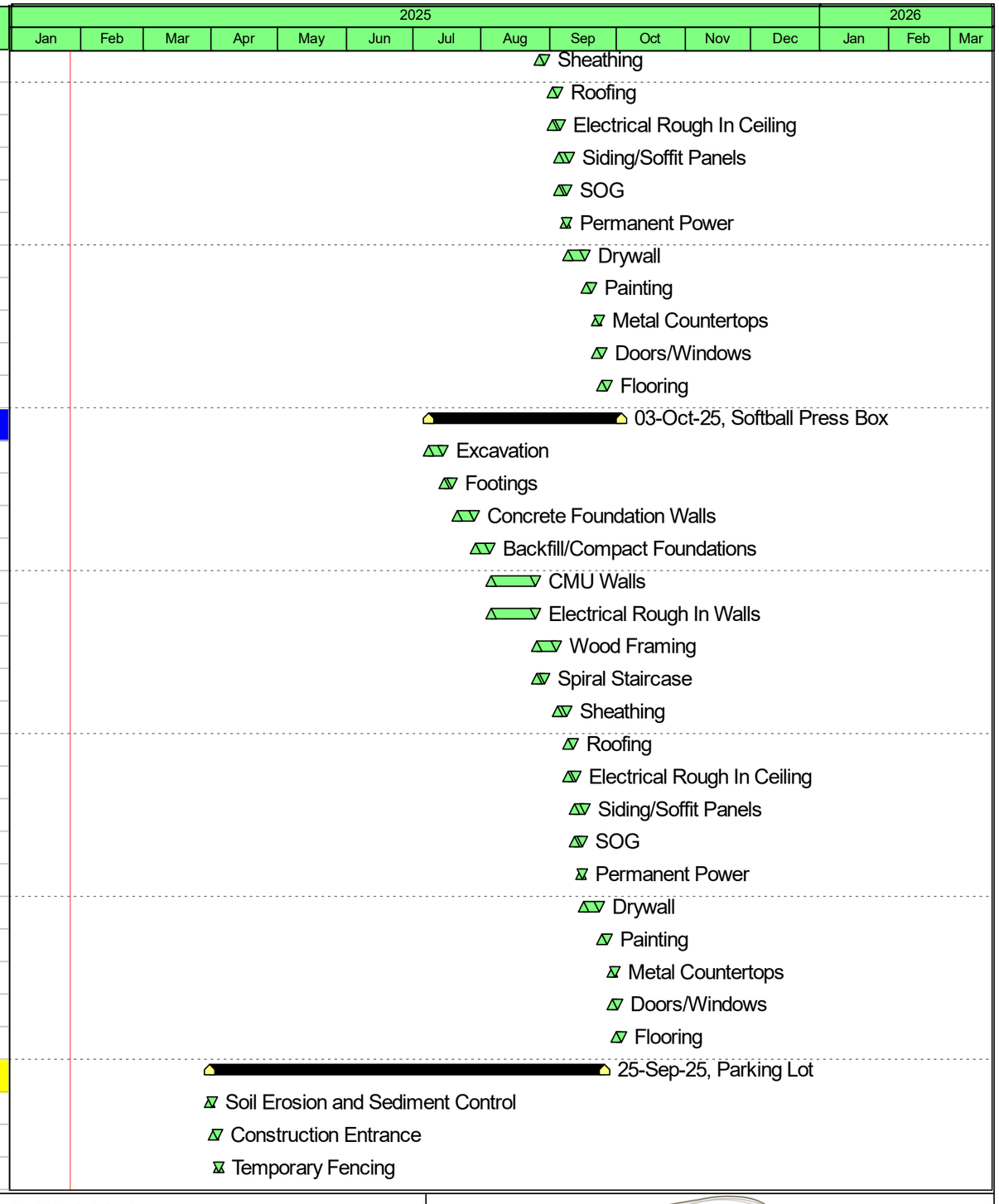



Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

| Activity Name | Original Duration | Start | Finish |
|---|---|---|---|
| Ballstop Netting System | 4 | 30-Jun-25 | 03-Jul-25 |
| Place/Grade Clean Fill | 5 | 30-Jun-25 | 07-Jul-25 |
| Underdrain System | 7 | 08-Jul-25 | 16-Jul-25 |
| Bricks/Infield Mix | 10 | 17-Jul-25 | 30-Jul-25 |
| Fencing | 10 | 17-Jul-25 | 30-Jul-25 |
| Warning Track Mix | 2 | 31-Jul-25 | 01-Aug-25 |
| Rough Grade Topsoil | 5 | 31-Jul-25 | 06-Aug-25 |
| Field Events | 5 | 04-Aug-25 | 08-Aug-25 |
| Irrigation | 5 | 07-Aug-25 | 13-Aug-25 |
| Final Grade Topsoil | 3 | 14-Aug-25 | 18-Aug-25 |
| Sod | 2 | 19-Aug-25 | 20-Aug-25 |
| Site Concrete | 10 | 10-Sep-25 | 23-Sep-25 |
| Site Restoration | 2 | 24-Sep-25 | 25-Sep-25 |
| **Dugouts** | 32 | 15-Jul-25 | 27-Aug-25 |
| Excavation | 3 | 15-Jul-25 | 17-Jul-25 |
| Footings | 3 | 18-Jul-25 | 22-Jul-25 |
| Foundations | 4 | 23-Jul-25 | 28-Jul-25 |
| Backfill Foundations | 2 | 29-Jul-25 | 30-Jul-25 |
| CMU Walls | 4 | 31-Jul-25 | 05-Aug-25 |
| Rough in Walls | 4 | 31-Jul-25 | 05-Aug-25 |
| SOG | 2 | 06-Aug-25 | 07-Aug-25 |
| Roof Framing/Blocking | 5 | 08-Aug-25 | 14-Aug-25 |
| Sheathing/Roofing | 3 | 15-Aug-25 | 19-Aug-25 |
| Frame Benches/Shelving | 3 | 20-Aug-25 | 22-Aug-25 |
| Painting | 1 | 25-Aug-25 | 25-Aug-25 |
| Door/Hardware | 2 | 26-Aug-25 | 27-Aug-25 |
| **Baseball Press Box** | 63 | 30-Jun-25 | 26-Sep-25 |
| Excavation | 5 | 30-Jun-25 | 07-Jul-25 |
| Footings | 4 | 08-Jul-25 | 11-Jul-25 |
| Concrete Foundation Walls | 6 | 14-Jul-25 | 21-Jul-25 |
| Backfill/Compact Foundations | 5 | 22-Jul-25 | 28-Jul-25 |
| CMU Walls | 15 | 29-Jul-25 | 18-Aug-25 |
| Electrical Rough In Walls | 15 | 29-Jul-25 | 18-Aug-25 |
| Wood Framing | 6 | 19-Aug-25 | 26-Aug-25 |
| Spiral Staircase | 4 | 19-Aug-25 | 22-Aug-25 |

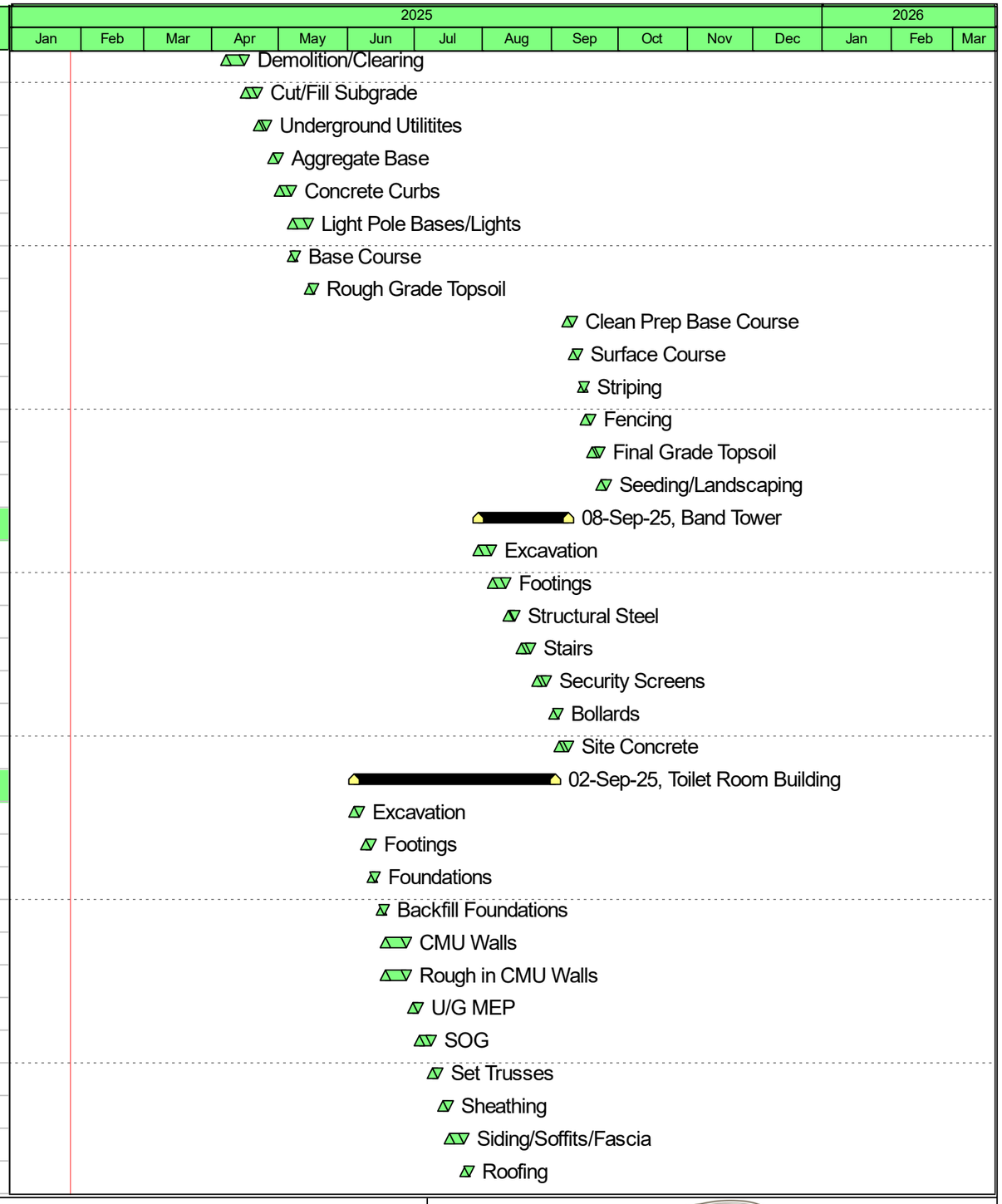

Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

| Activity Name | Original Duration | Start | Finish |
|---|---|---|---|
| Sheathing | 3 | 27-Aug-25 | 29-Aug-25 |
| Roofing | 3 | 02-Sep-25 | 04-Sep-25 |
| Electrical Rough In Ceiling | 4 | 02-Sep-25 | 05-Sep-25 |
| Siding/Soffit Panels | 3 | 05-Sep-25 | 09-Sep-25 |
| SOG | 2 | 05-Sep-25 | 08-Sep-25 |
| Permanent Power | 1 | 08-Sep-25 | 08-Sep-25 |
| Drywall | 6 | 09-Sep-25 | 16-Sep-25 |
| Painting | 3 | 17-Sep-25 | 19-Sep-25 |
| Metal Countertops | 2 | 22-Sep-25 | 23-Sep-25 |
| Doors/Windows | 3 | 22-Sep-25 | 24-Sep-25 |
| Flooring | 3 | 24-Sep-25 | 26-Sep-25 |
| **Softball Press Box** | 63 | 08-Jul-25 | 03-Oct-25 |
| Excavation | 5 | 08-Jul-25 | 14-Jul-25 |
| Footings | 4 | 15-Jul-25 | 18-Jul-25 |
| Concrete Foundation Walls | 6 | 21-Jul-25 | 28-Jul-25 |
| Backfill/Compact Foundations | 5 | 29-Jul-25 | 04-Aug-25 |
| CMU Walls | 15 | 05-Aug-25 | 25-Aug-25 |
| Electrical Rough In Walls | 15 | 05-Aug-25 | 25-Aug-25 |
| Wood Framing | 6 | 26-Aug-25 | 03-Sep-25 |
| Spiral Staircase | 4 | 26-Aug-25 | 29-Aug-25 |
| Sheathing | 3 | 04-Sep-25 | 08-Sep-25 |
| Roofing | 3 | 09-Sep-25 | 11-Sep-25 |
| Electrical Rough In Ceiling | 4 | 09-Sep-25 | 12-Sep-25 |
| Siding/Soffit Panels | 3 | 12-Sep-25 | 16-Sep-25 |
| SOG | 2 | 12-Sep-25 | 15-Sep-25 |
| Permanent Power | 1 | 15-Sep-25 | 15-Sep-25 |
| Drywall | 6 | 16-Sep-25 | 23-Sep-25 |
| Painting | 3 | 24-Sep-25 | 26-Sep-25 |
| Metal Countertops | 2 | 29-Sep-25 | 30-Sep-25 |
| Doors/Windows | 3 | 29-Sep-25 | 01-Oct-25 |
| Flooring | 3 | 01-Oct-25 | 03-Oct-25 |
| **Parking Lot** | 126 | 31-Mar-25 | 25-Sep-25 |
| Soil Erosion and Sediment Control | 2 | 31-Mar-25 | 01-Apr-25 |
| Construction Entrance | 2 | 02-Apr-25 | 03-Apr-25 |
| Temporary Fencing | 1 | 04-Apr-25 | 04-Apr-25 |



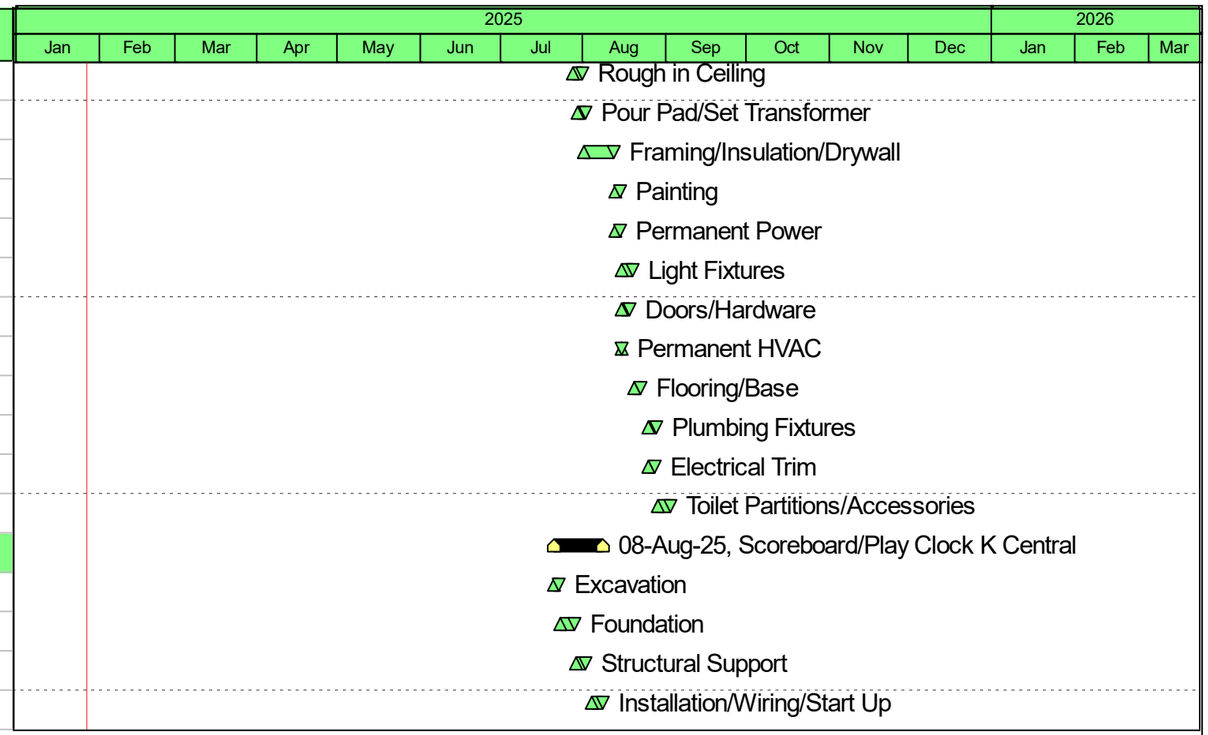

Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

| Activity Name | Original Duration | Start | Finish |
|---|---|---|---|
| Demolition/Clearing | 7 | 07-Apr-25 | 15-Apr-25 |
| Cut/Fill Subgrade | 4 | 16-Apr-25 | 21-Apr-25 |
| Underground Utilitites | 4 | 22-Apr-25 | 25-Apr-25 |
| Aggregate Base | 3 | 28-Apr-25 | 30-Apr-25 |
| Concrete Curbs | 4 | 01-May-25 | 06-May-25 |
| Light Pole Bases/Lights | 6 | 07-May-25 | 14-May-25 |
| Base Course | 2 | 07-May-25 | 08-May-25 |
| Rough Grade Topsoil | 2 | 15-May-25 | 16-May-25 |
| Clean Prep Base Course | 3 | 08-Sep-25 | 10-Sep-25 |
| Surface Course | 2 | 11-Sep-25 | 12-Sep-25 |
| Striping | 1 | 15-Sep-25 | 15-Sep-25 |
| Fencing | 3 | 16-Sep-25 | 18-Sep-25 |
| Final Grade Topsoil | 2 | 19-Sep-25 | 22-Sep-25 |
| Seeding/Landscaping | 3 | 23-Sep-25 | 25-Sep-25 |
| **Band Tower** | 28 | 30-Jul-25 | 08-Sep-25 |
| Excavation | 4 | 30-Jul-25 | 04-Aug-25 |
| Footings | 5 | 05-Aug-25 | 11-Aug-25 |
| Structural Steel | 4 | 12-Aug-25 | 15-Aug-25 |
| Stairs | 5 | 18-Aug-25 | 22-Aug-25 |
| Security Screens | 5 | 25-Aug-25 | 29-Aug-25 |
| Bollards | 2 | 02-Sep-25 | 03-Sep-25 |
| Site Concrete | 3 | 04-Sep-25 | 08-Sep-25 |
| **Toilet Room Building** | 63 | 04-Jun-25 | 02-Sep-25 |
| Excavation | 3 | 04-Jun-25 | 06-Jun-25 |
| Footings | 3 | 09-Jun-25 | 11-Jun-25 |
| Foundations | 22-S | 12-Jun-25 | 13-Jun-25 |
| Backfill Foundations | 2 | 16-Jun-25 | 17-Jun-25 |
| CMU Walls | 8 | 18-Jun-25 | 27-Jun-25 |
| Rough in CMU Walls | 8 | 18-Jun-25 | 27-Jun-25 |
| U/G MEP | 3 | 30-Jun-25 | 02-Jul-25 |
| SOG | 3 | 03-Jul-25 | 08-Jul-25 |
| Set Trusses | 3 | 09-Jul-25 | 11-Jul-25 |
| Sheathing | 3 | 14-Jul-25 | 16-Jul-25 |
| Siding/Soffits/Fascia | 5 | 17-Jul-25 | 23-Jul-25 |
| Roofing | 2 | 24-Jul-25 | 25-Jul-25 |




Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

| Activity Name | Original Duration | Start | Finish |
|---|---|---|---|
| Rough in Ceiling | 4 | 28-Jul-25 | 31-Jul-25 |
| Pour Pad/Set Transformer | 3 | 30-Jul-25 | 01-Aug-25 |
| Framing/Insulation/Drywall | 8 | 01-Aug-25 | 12-Aug-25 |
| Painting | 2 | 13-Aug-25 | 14-Aug-25 |
| Permanent Power | 2 | 13-Aug-25 | 14-Aug-25 |
| Light Fixtures | 3 | 15-Aug-25 | 19-Aug-25 |
| Doors/Hardware | 2 | 15-Aug-25 | 18-Aug-25 |
| Permanent HVAC | 1 | 15-Aug-25 | 15-Aug-25 |
| Flooring/Base | 3 | 20-Aug-25 | 22-Aug-25 |
| Plumbing Fixtures | 4 | 25-Aug-25 | 28-Aug-25 |
| Electrical Trim | 3 | 25-Aug-25 | 27-Aug-25 |
| Toilet Partitions/Accessories | 2 | 29-Aug-25 | 02-Sep-25 |
| **Scoreboard/Play Clock K Central** | 15 | 21-Jul-25 | 08-Aug-25 |
| Excavation | 2 | 21-Jul-25* | 22-Jul-25 |
| Foundation | 4 | 23-Jul-25 | 28-Jul-25 |
| Structural Support | 4 | 29-Jul-25 | 01-Aug-25 |
| Installation/Wiring/Start Up | 5 | 04-Aug-25 | 08-Aug-25 |




Actual Work
Remaining Work
Critical Remaining Work
Milestone
Summary

**224010.05 - KPS Loy Norrix HS Athletics**
**Guideline Schedule - 12-Feb-25**


SKILLMAN

# KPS Kalamazoo Central High School Athletics
## Pre-Bid RFI Log
## 2/18/2025

TowerPinkster
Architecture · Engineering · Interiors


| RFI # | Company Submitting RFI | Date Received | RFI Description | RFI Response |
|---|---|---|---|---|
| 1 | Bidder | 2/6/2025 | 1.Is the turf contractor to install turf on the batting cage?<br>2.What product is supposed to be installed? Is there a specification?<br>3.Will this installation take place while we are installing the field or will this need to be a separate mobilization? | Refer to forthcoming Addendum. No. 2 |
| 2 | Bidder | 2/7/2025 | 1. The trench drain noted on sheet C200 - Is this an existing trench drain?<br>2. If existing, does it only wrap around the "D" zones?<br>3. If existing, is the trench drain encapsulated in concrete?<br>4. If existing, can the concrete be used to attach the proposed nailer board for the turf?<br>5. Should we prepare for a nailer curb around the entire field, or start the new nailer curb at the end of the trench drain at each location? | RFI 2.1: Refer to Sheet L 501 Demolition Plan RFI 2.2: Refer to Sheet L 501 Demolition Plan<br>RFI 2.3: Refer to Sheet L 501 Demolition Plan, L 502 Site Plan, L 503 Dimension Plan, L 520 Site Details<br>RFI 2.4: Refer to Sheet L 502 Site Plan, L 503 Dimension Plan, L 520 Site Details |
| 3 | Bidder | 2/10/2025 | It has been determined that it will be necessary to pave the parking lot with base coat only, early on in the project, to protect against tracking of dirt onto Lovers Lane, and to provide a hard surface for staging and protection of aggregates for the football field. In Addendum, please consider increasing base course of asphalt from 2" to 3" to provide a thicker stronger base course to withstand loaded semis and cement trucks. The parking lot's aggregate base could be reduced from 8" to 7" to accommodate this. The added inch and overall thickness of the asphalt profile won't be for naught after construction as the lot will see future heavy truck traffic for turf and infill replacement and other construction on or around the field. | Refer to Addendum. No. 2 |
| 4 | Bidder | 2/12/2025 | At the pre-bid meeting, the question was asked whether there was any drainage tile in the football field that would need to be removed. This was not addressed in addendum 1.<br>Also, may the topsoil removed from the football field be used on the baseball field instead of importing topsoil. | There is currently no indication of existing underdrain within the stadium field<br>Topsoil shall meet the characteristics outlined in 32 9119, Topsoil, Part 2 Products, 2.1 Materials A - C |

| | | | | |
|---|---|---|---|---|
| 5 | Bidder | 2/13/2025 | Bidder asks: "Is there enough room (width wise) to pave the 8' wide path with a standard (+/-9.5' wide paver?" | Skillman Response:<br>Bidders should visit the site to determine site conditions, equipment accessibility<br>Bid as 8 foot wide path. Provide voluntary alternate price for standard paver.<br>There is room for 9.5" wide path |
| 6 | Bidder | 2/13/2025 | Bidder asks: "We do not see anything for toilet partitions for Loy Norrix. Can you please provide something?" | See addendum #3, issues spec sections 10 2113 - Toilet Partitions and 2800 Toilet, Bath, Accessories |
| 8 | Bidder | 2/14/2025 | 1. Sheet L531 calls out the bullpen at 17' yet L508 calls out 20'6". Which is correct?<br>2. Is there a fence on the outside of the bullpen or is it open to the public. L531 shows it open to the public.<br>3. L532 shows the backstop 32'x32'x32'. L509 shows 40'x32'x40'.<br>4. L532 shows specs for chain link fence that do not match the spec section 323113-2, 2.2, 2a and<br>b. Please clarify.<br>5. Are top, bottom, and middle rails needed for all 4' and 8' high chain link fence as called out on 323113-2, 2.2, 3a?<br>Sheet L532 detail 3 and 8 shows bottom tension wire.<br>6. Is ss40 (stronger and lighter) acceptable vs. the spec'd sch40?<br>7. Where are privacy slats needed?<br>8. Where is sheet L1.05 referenced on L532 detail 3?<br>9. Is there a spec for the fence protective cap?<br>10. What is the height of the batters eye?<br>11. L508 shows a cut detail 1/534 in the outfield. Detail 1/534 is netting. Is that what is required at that location?<br>12. L509 shows (2) 160' runs of what appears to be netting that is detailed on sheet 534. Please clarify.<br>13. Spec section 323113-2, 2.1, 2a has 1 3/4" chain link mesh. Where is that located? | 1. addendum #3 revised details to correspond with the plans<br>2. addendum #3 revised details to correspond with the plans<br>3. addendum #3 revised details to correspond with the plans<br>4. addendum #3 clarifies fencing<br>5. addendum #3 clarifies fencing<br>6. SS40 is acceptable<br>7. addendum #3 privacy slats omitted<br>8. addendum #3 clarifies sheet references<br>9. refer to specification section 11 6838 Baseball Field Equipment<br>10. addendum #3 clarifies batters eye height<br>11. clarification in addendum #3<br>12. clarification in addendum #3<br>13. clarification in addendum #3 updated specification section 32 3113 |
| 9 | Skillman | 2/10/2025 | Is the Alternate #1 that is listed in Addendum #1 (Batter's Eye) to replace the original Alternate #1 (Turf field graphics)? | TP Response: YES |
| 10 | Bidder | 2/17/2025 | Asphalt paving spec section 32 1216 calls out.....<br>36A mix for Tennis Court - but there is no tennis court paving Asphalt curbs.....but there are no asphalt curbs found on the plans Asphalt traffic calming-devices..... but none are found on the plans | clarified in addendum #3 specification section 32 1216 revised to omit references not in project |

| | | | | |
|---|---|---|---|---|
| 11 | Bidder | 2/18/2025 | In addendum #2 they took out the scoreboards for the baseball and football fields. They also removed the play clocks. Do we still need to include conduit to those locations? | Yes, stay tuned for Addendum #3 which upgrades (the prior designed scoreboards) to digital video scoreboards with sound system. The Addendum will clarify the electrical as well. |
| 12 | Skillman | 2/18/2025 | 1. Water lines in the chase will freeze since the chase is not insulated.<br>2. How are water coolers and lavatory sink traps being winterized in the toilet rooms?<br>3. Water from roof is draining to HH and transformer at toilet room.<br>4. Water from roof of pressbox is sheeting directly to spiral stair platform.<br>5. Transformer shown between pressbox and backstop won't fit in this location.<br>6. Toilet room hand hole, transformer and sanitary cleanout are all in the same location.<br>7. Boring report indicates 23.8" average topsoil removal, drawings call for 10" of removal.<br>8. C200 calls for 2" rigid insulation on top/sides of sanitary lines, but rigid not in specs.<br>9. Note: Retaining wall at the baseball service drive (off Lovers Lane) is in poor condition.<br>10. Time clocks noted as future. Their foundations & electrical installed now before turf? | 1. building will be winterized<br>2. building will be drained and blown down for winterization<br>3. addendum #3 moved move transformer set away from roof runoff<br>4. OK, building is seasonal and will not need to worry about snow and ice<br>5. addendum #3 moved transformer locations<br>6. addendum #3 moved conflicting site elements so they all play nice together<br>7. the 10 inch depth noted in the project is an equation of the average turn field excavation depth needed to achieve subgrade elevation plus the average topsoil depth of borings #1 thru #7 (18.2")<br><br>8. rigid is required, provide polystyrene 2" rigid foam insulation<br>9. addendum #3, retaining wall will be demolished and removed<br>10. addendum #3, clarifies scoreboards, game clocks and PA |

TowerPinkster

Architecture · Engineering · Interiors

# ADDENDUM NO. 3

| | |
|---|---|
| **DATE OF ISSUANCE:** | **February 21, 2025** |
| **PROJECT:** | **Loy Norrix High School Athletics Project**<br>**606 E. Kilgore Road**<br>**Kalamazoo, MI 49001** |
| **OWNER:** | **Kalamazoo Public Schools** |
| **ARCHITECT'S PROJECT NO.:** | **23-625.00** |
| **ORIGINAL BID ISSUE DATE:** | **January 24, 2025** |

---

**SCOPE OF WORK**

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

**DOCUMENTS INCLUDED IN THIS ADDENDUM**

This Addendum includes 6 pages of text and the following documents:

- Bidding Documents: None.
- Contract Conditions: None.
- Specification Sections: 10 2110, 10 2800, 11 6843, 27 5114, 32 3130, 32 1216, 32 3113
- Drawings: C100, C101, C102, C200, C201, C202, C300, C301, C302, L 502, L 503, L 507, L 508, L 509, L 510, L 521, L 531, L 532, A 103A, A 103B, ES100, ES102, ES103, E101A, E101B, E401
- New Drawings: E501
- Kalamazoo Central High School Sheet: E 104 (For Reference Only) Scoreboards and PA

**CHANGES TO PREVIOUSLY ISSUED ADDENDA**

None.

**CHANGES TO SPECIFICATIONS**

**ADD-3 Item No. S-1 - Specification Section 10 2113 – Toilet Compartments**

Refer to New Specification Section: 10 2113 – Toilet Compartments

**ADD-3 Item No. S-2 - Specification Section 10 2800 – Toilet, Bath, and Laundry Accessories**

Refer to New Specification Section: 10 2080 – Toilet, Bath, and Laundry Accessories

**ADD-3 Item No. S-3 - Specification Section 11 6843 – Exterior Scoreboards – Loy Norrix**

Refer to New Specification Section: 11 6843 – Exterior Scoreboards.

Provide break-out pricing for products defined in 11 6843 for the Loy Norrix High School Project:

1. Football Scoreboard and Video Board
2. Play Clocks
3. Baseball Scoreboard

**ADD-3 Item No. S-4 - Specification Section 11 6843 – Exterior Scoreboards – Kalamazoo Central**

Refer to New Specification Section: 11 6843 – Exterior Scoreboards.

Provide break-out pricing for products defined in 11 6843 for the Kalamazoo Central High School Project:

1. Football Scoreboard and Video Board
2. Play Clocks

**ADD-3 Item No. S-5 - Specification Section 27 5114–PA System (Single Point Speaker)–Loy Norrix**

Refer to New Specification Section: 27 5114 – PA System (Single Point Speaker)

Provide break-out pricing for products defined in 27 5114 for the Loy Norrix High School Project:

**ADD-3 Item No. S-6 - Specification Section 27 5114–PA System (Single Point Speaker)–Kalamazoo Central**

Refer to New Specification Section: 27 5114 – PA System (Single Point Speaker)

Provide break-out pricing for products defined in 27 5114 for the Kalamazoo Central High School Project:

**ADD-3 Item No. S-1 - Specification Section 32 1216 – Asphalt Paving – Loy Norrix**

Specification modified to remove reference to tennis court paving, asphalt curbs, and asphalt traffic calming devices as there is no scope within the plan set for these items.

**ADD-3 Item No. S-2 - Specification Section 32 3113 – Chain Link Fences and Gates – Loy Norrix**

Specification modified to remove privacy slats.

Specification modified to remove reference to 1 3/4" chain link mesh.

**CHANGES TO DRAWINGS**

**ADD-3 Item No. D-1 - Sheet C100**

Note removal of existing landscape block retaining wall and restoring area with topsoil and seed.

**ADD-3 Item No. D-2 - Sheet C101**

Note removal of part of existing fence and gate.

**ADD-3 Item No. D-3 - Sheet C102**

Note removal of existing concrete for new softball field press box construction. Protect existing softball fence and fence posts during concrete removal.

**ADD-3 Item No. D-4 - Sheet C200**

Note supplement topsoil and restore / seed area disturbed by existing landscape block wall removal.

**ADD-3 Item No. D-5 - Sheet C201**

Site Plan Notes “G” revised to indicate new 20’ wide gate.

Site Plan Notes “L” added to indicate new 6’ tall chainlink fence.

Site Plan Notes “M” added to indicate connection of proposed fence to existing / nearest fence post.

Note rim of leaching basin #5 adjusted to elevation 843.09. Invert of 8” HDPE Pipe connecting into leaching basin adjusted to elevation 840.98.

Note slope of 8” HDPE pipe from baseball underdrain system to LB-5 adjusted to be at 1.50%.

**ADD-3 Item No. D-6 - Sheet C202**

Softball press box location shown. Softball press box is a mirrored version of the press box on the baseball field. Refer to Architectural Sheets A 103A and A 103B.

**ADD-3 Item No. D-7 - Sheet C300**

Slight grading adjustments to sidewalk.

**ADD-3 Item No. D-8 - Sheet C301**

Adjustment to grading adjacent to baseball field and near added fence / gate replacement.

Note indicating the finish floor elevation of baseball press box, with minor grade updates in this area.

**ADD-3 Item No. D-9 - Sheet C302**

Grading of new concrete sidewalk adjacent to softball field.

Silt fence noted to protect existing ditch.

Note indicating the finish floor elevation of softball press box.

**ADD-3 Item No. D-10 - Sheet A 103A and A 103B**

Note the press box detailed on sheets A 103A and A 103B will be constructed twice, once at the new baseball field and a second time at the existing softball field (note orientation shown on civil plans – mirrored)

**ADD-3 Item No. D-11 - Sheet L 502, L 503, L 507, L508, and L 521**

Scoreboards and play clocks are added to the project.

**ADD-3 Item No. D-12 - L 507**

Clarified the size of the solid panel batters eye.

**ADD-3 Item No. D-13 - L 508**

Clarified detail callouts.

**ADD-3 Item No. D-14 - L 509**

Added and clarified detail callouts.

**ADD-3 Item No. D-15 - L 510**

Revised bullpen elevations.  Revised annotation of elevations as it relates to top of curb (T/C) versus finish grade.

**ADD-3 Item No. D-16 - L 531**

Revised bullpen details to correspond with the plans.

**ADD-3 Item No. D-17 - L 533**

Added fence sections for bullpens, clarified fence details for the athletic field, and revised the wing dimensions of the backstop to correspond with the plans.

**ADD-3 Item No. D-18 - Electrical Connections to Additional Dugout**

Refer to drawings: ES100, E101B, E401, and E501

Added notes to site, power, lighting, and detail drawings to show additional electrical connections to softball press box. Added new sheet E501

Sheet ES 100

- Duplicated call outs for softball press box.
- Added existing site distribution panel SDP

Sheet E101B

- Added note to indicate all power, data rough-ins, equipment, and lighting indicated applies to both baseball and softball press boxes.
- Revised location of transformer for baseball dugout.
- Transformer is NOT required for new softball press box.

Sheet E401

- Revised one-line diagrams and feeder schedules to account for new softball press box
- Remove panelboard directories and moved to sheet E501

Sheet E501

- New sheet with all previously issued panelboard schedules
- Added new panelboard schedule RPSB for softball press box
-

**ADD-3 Item No. D-19 - Revisions to Football Scoreboard Electrical**

Refer to drawings: , ES102, ES103, and E401

Added communications hand hole to ES102

Revised panelboard for future videoboard to be a 100A/2P narrow with panelboard. Revised feeder and upsized feeder accordingly for voltage.

**ADD-3 Item No. D-20 - Revised  Transformer TX-RPT Location**

Refer to drawings: , E101A

Revised location of TX-RPT to avoid conflict with mechanical.

**END OF ADDENDUM.**

# SECTION 10 2113 - TOILET COMPARTMENTS

## PART 1 - GENERAL

### 1.1 SUMMARY

A. This Section includes solid-polymer units as follows:

1. Toilet Enclosures: Overhead braced.
2. Urinal Screens: Wall hung.

### 1.2 SUBMITTALS

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

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

C. Samples for Initial Selection: For each type of unit indicated.

### 1.3 QUALITY ASSURANCE

A. Comply with requirements in CID-A-A-60003, "Partitions, Toilets, Complete."

### 1.4 PROJECT CONDITIONS

A. Field Measurements: Verify actual locations of walls, columns, ceilings, and other construction contiguous with toilet compartments by field measurements before fabrication and indicate measurements on Shop Drawings.

1. Established Dimensions: Where field measurements cannot be made without delaying the Work, establish dimensions and proceed with fabricating toilet compartments without field measurements. Coordinate wall, floor, ceilings, and other contiguous construction to ensure that actual dimensions correspond to established dimensions.

## PART 2 - PRODUCTS

### 2.1 SOLID-POLYMER UNITS

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

1. Accurate Partitions Corporation.
2. Ampco, Inc.
3. General Partitions Mfg. Corp.
4. Global Steel Products Corp.
5. Partition Systems Incorporated of South Carolina.
6. Sanymetal; a Crane Plumbing company.

B. Door, Panel, and Pilaster Construction: Solid, high-density polyethylene (HDPE) or polypropylene (PP) panel material, not less than 1 inch(25 mm) thick, seamless, with eased edges, and with homogenous color and pattern throughout thickness of material.

1. Color and Pattern: One color and pattern in each room as selected by Architect from manufacturer's full range of colors and patterns.

C. Pilaster Shoes: Manufacturer's standard design; stainless steel, not less than 3 inches(76 mm) high.

D. Brackets (Fittings): Full-height (continuous) heavy-duty cast type, manufacturer's standard design; stainless steel.

1. Brackets for Urinal Screens: Stirrup type: double ear brackets, stainless steel.

a. Product: Subject to compliance with requirements, provide Galaxy Hardware, Inc.; 1-inch Urinal Screen Bracket, Double Ear, Single High, Stainless Steel, SS-140.

E. Heat-Sink Strip: Manufacturer's standard continuous, extruded-aluminum strip fastened to exposed bottom edges of solid-polymer components to prevent burning.

## 2.2 ACCESSORIES

A. Hardware and Accessories: Manufacturer's standard design, heavy-duty operating hardware and accessories.

B. Overhead Bracing: Manufacturer's standard continuous, extruded-aluminum head rail with antigrip profile and in manufacturer's standard finish.

C. Anchorages and Fasteners: Manufacturer's standard exposed fasteners of stainless steel or chrome-plated steel or brass, finished to match hardware, with theft-resistant-type heads. Provide sex-type bolts for through-bolt applications. For concealed anchors, use hot-dip galvanized or other rust-resistant, protective-coated steel.

## 2.3 FABRICATION

A. Overhead-Braced Units: Provide manufacturer's standard corrosion-resistant supports, leveling mechanism, fasteners, and anchors at pilasters to suit floor conditions. Make provisions for setting and securing continuous head rail at top of each pilaster. Provide shoes at pilasters to conceal supports and leveling mechanism.

B. Doors: Unless otherwise indicated, provide 24-inch-(610-mm-) wide in-swinging doors for standard toilet compartments and 36-inch-(914-mm-) wide out-swinging doors with a minimum 32-inch-(813-mm-) wide clear opening for compartments indicated to be accessible to people with disabilities.

1. Hinges: Manufacturer’s continuous hinges.
2. Latch and Keeper: Manufacturer's standard recessed latch unit designed for emergency access and with combination rubber-faced door strike and keeper. Provide units that comply with accessibility requirements of authorities having jurisdiction at compartments indicated to be accessible to people with disabilities.
3. Coat Hook: Manufacturer's standard combination hook and rubber-tipped bumper, sized to prevent

door from hitting compartment-mounted accessories.

4. Door Bumper: Manufacturer's standard rubber-tipped bumper at out-swinging doors.
5. Door Pull: Manufacturer's standard unit at out-swinging doors that complies with accessibility requirements of authorities having jurisdiction. Provide units on both sides of doors at compartments indicated to be accessible to people with disabilities.

## PART 3 - EXECUTION

### 3.1 INSTALLATION

A. General: Comply with manufacturer's written installation instructions. Install units rigid, straight, level, and plumb. Secure units in position with manufacturer's recommended anchoring devices.

1. Maximum Clearances:

   a. Pilasters and Panels: 1/2 inch(13 mm).
   b. Panels and Walls: 1 inch(25 mm).

2. Urinal Screens: Secure to walls with not less than two brackets attached near top and bottom of panel.

B. Overhead-Braced Units: Secure pilasters to floor and level, plumb, and tighten. Secure continuous head rail to each pilaster with not less than two fasteners. Hang doors to align tops of doors with tops of panels and adjust so tops of doors are parallel with overhead brace when doors are in closed position.

C. Wall-Hung Urinal Screens: Attach with anchoring devices to suit supporting structure. Set units level and plumb and to resist lateral impact.

### 3.2 ADJUSTING

A. Hardware Adjustment: Adjust and lubricate hardware according to manufacturer's written instructions for proper operation. Set hinges on in-swinging doors to hold doors open approximately 30 degrees from closed position when unlatched. Set hinges on out-swinging doors to return doors to fully closed position.

**END OF SECTION 10 2113**

# SECTION 10 2800 - TOILET, BATH, AND LAUNDRY ACCESSORIES

## PART 1 - GENERAL

### 1.1 SUMMARY

A. This Section includes the following:

1. Washroom accessories.
2. Childcare accessories.
3. Custodial accessories.

B. Owner-Furnished Material: Paper towel dispensers, toilet tissue dispensers, and liquid soap dispensers.

### 1.2 SUBMITTALS

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

B. Product Schedule:

1. Identify locations using room designations indicated on Drawings.
2. Identify products using designations indicated on Drawings.

C. Maintenance Data: For toilet and bath accessories to include in maintenance manuals.

### 1.3 COORDINATION

A. Coordinate accessory locations with other work to prevent interference with clearances required for access by people with disabilities, and for proper installation, adjustment, operation, cleaning, and servicing of accessories.

B. Deliver inserts and anchoring devices set into concrete or masonry as required to prevent delaying the Work.

### 1.4 WARRANTY

A. Special Mirror Warranty: Manufacturer's standard form in which manufacturer agrees to replace mirrors that develop visible silver spoilage defects and that fail in materials or workmanship within specified warranty period.

1. Warranty Period: 15 years from date of Substantial Completion.

PART 2 - PRODUCTS

1.1 MATERIALS

A. Fasteners: Screws, bolts, and other devices of same material as accessory unit and tamper-and-theft resistant where exposed, and of galvanized steel where concealed.

B. Mirrors: ASTM C 1503, Mirror Glazing Quality, clear-glass mirrors, nominal 6.0 mm thick.

1.2 WASHROOM ACCESSORIES

A. Basis-of-Design Product: The design for accessories is based on products indicated. Subject to compliance with requirements, provide the named product or a comparable product by one of the following:

1. American Specialties, Inc.
2. Bobrick Washroom Equipment, Inc.
3. Bradley Corporation.
4. General Accessory Manufacturing Co. (GAMCO).

B. Toilet Tissue (Roll) Dispensers: Surface mounted, Owner furnished and Contractor installed.

C. Paper Towel Dispensers: Surface mounted, Owner furnished and Contractor installed.

D. Liquid-Soap Dispensers: Surface mounted, Owner furnished and Contractor installed.

E. Grab Bars:

1. Mounting: Flanges with concealed fasteners.
2. Material: Stainless steel, 0.05 inch(1.3 mm) thick.

a. Finish: Smooth, No. 4, satin finish on ends and slip-resistant texture in grip area.

3. Outside Diameter: 1-1/2 inches(38 mm).
4. Configuration and Length: As indicated on Drawings.

F. Sanitary-Napkin Disposal Units:

1. Basis-of-Design Product: Bobrick B-254.
2. Mounting: Surface mounted.
3. Door or Cover: Self-closing disposal-opening cover and hinged face panel with tumbler lockset.
4. Receptacle: Removable.
5. Material and Finish: Stainless steel, No. 4 finish (satin).

G. Mirror Units:

1. Frame: Stainless-steel angle, 0.05 inch(1.3 mm) thick.
2. Hangers: Wall bracket of galvanized steel, equipped with concealed locking devices requiring a special tool to remove.

3. Size: 24 by 36 inches(610 by 914 mm) unless indicated otherwise.

1.3 CHILDCARE ACCESSORIES

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

1. American Infant Care Products Inc.
2. Brocar Products, Inc.
3. General Accessory Manufacturing Co. (GAMCO).
4. Koala Corporation.
5. Safe-Strap Company, Inc.

B. Diaper-Changing Stations:

1. Description: Horizontal unit that opens by folding down from stored position and with child-protection strap.

a. Engineered to support a minimum of 250-lb(113-kg) static load when opened.

2. Mounting: Surface mounted, with unit projecting not more than 4 inches(100 mm) from wall when closed.
3. Operation: By pneumatic shock-absorbing mechanism.
4. Material and Finish: High-density polyethylene in manufacturer's standard color.
5. Liner Dispenser: Built in.

1.2 CUSTODIAL ACCESSORIES

A. Basis-of-Design Product: The design for accessories is based on products indicated. Subject to compliance with requirements, provide the named product or a comparable product by one of the following:

1. American Specialties, Inc.
2. Bobrick Washroom Equipment, Inc.
3. Bradley Corporation.
4. General Accessory Manufacturing Co. (GAMCO).

B. Mop and Broom Holders: Provide one for each service sink.

1. Basis-of-Design Product: Bobrick B-224.
2. Description: Unit with shelf, hooks, holders, and rod suspended beneath shelf.
3. Length: 36 inches(914 mm).
4. Hooks: Three.
5. Mop/Broom Holders: Four, spring-loaded, rubber hat, cam type.
6. Material and Finish: Stainless steel, No. 4 finish (satin).

a. Shelf: Not less than nominal 0.05-inch-(1.3-mm-) thick stainless steel.
b. Rod: Approximately 1/4-inch-(6-mm-) diameter stainless steel.

1.3 FABRICATION

A. General: Fabricate units with tight seams and joints, and exposed edges rolled. Hang doors and access panels with full-length, continuous hinges. Equip units for concealed anchorage and with corrosion-resistant backing plates.

B. Keys: Provide universal keys for internal access to accessories for servicing and resupplying. Provide minimum of six keys to Owner's representative.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Install accessories according to manufacturers' written instructions, using fasteners appropriate to substrate indicated and recommended by unit manufacturer. Install units level, plumb, and firmly anchored in locations and at heights indicated.

1. Grab Bars and Diaper-Changing Stations: Install to withstand a downward load of at least 250 lbf(1112 N), when tested according to method in ASTM F 446.

B. Adjusting and Cleaning: Adjust accessories for unencumbered, smooth operation. Replace damaged or defective items.

1. Remove temporary labels and protective coatings.
2. Clean and polish exposed surfaces according to manufacturer's written recommendations.

**END OF SECTION 10 2800**

**SECTION 11 6843 – EXTERIOR SCOREBOARD – ADDENDUM 3**

PART 1 – GENERAL

1.1 SUMMARY

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. Related Sections:

1. Section 03 3000 Cast In Place Concrete
2. Section 27 5114 PA System (Single Point Speaker)
3. Division 26 Electrical

1.2 SCOPE

A. The work under this section of the specifications shall consist of furnishing all labor, materials and equipment necessary for installation of the following:
   1. Two (2) single-sided 10mm LED Full Video Displays (8'x14'-6"), new digital scoreboards, advertising and filler panels, play clocks, 4' x 6' sound cabinet and custom architectural truss, and structural supports. Refer to Specification Section 27 5114 for sound cabinet.
   2. Two Sets (4 units) single-sided wireless LED playclocks, structural steel supports, and protective padding.
   3. One (1) single-sided LED fixed digit baseball scoreboard with two (2) non-backlit sponsor panels and structural steel supports.

B. Work includes furnishing and installing all necessary control wiring and all required control components as specified including fiber optic control wiring, coaxial cable wiring and terminations.

1.3 QUALITY ASSURANCE AND WARRANTY GUARANTEE

A. Reference Standards:

1. Standard for Electrics Signs, UL-48, 13th Edition
2. Standard for Control Centers for Changing Message Type Signs, UL-1433, 1st Edition
3. Standard for CAN/CSA C22.2
4. Federal Communications Commission Regulation Part 15
5. NEC & FCC Compliant

B. Structural Performance: Provide post and panel signs capable of withstanding the effects of gravity loads and the following loads and stresses within the limits and under conditions indicated determined according to local code requirements:

1. Wind Loads: Determine loads based on a uniform pressure of 30psf wind pressure of 80 mph, acting in any direction.

C. Thermal Movements: provide post and panel signs that allow for thermal movements resulting from the following maximum change (range) in ambient and surface temperatures by preventing buckling, opening of joints, overstressing of components, failure of connections and other detrimental effects. Base engineering

calculation on surface temperatures of materials due to both solar heat gain and nighttime-sk loss.

1. Temperature Change (Range): 120 degrees F, ambient 180 degrees F, material surfaces.

D. Warranty: Scoreboard shall be guaranteed for a period of five (5) years from the date of acceptance against defects in the workmanship, material or labor and shall be replaced or repaired without cost to the Owner provided the equipment or parts (which include LED segments) are returned to the Manufacturer.

E. Guarantee shall be void if any alteration or service, other than unplugging modules or controls, is performed without Manufacturer's factory authorization; or if the equipment shall have been connected to incorrect power, or is improperly grounded or improperly installed. Equipment which is subjected to accident, neglect, abuse, misuse or other natural disasters, including but not limited to: fire, wind, lightning, flood, is not covered by the guarantee.

1.4 SUBMITTALS

A. Product data: Submit manufacturer's product illustrations, data and literature that fully describe the scoreboards, video displays and accessories proposed for installation. Provide all required product data and installation instructions for control wiring and components.

B. Shop drawings: Mechanical and electrical drawings. Signed and sealed structural engineering design for steel size, concrete footing size/depth to support proposed signs.

C. Maintenance Data: Manufacturer's installation, operation, and maintenance manuals.

D. Graphics Renderings for Approval:
1. Upon color and logo confirmation for scoreboard and displays, Manufacturer shall produce a rendered image of proposed scoreboard system for Owner approval.
2. Graphics files can be provided in vector format upon request.

1.5 DELIVERY AND HANDLING

A. Deliver post and scoreboard signs in protective covering and crating to protect sign components and surfaces against damage.

1.6 PROJECT AND SITE CONDITIONS

A. Environmental Limitations: Do not install display or equipment until mounting structure is secure and required concrete has ample time to cure.

B. Field Measurements: Contractor/Installer is responsible to field verify position and elevation of structure(s) and layout for display and equipment.

C. Contractor/Installer shall be responsible to verify mounting surface can support the display's weight and wind load in addition to any auxiliary equipment.

D. Proceed with installation within acceptable weather conditions.

PART 2 - PRODUCTS

2.1 SCOREBOARD

A. Acceptable Manufacturers (or approved equal):

1. Daktronics
2. Fair-Play

B. Provide Two (2) complete packages for the stadium scoreboards at Kalamazoo Central and Loy Norrix high schools as follows:
   1. Video Display and Viewing Properties:
      a. LED display shall have the ability to show live and recorded video, real-time scores and statistics, animations, and graphics.
      b. LED Matrix (minimum): 200x300
      c. Color Capability: 16 bit or better
      d. LED Refresh Rate: 4000Hz or better with full signal redundancy.
      e. Module Intensity: 6,000nits minimum and shall allow for adjustment
      f. Viewing Angle: 150 degrees horizontal and +25°/-45° vertical
      g. The full-color video display must be able to interface and display real-time data from the control system without the need for a duplicate or redundant input device.
      h. Video board shall be capable of zoning for scoring & advertising while keeping a 16:9 video ratio.
   2. Pixel & LED Module Characteristics
      a. Each pixel shall consist of 3 through-hole LED's per pixel ( 1-red, 1-green, 1-blue).
      b. Pixels overbalanced with one color are not acceptable.
      c. Modules shall be rated for outdoor use and shall provide a 100% waterproof seal.
      d. Modules shall have the ability to be removed and installed from either the front or rear of the display.
   3. Video Components:
      a. Provide unit as follows: 8' high x 14'-6" wide full video 10mm pixel pitch LED scoreboard
      b. Four (4) professional portable control devices: Apple Pro 10.5 » or equivalent
      c. Provide all required racks, servers, LED controller(s), bridges, and switches required for a completed connection.
      d. Provide four (4) side filler panels.
   4. Animations:
      a. Contractors shall include the following animation packages with the Bid:
      b. Starter Package
      c. Sponsor Starter Package
      d. Pick-20: Provide (20) manufacturer standard animations – to be selected by Owner.
      e. School Logo Package
   5. Non-Video Scoreboard: 8' high x 25' wide football/track/soccer
      a. Color: Scoreboard with border striping to be selected by Owner from standard offerings
      b. Digits: Shall be TS AlInGaP Light Emitting Diodes (LEDs) with seven bar segments per digit. Digit panels shall be fastened with screws and allow for easy access and removal. Rivets are not an acceptable fastening method. All LED digits shall be Red or Amber in color
         i. Game Clock = 30" in height with 1/10th of a second timing.
         ii. Score/Down/To Go/Ball On/Qtr = 24" in height
         iii. Time Outs Left (T.O.L.) = 15" in height
         (Note: LED dots in lieu of numerical digits will not be accepted)
      c. Caption (Fixed):
         i. "KNIGHTS" or "GIANTS" for home side

ii. "GUEST" for Visitor side
iii. Manufacturer standard White in color

6. Sponsor Panel (non-backlit) below scoreboard
   a. 3' high x 25' wide nominal dimensions
7. Architectural Accent Truss
   a. 4' high x 25' wide nominal dimensions, arched with integrated sound cabinet.
   b. Screen backed lettering and logos shall include:
      i. Loy Norrix High School: LN logo and "KNIGHTS"
      ii. Central High School: KC logo and "GIANTS"
      iii. Graphics can be provided electronically upon award
8. Play Clock
   a. Furnish and install two (2) game clocks as follows:
      i. Game Clocks: 36" high x 48" wide
      ii. Digit size: 30" high
      iii. Digit color: Red or Amber
   b. Hand-held controllers and product hub.
   c. Game clocks shall be mounted to new steel supports.
   d. Work shall include all required electrical for a complete system.
   e. Provide new protective padding around support post of play clock. Basis of Design is as follows:
      i. 3" Thick foam, 18 oz. high UV resistant outdoor vinyl, hook and loop attachment, rear cutout at seam. Padding should be field measured to provide cutouts for any electrical or data access boxes.
      ii. Basis of Design: Sportsfield Specialties Model #BSSPP (custom size)

C. Provide one (1) Baseball unit for Loy Norrix High School as follows:
1. Scoreboard: 6'-6" high x 20' wide
   a. Color: Color: Scoreboard with border striping to be selected by Owner from standard offerings.
   b. Digits: Shall be TS AlInGaP Light Emitting Diodes (LEDs) with seven bar segments per digit. Digit panels shall be fastened with screws and allow for easy access and removal. Rivets are not an acceptable fastening method. All LED digits shall be Red or Amber in color
      i. 9 INNING = 15" in height
      ii. BALL/STRIKE/OUT = 18" in height
      (Note: LED dots in lieu of numerical digits will not be accepted)
   c. Caption (Fixed):
      i. "KNIGHTS" for home side
      ii. "GUEST" for Visitor side
      iii. Manufacturer standard White in color
2. Sponsor Panel (non-backlit) above scoreboard
   a. 3' high x 20' wide nominal dimensions
      i. LN logo and "KNIGHTS BASEBALL"
      ii. Graphics can be provided electronically upon award
3. Sponsor Panel (non-backlit) below scoreboard
   a. 3' high x 20' wide nominal dimensions
      i. Graphics can be provided electronically upon award

2.2 CONTROL EQUIPMENT

A. All required data racks shall be determined by manufacturer to fit the components necessary. Servers, LED controller(s) bridges, and switches required for a complete installation shall be provided as part of package.

B. Media Player

1. Animation rates shall display up to 60 frames per second.
2. Resolution of display: up to 1080i full motion
3. Video Input: HDMI or better
4. Video Output: DVI or better
5. Audio Output: shall consist of balanced 3-pin XLR or better
6. Component Ports: USB 2.0 and USB 3.0
7. Memory: 8GB or better
8. Storage: 480GB SSD or better
9. Networking: 10/100/1000 Ethernet (RJ-45LAN) or better
10. Network Router: 8-port gigabit or better

C. Control Devices
   1. Laptop Computer:
      a. Windows 10 Pro 64-bit, with Intel Core i5 or better
      b. Memory: 8GB SDRAM or better
      c. Hard Drive: 500GB SSD or better
      d. Provide minimum one (1) unit per site
   2. Portable Control Device:
      a. Apple Pro iPad 10.5 or better
      b. Provide one (1) unit per site LED Video Display
      c. iPad shall be capable of scoring and sending video clips to video board
   3. All software required for operation of LED display shall come pre-loaded, configured, and ready to control display upon startup.
   4. Display control software shall provide a simple, user-friendly programming to allow for creating, editing, scheduling display functions.

D. Control System: Fixed digit scoreboard shall be capable of scoring football, soccer and track through keyboard inserts for the stadium scoreboards and baseball for Loy Norrix's baseball field. Construction is to be of a gray, highly break-resistant plastic. Control center shall include remote hand-held time switch, 25 feet of cable with connectors, and a keyboard overlay. The controller will have the following features: bright travelling alpha-numeric dot matrix LED display, lithium cell battery backup to retain memory, self test mode, power on/off switch, alternate time switch, internal beeper which acknowledges each entry, multiple scoreboard control capability, and soft sided carry case. Controller shall include wireless capability with 2.4Ghz radio transmission so as not to interfere with other radio frequencies.

## 2.3 OPERATING SOFTWARE

A. Contractor shall provide a documented software that is capable of various scorekeeping scenarios, producer apps, and an enterprise cloud account. Software shall have the ability for real-time video, digital sponsor ads, player accolades, etc.

B. Software shall have a dedicated cloud-based storage with remote monitoring and reporting.

C. As a condition of the bid, Contractor shall supply the Owner with a minimum of (20) twenty electronic animations compatible with the intended system. Custom content (logos, sponsors, team lettering, etc.) will be furnished by Owner in compatible format.

## 2.4 COMMUNICATION TYPE

A. All controls shall be utilized with Fiber Optic (50/125 µm multi-mode) or equivalent.

B. All controls from data cabinet to operation station shall utilize CAT5/6 cabling or equivalent.

C. Contractor will be responsible to furnish and pull new fiber optic & CAT5/6 cabling required for Video Scoreboard, Sound System. Analog scoreboard shall allow for the ability to be controlled via Bluetooth of wireless connectivity.

2.5 TIMING

A. The fixed digit scoreboard shall have bi-directional timing, UP or DOWN count. The timer shall have the ability to enter any number of minutes or seconds directly. The timer range shall be timed to 1/10th of a second.

2.6 SUPPORT SYSTEM

A. Scoreboard manufacturer is required to provide signed and sealed engineering plans, which include but not limited to, steel size, concrete footing size/depth, and wind loads. Base Bid design shall include steel and foundation sizes to support the proposed scoreboard and accessories. Refer to Geotechnical Report for proposed Scoreboard Footing Design.

B. Steel supports and concrete foundations shall be furnished and installed by the scoreboard contractor in coordination with the manufacturer. Steel shall be primed and painted black.

C. All primary electrical service work and final electrical connection will be provided by Others. Scoreboard contractor is responsible to provide and install all final fiber connections for components.

PART 3 - EXECUTION

3.1 INSTALLATION

A. Verify that mounting structure is ready to receive scoreboard and that concrete has cured adequately according to specifications. Installer shall also verify placement of conduit and junction boxes are as specified and indicated on plans.

B. Installer shall verify mounting heights prior to installation of support posts.

C. All power and control cables shall be routed in conduit. Scoreboard control wiring will be the responsibility of the contractor furnishing and installing the scoreboard.

D. Install scoreboard and applicable exterior displays in accordance with manufacturer's instructions. Installed scoreboard unit shall be plumb and level.

E. Provide boxes, cover plates and jacks in locations shown on plans. Installer shall test connect control unit to all jacks and check for proper operation of control unit, scoreboard and all features. Control unit in carrying case, manuals and operational information shall be turned over to Owner's Representative.

F. Upon installation, contractor shall provide the Owner with a minimum of 4-hour onsite training on the proper operation of all scoreboard/message display functions. (1) two-hour training session shall be dedicated for Fall Sports and (1) two-hour training shall be dedicated for Spring Sports.

3.2 INSTALLATION - CONTROL CENTER

A. Provide boxes, cover plates and jacks in locations as required.

B. Test operation of the display, controller(s) and all control jacks. Control devices shall be turned over to Owner's Representative.

END OF SECTION 11 6843

# SECTION 27 5114 – PA SYSTEM (SINGLE POINT SPEAKER) – ADDENDUM 3

## PART 1 - GENERAL

### 1.1 SUMMARY

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. Related Sections

1. Specification Section 11 6843 Exterior Scoreboard
2. Division 13 - Electrical

### 1.2 SCOPE

A. This section includes all services, supervision, coordination, etc., necessary to complete the installation of a high-quality Audio System as specified. “Audio System” references the system and “Audio System Installer” references the installer. The Audio System Installer is responsible for sizing the sound cabinet, amplifiers, patch panels, transformers, etc. to ensure a complete and properly operating system in accordance with the performance criteria set forth in this specification. All installed equipment must be new and in unused condition. It is the intent of the specifications to indicate the quality, configuration, and performance of the Audio System. The Audio System installation includes the following:

1. Point Source Sound System
2. Audio Control System
3. Cables, connectors, plates and wiring
4. All necessary design, fabrication, processing and amplification equipment, and installation for a complete sound system as described

B. The section also includes:
1. Verification of dimensions and conditions at the job site
2. Preparation of submittal information
3. Installation in accordance with the contract documents, manufacturers recommendations, and all applicable code requirements
4. Instruction of operating personnel: provision of manuals
5. Maintenance services and warranty

C. The Contractor shall furnish all the equipment, accessories, and necessary material for a complete system as indicated on the Drawings and described herein.

D. Included in the proposal shall be two (2) man hours to instruct the Owner’s representatives in the recommended operation of the systems.

E. Contractor must maintain a sufficient service within a 50 mile radius and be able to respond to a call for service within 24 hours.

### 1.3 SUBMITTALS

A. Submit the following documents with bid proposal. Failure to provide a complete set of submittals will result in disqualification. Provide shop drawings and submittal data containing sufficient information to describe the work to be performed. Prepare drawings at an appropriate scale. Submit shop drawing information at one time. Provide the following information, but not necessarily limited to:

1. System description
2. Complete system equipment list, with individual specification sheets for each piece of equipment
3. Functional system block diagram showing all major equipment and signal flow
4. Basic speaker cabinet design drawings consisting of the cabinets' overall dimensions, cabinet integration with a display structure and estimated weight of entire system with all equipment installed
5. Speaker cluster drawings showing all speakers in their installed position and estimated electrical draw of the entire system
6. Proof of performance illustrations as generated by an acoustical CAD modeling program (EASE or equivalent). Illustrations to include direct field sound pressure level performance throughout the stadium at 125 Hz, 250 Hz, 500 Hz, 1,000 Hz, 2,000 Hz and 4,000 Hz.

1.4 DELIVERY

A. The Audio System Installer will be responsible for transporting all related audio equipment to the job site. Upon installation, audio equipment becomes the responsibility of the owner.

B. The Audio System Installer will be responsible for audio equipment once it is received at the job site. In addition, Audio System Installer will be responsible for unloading the shipment truck, providing safe storage of audio equipment, installation of audio equipment and all necessary welding of structure.

C. All transportation expenses of equipment to the job site will be the responsibility of the Audio System Installer.

2.5 PROJECT CONDITIONS

A. Audio System Installer desiring to submit a proposal are responsible for acquiring, from the owner, any plans or documentation pertaining to the audio system installation and are encouraged to perform a pre-bid site survey.

B. Confirm conditions on the jobsite pertinent to this work. Give notice to the owner in writing of discrepancies, conflict, or omissions promptly upon discovery.

2.6 QUALITY ASSURANCE

A. Source Limitations: Obtain each type of audio equipment through one source from a single manufacturer.

B. ETL listed and conform to IEC 60065, UL 60065 and EN 60065

C. Certified to CSA C22.2 #60065

D. Carries the ETL US, ETL Canada, ETL EU, and CE marks

E. Manufacturer's qualifications: A minimum of five (5) years' experience with the specified types of products and installation.

F. Installer's qualification: Business familiar in the installation of systems similar in complexity to those essential for this project; and fulfillment of the following:

1. The primary business of contractor shall be in the installation of sound and video systems.
2. At least (5) five years' experience with systems of the specified types and products included.
3. Experience with comparable scale sound reinforcement projects within the last three (3) years.
4. Retain a fully staffed and equipped service facility with fulltime field technicians.
5. Be a franchised dealer and approved service facility for all amplifiers, digital and analog signal processing equipment and loudspeaker products specified or proposed; if not, supply detailed description of how warranty service on these items will be obtained, and if any manufacturer's warranties will become void.
6. Installer to be factory educated in the installation and maintenance of any digital signal processed based control systems.
7. At the request of the owner, the Installer must demonstrate that he has:
   a) Sufficient plant and equipment to complete the work within the agreed timetable
   b) Sufficient staff with commensurate technical experience
   c) Appropriate financial status to meet the obligations of the work
   d) Capability to provide performance bonding

## 2.7 REFERENCES

A. Audio System Design and Installation, G.H. Philip Giddings, 1990
B. Digital Audio Engineering - Serial Transmission Format for Two-Channel Linearly Represented Digital Audio Data, Recommended Practice (AES-3), ANSI S4.40, 1992
C. Handbook for Sound Engineers (Third Edition) Glen M. Ballou, 2002
D. Loudspeaker Components Used in Professional Audio and Sound Reinforcement, ANSI S4.26, 1984 (R1992)
E. Sound System Engineering (Third Edition), Don Davis and Eugene Patronis, Jr., 2006
F. *Standard for Safety for Audio, Video, and Similar Electronic Apparatus – Safety Requirements*: IEC 60065, UL 60065, EN 60065, and CAN/CSA C22.2 #60065
G. *Information Technology Equipment-Radio Disturbance Characteristics*: EN 55022:2010 / AC:2011, Class A / CISPR 22 (ed.5); am1
H. *Electromagnetic Compatibility:* EN 61000-3-2:2006 +A1:2009 +A2:2009 / IEC 61000-3-2 (ed.3); am1, am2
I. *Electromagnetic Compatibility:* EN 61000-3-3:2008 / IEC 61000-3-3 (ed.2)
J. *Information Technology Equipment – Immunity Characteristics:* EN 55024:2010 / CISPR 24 (ed.1); am1, am2; 47 CFR, Part 15:2010, §15.107 and §15.109, Class A; ICES-003, Issue 4:2004
K. National Electric Code

## 2.8 WARRANTY

A. Provide a complete system parts warranty for a minimum period of five (5) years after completion and acceptance of audio system.

B. This warranty will not void specific warranties issued by manufacturers for greater periods of time. Nor will it void any rights guaranteed to the owner by law.

C. The Audio System Installer must provide the owner an opportunity to purchase a preventive maintenance inspection agreement or full service agreement. The minimum term of any maintenance or service agreement consists of one year.

D. Contractor shall supply a spare parts inventory containing a minimum of 3% spare parts. Contractor shall provide proposed spare parts inventory as part of submittal process.

## PART 2 - PRODUCTS

### 2.1 ACCEPTABLE MANUFACTURERS

A. To establish the minimum functional, aesthetic and quality standards, products and product series of the manufacturers listed below are the Basis of Design.

B. Substitutions: Products of other manufacturers are acceptable provided they meet the performance and reliability standards of the recommended equipment. Any substitution to this list must be submitted and approved in writing 10 days prior to the bid date.

### 2.2 GENERAL

A. Regardless of the length or completeness of the descriptions below, each device shall meet published manufacturers' specifications.

B. Equipment and materials must be new and conform to applicable UL or ANSI provision.

C. Product quantity is as required. If a quantity is given, Audio System Installer shall provide at least the given amount.

### 2.3 MAIN SPEAKER CLUSTER

A. Engineered speaker cluster consisting of self-powered three-way active devices

1. Frequency response (-10 dB @ 1 m): 50 Hz to 14 kHz
2. Max SPL (@ 1 m): 137 dBA
3. Overall cluster dispersion: 30 V X 120 H
4. Audio input: CobraNet® digital audio
5. Weather treatment: polyurea coating
6. Basis of Design:
   a) Daktronics Sportsound® 500HD System (@ 1)
   b) R2-52N Full-range speaker w/ I-215LVSN integrated subwoofer

B. Fiber Conversion Box

1. Media Converter/Network Switch
   a) Four (4) 10/100 Mbps ports
   b) Auto speed-sensing UTP ports
   c) One (1) 10/100 BASE-TX (RJ45) to 100BASE-FX 1300nm multimode
   d) Basis of Design:
      i. MOXA EDS-205A-M-ST-T
      ii. Netgear ProSafe™ FS105 (@ 1) and Transition Networks J/E-PSW-FX-02 (@ 1)

2. CobraNet® Injector
   a) Two channel analog input

b) CobraNet® networking protocol
c) Frequency response: +/- .25 dBv 20 Hz to 20 kHz at unity gain
d) Input impedance: 20 kΩ balanced
e) Acceptable products:
   i. Biamp Audia EXPI/O-2

.4 AUDIO CONTROL SYSTEM

A. Equipment Rack

1. 4RU vertical rackmount
2. Rear Access Panel
3. Acceptable product:
   a) SKB Shallow Roto Rack / 1SKB-R4S

B. Audio Mixer

1. Four mic inputs with bass cut for vocal microphones and phantom power
2. Two mic/line (XLR/TRS) switchable inputs
3. Two stereo RCA inputs
4. One 1/8" music input
5. Individual input channel metering and output meters
6. Two outputs, XLR and 1/4", each with selectable ducking and limiting functions
7. Fire Alarm interface, Normally Open (NO) or Normally Closed (NC), selectable

C. Audio Signal Switch

1. Style: 2 Position
2. Operator action: maintained
3. 1 RU standard rack space, black
4. Laser etched text

D. Laptop Interface

1. 1/8" (3.5 mm) male input
2. Balanced XLR male output
3. Adjustable output volume control
4. Acceptable products:
   a) LTIBLOX Laptop Interface
   b) Whirlwind podDI

E. USB Audio Interface

1. 24-bit, 96 kHz quality audio
2. Two balanced XLR outputs (left and right)
3. 3.5mm TRS headphone output
4. Ground lift and mono-sum switches
5. Acceptable product:
   a) Radial® Engineering USB-Pro™

F. Push-to-Talk Announcer Interface

1. Balanced XLR input, balanced XLR output, and 1/4" headphone jack
2. Momentary and continuous audio output modes
3. Acceptable products:
   a) Daktronics Announcer's Interface
   b) Studio Technologies, Inc. Model 210 Announcer's Console

G. Wireless Microphone Receiver (Qty: 2)

1. $^1/_2$ RU unit
2. 24 bit digital audio
3. XLR balanced mic/line outputs
4. RF Sensitivity: −97 dBm at $10^{-5}$ BER
5. Audio Frequency Response: 20 Hz to 20 kHz, +/- 1 dB
6. Audio Dynamic Range: > 120 dB (A)
7. Total Harmonic Distortion: < 0.1%
8. Acceptable products:
   a) Shure QLXD4
   b) AKG DSR700 V2

H. Wireless Handheld Transmitter

1. Microphone element: Cardioid, Dynamic Vocal Microphone (Qty : 1)
2. Working Range: 100 m (328')
3. Battery life: 9+ hours
4. RF Output: Selectable 1 mW or 10 mW
5. Acceptable products:
   a) Shure QLXD2/58
   b) AKG DHT700 V2

I. Wireless Bodypack Transmitter (Qty : 1)
1. Connector: 4-pin male mini connector (TA4M) for microphone or mute switch
2. Working Range: 100 m (328')
3. Battery life: 9+ hours
4. RF output: Selectable 1 mW or 10 mW
5. Acceptable products:
   a) Shure QLXD1
   b) AKG DPT700 V2

J. Referee Headset (Qty : 2)

1. Electret condenser microphone element
2. Unidirectional cardioid polar pattern
3. Acceptable product:
   a) Shure SM35

K. High Gain Antenna Kit

1. Cardioid directional antenna
2. 6 dB gain
3. Acceptable products

2.5 CABLE AND CONTROL WIRING

A. All cables must be installed in conduit or closed raceway areas. Use plenum cable as necessary. Exposed cable is not acceptable. Cable specifications are as follows:

1. Multi-mode fiber optic cable from audio control to sound cabinet
2. Microphone level cables: No. 22 shielded jacketed - Belden 9451 with black jacket

PART 3 - EXECUTION

3.1 GENERAL

A. Coordinate work with other trades to prevent delays in the construction schedule.

B. Verify dimensions and location of equipment to be mounted.

3.2 INSTALLATION

A. Mount equipment and enclosures square and plumb. Permanently installed equipment to be held firmly and safely in place. Loudspeaker mounting systems, mounting brackets, and sound cabinet mounting systems to be approved by a structural engineer provided by the installing contractor.

B. All new equipment shall be installed in the existing pressbox and a manufacturer approved data rack.

3.3 FIELD QUALITY CONTROL

A. Upon completion of installation and initial test adjustments, the audio system installer will conduct a performance evaluation in the presence of the owner or the owner's representative (owner's option). The audio system installer will notify the owner or the installer's representative of the testing schedule.

END OF SECTION 27 5114

PART 1 - GENERAL

1.1 SUMMARY

A. This Section is a part of the entire set of Contract Documents and shall be coordinated with the applicable provisions of the other parts.

B. Related Sections:

1. Section 03 3000 Cast In Place Concrete

1.2 SCOPE

A. The work under this section of the specifications shall consist of furnishing all labor, materials and equipment necessary for a new black vinyl chainlink fence system as indicated herein and on the Contract Documents. Work shall include but not limited to footings, posts, fabric, rails, gates and all related hardware.

1.3 QUALITY ASSURANCE AND WARRANTY GUARANTEE

A. American Society for Testing and Materials (ASTM) latest version:

1. ASTM A53 – Standard Specification for Pip, Steel, Black and Hot-Dipped, Zinc-Coated, Welded and Seamless
2. ASTM A90 – Standard Test Method for Weight (Mass) of Coating on Iron and Steel Articles with Zinc or Zinc-Alloy Coatings
3. ASTM C94 – Standard Specification for Ready-Mixed Concrete
4. ASTM A153 – Standard Specification for Zinc Coating (Hot-Dip) on Iron and Steel Hardware
5. ASTM F626 – Standard Specification for Fence Fittings
6. ASTM F668 – Standard Specification for Polymer Coated Chainlink Fence Fabric
7. ASTM F900 – Standard Specification for Industrial and Commercial Swing Gates
8. ASTM F934 – Standard Practice for Standard Colors for Polymer Coated Chainlink
9. ASTM F1043 – Standard Specification for Strength and Protective Coatings on Steel Industrial Chainlink Fence Framework
10. ASTM F1083 – Standard Specification for Pipe, Hot-Dipped Zinc-Coated (Galvanized) Welded, for Fence Structures

B. Weights and tolerances to conform to Federal Specification RR-F-191G dated January 25, 1974.

C. The Contractor and any Sub-Contractor hereunder guarantee their respective work against defective materials or workmanship for a period of one (1) year from the date of filing Certificate of Substantial Completion and as accepted by the Owner.

D. All material installed under this specification shall be subject to testing by the Owner. Any material so inspected and found to be not in strict conformance with this specification shall be promptly removed and replaced by the Contractor at his expense.

1.4 SUBMITTALS

A. Shop drawings showing plan layout, spacing of components, post foundation dimensions, hardware, gates and schedule of components.

B. Product Data: Submit product data on fabric pattern, posts, accessories, fittings and hardware.

C. Samples: Color selection for vinyl finishes. If requested, samples of materials (e.g., fabric, wires, and accessories).

D. Mill Certificates conforming to ASTM F1043 for Coating Requirements and Adhesion Testing.

1. Test Results shall be provided before material is shipped to site.
2. Minimum (3) random tests for each post size specified.

E. At the request of the Architect, provide Material Certificates confirming product provided is Domestic pipe.

1.5 QUALIFICATIONS

A. Manufacturer: Company specializing in the manufacturing of products specified in this section with a minimum of ten (10) years experience

B. Installer: Company specializing in performing work of this section with a minimum of five (5) years experienced. Must have a minimum of two in-house fence installation crews.

1.6 PROJECT CONDITIONS

A. Field Measurements: Verify layout information for chainlink fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

1.7 DELIVERY, STORAGE AND HANDLING

A. Deliver fence fabric and accessories in packed cartons or firmly tied rolls.

B. Identify each package with manufacturer's name.

C. Store fence fabric and accessories in a secure and dry place.

1.8 WARRANTY

A. Special Warranty: Manufacturer's standard form in which Installer agrees to repair or replace components of chainlink fences and gates that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, deterioration of metals, metal finishes, and other materials beyond normal weathering.
2. Warranty Period: 15 years from date of Substantial Completion

PART 2 - PRODUCTS

2.1 MANUFACTURER

A. Framework, posts, rails, fabric and fittings for chainlink fence system shall be domestic pipe manufactured and supplied by the following:

1. Merchants Metals – Color Bond Product:
   Phone: (888) 260-1600

2. Master Halco – Permafused Product
   Phone: (888) 643-3623

2.2 VINYL CLAD CHAINLINK FENCE

A. This specification covers chain link fabric made from galvanized steel wire which has been coated with polyvinyl chloride compound hereinafter designated as "vinyl." The base metal shall be steel of such quality and purity that, when drawn to the size of wire specified and coated with vinyl, the finished fencing shall be of uniform quality and have the properties and characteristics as prescribed in the specification. Wire used for the manufacture of this fabric shall be capable of being woven into fabric without the vinyl coating voiding, cracking or peeling. Vinyl shall be plasticized and thoroughly compounded.

B. Thermal Fused Vinyl: The thermally fused vinyl coated wire shall consist of vinyl thermally fused to primed zinc coated wire. The zinc coating shall be in accordance with ASTM A641, .30 oz. per square foot. The vinyl adhesion shall be greater than the cohesive strength of the vinyl material itself.

C. Physical Properties of Coating

1. Accelerated Aging: PVC coated wire from which the fabric is woven shall withstand exposure for 1000 hours without failure at a black panel temperature of 145°F, Type BH apparatus described in ASTM G155 shall be used for the test. The product shall be construed to have failed the test if:

   a. The wire fails to withstand the Mandrel Bend Test described below.
   b. Shrinkage of the PVC coating is greater than 1/16” per foot of wire.
   c. There is a significant change in color or gloss of the PVC surface as determined by visual inspection.

2. Mandrel Bend Test: PVC coated wire when subjected to a single bend at -20°F around a mandrel no larger than ten times the diameter of the wire shall not exhibit breaks or cracks in the PVC coating. The Mandrel Bend Test shall be performed on an individual piece of wire removed from the fabric. This specimen may be any length of wire over 12“and shall include both bends and straight sections, but shall not include either twists or knuckles.

3. Color of Coatings:

| | |
|---|---|
| Hue | Black |
| Tolerance | 2.0 G |
| Value | 3.02 |
| Chroma | 2.35 |

D. Workmanship: Vinyl coated chain link fabric shall be produced by methods recognized as good commercial practices. Careful inspection shall be made to determine the quality of vinyl coating. Coatings not free from

pinholes, bubbles or voids, rough or blistered surfaces shall provide a basis for rejection. An apparent mismatch of color readily discernible by visual inspection shall be cause for rejection.

E. Weight of Zinc Coating: The weight of coating shall be determined on individual pieces of wire removed from the fabric. The specimens may be of any continuous length of 12 inches, but preferably about 24 inches long. The weight of coating shall be determined in accordance with tests for weight of coating described in ASTM A90. The weight of zinc coating shall be determined after removing the vinyl coating from the fabric.

2.3 VINYL CLAD FRAMEWORK

A. General: The framework consists of all line, corner, terminal posts, horizontal rails and gate frame materials which shall be coated with a polyvinyl chloride coating 10 to 12 mils in thickness over galvanized steel or aluminum. These surfaces shall be thermally fused to the metal surface with an appropriate sured primer. The PVC shall be plasticized and thoroughly compounded so that all pigments, stabilizers and other ingredients are fully dispersed.

B. Color of Framework: The color of framework shall match the fabric.

C. Fabric: The wire used in the vinyl coated fences shall possess a minimum breakload of 850 pounds. The coated size of the thermally fused vinyl fence wire shall be 9 gauge core, 8 gauge finish (Class 2B). Vinyl coated fabric shall be woven to form a 2" mesh. The size of mesh shall be determined by measuring the minimum clear distance between the wires forming the parallel sides of the mesh, measured in either direction. The tolerance in the size of mesh shall be +/- 1/8" inch. The thickness of the vinyl coating shall be 0.007".

D. Framework Materials: Framework materials shall be, before coating with PVC, either Type I Schedule 40 pipe with 1.8 ounce per square foot zinc coating before resin coating, or Type II pipe manufactured from steel conforming to the Standard Specification for Black and Hot-Dipped Zinc Coated (Galvanized) Welded and Seamless Steel Pipe for Ordinary Uses, ASTM A53; or TYPE II pipe manufactured from steel conforming to ASTM A1011, Cold-Rolled, Electric welded and Triple Coated with 1.0 ounce, +/- 0.1 ounce zinc per square foot. The internal surface shall have corrosion protection by a zinc-rich based organic coating with 87% minimum zinc powder loading, with the capability of withstanding 350 hours when subjected to Salt Spray Test ASTM B117, with a 5% minimum Red Rust.

E. Line Posts: Shall be one of the following vinyl coated materials: Type I, 2.375“ O.D. round steel posts weighing 3.65 lbs. per lineal foot; or, alternately, Type II 2.375“ O.D. round steel pipe weighing 2.78 lbs. per foot or roll-formed "c" section posts measuring 2.25 inches by 1.70” weighing 2.73 lb. per lineal foot. Posts shall not be splice welded in such a manner that the weld appears above the grade line. The chain link fabric shall be tied to the line posts with vinyl coated clips or tie wires with a minimum steel diameter of 0.132” and spaced on 15” maximum centers.

F. Terminal and Gate Posts: Terminal and gate posts shall be one of the following vinyl coated materials: two and one-half inch (2 1/2") square tubing weighing 5.10 lbs per lineal foot, or alternately, Type I, 2.875” OD steel round posts weighing 3.66 lbs. per lineal foot, or Type II 2.875” OD steel round posts weighing 4.64 lbs per lineal foot. Posts shall not be splice welded in such a manner that the weld appears above the grade line.

G. Terminal and Gate Post Fittings: Terminal and gate post fittings, including tension bands, brace connections

and top rail connections, shall be 14 gauge, hot-dipped galvanized, cold-rolled, carbon steel. Top rail, brace and truss bands shall not be less than ¾" wide, secured by 5/16" diameter carriage bolts. Tension bars shall not be less than 2" shorter than the nominal height of the fabric with which they are to be used. One tension bar shall be provided for each end and gate post, and two for each corner and pull post.

H. All fixed component parts such as post tops, bands, connectors, and rail ends shall be vinyl coated on visible surfaces of a color to match the fabric and framework. Non-visible portions of parts may be uncoated in the case of aluminum components. Non-visible portions of steel or iron components not vinyl coated must be coated with zinc as per ASTM A153. All hardware shall come vinyl coated or shall be coated in the field with a vinyl base compound after installation. Aerosol spray paint to match the color of vinyl fencing will not be accepted.

I. All hardware and caps shall be made in the USA.

J. Top, Intermediate and Bottom Rail: Top, intermediate and bottom rails (where applicable) shall be vinyl coated Type I, 1.660" O.D. round steel pipe weighing 2.27 lbs. per lineal foot, or Type II, 1.660" O.D. round steel pipe weighing 1.59 lbs. per lineal foot. An outside sleeve type coupling measuring not less than 6" in length shall be provided at each interval of twenty-one feet. The chain link fabric shall be tied to the rails at intervals of 24" with vinyl clad tie wires, 13 gauge for double wrap ties or 9 gauge for single wrap ties. Wrap ties shall have a minimum of two (2) loops at each end. Intermediate rails shall be fastened between posts with vinyl clad boulevard type connectors or bands and rail end caps. The terminal ends of all top, bottom, mid and bracing rails shall utilize rail end cups and boulevard hardware that prevents insects from gaining access into top rails.

K. Bottom Tension Wire: Bottom tension wire shall be No. 6 gauge galvanized steel coil, vinyl coated tension wire, high carbon or hard drawn, Class II, Aluminum Coated, fastened to the chain link fabric at intervals of twenty-four inches (24") with No. 11 gauge galvanized steel hog rings. Hog rings shall be closed 100%.

L. Brace Rail for Terminal and Gate Posts: Vinyl coated terminal and gate posts shall be strengthened and reinforced by vinyl coated braces meeting the same specifications as above. Braces shall be installed midway between top rail and court surface and extend from each terminal post to the first adjacent line post. Braces shall be securely fastened to posts by vinyl coated heavy pressed steel connections and also be trussed from line post back to terminal post with a 5/16" vinyl coated round truss rod complete with tightening turnbuckle.

M. Posts Spacing and Settings: Line and terminal posts shall be set in concrete foundations not less than 12" in diameter and not less than 42" in depth. The concrete shall have a design mix of 3500 PSI. Spacing of posts in the line of fence shall be uniform and no more than ten-feet (10') apart and eight feet (8') for baseball foul line and outfield fence. The smaller side of a "C" post shall be touching the chain link fabric and all open slots shall be facing in the same direction.

N. Post Tops: Tops of line posts shall be of a vinyl coated steel or aluminum casting capable of providing a through passage for top rail. Terminal post tops shall be of a vinyl coated steel or aluminum casting and be designed so as to exclude all moisture from the terminal post. Post caps at terminal posts shall be securely fastened to prevent removal.

O. Gates: Gate openings shall not be less than 4 feet wide and constructed and hung as detailed on drawings. Frame shall be assembled from vinyl coated 2" square aluminum, alloy 6063-T6 or 6061-T6, weighing 0.940 lbs. per foot, Type I pipe weighing 2.72 lbs. per foot, or Type II, 1.90" O.D. round steel pip weighing

2.28 lbs. per foot. Gate frames shall be welded or alternately shall utilize corner fittings of compressed or riveted type. A diagonal truss rod not less than 5/16" diameter shall be used on frames utilizing corner fittings. Color or the gate frame materials shall match the fence framework and component parts.

1. Fabric matching the fence fabric shall be installed in the frame by means of tension bars and hook bolts or bands. Galvanized gate frame and gate post hinges shall be furnished of adequate strength for the gate size specified and to allow for a 180° swing. Gates shall be equipped with a positive strong arm latching device that will accommodate padlocking. A plunger rod, catch and semi-automatic outer catch shall be installed on drive gates so as to secure gates in an open position. Hinges, latches and catches shall be approved by the Landscape Architect.

P. Hardware

1. All hardware requiring nuts and bolts should have no more than ½" of the threaded bolt extending beyond the nut.
2. Gate hinges shall be Bulldog Hinges
3. Gate latches shall be commercial grade Strong Arm gate latches
    a. Fork & collar not approved

Q. Driven Post Caulk

1. Contractor is responsible to caulk around all driven fence posts.
2. Caulk shall be supplied from the following manufacturer:
    a. Sportmaster "Courtflex Crack Sealant"
       Phone: 800-395-7325
    b. Color: Neutral

2.4 FENCE COMPONENTS – BACKSTOPS

A. Chain Link Fabric: The chain link fabric shall be 2" mesh with a thermally fused vinyl finish, 6 gauge for the bottom six feet (6') of the backstop. The remaining vertical dimension shall have chain link fabric with 2" vinyl mesh 9 gauge. The canopy shall be 2" vinyl mesh, 11 gauge. Top and bottom sleevage shall have knuckle finish. The thickness of the vinyl coating shall be 0.007".

B. Line Posts: Line posts shall not be splice welded in such a manner that the weld appears above the grade line. Line posts shall have an outside diameter of 4" and weight of not less than six and fifty-six one-hundredths (6.56) lbs. per lineal foot.

C. Terminal Posts: Terminal posts shall not be splice welded in such a manner that the weld appears above the grade line. Terminal end posts shall have a nominal outside diameter of 6-5/8" and weight of not less than eighteen and ninety-seven hundredths (18.97) lbs. per lineal foot.

D. Terminal Post Fittings: Terminal and gate post fittings, including tension bands, brace connections and top rail connections, shall be 14 gauge, hot-dipped galvanized, cold-rolled, carbon steel. Top rail, brace and truss bands shall not be less than ¾" wide, secured by 5/16" diameter carriage bolts.

E. Top, Intermediate and Bottom Rails: Top, intermediate, and bottom rails shall be vinyl coated Type I, 1.660" O.D. round steel pipe weighing 2.27 lbs. per lineal foot, or Type II, 1.660" O.D. round steel pipe weighing 1.59 lbs. per lineal foot. An outside sleeve type coupling measuring not less than 6" in length shall be

provided at each interval of twenty-one feet. The chain link fabric shall be tied to the rails at intervals of 24" with vinyl clad tie wires, 13 gauge for double wrap ties or 9 gauge for single wrap ties. Intermediate rails shall be fastened between posts with vinyl clad boulevard type connectors or bands and rail end caps. The terminal ends of all top, bottom, mid and bracing rails shall utilize rail end cups and boulevard hardware that prevents insects from gaining access into top rails.

F. Braces: Vinyl coated braces shall be installed midway between top rail and grade and extend from each terminal post to the first adjacent line posts. Braces shall be securely fastened to posts by vinyl coated heavy pressed steel connections and also be trussed from line posts back to terminal post with a three-eighths inch (3/8") vinyl coated round truss rod complete with tightened unit.

G. Post Spacings and Settings: Line and terminal posts shall be set in concrete foundation not less than eighteen inches (18") in diameter and not less than forty-eight inches (48") in depth. Concrete shall attain a compressive strength of not less than three thousand five hundred (3,500) lbs. per square inch at the twenty-eighth (28th) day after pouring. Spacing of posts in the line of fence shall be uniform. Refer to geotechnical report for final foundation design.

## PART 3 - EXECUTION

### 3.1 INSPECTION

A. Examine areas and conditions, with Installer present, for compliance with requirements for a verified survey of property lines and legal boundaries, site clearing, earthwork, pavement work, and other conditions affecting performance of the Work.

1. Do not begin installation before final grading is completed unless permitted by Architect.
2. Proceed with installation only after unsatisfactory conditions have been corrected.

B. Stake locations of fence lines, gates and terminal posts. Do not exceed intervals of 500 feet or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks and property monuments.

### 3.2 INSTALLATION

A. All posts shall be set plumb and in accordance with the following table (unless specified otherwise):

1. Corner/Terminal and Bracing Post - General Fence

| Fabric Height | Post Depth | Diameter of Foundation | Foundation Depth | Maximum Spacing |
|---|---|---|---|---|
| 0' - 6'-0" | 36" | 12" min | 42" | ~~10'-0"~~ 8'-0" |
| 6'-1" - 12'-0" | 36" | 12" min | 42" | 8'-0" |

2. Line Post - Backstop

| Backstop Height | Post Depth | Diameter of Foundation | Foundation Depth | Maximum Spacing |
|---|---|---|---|---|
| 24' | 48" | 18" min | 60" | 8'-0" |
| 30' | 48" | 18" min | 60" | 8'-0" |

3. Line posts shall be pneumatically driven into the ground using the following chart*:

| Fabric Height | Pipe Below Grade | Total Length of Post |
|---|---|---|
| 4’ | 4’ | 8’ |
| 6’ | 5’ | 11’ |
| 8’ | 6’ | 14’ |
| 10’ | 7’ | 17’ |
| 12’ | 8’ | 20’ |

B. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.

C. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.

1. Verify that posts are set plumb, aligned and at correct height and spacing, and hold position during setting with concrete or mechanical devices.
2. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.

D. Fence posts shall be installed with maximum 6 inches clear opening from end posts to buildings, fences, property lines or other structures.

E. Install gates level, plum and secure for full opening without interference. Attach hardware using tamper-resistant or concealed means. Adjust hardware for smooth operation and lubricate where necessary.

F. The fabric shall be installed on the court/playing side of posts. Bottom of fence fabric shall be 3/4" (+/-1/4") above the finished court surface. Fabric shall be furnished with selvage knuckled on both ends.

G. Top of concrete footing shall be left down and topped with surrounding pavings as detailed. Cold patch is not acceptable.

3.3 CLEAN UP AND DISPOSAL

A. Remove dirt, concrete and tags from all posts and rails.

B. Remove from the site all equipment, materials, and debris resulting from construction work including this section. Leave work area neat and clean and in a condition acceptable by the Landscape Architect, Owner. All work shall be complete, ready for use, at the time of final acceptance.

END OF SECTION 32 3130

# SECTION 32 1216 - ASPHALT PAVING ADDENDUM 3

## PART 1 - GENERAL

### 1.1 SUMMARY

A. Section Includes:

1. Hot-mix asphalt paving.
2. Hot-mix asphalt overlay.
3. Hot-mix asphalt trail.

B. Related Requirements:

1. Section 31 2000 "Earth Moving" for subgrade preparation, fill material, unbound-aggregate subbase and base courses, and aggregate pavement shoulders.
2. Section 32 1373 "Concrete Paving Joint Sealants" for joint sealants and fillers at pavement terminations.
3. Section 32 1400 "Unit Paving" for bituminous setting bed for pavers.

### 1.2 ACTION SUBMITTALS

A. Product Data: For each type of product. Include technical data and tested physical and performance properties.

1. Job-Mix Designs: For each job mix proposed for the Work.

B. LEED Submittals:

1. Product Data for Credit MR 4: For products having recycled content, documentation indicating percentages by weight of postconsumer and preconsumer recycled content. Include statement indicating cost for each product having recycled content.

### 1.3 INFORMATIONAL SUBMITTALS

A. Material Certificates: For each paving material.

### 1.4 QUALITY ASSURANCE

A. Manufacturer Qualifications: A paving-mix manufacturer registered with and approved by authorities having jurisdiction or the DOT of state in which Project is located.

B. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of the Michigan Department of Transportation for asphalt paving work.

1. Measurement and payment provisions and safety program submittals included in standard specifications do not apply to this Section.

1.5 FIELD CONDITIONS

A. Environmental Limitations: Do not apply asphalt materials if subgrade is wet or excessively damp, if rain is imminent or expected before time required for adequate cure, or if the following conditions are not met:

1. Tack Coat: Minimum surface temperature of 60 deg F (15.6 deg C).
2. Asphalt Base Course: Minimum surface temperature of 40 deg F (4.4 deg C) and rising at time of placement.
3. Asphalt Surface Course: Minimum surface temperature of 60 deg F (15.6 deg C) at time of placement.

PART 2 - PRODUCTS

2.1 AGGREGATES

A. Coarse Aggregate: ASTM D 692/D 692M, sound; angular crushed stone, crushed gravel, or cured, crushed blast-furnace slag.

B. Fine Aggregate: ASTM D 1073, sharp-edged natural sand or sand prepared from stone, gravel, cured blast-furnace slag, or combinations thereof.

C. Mineral Filler: ASTM D 242/D 242M, rock or slag dust, hydraulic cement, or other inert material.

2.2 ASPHALT MATERIALS

A. Asphalt Binder: AASHTO M 320, PG 64-22.

B. Tack Coat: ASTM D 977 emulsified asphalt, or ASTM D 2397 cationic emulsified asphalt, slow setting, diluted in water, of suitable grade and consistency for application.

C. Water: Potable.

2.3 AUXILIARY MATERIALS

A. Pavement-Marking Paint: MPI #97 Latex Traffic Marking Paint.

1. Color: Yellow stripes and Blue for barrier free.

B. Recycled Materials for Hot-Mix Asphalt Mixes: Reclaimed asphalt pavement; reclaimed, unbound-aggregate base material; and recycled tires, asphalt shingles, or glass from sources and gradations that have performed satisfactorily in previous installations, equal to performance of required hot-mix asphalt paving produced from all new materials.

C. Sand: ASTM D 1073, Grade No. 2 or No. 3.

D. Paving Geotextile: AASHTO M 288 paving fabric; nonwoven polypropylene; resistant to chemical attack, rot, and mildew; and specifically designed for paving applications.

E. Joint Sealant: ASTM D 6690, Type II or III, hot-applied, single-component, polymer-modified bituminous sealant.

## 2.4 MIXES

A. Recycled Content of Hot-Mix Asphalt: Postconsumer recycled content plus one-half of preconsumer recycled content not more than 15 percent by weight.

1. Surface Course Limit: Recycled content no more than 10 percent by weight.

B. Hot-Mix Asphalt: Dense-graded, hot-laid, hot-mix asphalt plant mixes approved by authorities having jurisdiction and complying with the following requirements:

1. Provide mixes with a history of satisfactory performance in geographical area where Project is located.
2. Base Course: MDOT 13A
3. Surface Course: MDOT 13A
4. Pavement Course (HMA Trail): 13A

# PART 3 - EXECUTION

## 3.1 EXAMINATION

A. Verify that subgrade is dry and in suitable condition to begin paving.

B. Proof-roll subgrade below pavements with heavy pneumatic-tired equipment to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades.

C. Proceed with paving only after unsatisfactory conditions have been corrected.

## 3.2 COLD MILLING

A. Milling will be an allowed method for pavement removal.

## 3.3 SURFACE PREPARATION

A. General: Immediately before placing asphalt materials, remove loose and deleterious material from substrate surfaces. Ensure that prepared subgrade is ready to receive paving.

B. Tack Coat: Apply uniformly to surfaces of existing pavement at a rate of 0.05 to 0.15 gal./sq. yd. (0.2 to 0.7 L/sq. m).

1. Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.

2. Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.

## 3.4 PLACING HOT-MIX ASPHALT

A. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand in areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.

1. Place hot-mix asphalt base course in number of lifts and thicknesses indicated.
2. Place hot-mix asphalt surface course in single lift.
3. Spread mix at a minimum temperature of 250 deg F (121 deg C).
4. Regulate paver machine speed to obtain smooth, continuous surface free of pulls and tears in asphalt-paving mat.

B. Place paving in consecutive strips not less than 10 feet (3 m) wide unless infill edge strips of a lesser width are required.

C. Promptly correct surface irregularities in paving course behind paver. Use suitable hand tools to remove excess material forming high spots. Fill depressions with hot-mix asphalt to prevent segregation of mix; use suitable hand tools to smooth surface.

## 3.5 JOINTS

A. Construct joints to ensure a continuous bond between adjoining paving sections. Construct joints free of depressions, with same texture and smoothness as other sections of hot-mix asphalt course.

1. Clean contact surfaces and apply tack coat to joints.
2. Offset longitudinal joints, in successive courses, a minimum of 6 inches (150 mm).
3. Offset transverse joints, in successive courses, a minimum of 24 inches (600 mm).
4. Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time. Construct these joints using either "bulkhead" or "papered" method according to AI MS-22, for both "Ending a Lane" and "Resumption of Paving Operations."
5. Compact joints as soon as hot-mix asphalt will bear roller weight without excessive displacement.
6. Compact asphalt at joints to a density within 2 percent of specified course density.

## 3.6 COMPACTION

A. General: Begin compaction as soon as placed hot-mix paving will bear roller weight without excessive displacement. Compact hot-mix paving with hot, hand tampers or with vibratory-plate compactors in areas inaccessible to rollers.

1. Complete compaction before mix temperature cools to 185 deg F (85 deg C).

B. Breakdown Rolling: Complete breakdown or initial rolling immediately after rolling joints and outside edge. Examine surface immediately after breakdown rolling for indicated crown, grade, and smoothness. Correct laydown and rolling operations to comply with requirements.

C. Intermediate Rolling: Begin intermediate rolling immediately after breakdown rolling while hot-mix asphalt is still hot enough to achieve specified density. Continue rolling until hot-mix asphalt course has been uniformly compacted to the following density:

1. Average Density: 92 percent of reference maximum theoretical density according to ASTM D 2041, but not less than 90 percent or greater than 96 percent.

D. Finish Rolling: Finish roll paved surfaces to remove roller marks while hot-mix asphalt is still warm.

E. Edge Shaping: While surface is being compacted and finished, trim edges of pavement to proper alignment. Bevel edges while asphalt is still hot; compact thoroughly.

F. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.

G. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

## 3.7 INSTALLATION TOLERANCES

A. Pavement Thickness: Compact each course to produce the thickness indicated within the following tolerances:

1. Base Course: Plus or minus 1/2 inch (13 mm).
2. Surface Course: Plus 1/4 inch (6 mm), no minus.

B. Pavement Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot (3-m) straightedge applied transversely or longitudinally to paved areas:

1. Base Course: 1/4 inch (6 mm).
2. Surface Course: 1/8 inch (3 mm).
3. Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template is 1/4 inch (6 mm).

## 3.8 FIELD QUALITY CONTROL

A. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections.

B. Thickness: In-place compacted thickness of hot-mix asphalt courses will be determined according to ASTM D 3549.

C. Surface Smoothness: Finished surface of each hot-mix asphalt course will be tested for compliance with smoothness tolerances.

D. Replace and compact hot-mix asphalt where core tests were taken.

E. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

**END OF SECTION 32 1216**

# SECTION 32 3113 - CHAIN LINK FENCES AND GATES ADDENDUM 3

## PART 1 - GENERAL

### 1.1 SUMMARY

A. Section Includes:

1. Chain-link fences.
2. Barrier swing gates.

B. Related Sections:

1. Section 03 3000 "Cast-in-Place Concrete" for cast-in-place concrete post footings.

### 1.2 ACTION SUBMITTALS

A. Product Data: For each type of product indicated

B. Shop Drawings: Include plans, elevations, sections, details, and attachments to other work. Show accessories, hardware, gate operation, and operational clearances.

### 1.3 INFORMATIONAL SUBMITTALS

A. Product Certificates: For each type of chain-link fence, and gate, from manufacturer.

B. Sample of special warranty.

### 1.4 PROJECT CONDITIONS

A. Field Measurements: Verify layout information for chain-link fences and gates shown on Drawings in relation to property survey and existing structures. Verify dimensions by field measurements.

### 1.5 WARRANTY

A. Special Warranty: Manufacturer's standard form in which manufacturer agrees to repair or replace components of chain-link fences and gates that fail in materials or workmanship within specified warranty period.

1. Failures include, but are not limited to, deterioration of metals, metal finishes, and other materials beyond normal weathering.
2. Warranty Period: 15 years from date of Substantial Completion.

## PART 2 - PRODUCTS

### 2.1 CHAIN-LINK FENCE FABRIC

A. General: Provide fabric in one-piece heights measured between top and bottom of outer edge of selvage knuckle or twist. Comply with CLFMI Product Manual and with requirements indicated below:

1. Fabric Height: As indicated on Drawings.
2. Steel Wire Fabric: Wire with a diameter of 0.148 inch (3.76 mm)

    a. Mesh Size: 2 inches (50 mm)
    b. Zinc-Coated Fabric: ASTM A 392, Type II, Class 2, 2.0 oz./sq. ft. (610 g/sq. m) with zinc coating applied after weaving.

2.2 FENCE FRAMING

A. Posts and Rails: Comply with ASTM F 1043 for framing, including rails, braces, and line; terminal; and corner posts. Provide members with minimum dimensions and wall thickness according to ASTM F 1043 or ASTM F 1083 based on the following:

1. Fence Height: As indicated on Drawings

2. Heavy Industrial Strength: Material Group IA, round steel pipe, Schedule 40

    a. Line Post: 3.0 (76mm) and 4.0 inches (102 mm) in diameter as noted on plans
    b. End, Corner and Pull Post: 2.0 (51mm) and 3.0 inches (76 mm) in diameter as noted on plans.

3. Horizontal Framework Members: Intermediate, top, and bottom rails complying with ASTM F 1043.

    a. Top, Bottom, and Intermediate Rail: 1.66 inches (42 mm) in diameter

4. Brace Rails: Comply with ASTM F 1043.
5. Metallic Coating for Steel Framing:

    a. Type A zinc coating.

2.3 BARRIER SWING GATES

A. General: Comply with ASTM F 900 for gate posts and single/double swing gate types.

1. Gate Leaf Width: As indicated on plans.
2. Gate Fabric Height: As indicated on plans.

B. Pipe and Tubing:

1. Zinc-Coated Steel: Comply with ASTM F 1043 and ASTM F 1083; protective coating and finish to match fence framing
2. Gate Posts: Round tubular steel
3. Gate Frames and Bracing: Round tubular steel

C. Frame Corner Construction: Welded

D. Hardware:

1. Hinges: 180-degree outward swing.
2. Latches permitting operation from both sides of gate with provision for padlocking accessible from both sides of gate.
3. Closer: Manufacturer's standard

2.4 FITTINGS

A. General: Comply with ASTM F 626 and Manufacturer's standard

PART 3 - EXECUTION

3.1 INSTALLATION

A. Examine areas and conditions, with Installer present, for compliance with requirements for a verified survey of property lines and legal boundaries, site clearing, earthwork, pavement work, and other conditions affecting performance of the Work.

1. Do not begin installation before final grading is completed unless otherwise permitted by Architect.
2. Proceed with installation only after unsatisfactory conditions have been corrected.

B. Stake locations of fence lines, gates, and terminal posts. Do not exceed intervals of 500 feet (152.5 m) or line of sight between stakes. Indicate locations of utilities, lawn sprinkler system, underground structures, benchmarks, and property monuments.

C. Install chain-link fencing to comply with ASTM F 567 and more stringent requirements indicated.

D. Post Excavation: Drill or hand-excavate holes for posts to diameters and spacings indicated, in firm, undisturbed soil.

E. Post Setting: Set posts in concrete at indicated spacing into firm, undisturbed soil.

1. Verify that posts are set plumb, aligned, and at correct height and spacing, and hold in position during setting with concrete or mechanical devices.
2. Concrete Fill: Place concrete around posts to dimensions indicated and vibrate or tamp for consolidation. Protect aboveground portion of posts from concrete splatter.

a. Concealed Concrete: Top 4 inches (100 mm) <Insert dimension> below grade to allow covering with surface material.

F. Terminal Posts: Locate terminal end, corner, and gate posts per ASTM F 567 and terminal pull posts at changes in horizontal or vertical alignment of as indicated on Drawings.

G. Line Posts: Space line posts uniformly at 10 feet (3 m) o.c.

H. Post Bracing and Intermediate Rails: Install according to ASTM F 567, maintaining plumb position and alignment of fencing. Diagonally brace terminal posts to adjacent line posts with truss rods and turnbuckles. Install braces at end and gate posts and at both sides of corner and pull posts.

1. Locate horizontal braces at midheight of fabric 60 inches (1524 mm) or higher, on fences with top rail and at two-third fabric height on fences without top rail. Install so posts are plumb when diagonal rod is under proper tension.

I. Top Rail: Install according to ASTM F 567, maintaining plumb position and alignment of fencing. Run rail continuously through line post caps, bending to radius for curved runs and terminating into rail end attached to posts or post caps fabricated to receive rail at terminal posts. Provide expansion couplings as recommended in writing by fencing manufacturer.

J. Intermediate and Bottom Rails: Install and secure to posts with fittings.

K. Chain-Link Fabric: Apply fabric to outside of enclosing framework. Leave 1 inch (25.4 mm) between finish grade or surface and bottom selvage unless otherwise indicated.

L. Tension or Stretcher Bars: Thread through fabric and secure to end, corner, pull, and gate posts with tension bands spaced not more than 15 inches (380 mm) o.c.

M. Tie Wires: Use wire of proper length to firmly secure fabric to line posts and rails. Attach wire at one end to chain-link fabric, wrap wire around post a minimum of 180 degrees, and attach other end to chain-link fabric per ASTM F 626. Bend ends of wire to minimize hazard to individuals and clothing.

1. Maximum Spacing: Tie fabric to line posts at 12 inches (300 mm) o.c. and to braces at 24 inches (610 mm) o.c.

N. Fasteners: Install nuts for tension bands and carriage bolts on the side of the fence opposite the fabric side.

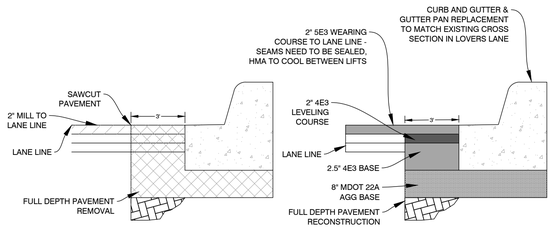
O. Install gates according to manufacturer's written instructions, level, plumb, and secure for full opening without interference. Attach fabric as for fencing. Attach hardware using tamper-resistant or concealed means. Install ground-set items in concrete for anchorage. Adjust hardware for smooth operation and lubricate where necessary.

P. Gates: Adjust gates to operate smoothly, easily, and quietly, free of binding, warp, excessive deflection, distortion, nonalignment, misplacement, disruption, or malfunction, throughout entire operational range. Confirm that latches and locks engage accurately and securely without forcing or binding.

**END OF SECTION 32 3113**

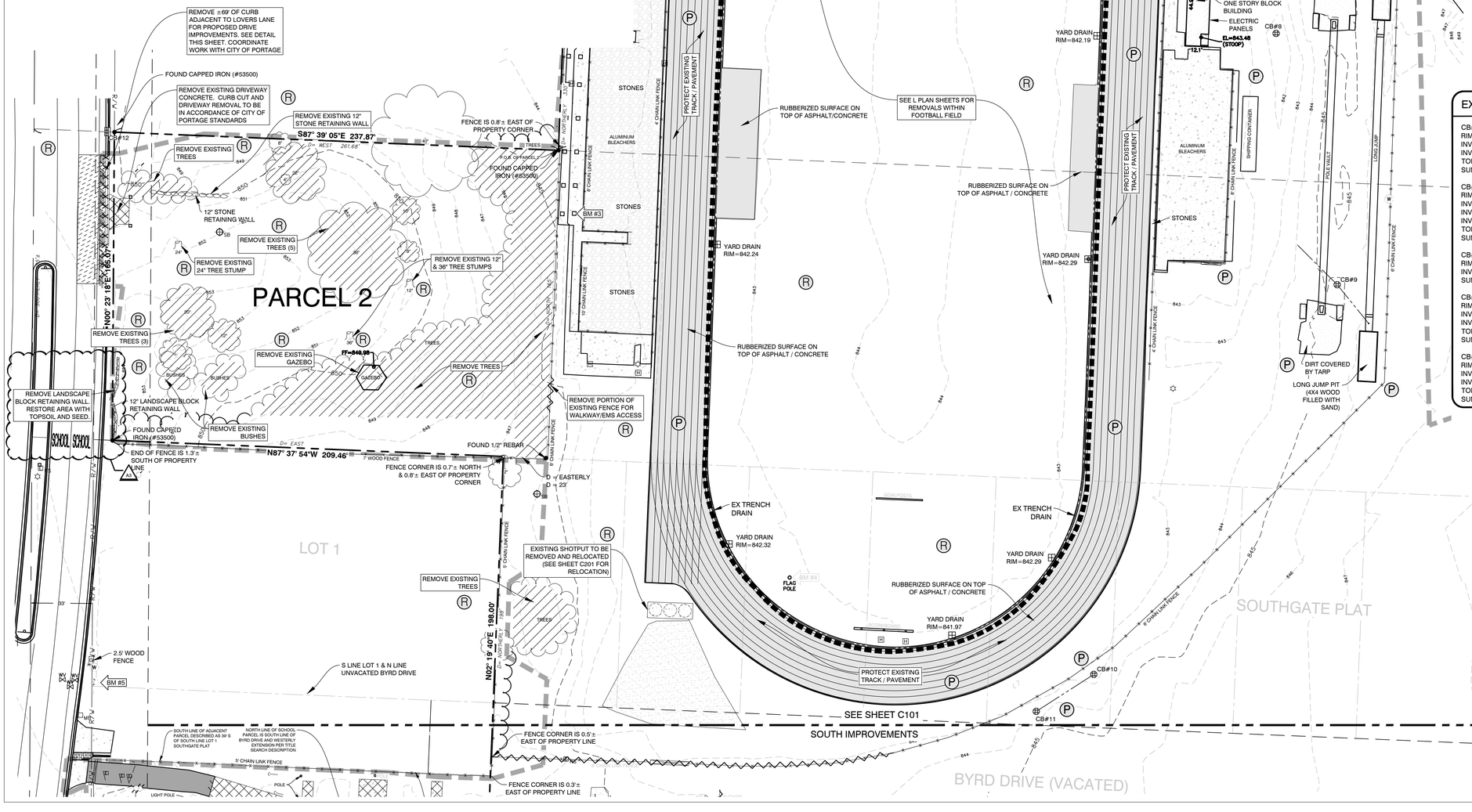
## DEMOLITION NOTES

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES PRIOR TO CONSTRUCTION ON THE CONTRACTOR'S BEHALF. WORK SHALL INCLUDE ENLISTING THE SERVICES OF A PRIVATE UTILITY LOCATOR AS REQUIRED.
2. ANY DEPRESSIONS CREATED DURING DEMOLITION ACTIVITIES SHALL BE BACKFILLED WITH CLASS II FILL MATERIAL UP TO PROPOSED SUBGRADE ELEVATION, IN 8 INCH LIFTS AND COMPACTED TO 95% OF MAXIMUM UNIT WEIGHT.
3. ALL CONTRACTORS ARE RESPONSIBLE TO PROTECT EXISTING WALKS, PAVEMENT, LAWNS, BUILDINGS, AND TREES SCHEDULED TO REMAIN THROUGH CONSTRUCTION.
4. ALL EXCESS SOIL SHALL BE EXPORTED OFFSITE UNLESS NOTED OTHERWISE
5. CONTRACTOR TO LOCATE, POWER WASH, AND CLEAN SUMPS OF ALL EXISTING CATCH BASINS AND STORM DRAIN AROUND THE PERIMETER OF THE STADIUM / ADJACENT TO CONSTRUCTION LIMITS THROUGHOUT SITE. CONTRACTOR TO ENSURE DRAINAGE SYSTEM HAS POSITIVE FLOW.
6. CONTRACTOR TO REMOVE AND DISPOSE EXISTING FOOTBALL GOAL POSTS, SCORE BOARD, FLAG POLE, AND FOOTINGS. CONTRACTOR SHALL BACKFILL AND TAMP HOLES FROM FOOTING REMOVAL.
7. CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND MAKE EVERY EFFORT TO LOCATE EXISTING UNDERGROUND UTILITIES. THIS SHALL INCLUDE CONSULTING WITH ALL LOCAL UTILITY COMPANIES AND USING A SIGNAL LOCATOR PRIOR TO EXCAVATION. ANY AND ALL REPAIRS SHALL BE COMPLETED WITHIN 48 HRS. OR THE OWNER SHALL HAVE THE REPAIR WORK COMPLETED AT THE CONTRACTORS EXPENSE.
8. WORK RELATING TO FOOTBALL FIELD REMOVALS SHALL BE COORDINATED WITH L PLAN SHEETS.




## A 2" MILL AND OVERLAY DETAIL

C100 - 030303 NOT TO SCALE




## EX. SANITARY STRUCTURE

MH-A - 4'Ø CONCRETE
RIM 842.87
INV (NE) 6" PVC=839.22 - PARTIAL OPENING
(NO OTHER PIPES VISIBLE DUE TO BUILD-UP IN MANHOLE)

MH-B - 4'Ø CONCRETE
RIM 843.52
INV (NW) 6" RCP=839.62
INV (S) 6" CLAY=839.67

## LEGEND

- FURNISH AND INSTALL TRACK PROTECTION OVER EXISTING ASPHALT. TRACK PROTECTION SHALL BE LEFT ONSITE UNTIL WORK BY ALL TRADES IS COMPLETE. REFER TO L PLAN SHEETS FOR MORE DETAIL.
- EXISTING PAVEMENT/ TRACK TO REMAIN
- PAVEMENT REMOVAL
- MILL & OVERLAY (SEE DETAIL THIS SHEET)
- SAWCUT
- R REMOVE
- P PROTECT
- TREE REMOVAL
- X X X X X X X EXISTING CURB REMOVAL
- EXISTING FENCE REMOVAL
- LIMITS OF FOOTBALL FIELD IMPROVEMENTS (SEE L PLAN SHEETS)
- LIMITS OF PROJECT

## EX. STORM STRUCTURE

CB#1 - 4'Ø CONCRETE
RIM 842.24
INV (N) 12" CPP=839.34
INV (SE) 12" CPP=839.31
TOP OF WATER=839.29
SUMP=837.39

CB#2 - 4'Ø CONCRETE
RIM 843.54
INV (NW) 12" CPP=839.51
INV (S) 12" CPP=839.36
INV (SE) 12" CPP=839.34
TOP OF WATER=839.29
SUMP=837.54

CB#3 - 2'Ø CONCRETE
RIM 842.15
INV (NW) 12" CPP=839.50
SUMP=837.60

CB#4 - 3'Ø CONCRETE
RIM 843.26
INV (NE) 8" CPP=840.36
INV (SE) 7" PVC=839.76
TOP OF WATER=839.60
SUMP=838.41

CB#5 - 3'Ø CONCRETE
RIM 843.63
INV (N) 8" CPP=841.03
INV (SW) 8" CPP=841.03
TOP OF WATER=840.90
SUMP=839.63

CB#6 YARD DRAIN
RIM 842.94
(FILLED WITH DEBRIS - NO PIPES VISIBLE)

CB#7 - CONCRETE
RIM 842.24 (BEEHIVE)
INV (NW) 6" PVC=840.04
TOP OF WATER=839.79
SUMP=839.24

CB#8 - 2'Ø CONCRETE LEACHING BASIN
RIM 841.10
(FILLED WITH WATER - NO PIPES VISIBLE)
TOP OF WATER=840.10
SUMP=838.20

CB#9 - 2'Ø PLASTIC
RIM 844.83
INV (NW) 6" PVC=842.92
INV (SE) 6" PVC=842.99
SUMP=842.33

CB#12 - 3'Ø CONCRETE LEACHING BASIN
RIM 850.10
(NO PIPES VISIBLE)
SUMP=841.10

0 30 45 60
1 inch = 30 ft.

FORESITE DESIGN, INC.
A: 9269 Coolidge Highway Berkley, Michigan 48072
O: 248-547-7757
www.foresitedesign.com

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING
MICHIGAN | INDIANA | ILLINOIS | OHIO
269.250.5991 PHONE | 866.569.0604 FAX
www.arengineeringllc.com

PROJECT NUMBER: 24183001_LNHS

811 Know what's below. Call before you dig.

ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA. FIELD WORK PERFORMED BY: DRIESENGA & ASSOCIATES

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| ADDENDUM No. 3 | 02/21/2025 |
|---|---|
| ADDENDUM No. 2 | 02/12/2025 |
| ADDENDUM No. 1 | 02/07/2025 |
| ISSUED FOR | DATE |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

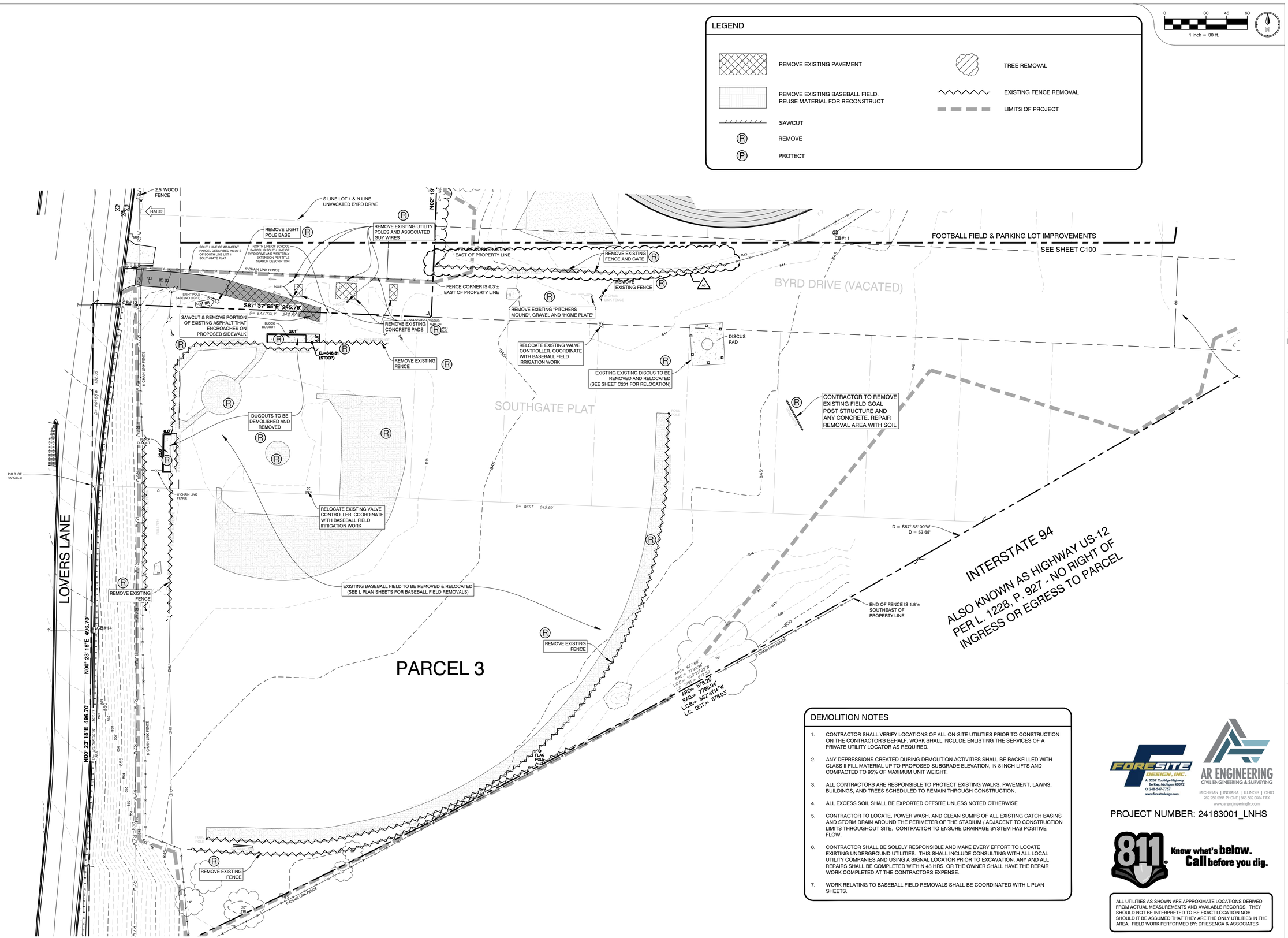
OWNER
KALAMAZOO PUBLIC SCHOOLS

Kalamazoo, Michigan

SHEET TITLE
EX CONDITIONS / DEMO PLAN - FOOTBALL FIELD & PARKING IMPROVEMENTS

DATE
JANUARY 24, 2025

SHEET NUMBER
C100
23-625.00




## DEMOLITION NOTES

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES PRIOR TO CONSTRUCTION ON THE CONTRACTOR'S BEHALF. WORK SHALL INCLUDE ENLISTING THE SERVICES OF A PRIVATE UTILITY LOCATOR AS REQUIRED.
2. ANY DEPRESSIONS CREATED DURING DEMOLITION ACTIVITIES SHALL BE BACKFILLED WITH CLASS II FILL MATERIAL UP TO PROPOSED SUBGRADE ELEVATION, IN 8 INCH LIFTS AND COMPACTED TO 95% OF MAXIMUM UNIT WEIGHT.
3. ALL CONTRACTORS ARE RESPONSIBLE TO PROTECT EXISTING WALKS, PAVEMENT, LAWNS, BUILDINGS, AND TREES SCHEDULED TO REMAIN THROUGH CONSTRUCTION.
4. ALL EXCESS SOIL SHALL BE EXPORTED OFFSITE UNLESS NOTED OTHERWISE
5. CONTRACTOR TO LOCATE, POWER WASH, AND CLEAN SUMPS OF ALL EXISTING CATCH BASINS AND STORM DRAIN AROUND THE PERIMETER OF THE STADIUM / ADJACENT TO CONSTRUCTION LIMITS THROUGHOUT SITE. CONTRACTOR TO ENSURE DRAINAGE SYSTEM HAS POSITIVE FLOW.
6. CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND MAKE EVERY EFFORT TO LOCATE EXISTING UNDERGROUND UTILITIES. THIS SHALL INCLUDE CONSULTING WITH ALL LOCAL UTILITY COMPANIES AND USING A SIGNAL LOCATOR PRIOR TO EXCAVATION. ANY AND ALL REPAIRS SHALL BE COMPLETED WITHIN 48 HRS. OR THE OWNER SHALL HAVE THE REPAIR WORK COMPLETED AT THE CONTRACTORS EXPENSE.
7. WORK RELATING TO BASEBALL FIELD REMOVALS SHALL BE COORDINATED WITH L PLAN SHEETS.

FORESITE DESIGN, INC.
A: 3269 Coolidge Highway Berkley, Michigan 48072
O: 248-547-7757
www.foresitedesign.com

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING
MICHIGAN | INDIANA | ILLINOIS | OHIO
269.250.5991 PHONE | 866.569.0604 FAX
www.arengineeringllc.com

PROJECT NUMBER: 24183001_LNHS

811 Know what's below. Call before you dig.

ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA. FIELD WORK PERFORMED BY: DRIESENGA & ASSOCIATES

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| | |
|---|---|
| ADDENDUM No. 3 | 02/21/2025 |
| ADDENDUM No. 2 | 02/12/2025 |
| ADDENDUM No. 1 | 02/07/2025 |
| ISSUED FOR | DATE |

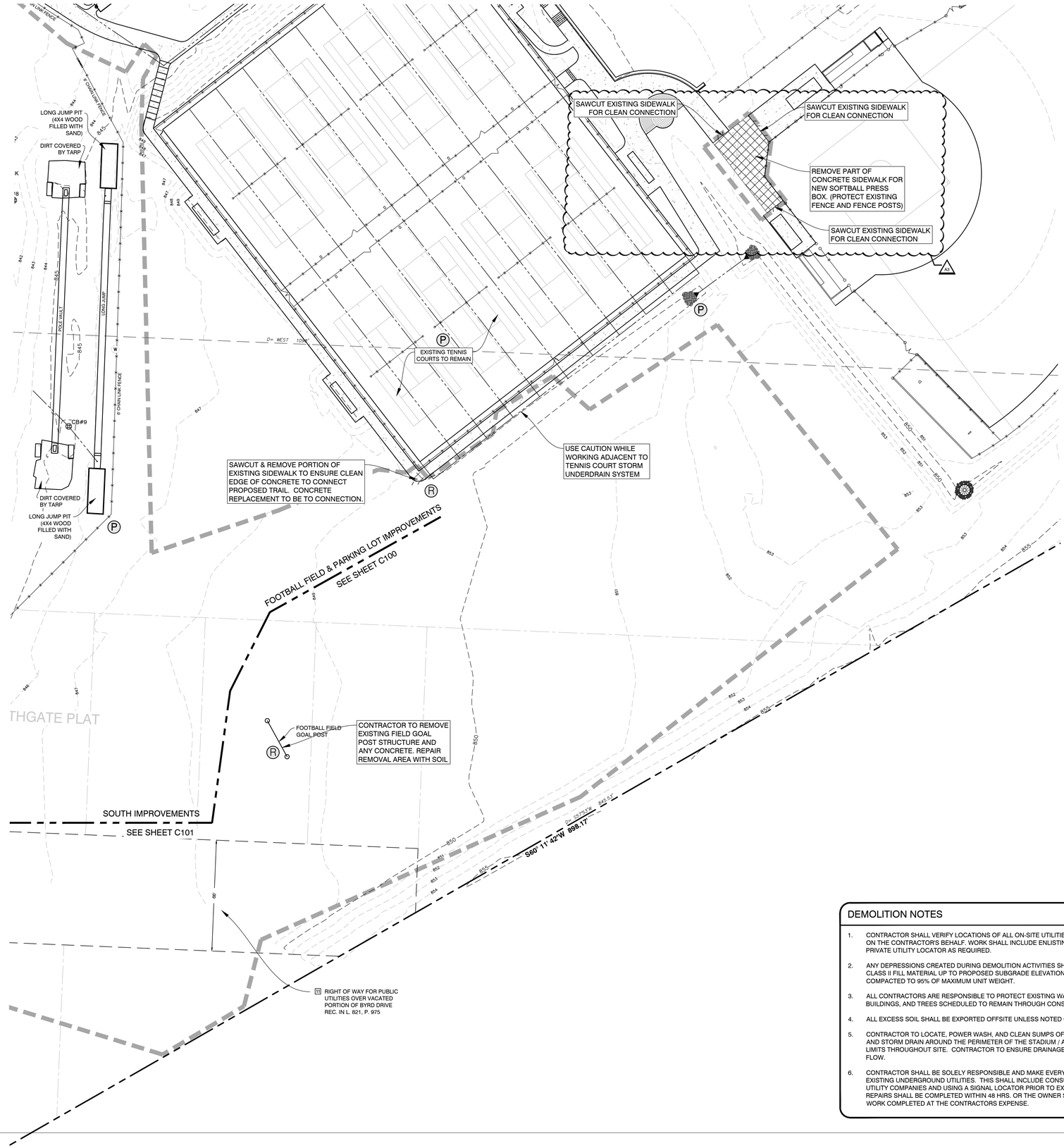
PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

SHEET TITLE
EX CONDITIONS / DEMO PLAN - SOUTH IMPROVEMENTS

DATE
JANUARY 24, 2025

SHEET NUMBER
C101
23-625.00




0 30 45 60

1 inch = 30 ft.

## LEGEND

- REMOVE EXISTING PAVEMENT
- SAWCUT
- (R) REMOVE
- (P) PROTECT
- LIMITS OF PROJECT

## DEMOLITION NOTES

1. CONTRACTOR SHALL VERIFY LOCATIONS OF ALL ON-SITE UTILITIES PRIOR TO CONSTRUCTION ON THE CONTRACTOR'S BEHALF. WORK SHALL INCLUDE ENLISTING THE SERVICES OF A PRIVATE UTILITY LOCATOR AS REQUIRED.
2. ANY DEPRESSIONS CREATED DURING DEMOLITION ACTIVITIES SHALL BE BACKFILLED WITH CLASS II FILL MATERIAL UP TO PROPOSED SUBGRADE ELEVATION, IN 8 INCH LIFTS AND COMPACTED TO 95% OF MAXIMUM UNIT WEIGHT.
3. ALL CONTRACTORS ARE RESPONSIBLE TO PROTECT EXISTING WALKS, PAVEMENT, LAWNS, BUILDINGS, AND TREES SCHEDULED TO REMAIN THROUGH CONSTRUCTION.
4. ALL EXCESS SOIL SHALL BE EXPORTED OFFSITE UNLESS NOTED OTHERWISE
5. CONTRACTOR TO LOCATE, POWER WASH, AND CLEAN SUMPS OF ALL EXISTING CATCH BASINS AND STORM DRAIN AROUND THE PERIMETER OF THE STADIUM / ADJACENT TO CONSTRUCTION LIMITS THROUGHOUT SITE. CONTRACTOR TO ENSURE DRAINAGE SYSTEM HAS POSITIVE FLOW.
6. CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND MAKE EVERY EFFORT TO LOCATE EXISTING UNDERGROUND UTILITIES. THIS SHALL INCLUDE CONSULTING WITH ALL LOCAL UTILITY COMPANIES AND USING A SIGNAL LOCATOR PRIOR TO EXCAVATION. ANY AND ALL REPAIRS SHALL BE COMPLETED WITHIN 48 HRS. OR THE OWNER SHALL HAVE THE REPAIR WORK COMPLETED AT THE CONTRACTORS EXPENSE.

FORESITE DESIGN, INC.
A: 3269 Coolidge Highway Berkley, Michigan 48072
O: 248.547.7757
www.foresitedesign.com

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING
MICHIGAN | INDIANA | ILLINOIS | OHIO
269.250.5991 PHONE | 866.569.0604 FAX
www.arengineeringllc.com

PROJECT NUMBER: 24183001_LNHS

811 Know what's below. Call before you dig.

ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA. FIELD WORK PERFORMED BY: DRIESENGA & ASSOCIATES

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| | |
|---|---|
| ADDENDUM No. 3 | 02/21/2025 |
| ADDENDUM No. 2 | 02/12/2025 |
| ADDENDUM No. 1 | 02/07/2025 |
| ISSUED FOR | DATE |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS

Kalamazoo, Michigan

SHEET TITLE
EX CONDITIONS / DEMO PLAN - EAST IMPROVEMENTS

DATE
JANUARY 24, 2025

SHEET NUMBER
C102
23-625.00

## EXISTING STORM STRUCTURE

CB#1 - 4'Ø CONCRETE
RIM 842.24
INV (N) 12" CPP=839.34
INV (SE) 12" CPP=839.31
TOP OF WATER=839.29
SUMP=837.39

CB#2 - 4'Ø CONCRETE
RIM 843.54
INV (NW) 12" CPP=839.51
INV (S) 12" CPP=839.36
INV (SE) 12" CPP=839.34
TOP OF WATER=839.29
SUMP=837.54

CB#3 - 2'Ø CONCRETE
RIM 842.15
INV (NW) 12" CPP=839.50
SUMP=837.60

CB#4 - 3'Ø CONCRETE
RIM 843.26
INV (NE) 8" CPP=840.36
INV (SE) 7" PVC=839.76
TOP OF WATER=839.60
SUMP=838.41

CB#5 - 3'Ø CONCRETE
RIM 843.63
INV (N) 8" CPP=841.03
INV (SW) 8" CPP=841.03
TOP OF WATER=840.90
SUMP=839.63

CB#6 YARD DRAIN
RIM 842.94
(FILLED WITH DEBRIS - NO PIPES VISIBLE)

CB#7 - CONCRETE
RIM 842.24 (BEEHIVE)
INV (NW) 6" PVC=840.04
TOP OF WATER=839.79
SUMP=839.24

CB#8 - 2'Ø CONCRETE
LEACHING BASIN
RIM 841.10
(FILLED WITH WATER - NO PIPES VISIBLE)
TOP OF WATER=840.10
SUMP=838.20

CB#9 - 2'Ø PLASTIC
RIM 844.83
INV (NW) 6" PVC=842.92
INV (SE) 6" PVC=842.99
SUMP=842.33

CB#12 - 3'Ø CONCRETE
LEACHING BASIN
RIM 850.10
(NO PIPES VISIBLE)
SUMP=841.10

## EX. SANITARY STRUCTURE

MH-A - 4'Ø CONCRETE
RIM 842.87
INV (NE) 6" PVC=839.22 -
PARTIAL OPENING
(NO OTHER PIPES VISIBLE DUE TO
BUILD-UP IN MANHOLE)

MH-B - 4'Ø CONCRETE
RIM 843.52
INV (NW) 6" RCP=839.62
INV (S) 6" CLAY=839.67

## PROPOSED STORM STRUCTURE

CB-1 - 4' DIA. EJIW 7075, TYPE M1
RIM = 845.08
24" HDPE PERF PIPE S 841.00
24" HDPE PERF PIPE W 841.00

CB-2 - 4' DIA. EJIW 7075, TYPE M1
RIM = 845.03
24" HDPE PERF PIPE N 841.00
24" HDPE PERF PIPE W 841.00
8" HDPE S 843.25

LB-9 - 4' DIA., EJIW 1000 O2 BEEHIVE, 6' DEPTH
RIM = 842.42
8" HDPE NW 840.31
BTM = 836.42

* ALL STRUCTURES HAVE 2' SUMPS

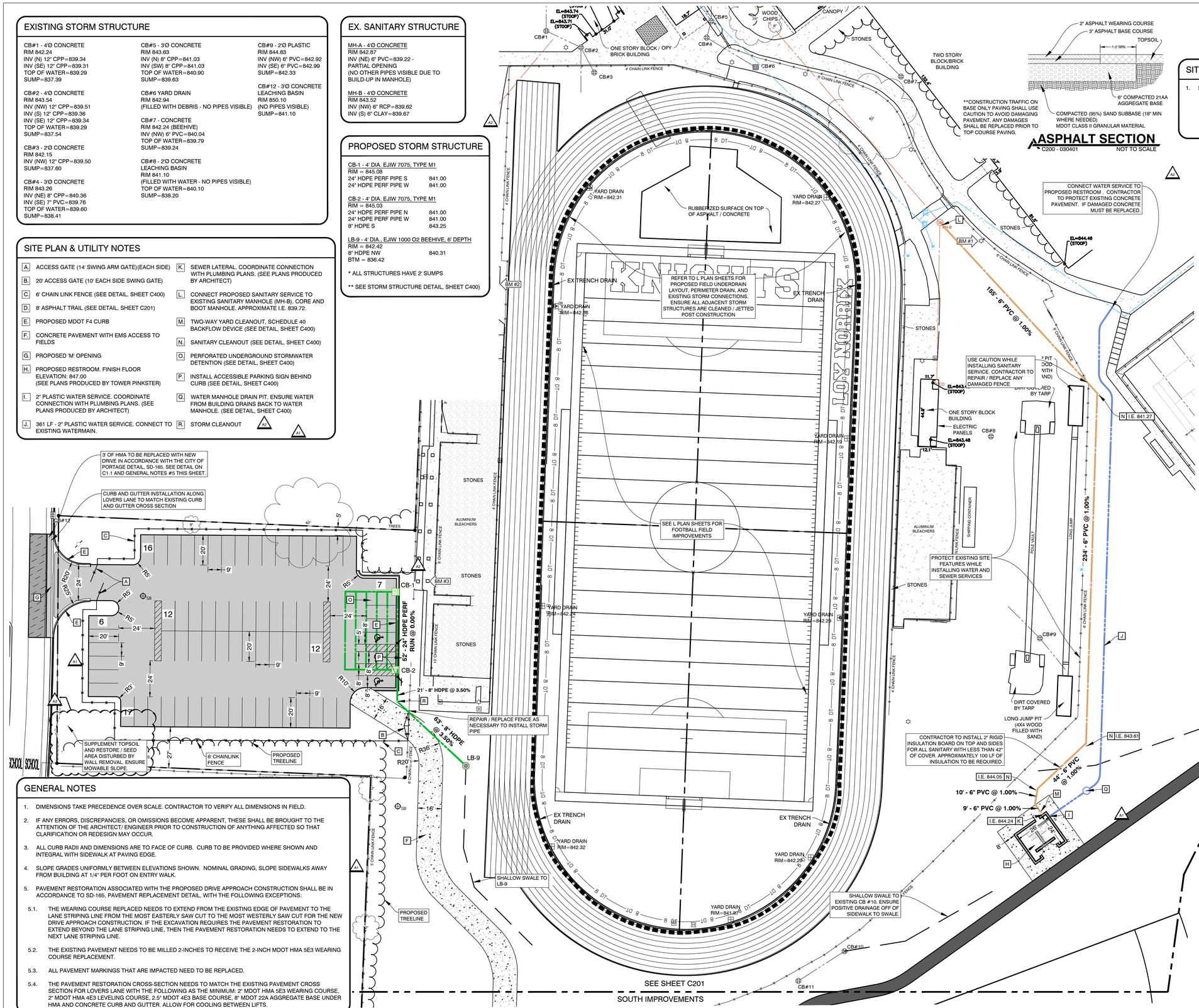
** SEE STORM STRUCTURE DETAIL, SHEET C400)

## SITE PLAN & UTILITY NOTES

A. ACCESS GATE (14' SWING ARM GATE)(EACH SIDE)
B. 20' ACCESS GATE (10' EACH SIDE SWING GATE)
C. 6' CHAIN LINK FENCE (SEE DETAIL, SHEET C400)
D. 8' ASPHALT TRAIL (SEE DETAIL, SHEET C201)
E. PROPOSED MDOT F4 CURB
F. CONCRETE PAVEMENT WITH EMS ACCESS TO FIELDS
G. PROPOSED 'M' OPENING
H. PROPOSED RESTROOM. FINISH FLOOR ELEVATION: 847.00 (SEE PLANS PRODUCED BY TOWER PINKSTER)
I. 2" PLASTIC WATER SERVICE. COORDINATE CONNECTION WITH PLUMBING PLANS. (SEE PLANS PRODUCED BY ARCHITECT)
J. 361 LF - 2" PLASTIC WATER SERVICE. CONNECT TO EXISTING WATERMAIN.
K. SEWER LATERAL. COORDINATE CONNECTION WITH PLUMBING PLANS. (SEE PLANS PRODUCED BY ARCHITECT)
L. CONNECT PROPOSED SANITARY SERVICE TO EXISTING SANITARY MANHOLE (MH-B). CORE AND BOOT MANHOLE. APPROXIMATE I.E. 839.72.
M. TWO-WAY YARD CLEANOUT, SCHEDULE 40 BACKFLOW DEVICE (SEE DETAIL, SHEET C400)
N. SANITARY CLEANOUT (SEE DETAIL, SHEET C400)
O. PERFORATED UNDERGROUND STORMWATER DETENTION (SEE DETAIL, SHEET C400)
P. INSTALL ACCESSIBLE PARKING SIGN BEHIND CURB (SEE DETAIL, SHEET C400)
Q. WATER MANHOLE DRAIN PIT. ENSURE WATER FROM BUILDING DRAINS BACK TO WATER MANHOLE. (SEE DETAIL, SHEET C400)
R. STORM CLEANOUT

## GENERAL NOTES

1. DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
2. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
3. ALL CURB RADII AND DIMENSIONS ARE TO FACE OF CURB. CURB TO BE PROVIDED WHERE SHOWN AND INTEGRAL WITH SIDEWALK AT PAVING EDGE.
4. SLOPE GRADES UNIFORMLY BETWEEN ELEVATIONS SHOWN. NOMINAL GRADING, SLOPE SIDEWALKS AWAY FROM BUILDING AT 1/4" PER FOOT ON ENTRY WALK.
5. PAVEMENT RESTORATION ASSOCIATED WITH THE PROPOSED DRIVE APPROACH CONSTRUCTION SHALL BE IN ACCORDANCE TO SD-165, PAVEMENT REPLACEMENT DETAIL, WITH THE FOLLOWING EXCEPTIONS:
   - 5.1. THE WEARING COURSE REPLACED NEEDS TO EXTEND FROM THE EXISTING EDGE OF PAVEMENT TO THE LANE STRIPING LINE FROM THE MOST EASTERLY SAW CUT TO THE MOST WESTERLY SAW CUT FOR THE NEW DRIVE APPROACH CONSTRUCTION. IF THE EXCAVATION REQUIRES THE PAVEMENT RESTORATION TO EXTEND BEYOND THE LANE STRIPING LINE, THEN THE PAVEMENT RESTORATION NEEDS TO EXTEND TO THE NEXT LANE STRIPING LINE.
   - 5.2. THE EXISTING PAVEMENT NEEDS TO BE MILLED 2-INCHES TO RECEIVE THE 2-INCH MDOT HMA 5E3 WEARING COURSE REPLACEMENT.
   - 5.3. ALL PAVEMENT MARKINGS THAT ARE IMPACTED NEED TO BE REPLACED.
   - 5.4. THE PAVEMENT RESTORATION CROSS-SECTION NEEDS TO MATCH THE EXISTING PAVEMENT CROSS SECTION FOR LOVERS LANE WITH THE FOLLOWING AS THE MINIMUM: 2" MDOT HMA 5E3 WEARING COURSE, 2" MDOT HMA 4E3 LEVELING COURSE, 2.5" MDOT 4E3 BASE COURSE, 8" MDOT 22A AGGREGATE BASE UNDER HMA AND CONCRETE CURB AND GUTTER. ALLOW FOR COOLING BETWEEN LIFTS.




## SITE PLAN NOTES

1. SEE L PLAN SHEETS FOR LOCATIONS OF THE FOLLOWING PROPOSED ITEMS:
   - 12" x 18" TURF BOX
   - 6 x 12 CONCRETE TURF ANCHOR (TYP.)
   - GOAL POSTS
   - PLAY CLOCK
   - SCOREBOARD
   - FLAGPOLE

## LEGEND

- ASPHALT PAVEMENT (SEE DETAIL, THIS SHEET)
- ASPHALT TRAIL (SEE DETAIL, SHEET C201)
- CONCRETE PAVEMENT (SEE DETAIL, THIS SHEET)
- MILL AND OVERLAY (SEE DETAIL ON C100)
- LIMITS OF FOOTBALL FIELD IMPROVEMENTS (SEE L PLAN SHEETS)

## UTILITY NOTES

1. ADJUST RIMS OF ALL EXISTING STRUCTURES WITHIN FOOTBALL FIELD IMPROVEMENTS TO BE MIN. 12" BELOW PROPOSED FINISHED GRADE. (SEE DETAIL #2, SHEET LD1.01.)
2. NEW FLAG POLE TO HAVE LIGHT, REFER TO ELECTRIC ENGINEER FOR ELECTRICAL SERVICE, SEE LOCATION SHEET L 505

| ISSUED FOR | DATE |
|---|---|
| ADDENDUM No. 3 | 02/21/2025 |
| ADDENDUM No. 2 | 02/12/2025 |
| ADDENDUM No. 1 | 02/07/2025 |


TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM



PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS

Kalamazoo, Michigan

SHEET TITLE
SITE LAYOUT / UTILITY PLAN - FOOTBALL & PARKING IMPROVEMENTS

DATE
JANUARY 24, 2025

SHEET NUMBER
C200
23-625.00

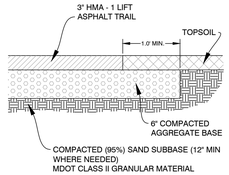

FORESITE DESIGN, INC.
A: 3269 Coolidge Highway
Berkley, Michigan 48072
O: 248.547.7757
www.foresitedesign.com

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING
MICHIGAN | INDIANA | ILLINOIS | OHIO
269.250.5991 PHONE | 866.569.0604 FAX
www.arengineeringllc.com

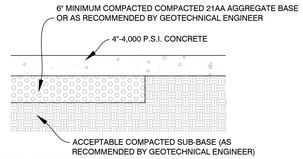

PROJECT NUMBER: 24183001_LNHS

811 Know what's below. Call before you dig.

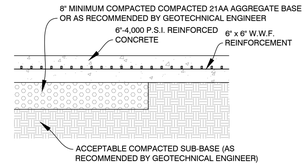
ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA. FIELD WORK PERFORMED BY: DRIESENGA & ASSOCIATES



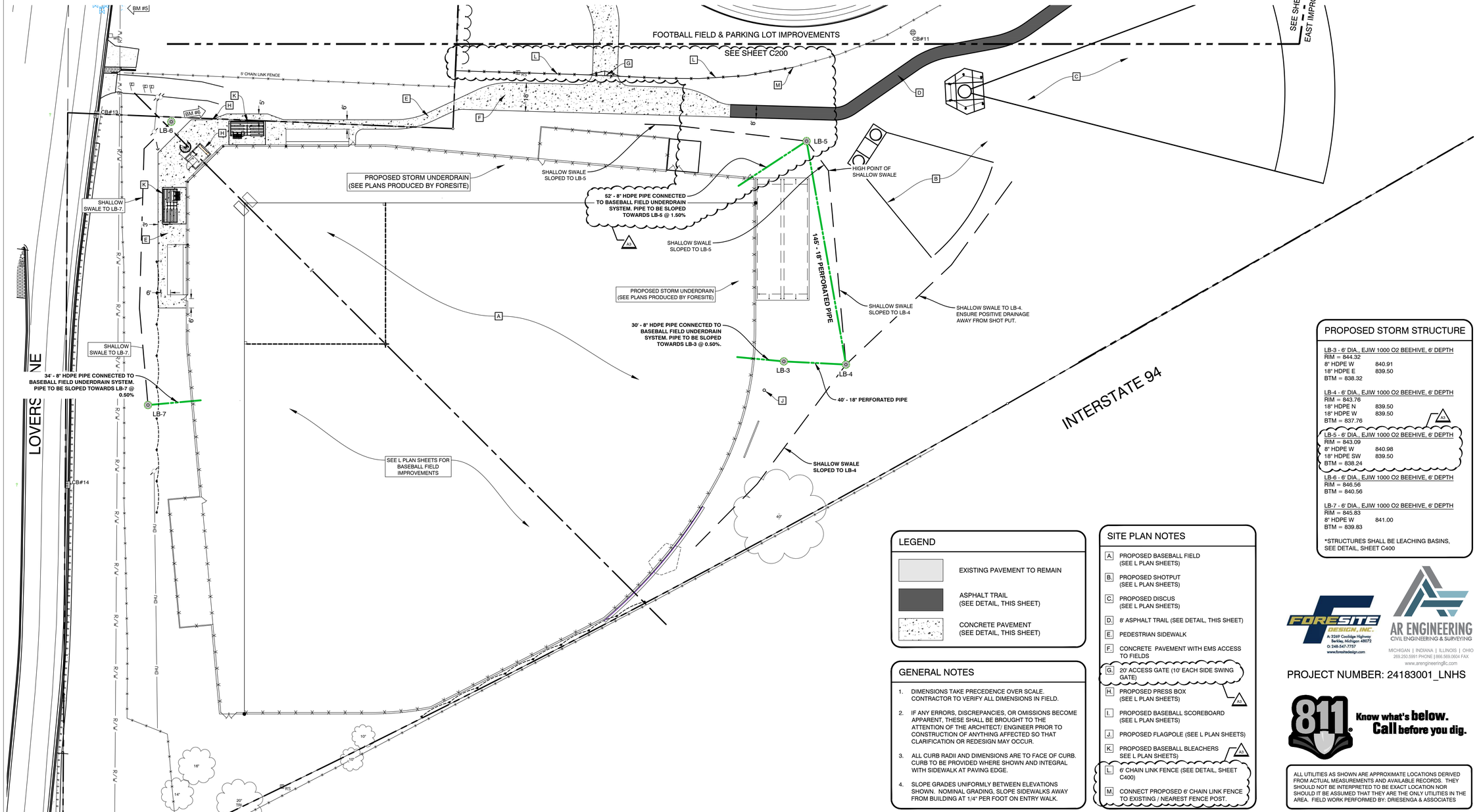

**8' WIDE HMA TRAIL SECTION**
C201 - 030401 NOT TO SCALE




**PEDESTRIAN SIDEWALK SECTION**
C201 - 030402 NOT TO SCALE




**CONC. PAVEMENT SECTION**
C201 - 030402 NOT TO SCALE




## LEGEND

- EXISTING PAVEMENT TO REMAIN
- ASPHALT TRAIL (SEE DETAIL, THIS SHEET)
- CONCRETE PAVEMENT (SEE DETAIL, THIS SHEET)

## GENERAL NOTES

1. DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
2. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
3. ALL CURB RADII AND DIMENSIONS ARE TO FACE OF CURB. CURB TO BE PROVIDED WHERE SHOWN AND INTEGRAL WITH SIDEWALK AT PAVING EDGE.
4. SLOPE GRADES UNIFORMLY BETWEEN ELEVATIONS SHOWN. NOMINAL GRADING, SLOPE SIDEWALKS AWAY FROM BUILDING AT 1/4" PER FOOT ON ENTRY WALK.

## SITE PLAN NOTES

- A. PROPOSED BASEBALL FIELD (SEE L PLAN SHEETS)
- B. PROPOSED SHOTPUT (SEE L PLAN SHEETS)
- C. PROPOSED DISCUS (SEE L PLAN SHEETS)
- D. 8' ASPHALT TRAIL (SEE DETAIL, THIS SHEET)
- E. PEDESTRIAN SIDEWALK
- F. CONCRETE PAVEMENT WITH EMS ACCESS TO FIELDS
- G. 20' ACCESS GATE (10' EACH SIDE SWING GATE)
- H. PROPOSED PRESS BOX (SEE L PLAN SHEETS)
- I. PROPOSED BASEBALL SCOREBOARD (SEE L PLAN SHEETS)
- J. PROPOSED FLAGPOLE (SEE L PLAN SHEETS)
- K. PROPOSED BASEBALL BLEACHERS SEE L PLAN SHEETS)
- L. 6' CHAIN LINK FENCE (SEE DETAIL, SHEET C400)
- M. CONNECT PROPOSED 6' CHAIN LINK FENCE TO EXISTING / NEAREST FENCE POST.

## PROPOSED STORM STRUCTURE

LB-3 - 6' DIA., EJIW 1000 O2 BEEHIVE, 6' DEPTH
RIM = 844.32
8" HDPE W 840.91
18" HDPE E 839.50
BTM = 838.32

LB-4 - 6' DIA., EJIW 1000 O2 BEEHIVE, 6' DEPTH
RIM = 843.76
18" HDPE N 839.50
18" HDPE W 839.50
BTM = 837.76

LB-5 - 6' DIA., EJIW 1000 O2 BEEHIVE, 6' DEPTH
RIM = 843.09
8" HDPE W 840.98
18" HDPE SW 839.50
BTM = 838.24

LB-6 - 6' DIA., EJIW 1000 O2 BEEHIVE, 6' DEPTH
RIM = 846.56
BTM = 840.56

LB-7 - 6' DIA., EJIW 1000 O2 BEEHIVE, 6' DEPTH
RIM = 845.83
8" HDPE W 841.00
BTM = 839.83

*STRUCTURES SHALL BE LEACHING BASINS, SEE DETAIL, SHEET C400

FORESITE REGION, INC.
A: 3269 Coolidge Highway
Berkley, Michigan 48072
o: 248.547.7757
www.foresitedesign.com

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING
MICHIGAN | INDIANA | ILLINOIS | OHIO
269.250.5981 PHONE | 866.569.0604 FAX
www.arengineeringllc.com

PROJECT NUMBER: 24183001_LNHS

811 Know what's below. Call before you dig.

ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA. FIELD WORK PERFORMED BY: DRIESENGA & ASSOCIATES

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| | |
|---|---|
| ADDENDUM No. 3 | 02/21/2025 |
| ADDENDUM No. 2 | 02/12/2025 |
| ADDENDUM No. 1 | 02/07/2025 |
| ISSUED FOR | DATE |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

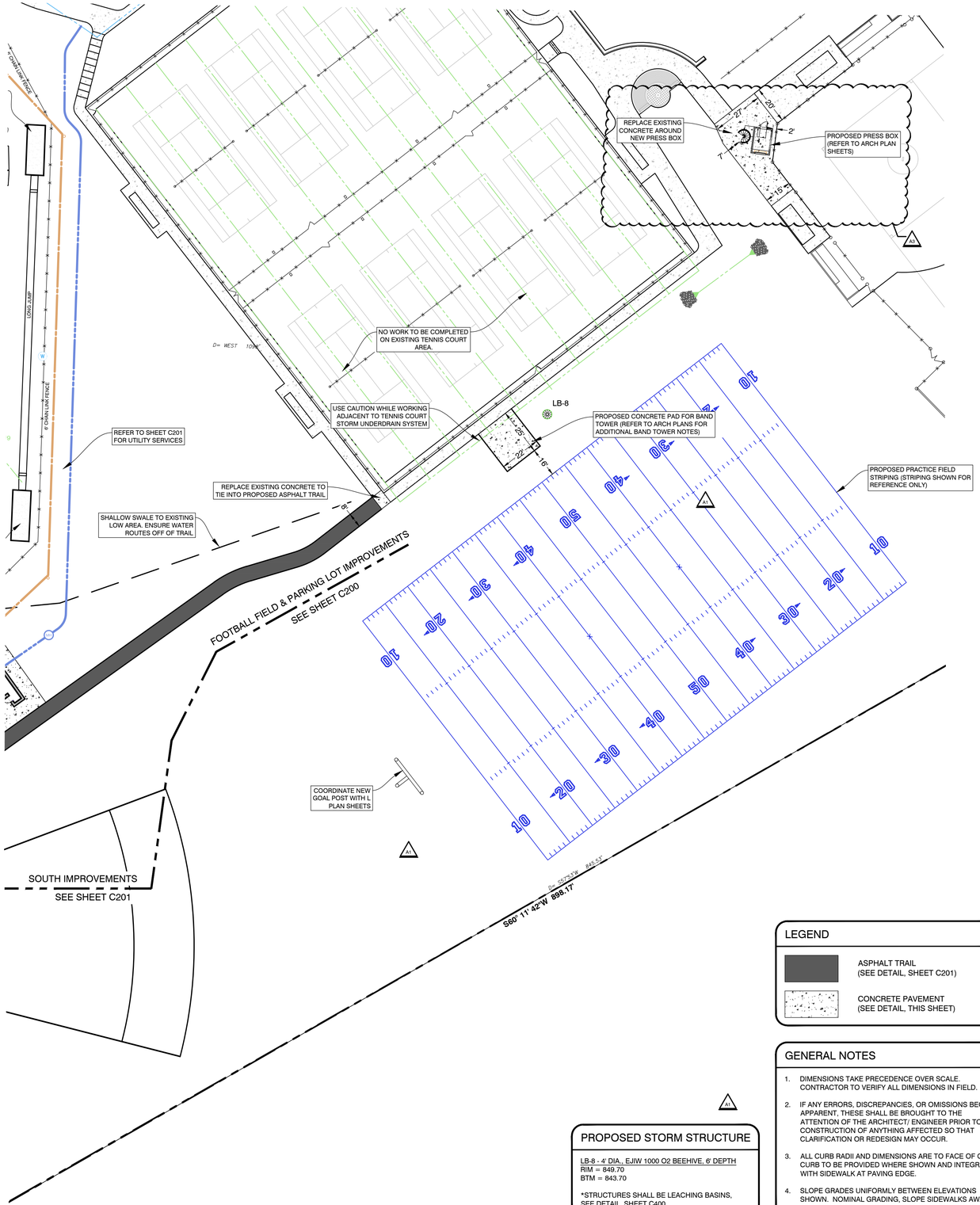
OWNER
KALAMAZOO PUBLIC SCHOOLS

Kalamazoo, Michigan

SHEET TITLE
SITE LAYOUT / UTILITY PLAN - SOUTH IMPROVEMENTS

DATE
JANUARY 24, 2025

SHEET NUMBER
C201
23-625.00




0 30 45 60

1 inch = 30 ft.

## LEGEND

- ASPHALT TRAIL (SEE DETAIL, SHEET C201)
- CONCRETE PAVEMENT (SEE DETAIL, THIS SHEET)

## GENERAL NOTES

1. DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
2. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
3. ALL CURB RADII AND DIMENSIONS ARE TO FACE OF CURB. CURB TO BE PROVIDED WHERE SHOWN AND INTEGRAL WITH SIDEWALK AT PAVING EDGE.
4. SLOPE GRADES UNIFORMLY BETWEEN ELEVATIONS SHOWN. NOMINAL GRADING, SLOPE SIDEWALKS AWAY FROM BUILDING AT 1/4" PER FOOT ON ENTRY WALK.

## PROPOSED STORM STRUCTURE

LB-8 - 4' DIA., EJIW 1000 O2 BEEHIVE, 6' DEPTH
RIM = 849.70
BTM = 843.70

*STRUCTURES SHALL BE LEACHING BASINS, SEE DETAIL, SHEET C400

TowerPinkster
Architecture · Engineering · Interiors



| | |
|---|---|
| ADDENDUM No. 3 | 02/21/2025 |
| ADDENDUM No. 2 | 02/12/2025 |
| ADDENDUM No. 1 | 02/07/2025 |
| ISSUED FOR | DATE |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS

Kalamazoo, Michigan

FORESITE DESIGN, INC.
A: 3269 Coolidge Highway
Berkley, Michigan 48072
O: 248.547.7757
www.foresitedesign.com

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING
MICHIGAN | INDIANA | ILLINOIS | OHIO
269.250.5991 PHONE | 866.569.0604 FAX
www.arengineeringllc.com

PROJECT NUMBER: 24183001_LNHS

811 Know what's below. Call before you dig.

ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA. FIELD WORK PERFORMED BY: DRIESENGA & ASSOCIATES

SHEET TITLE
SITE LAYOUT / UTILITY PLAN - EAST IMPROVEMENTS

DATE
JANUARY 24, 2025

SHEET NUMBER
C202
23-625.00

## GRADING NOTES

1. ALL WORK SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL LAWS, RULES AND REGULATIONS IN FORCE AT TIME OF CONSTRUCTION.
2. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, PERMIT COSTS, TAP FEES, METER DEPOSITS, PERMANENT UTILITY APPLICATIONS, BONDS, AND OTHER FEES REQUIRED FOR PROPOSED WORK. THIS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO THOSE REQUIRED BY THE MICHIGAN DEPARTMENT OF TRANSPORTATION.
3. CONTACT MISS DIG "811" FOR LOCATION OF UNDERGROUND UTILITIES A MINIMUM OF 48 HOURS BEFORE COMMENCING EXCAVATION WORK. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO ARE NOT PART OF THE "MISS DIG" ALERT SYSTEM. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.
4. DEMOLISH & REMOVE ALL EXISTING SITE FEATURES AS REQUIRED.
5. MATCH EXISTING GRADES AROUND PERIMETER WITH SLOPES AS SHOWN.
6. ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT GRADES AT EDGE OF METAL (EOM) UNLESS OTHERWISE NOTED.
7. ALL SOIL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO MASS GRADING.
8. ALL EARTHWORK SHALL BE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS AND GEOTECHNICAL REPORT.
9. ALL EXISTING ELEVATIONS ARE TO BE VERIFIED AND ACCEPTED AS SHOWN PRIOR TO COMMENCEMENT OF WORK.
10. CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID TRACKING SOIL ONTO ADJACENT ROADWAYS. CONTRACTOR SHALL SWEEP IMMEDIATELY IF OCCURS.
11. ANY DISTURBED AREA WHICH WILL BE LEFT UNWORKED 15 DAYS OR LONGER MUST BE SEEDED TO ESTABLISH VEGETATION FOR TEMPORARY STABILIZATION. BASINS TO BE SEEDED AND MULCH BLANKETS APPLIED IMMEDIATELY TO PROVIDE A STABLE BASE AND AVOID EXCESSIVE EROSION.
12. CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE DURING ALL EARTHWORK OPERATIONS.
13. TOPSOIL AND SEED ALL AREAS DISTURBED AND NOT OTHERWISE DEVELOPED. ALL WORK I.E. DEMOLITION AND REMOVALS, DRAINAGE WORK, STONE AND ASPHALT, FENCING, TRACK SURFACE, ETC. SHALL BE COMPLETED BY DATE AS NOTED IN CONTRACT DOCUMENTS. ALL LAWN AREAS SHALL SLOPE TO DRAINAGE STRUCTURES.
14. CONTRACTOR TO CLEAN ALL PROPOSED AND EXISTING STORM STRUCTURE SUMPS AND JET ALL STORM PIPES THAT ARE ADJACENT TO CONSTRUCTION ACTIVITIES.
15. SEE DETAILED GRADING OF FOOTBALL FIELD IMPROVEMENTS, L PLAN SHEETS.

## LEGEND

- EXISTING PAVEMENT/ TRACK TO REMAIN
- FURNISH AND INSTALL TRACK PROTECTION OVER EXISTING ASPHALT. TRACK PROTECTION SHALL BE LEFT ONSITE UNTIL WORK BY ALL TRADES IS COMPLETE.
- LIMITS OF FOOTBALL FIELD IMPROVEMENTS (SEE L PLAN SHEETS)
- SILT FENCE
- LIMITS OF CONSTRUCTION

## UTILITY NOTES

1. ADJUST RIMS OF ALL EXISTING STRUCTURES WITHIN FOOTBALL FIELD IMPROVEMENTS TO BE MIN. 12" BELOW PROPOSED FINISHED GRADE. (SEE DETAIL #2, SHEET LD1.01.)
2. NEW FLAG POLE TO HAVE LIGHT, REFER TO ELECTRIC ENGINEER FOR ELECTRICAL SERVICE, SEE LOCATION SHEET L 505

## EX. STORM STRUCTURE

CB#1 - 4'Ø CONCRETE
RIM 842.24
INV (N) 12" CPP=839.34
INV (SE) 12" CPP=839.31
TOP OF WATER=839.29
SUMP=837.39

CB#2 - 4'Ø CONCRETE
RIM 843.54
INV (NW) 12" CPP=839.51
INV (S) 12" CPP=839.36
INV (SE) 12" CPP=839.34
TOP OF WATER=839.29
SUMP=837.54

CB#3 - 2'Ø CONCRETE
RIM 842.15
INV (NW) 12" CPP=839.50
SUMP=837.60

CB#4 - 3'Ø CONCRETE
RIM 843.26
INV (NE) 8" CPP=840.36
INV (SE) 7" PVC=839.76
TOP OF WATER=839.60
SUMP=838.41

CB#5 - 3'Ø CONCRETE
RIM 843.63
INV (N) 8" CPP=841.03
INV (SW) 8" CPP=841.03
TOP OF WATER=840.90
SUMP=839.63

CB#6 YARD DRAIN
RIM 842.94
(FILLED WITH DEBRIS - NO PIPES VISIBLE)

CB#7 - CONCRETE
RIM 842.24 (BEEHIVE)
INV (NW) 6" PVC=840.04
TOP OF WATER=839.79
SUMP=839.24

CB#8 - 2'Ø CONCRETE
LEACHING BASIN
RIM 841.10
(FILLED WITH WATER - NO PIPES VISIBLE)
TOP OF WATER=840.10
SUMP=838.20

CB#9 - 2'Ø PLASTIC
RIM 844.83
INV (NW) 6" PVC=842.92
INV (SE) 6" PVC=842.99
SUMP=842.33

CB#12 - 3'Ø CONCRETE
LEACHING BASIN
RIM 850.10
(NO PIPES VISIBLE)
SUMP=841.10

## EX. SANITARY STRUCTURE

MH-A - 4'Ø CONCRETE
RIM 842.87
INV (NE) 6" PVC=839.22 - PARTIAL OPENING
(NO OTHER PIPES VISIBLE DUE TO BUILD-UP IN MANHOLE)

MH-B - 4'Ø CONCRETE
RIM 843.52
INV (NW) 8" RCP=839.62
INV (S) 6" CLAY=839.67

## SOIL EROSION & SEDIMENT CONTROL NOTES

1 ALL CONSTRUCTION METHODS SHALL BE DONE IN COMPLIANCE WITH MDOT-EGLE. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING A "SOIL EROSION PERMIT" FROM THE GOVERNING AUTHORITY AND A "PERMIT BY RULE/NOTICE OF COVERAGE" FROM THE GOVERNING AUTHORITY, IF APPLICABLE, PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF THE "SOIL EROSION PERMIT" AND FOR ALL CERTIFIED STORM WATER INSPECTION SERVICE REQUIRED BY THE "PERMIT BY RULE." EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS AND SHALL NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR PROVIDING ALL REQUIRED EROSION CONTROL MEASURES.

2. AVOID UNNECESSARY DISTURBING OR REMOVING OF EXISTING VEGETATED TOPSOIL OR EARTH COVER, THESE COVER AREAS ACT AS SEDIMENT FILTERS.

3. ALL TEMPORARY SOIL EROSION PROTECTION SHALL REMAIN IN PLACE UNTIL REMOVAL IS REQUIRED FOR FINAL CLEAN UP AND APPROVAL.

4. GEOTEXTILE SILT FENCE SHALL BE INSTALLED AS REQUIRED WHEN CROSSING CREEKS OR WHEN ADJACENT TO WETLANDS OR SURFACE WATER BODIES TO PREVENT SILTATION AND ELSEWHERE AS DIRECTED BY THE ENGINEER. SEEDING AND/OR SODDING SHALL BE INSTALLED ON CREEK BANKS IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.

5. MAINTENANCE, CLEANING, AND REMOVAL OF THE VARIOUS SEDIMENT CONTROL MEASURES SHALL BE INCLUDED IN THE VARIOUS EROSION CONTROL ITEMS.

ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE PER MDOT STANDARD DETAILS. "P" DENOTES PERMANENT MEASURE AND "T" DENOTES TEMPORARY MEASURE. SOIL EROSION CONTROL PLANS DENOTE MINIMUM EROSION MEASURES REQUIRED AS DESCRIBED BELOW.

(##) DENOTES PERMANENT SEEDING. ALL DISTURBED AREAS NOT PAVED OR GRAVELED SHALL BE RESTORED. INSTALL TOPSOIL AND SEED AS INDICATED IN SPECIFICATIONS AND ON PLANS.

3P DENOTES AGGREGATE COVER/PERMANENT PAVEMENT RESTORATION

4T DENOTES DUST CONTROL. DUST CONTROL MAY BE REQUIRED ON THE SUBGRADE CONSTRUCTION AND WILL INCLUDE APPLYING FRESH WATER TO BE INCLUDED IN THE ITEM OF EMBANKMENT. DUST CONTROL ON THE AGGREGATE BASE COURSE WILL BE ACCOMPLISHED BY APPLYING FRESH WATER (INCLUDED IN THE ITEM OF AGGREGATE BASE, 6 INCH) AND APPLYING DUST PALLIATIVE, APPLIED, $CACL_2$ (TON) AS DIRECTED BY THE PROJECT ENGINEER.

8P DENOTES AGGREGATE COVER/PERMANENT PAVEMENT RESTORATION

14T DENOTES GRAVEL ACCESS APPROACH. APPROACH SHALL BE INSTALLED TO PROVIDE STABLE ACCESS TO ROADWAYS AND MINIMIZE DUST AND TRACKING OF MATERIALS ONTO PUBLIC STREETS AND HIGHWAYS. THE APPROACH SHALL BE A MINIMUM OF 12' WIDE, 6" DEEP, AND CONSIST OF 2"-4" AGGREGATE.

26T DENOTES TEMPORARY SILT FENCE. SILT FENCE SHALL BE INSTALLED AT CREEK CROSSINGS, ADJACENT TO ALL WETLANDS AND SURFACE WATERS, AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. EACH SILT FENCE SHALL BE INSTALLED GENERALLY ALONG THE SAME CONTOUR ELEVATION.

29T DENOTES INLET PROTECTION FABRIC DROP. SHALL BE INSTALLED AT EXISTING AND PROPOSED STORM SEWER INLETS TO PROVIDE SETTLING AND FILTERING OF SILT LADEN WATER PRIOR TO ENTRY INTO THE DRAINAGE SYSTEM.

## GENERAL NOTES

1. DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
2. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
3. ALL CURB RADII AND DIMENSIONS ARE TO FACE OF CURB. CURB TO BE PROVIDED WHERE SHOWN AND INTEGRAL WITH SIDEWALK AT PAVING EDGE.
4. SLOPE GRADES UNIFORMLY BETWEEN ELEVATIONS SHOWN. NOMINAL GRADING, SLOPE SIDEWALKS AWAY FROM BUILDING AT 1/4" PER FOOT ON ENTRY WALK.

0 30 45 60
1 inch = 30 ft.

| | |
|---|---|
| ADDENDUM No. 3 | 02/21/2025 |
| ADDENDUM No. 2 | 02/12/2025 |
| ADDENDUM No. 1 | 02/07/2025 |
| ISSUED FOR | DATE |

PROJECT NUMBER: 24183001_LNHS

ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA. FIELD WORK PERFORMED BY: DRIESENGA & ASSOCIATES


TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM



PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

SHEET TITLE
GRADING / SESC PLAN - FOOTBALL FIELD & PARKING IMPROVEMENTS

DATE
JANUARY 24, 2025

SHEET NUMBER
C300
23-625.00

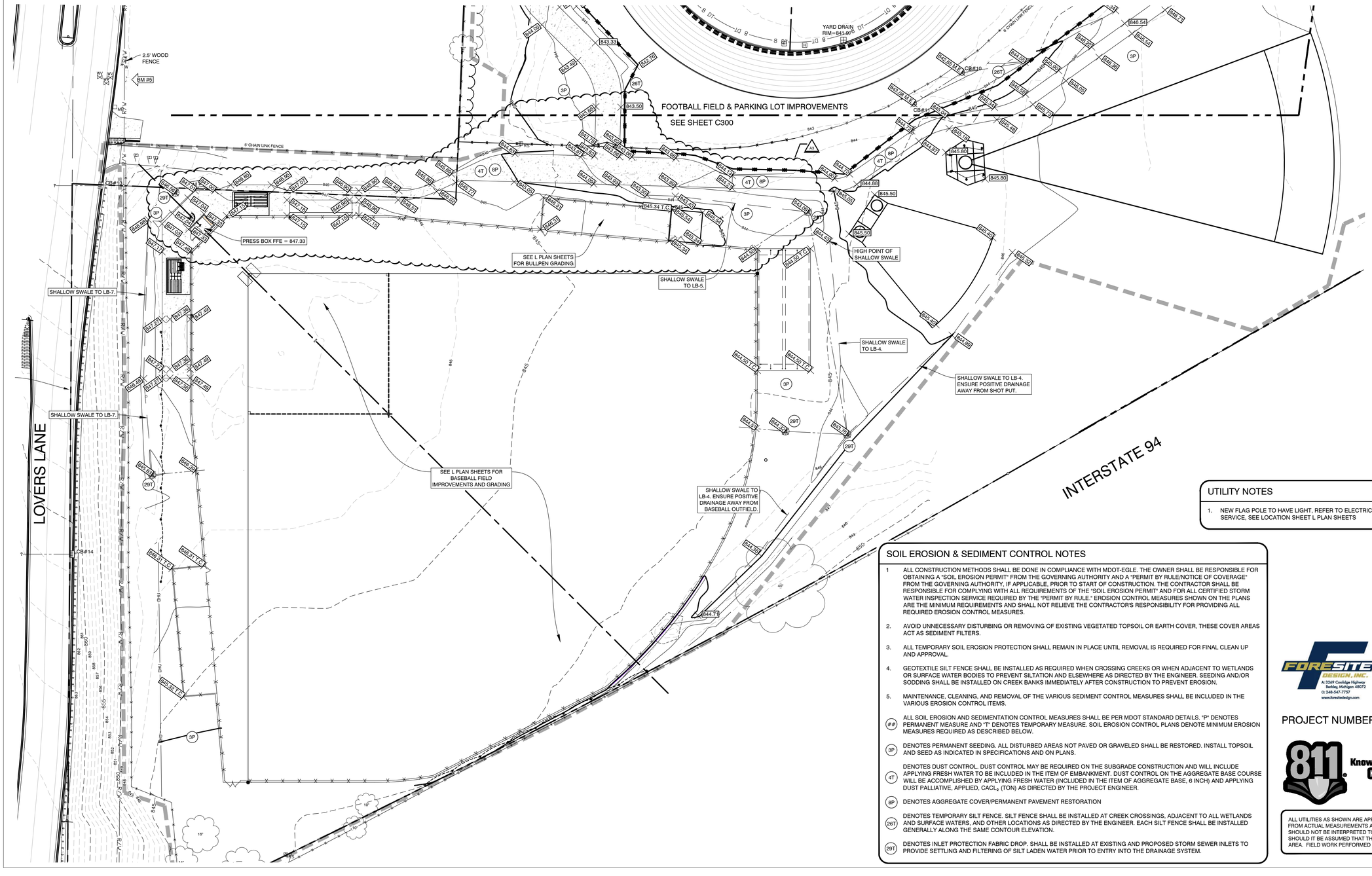
## GRADING NOTES

1. ALL WORK SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL LAWS, RULES AND REGULATIONS IN FORCE AT TIME OF CONSTRUCTION.
2. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, PERMIT COSTS, TAP FEES, METER DEPOSITS, PERMANENT UTILITY APPLICATIONS, BONDS, AND OTHER FEES REQUIRED FOR PROPOSED WORK. THIS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO THOSE REQUIRED BY THE MICHIGAN DEPARTMENT OF TRANSPORTATION.
3. CONTACT MISS DIG "811" FOR LOCATION OF UNDERGROUND UTILITIES A MINIMUM OF 48 HOURS BEFORE COMMENCING EXCAVATION WORK. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO ARE NOT PART OF THE "MISS DIG" ALERT SYSTEM. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.
4. DEMOLISH & REMOVE ALL EXISTING SITE FEATURES AS REQUIRED.
5. MATCH EXISTING GRADES AROUND PERIMETER WITH SLOPES AS SHOWN.
6. ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT GRADES AT EDGE OF METAL (EOM) UNLESS OTHERWISE NOTED.
7. ALL SOIL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO MASS GRADING.
8. ALL EARTHWORK SHALL BE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS AND GEOTECHNICAL REPORT.
9. ALL EXISTING ELEVATIONS ARE TO BE VERIFIED AND ACCEPTED AS SHOWN PRIOR TO COMMENCEMENT OF WORK.
10. CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID TRACKING SOIL ONTO ADJACENT ROADWAYS. CONTRACTOR SHALL SWEEP IMMEDIATELY IF OCCURS.
11. ANY DISTURBED AREA WHICH WILL BE LEFT UNWORKED 15 DAYS OR LONGER MUST BE SEEDED TO ESTABLISH VEGETATION FOR TEMPORARY STABILIZATION. BASINS TO BE SEEDED AND MULCH BLANKETS APPLIED IMMEDIATELY TO PROVIDE A STABLE BASE AND AVOID EXCESSIVE EROSION.
12. CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE DURING ALL EARTHWORK OPERATIONS.
13. TOPSOIL AND SEED ALL AREAS DISTURBED AND NOT OTHERWISE DEVELOPED. ALL WORK I.E. DEMOLITION AND REMOVALS, DRAINAGE WORK, STONE AND ASPHALT, FENCING, TRACK SURFACE, ETC. SHALL BE COMPLETED BY DATE AS NOTED IN CONTRACT DOCUMENTS. ALL LAWN AREAS SHALL SLOPE TO DRAINAGE STRUCTURES.
14. CONTRACTOR TO CLEAN ALL PROPOSED AND EXISTING STORM STRUCTURE SUMPS AND JET ALL STORM PIPES THAT ARE ADJACENT TO CONSTRUCTION ACTIVITIES.

## GENERAL NOTES

1. DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
2. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
3. ALL CURB RADII AND DIMENSIONS ARE TO FACE OF CURB. CURB TO BE PROVIDED WHERE SHOWN AND INTEGRAL WITH SIDEWALK AT PAVING EDGE.
4. SLOPE GRADES UNIFORMLY BETWEEN ELEVATIONS SHOWN. NOMINAL GRADING, SLOPE SIDEWALKS AWAY FROM BUILDING AT 1/4" PER FOOT ON ENTRY WALK.

0 30 45 60
1 inch = 30 ft.




## UTILITY NOTES

1. NEW FLAG POLE TO HAVE LIGHT, REFER TO ELECTRIC ENGINEER FOR ELECTRICAL SERVICE, SEE LOCATION SHEET L PLAN SHEETS

## SOIL EROSION & SEDIMENT CONTROL NOTES

1. ALL CONSTRUCTION METHODS SHALL BE DONE IN COMPLIANCE WITH MDOT-EGLE. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING A "SOIL EROSION PERMIT" FROM THE GOVERNING AUTHORITY AND A "PERMIT BY RULE/NOTICE OF COVERAGE" FROM THE GOVERNING AUTHORITY, IF APPLICABLE, PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF THE "SOIL EROSION PERMIT" AND FOR ALL CERTIFIED STORM WATER INSPECTION SERVICE REQUIRED BY THE "PERMIT BY RULE." EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS AND SHALL NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR PROVIDING ALL REQUIRED EROSION CONTROL MEASURES.
2. AVOID UNNECESSARY DISTURBING OR REMOVING OF EXISTING VEGETATED TOPSOIL OR EARTH COVER, THESE COVER AREAS ACT AS SEDIMENT FILTERS.
3. ALL TEMPORARY SOIL EROSION PROTECTION SHALL REMAIN IN PLACE UNTIL REMOVAL IS REQUIRED FOR FINAL CLEAN UP AND APPROVAL.
4. GEOTEXTILE SILT FENCE SHALL BE INSTALLED AS REQUIRED WHEN CROSSING CREEKS OR WHEN ADJACENT TO WETLANDS OR SURFACE WATER BODIES TO PREVENT SILTATION AND ELSEWHERE AS DIRECTED BY THE ENGINEER. SEEDING AND/OR SODDING SHALL BE INSTALLED ON CREEK BANKS IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.
5. MAINTENANCE, CLEANING, AND REMOVAL OF THE VARIOUS SEDIMENT CONTROL MEASURES SHALL BE INCLUDED IN THE VARIOUS EROSION CONTROL ITEMS.

(##) ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE PER MDOT STANDARD DETAILS. "P" DENOTES PERMANENT MEASURE AND "T" DENOTES TEMPORARY MEASURE. SOIL EROSION CONTROL PLANS DENOTE MINIMUM EROSION MEASURES REQUIRED AS DESCRIBED BELOW.

(3P) DENOTES PERMANENT SEEDING. ALL DISTURBED AREAS NOT PAVED OR GRAVELED SHALL BE RESTORED. INSTALL TOPSOIL AND SEED AS INDICATED IN SPECIFICATIONS AND ON PLANS.

(4T) DENOTES DUST CONTROL. DUST CONTROL MAY BE REQUIRED ON THE SUBGRADE CONSTRUCTION AND WILL INCLUDE APPLYING FRESH WATER TO BE INCLUDED IN THE ITEM OF EMBANKMENT. DUST CONTROL ON THE AGGREGATE BASE COURSE WILL BE ACCOMPLISHED BY APPLYING FRESH WATER (INCLUDED IN THE ITEM OF AGGREGATE BASE, 6 INCH) AND APPLYING DUST PALLIATIVE, APPLIED, $CACL_2$ (TON) AS DIRECTED BY THE PROJECT ENGINEER.

(8P) DENOTES AGGREGATE COVER/PERMANENT PAVEMENT RESTORATION

(26T) DENOTES TEMPORARY SILT FENCE. SILT FENCE SHALL BE INSTALLED AT CREEK CROSSINGS, ADJACENT TO ALL WETLANDS AND SURFACE WATERS, AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. EACH SILT FENCE SHALL BE INSTALLED GENERALLY ALONG THE SAME CONTOUR ELEVATION.

(29T) DENOTES INLET PROTECTION FABRIC DROP. SHALL BE INSTALLED AT EXISTING AND PROPOSED STORM SEWER INLETS TO PROVIDE SETTLING AND FILTERING OF SILT LADEN WATER PRIOR TO ENTRY INTO THE DRAINAGE SYSTEM.


FORESITE DESIGN, INC.
A: 3591 Coolidge Highway
Berkley, Michigan 48072
O: 248-547-7757
www.foresitedesign.com

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING
MICHIGAN | INDIANA | ILLINOIS | OHIO
269.250.5991 PHONE | 866.569.0604 FAX
www.arengineeringllc.com


PROJECT NUMBER: 24183001_LNHS

811 Know what's below. Call before you dig.

ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA. FIELD WORK PERFORMED BY: DRIESENGA & ASSOCIATES


TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM



| | |
|---|---|
| ADDENDUM No. 3 | 02/21/2025 |
| ADDENDUM No. 2 | 02/12/2025 |
| ADDENDUM No. 1 | 02/07/2025 |
| ISSUED FOR | DATE |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS

Kalamazoo, Michigan

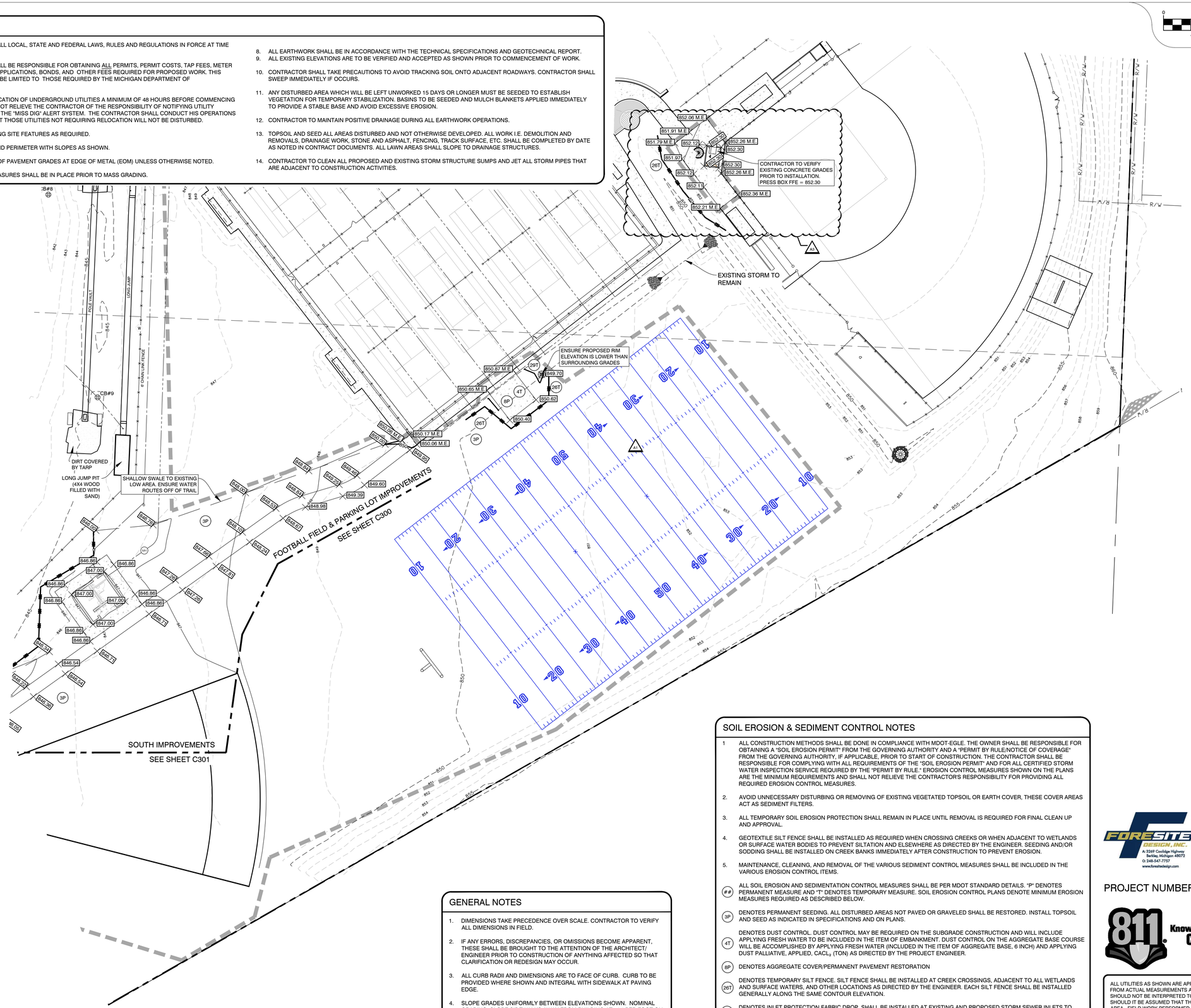
SHEET TITLE
GRADING / SESC PLAN - SOUTH IMPROVEMENTS

DATE
JANUARY 24, 2025

SHEET NUMBER
C301
23-625.00

## GRADING NOTES

1. ALL WORK SHALL CONFORM TO ALL LOCAL, STATE AND FEDERAL LAWS, RULES AND REGULATIONS IN FORCE AT TIME OF CONSTRUCTION.
2. THE GENERAL CONTRACTOR SHALL BE RESPONSIBLE FOR OBTAINING ALL PERMITS, PERMIT COSTS, TAP FEES, METER DEPOSITS, PERMANENT UTILITY APPLICATIONS, BONDS, AND OTHER FEES REQUIRED FOR PROPOSED WORK. THIS SHALL INCLUDE, BUT SHALL NOT BE LIMITED TO THOSE REQUIRED BY THE MICHIGAN DEPARTMENT OF TRANSPORTATION.
3. CONTACT MISS DIG "811" FOR LOCATION OF UNDERGROUND UTILITIES A MINIMUM OF 48 HOURS BEFORE COMMENCING EXCAVATION WORK. THIS DOES NOT RELIEVE THE CONTRACTOR OF THE RESPONSIBILITY OF NOTIFYING UTILITY OWNERS WHO ARE NOT PART OF THE "MISS DIG" ALERT SYSTEM. THE CONTRACTOR SHALL CONDUCT HIS OPERATIONS IN A MANNER AS TO ENSURE THAT THOSE UTILITIES NOT REQUIRING RELOCATION WILL NOT BE DISTURBED.
4. DEMOLISH & REMOVE ALL EXISTING SITE FEATURES AS REQUIRED.
5. MATCH EXISTING GRADES AROUND PERIMETER WITH SLOPES AS SHOWN.
6. ALL SPOT ELEVATIONS ARE TOP OF PAVEMENT GRADES AT EDGE OF METAL (EOM) UNLESS OTHERWISE NOTED.
7. ALL SOIL EROSION CONTROL MEASURES SHALL BE IN PLACE PRIOR TO MASS GRADING.
8. ALL EARTHWORK SHALL BE IN ACCORDANCE WITH THE TECHNICAL SPECIFICATIONS AND GEOTECHNICAL REPORT.
9. ALL EXISTING ELEVATIONS ARE TO BE VERIFIED AND ACCEPTED AS SHOWN PRIOR TO COMMENCEMENT OF WORK.
10. CONTRACTOR SHALL TAKE PRECAUTIONS TO AVOID TRACKING SOIL ONTO ADJACENT ROADWAYS. CONTRACTOR SHALL SWEEP IMMEDIATELY IF OCCURS.
11. ANY DISTURBED AREA WHICH WILL BE LEFT UNWORKED 15 DAYS OR LONGER MUST BE SEEDED TO ESTABLISH VEGETATION FOR TEMPORARY STABILIZATION. BASINS TO BE SEEDED AND MULCH BLANKETS APPLIED IMMEDIATELY TO PROVIDE A STABLE BASE AND AVOID EXCESSIVE EROSION.
12. CONTRACTOR TO MAINTAIN POSITIVE DRAINAGE DURING ALL EARTHWORK OPERATIONS.
13. TOPSOIL AND SEED ALL AREAS DISTURBED AND NOT OTHERWISE DEVELOPED. ALL WORK I.E. DEMOLITION AND REMOVALS, DRAINAGE WORK, STONE AND ASPHALT, FENCING, TRACK SURFACE, ETC. SHALL BE COMPLETED BY DATE AS NOTED IN CONTRACT DOCUMENTS. ALL LAWN AREAS SHALL SLOPE TO DRAINAGE STRUCTURES.
14. CONTRACTOR TO CLEAN ALL PROPOSED AND EXISTING STORM STRUCTURE SUMPS AND JET ALL STORM PIPES THAT ARE ADJACENT TO CONSTRUCTION ACTIVITIES.




## GENERAL NOTES

1. DIMENSIONS TAKE PRECEDENCE OVER SCALE. CONTRACTOR TO VERIFY ALL DIMENSIONS IN FIELD.
2. IF ANY ERRORS, DISCREPANCIES, OR OMISSIONS BECOME APPARENT, THESE SHALL BE BROUGHT TO THE ATTENTION OF THE ARCHITECT/ ENGINEER PRIOR TO CONSTRUCTION OF ANYTHING AFFECTED SO THAT CLARIFICATION OR REDESIGN MAY OCCUR.
3. ALL CURB RADII AND DIMENSIONS ARE TO FACE OF CURB. CURB TO BE PROVIDED WHERE SHOWN AND INTEGRAL WITH SIDEWALK AT PAVING EDGE.
4. SLOPE GRADES UNIFORMLY BETWEEN ELEVATIONS SHOWN. NOMINAL GRADING, SLOPE SIDEWALKS AWAY FROM BUILDING AT 1/4" PER FOOT ON ENTRY WALK.

## SOIL EROSION & SEDIMENT CONTROL NOTES

1. ALL CONSTRUCTION METHODS SHALL BE DONE IN COMPLIANCE WITH MDOT-EGLE. THE OWNER SHALL BE RESPONSIBLE FOR OBTAINING A "SOIL EROSION PERMIT" FROM THE GOVERNING AUTHORITY AND A "PERMIT BY RULE/NOTICE OF COVERAGE" FROM THE GOVERNING AUTHORITY. IF APPLICABLE, PRIOR TO START OF CONSTRUCTION. THE CONTRACTOR SHALL BE RESPONSIBLE FOR COMPLYING WITH ALL REQUIREMENTS OF THE "SOIL EROSION PERMIT" AND FOR ALL CERTIFIED STORM WATER INSPECTION SERVICE REQUIRED BY THE "PERMIT BY RULE." EROSION CONTROL MEASURES SHOWN ON THE PLANS ARE THE MINIMUM REQUIREMENTS AND SHALL NOT RELIEVE THE CONTRACTOR'S RESPONSIBILITY FOR PROVIDING ALL REQUIRED EROSION CONTROL MEASURES.
2. AVOID UNNECESSARY DISTURBING OR REMOVING OF EXISTING VEGETATED TOPSOIL OR EARTH COVER, THESE COVER AREAS ACT AS SEDIMENT FILTERS.
3. ALL TEMPORARY SOIL EROSION PROTECTION SHALL REMAIN IN PLACE UNTIL REMOVAL IS REQUIRED FOR FINAL CLEAN UP AND APPROVAL.
4. GEOTEXTILE SILT FENCE SHALL BE INSTALLED AS REQUIRED WHEN CROSSING CREEKS OR WHEN ADJACENT TO WETLANDS OR SURFACE WATER BODIES TO PREVENT SILTATION AND ELSEWHERE AS DIRECTED BY THE ENGINEER. SEEDING AND/OR SODDING SHALL BE INSTALLED ON CREEK BANKS IMMEDIATELY AFTER CONSTRUCTION TO PREVENT EROSION.
5. MAINTENANCE, CLEANING, AND REMOVAL OF THE VARIOUS SEDIMENT CONTROL MEASURES SHALL BE INCLUDED IN THE VARIOUS EROSION CONTROL ITEMS.

(##) ALL SOIL EROSION AND SEDIMENTATION CONTROL MEASURES SHALL BE PER MDOT STANDARD DETAILS. "P" DENOTES PERMANENT MEASURE AND "T" DENOTES TEMPORARY MEASURE. SOIL EROSION CONTROL PLANS DENOTE MINIMUM EROSION MEASURES REQUIRED AS DESCRIBED BELOW.

(3P) DENOTES PERMANENT SEEDING. ALL DISTURBED AREAS NOT PAVED OR GRAVELED SHALL BE RESTORED. INSTALL TOPSOIL AND SEED AS INDICATED IN SPECIFICATIONS AND ON PLANS.

(4T) DENOTES DUST CONTROL. DUST CONTROL MAY BE REQUIRED ON THE SUBGRADE CONSTRUCTION AND WILL INCLUDE APPLYING FRESH WATER TO BE INCLUDED IN THE ITEM OF EMBANKMENT. DUST CONTROL ON THE AGGREGATE BASE COURSE WILL BE ACCOMPLISHED BY APPLYING FRESH WATER (INCLUDED IN THE ITEM OF AGGREGATE BASE, 6 INCH) AND APPLYING DUST PALLIATIVE, APPLIED, $CACL_2$ (TON) AS DIRECTED BY THE PROJECT ENGINEER.

(8P) DENOTES AGGREGATE COVER/PERMANENT PAVEMENT RESTORATION

(26T) DENOTES TEMPORARY SILT FENCE. SILT FENCE SHALL BE INSTALLED AT CREEK CROSSINGS, ADJACENT TO ALL WETLANDS AND SURFACE WATERS, AND OTHER LOCATIONS AS DIRECTED BY THE ENGINEER. EACH SILT FENCE SHALL BE INSTALLED GENERALLY ALONG THE SAME CONTOUR ELEVATION.

(29T) DENOTES INLET PROTECTION FABRIC DROP. SHALL BE INSTALLED AT EXISTING AND PROPOSED STORM SEWER INLETS TO PROVIDE SETTLING AND FILTERING OF SILT LADEN WATER PRIOR TO ENTRY INTO THE DRAINAGE SYSTEM.

FORESITE DESIGN, INC.
A: 3269 Coolidge Highway
Berkley, Michigan 48072
O: 248.547.7757
www.foresitedesign.com

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING
MICHIGAN | INDIANA | ILLINOIS | OHIO
269.250.5991 PHONE | 866.569.0604 FAX
www.arengineeringllc.com

PROJECT NUMBER: 24183001_LNHS

811 Know what's below. Call before you dig.

ALL UTILITIES AS SHOWN ARE APPROXIMATE LOCATIONS DERIVED FROM ACTUAL MEASUREMENTS AND AVAILABLE RECORDS. THEY SHOULD NOT BE INTERPRETED TO BE EXACT LOCATION NOR SHOULD IT BE ASSUMED THAT THEY ARE THE ONLY UTILITIES IN THE AREA. FIELD WORK PERFORMED BY: DRIESENGA & ASSOCIATES

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| | |
|---|---|
| ADDENDUM No. 3 | 02/21/2025 |
| ADDENDUM No. 2 | 02/12/2025 |
| ADDENDUM No. 1 | 02/07/2025 |
| ISSUED FOR | DATE |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

SHEET TITLE
GRADING / SESC PLAN - EAST IMPROVEMENTS

DATE
JANUARY 24, 2025

SHEET NUMBER
C302
23-625.00

NORTH

0 15 30 60

SCALE: 1"=30'

## LEGEND

| EXISTING | | PROPOSED | |
|---|---|---|---|
| | SPOT ELEVATION | XXXXX | SPOT GRADE |
| XXXXX | AS-BUILT SPOT ELEVATION | T/WallXXXXX | TOP OF WALL ELEVATION |
| —X—X— | FENCE | T/CurbXXXXX | TOP OF CURB ELEVATION |
| | DRAINAGE STRUCTURE | ME ± XXXXX | MATCH EXISTING ELEVATION |
| —ST— | STORM DRAIN | T/TrenchXXXXX | TOP OF TRENCH ELEVATION |
| | LIGHT POLE | | DRAINAGE SWALE |
| — E — | ELECTRICAL | | CHAINLINK FENCE - SEE PLANS FOR HT. |
| — W — | WATER | | ORNAMENTAL FENCE - SEE PLANS FOR HT. |
| — T — | TELEPHONE | | DRAINAGE STRUCTURE |
| — IRR — | IRRIGATION | ST | STORM DRAIN |
| | PROPERTY | | FLAT DRAIN |
| — SS — | SANITARY | | 4" PERFORATED DRAINTILE |
| — GAS — | GAS | | 6" PERFORATED DRAINTILE |
| | | 8 DT | 8" PERFORATED DRAINTILE |
| | | | LIGHT POLE |
| | | E | ELECTRICAL |
| | | W | WATER |
| | | T | TELEPHONE |
| | | | IRRIGATION |
| | | | LIMITS OF CONSTRUCTION |
| | | | DEMOLITION |
| | | | SYNTHETIC TURF |
| | | | TOPSOIL AND SEED |
| | | | RED CLAY INFIELD MIX TOP DRESSING |
| | | | NON-REINFORCED CONCRETE OVER COMPACTED SAND BASE |
| | | | WARNING TRACK |

## NOTES

1. NOTES AND LEGEND SHALL APPLY TO ALL SHEETS AND ALL SITES
2. CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND MAKE EVERY EFFORT TO LOCATE EXISTING UNDERGROUND UTILITIES. THIS SHALL INCLUDE CONSULTING WITH ALL LOCAL UTILITY COMPANIES AND USING A SIGNAL LOCATOR PRIOR TO EXCAVATION. ANY AND ALL REPAIRS SHALL BE COMPLETED WITHIN 48 HRS, OR THE OWNER SHALL HAVE THE REPAIR WORK COMPLETED AT THE CONTRACTORS EXPENSE.
3. TOPSOIL AND SEED ALL AREAS DISTURBED AND NOT OTHERWISE DEVELOPED, ALL WORK I.E. DEMOLITION AND REMOVALS, DRAINAGE WORK, STONE AND ASPHALT, FENCING, TRACK SURFACE, ETC. SHALL BE COMPLETED BY DATE AS NOTED IN CONTRACT DOCUMENTS. ALL LAWN AREAS SHALL SLOPE TO DRAINAGE STRUCTURES.
4. ALL CONTOURS AND SPOT GRADES REFER TO FINISH GRADE OF LAWN, ASPHALT, OR CONCRETE. DO NOT FACTOR IN THE ALL-WEATHER SURFACE OR ACRYLIC COATING DEPTH.

FORESITE DESIGN, INC.
ATHLETIC FACILITY PLANNING \ SITE PLANNING
CONSULTING \ LANDSCAPE ARCHITECTURE
3263 COOLIDGE HWY BERKLEY MI 48072
2483477757

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| ISSUED FOR | DATE |
|---|---|
| ADDENDUM 3 | FEBRUARY 21, 2025 |
| ADDENDUM 2 | FEBRUARY 12, 2025 |
| ADDENDUM 1 | FEBRUARY 7, 2025 |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

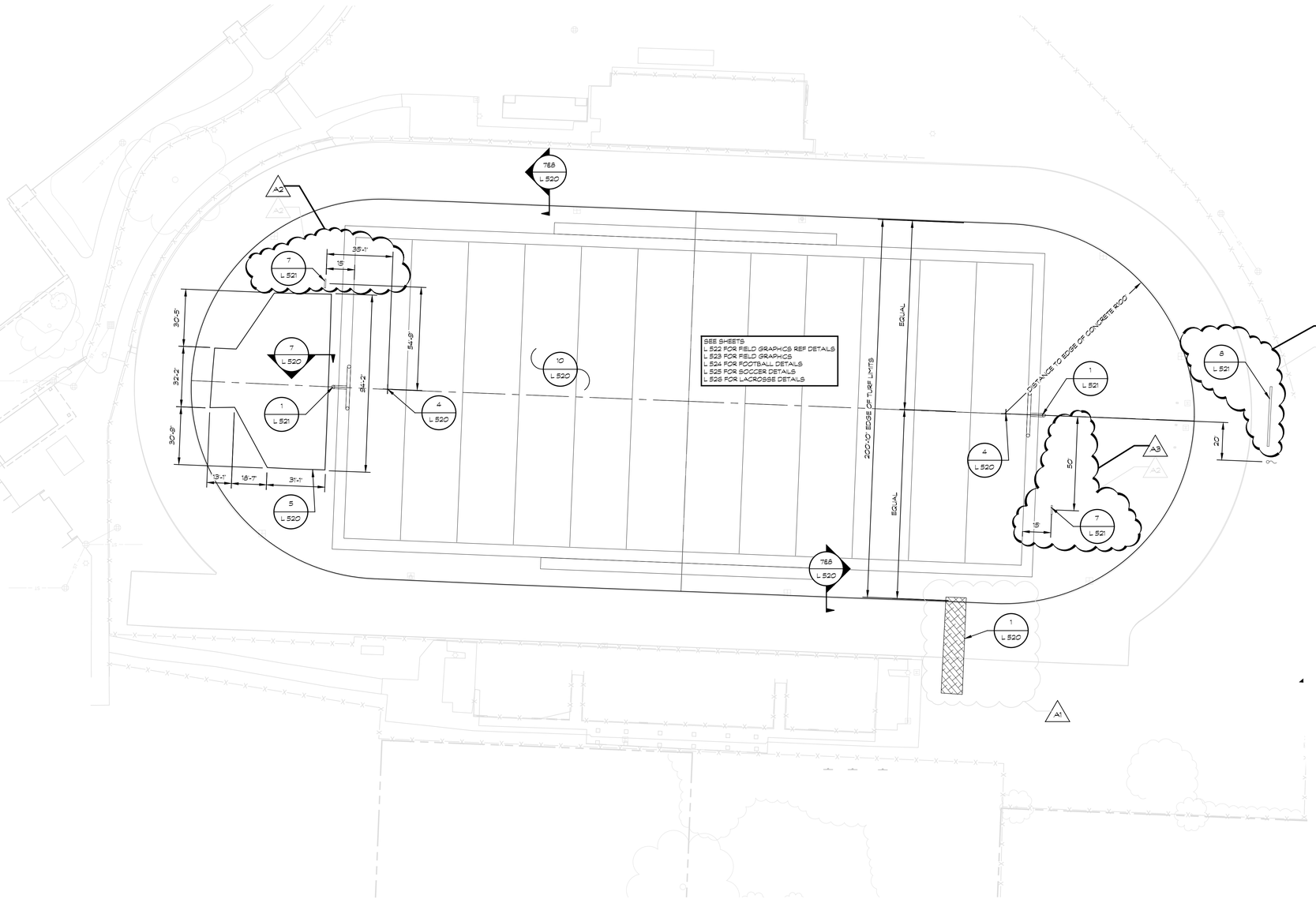
OWNER
KALAMAZOO PUBLIC SCHOOLS

Kalamazoo, Michigan

SHEET TITLE
SITE PLAN
AREA A

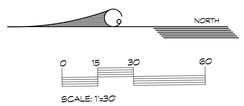
DATE
JANUARY 24, 2025

SHEET NUMBER
L 502
23-625.00




## LEGEND

| EXISTING | PROPOSED |
|---|---|
| SPOT ELEVATION | SPOT GRADE |
| AS-BUILT SPOT ELEVATION | TW=XXXXX TOP OF WALL ELEVATION |
| FENCE | T/C=XXXXX TOP OF CURB ELEVATION |
| DRAINAGE STRUCTURE | ME = XXXXX MATCH EXISTING ELEVATION |
| STORM DRAIN | T/T=XXXXX TOP OF TRENCH ELEVATION |
| LIGHT POLE | DRAINAGE SWALE |
| ELECTRICAL | CHAINLINK FENCE - SEE PLANS FOR HT. |
| WATER | ORNAMENTAL FENCE - SEE PLANS FOR HT. |
| TELEPHONE | DRAINAGE STRUCTURE |
| IRRIGATION | STORM DRAIN |
| PROPERTY | FLAT DRAIN |
| SANITARY | 4" PERFORATED DRAINTILE |
| GAS | 6" PERFORATED DRAINTILE |
| | 8" PERFORATED DRAINTILE |
| | LIGHT POLE |
| | ELECTRICAL |
| | WATER |
| | TELEPHONE |
| | IRRIGATION |
| | LIMITS OF CONSTRUCTION |
| | DEMOLITION |
| | SYNTHETIC TURF |
| | TOPSOIL AND SEED |
| | RED CLAY INFIELD MIX TOP DRESSING |
| | NON-REINFORCED CONCRETE OVER COMPACTED SAND BASE |
| | WARNING TRACK |




## NOTES

1. NOTES AND LEGEND SHALL APPLY TO ALL SHEETS AND ALL SITES
2. CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND MAKE EVERY EFFORT TO LOCATE EXISTING UNDERGROUND UTILITIES. THIS SHALL INCLUDE CONSULTING WITH ALL LOCAL UTILITY COMPANIES AND USING A SIGNAL LOCATOR PRIOR TO EXCAVATION. ANY AND ALL REPAIRS SHALL BE COMPLETED WITHIN 48 HRS. OR THE OWNER SHALL HAVE THE REPAIR WORK COMPLETED AT THE CONTRACTORS EXPENSE.
3. TOPSOIL AND SEED ALL AREAS DISTURBED AND NOT OTHERWISE DEVELOPED. ALL WORK I.E. DEMOLITION AND REMOVALS, DRAINAGE WORK, STONE AND ASPHALT, FENCING, TRACK SURFACE, ETC. SHALL BE COMPLETED BY DATE AS NOTED IN CONTRACT DOCUMENTS. ALL LAWN AREAS SHALL SLOPE TO DRAINAGE STRUCTURES.
4. ALL CONTOURS AND SPOT GRADES REFER TO FINISH GRADE OF LAWN, ASPHALT, OR CONCRETE. DO NOT FACTOR IN THE ALL-WEATHER SURFACE OR ACRYLIC COATING DEPTH.

FORESITE DESIGN, INC.
ATHLETIC FACILITY PLANNING \ SITE PLANNING
CONSULTING \ LANDSCAPE ARCHITECTURE
3269 COOLIDGE HWY BERKLEY MI 48072
248.547.7767

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| ISSUED FOR | DATE |
|---|---|
| ADDENDUM 3 | FEBRUARY 21, 2025 |
| ADDENDUM 2 | FEBRUARY 12, 2025 |
| ADDENDUM 1 | FEBRUARY 7, 2025 |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS

Kalamazoo, Michigan

SHEET TITLE
DIMENSION PLAN
AREA A

DATE
JANUARY 24, 2025

SHEET NUMBER
L 503
23-625.00

## NOTES

1. NOTES AND LEGEND SHALL APPLY TO ALL SHEETS AND ALL SITES
2. CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND MAKE EVERY EFFORT TO LOCATE EXISTING UNDERGROUND UTILITIES. THIS SHALL INCLUDE CONSULTING WITH ALL LOCAL UTILITY COMPANIES AND USING A SIGNAL LOCATOR PRIOR TO EXCAVATION. ANY AND ALL REPAIRS SHALL BE COMPLETED WITHIN 48 HRS. OR THE OWNER SHALL HAVE THE REPAIR WORK COMPLETED AT THE CONTRACTORS EXPENSE.
3. TOPSOIL AND SEED ALL AREAS DISTURBED AND NOT OTHERWISE DEVELOPED. ALL WORK I.E. DEMOLITION AND REMOVALS, DRAINAGE WORK, STONE AND ASPHALT, FENCING, TRACK SURFACE, ETC. SHALL BE COMPLETED BY DATE AS NOTED IN CONTRACT DOCUMENTS. ALL LAWN AREAS SHALL SLOPE TO DRAINAGE STRUCTURES.
4. ALL CONTOURS AND SPOT GRADES REFER TO FINISH GRADE OF LAWN, ASPHALT, OR CONCRETE. DO NOT FACTOR IN THE ALL-WEATHER SURFACE OR ACRYLIC COATING DEPTH.




## IRRIGATION NOTES:

1. IRRIGATION HEAD AND PIPING LAYOUT IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL FIELD VERIFY, PROVIDE HEAD TO HEAD COVERAGE WITH CONSIDERATION OF PROPOSED SITE GRADING AND ROUTE IRRIGATION MAIN AND LATERAL LINES FOR MOST ECONOMICAL USE. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE UNLESS NOTED OTHERWISE.
2. WATER SOURCE, POINT OF CONNECTION, CONTROLLER, BOOSTER PUMP AND BACKFLOW PREVENTER SHALL BE FIELD VERIFIED PRIOR TO INSTALLATION OF ANY IRRIGATION COMPONENTS.
3. WATER SOURCE IS LOCATED NEAR PROPOSED BUILDING. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR PROVIDING NEW CONTROLLER, VFD, BACKFLOW PREVENTER AND BOOSTER PUMP FOR A COMPLETE CONNECTION.
4. ELECTRICAL FOR CONTROLLER SUPPLIED BY OTHERS. ALL PLUMBING AND ELECTRICAL SHALL BE INSTALLED ACCORDING TO STATE AND LOCAL CODES.
5. COORDINATE PIPE ROUTING WITH REGARDS TO ALL EXISTING OR PROPOSED STORM, ELECTRICAL, SANITARY, WATER OR TECHNOLOGY LINES.
6. COORDINATE MOUNTING LOCATION OF IRRIGATION CONTROLLER WITH BUILDING TRADES.

## LEGEND

| EXISTING | PROPOSED |
|---|---|
| SPOT ELEVATION | SPOT GRADE |
| AS-BUILT SPOT ELEVATION | TOP OF WALL ELEVATION |
| FENCE | TOP OF CURB ELEVATION |
| DRAINAGE STRUCTURE | MATCH EXISTING ELEVATION |
| STORM DRAIN | TOP OF TRENCH ELEVATION |
| LIGHT POLE | DRAINAGE SWALE |
| ELECTRICAL | DRAINAGE STRUCTURE |
| WATER | STORM DRAIN |
| TELEPHONE | FLAT DRAIN |
| IRRIGATION | 4" PERFORATED DRAINTILE |
| PROPERTY | 6" PERFORATED DRAINTILE |
| SANITARY | 8" PERFORATED DRAINTILE |
| GAS | LIGHT POLE |
| | ELECTRICAL |
| | WATER |
| | TELEPHONE |
| | IRRIGATION |
| | LIMITS OF CONSTRUCTION |
| | DEMOLITION |
| | SYNTHETIC TURF |
| | SOD OVER 4" IMPORTED SANDY LOAM TOPSOIL |
| | RED CLAY INFIELD MIX TOP DRESSING |
| | NON-REINFORCED CONCRETE OVER COMPACTED SAND BASE |
| | WARNING TRACK |
| | 6" CRUSHER DUST |
| | CONCRETE PAD |
| | TOPSOIL AND SEED |

NORTH

0 20 40 80

SCALE: 1"=40'

FORESITE DESIGN, INC.
ATHLETIC FACILITY PLANNING \ SITE PLANNING
CONSULTING \ LANDSCAPE ARCHITECTURE
3263 COOLIDGE HWY BERKLEY MI 48072
248.547.7757

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| | |
|---|---|
| ADDENDUM 3 | FEBRUARY 21, 2025 |
| ADDENDUM 2 | FEBRUARY 12, 2025 |
| ADDENDUM 1 | FEBRUARY 7, 2025 |
| ISSUED FOR | DATE |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS

Kalamazoo, Michigan

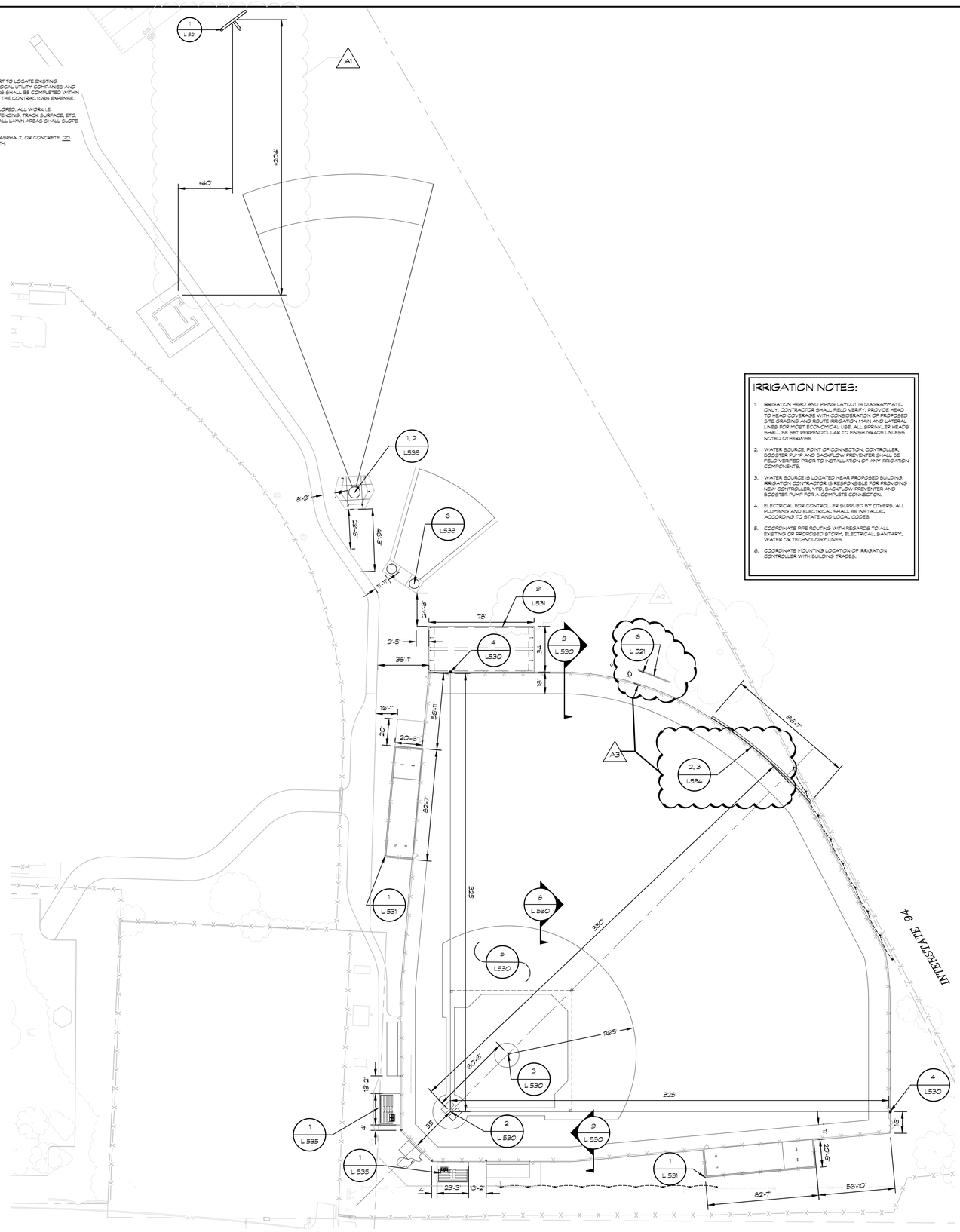
DATE
JANUARY 24, 2025

SHEET TITLE
SITE PLAN
AREA B

SHEET NUMBER
L 507
23-625.00

## NOTES

1. NOTES AND LEGEND SHALL APPLY TO ALL SHEETS AND ALL SITES
2. CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND MAKE EVERY EFFORT TO LOCATE EXISTING UNDERGROUND UTILITIES. THIS SHALL INCLUDE CONSULTING WITH ALL LOCAL UTILITY COMPANIES AND USING A SIGNAL LOCATOR PRIOR TO EXCAVATION. ANY AND ALL REPAIRS SHALL BE COMPLETED WITHIN 48 HRS. OR THE OWNER SHALL HAVE THE REPAIR WORK COMPLETED AT THE CONTRACTORS EXPENSE.
3. TOPSOIL AND SEED ALL AREAS DISTURBED AND NOT OTHERWISE DEVELOPED. ALL WORK I.E. DEMOLITION AND REMOVALS, DRAINAGE WORK, STONE AND ASPHALT, FENCING, TRACK SURFACE, ETC. SHALL BE COMPLETED BY DATE AS NOTED IN CONTRACT DOCUMENTS. ALL LAWN AREAS SHALL SLOPE TO DRAINAGE STRUCTURES.
4. ALL CONTOURS AND SPOT GRADES REFER TO FINISH GRADE OF LAWN, ASPHALT, OR CONCRETE. DO NOT FACTOR IN THE ALL-WEATHER SURFACE OR ACRYLIC COATING DEPTH.




## IRRIGATION NOTES:

1. IRRIGATION HEAD AND PIPING LAYOUT IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL FIELD VERIFY, PROVIDE HEAD TO HEAD COVERAGE WITH CONSIDERATION OF PROPOSED SITE GRADING AND ROUTE IRRIGATION MAIN AND LATERAL LINES FOR MOST ECONOMICAL USE. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE UNLESS NOTED OTHERWISE.
2. WATER SOURCE, POINT OF CONNECTION, CONTROLLER, BOOSTER PUMP AND BACKFLOW PREVENTER SHALL BE FIELD VERIFIED PRIOR TO INSTALLATION OF ANY IRRIGATION COMPONENTS.
3. WATER SOURCE IS LOCATED NEAR PROPOSED BUILDING. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR PROVIDING NEW CONTROLLER, VFD, BACKFLOW PREVENTER AND BOOSTER PUMP FOR A COMPLETE CONNECTION.
4. ELECTRICAL FOR CONTROLLER SUPPLIED BY OTHERS. ALL PLUMBING AND ELECTRICAL SHALL BE INSTALLED ACCORDING TO STATE AND LOCAL CODES.
5. COORDINATE PIPE ROUTING WITH REGARDS TO ALL EXISTING OR PROPOSED STORM, ELECTRICAL, SANITARY, WATER OR TECHNOLOGY LINES.
6. COORDINATE MOUNTING LOCATION OF IRRIGATION CONTROLLER WITH BUILDING TRADES.

## LEGEND

| EXISTING | PROPOSED |
|---|---|
| SPOT ELEVATION | SPOT GRADE |
| AS-BUILT SPOT ELEVATION | TOP OF WALL ELEVATION |
| FENCE | TOP OF CURB ELEVATION |
| DRAINAGE STRUCTURE | MATCH EXISTING ELEVATION |
| STORM DRAIN | TOP OF TRENCH ELEVATION |
| LIGHT POLE | DRAINAGE SWALE |
| ELECTRICAL | |
| WATER | DRAINAGE STRUCTURE |
| TELEPHONE | STORM DRAIN |
| IRRIGATION | FLAT DRAIN |
| PROPERTY | 4" PERFORATED DRAINTILE |
| SANITARY | 6" PERFORATED DRAINTILE |
| GAS | 8" PERFORATED DRAINTILE |
| | LIGHT POLE |
| | ELECTRICAL |
| | WATER |
| | TELEPHONE |
| | IRRIGATION |
| | LIMITS OF CONSTRUCTION |
| | DEMOLITION |
| | SYNTHETIC TURF |
| | SOD OVER 4" IMPORTED SANDY LOAM TOPSOIL |
| | RED CLAY INFIELD MIX TOP DRESSING |
| | NON-REINFORCED CONCRETE OVER COMPACTED SAND BASE |
| | WARNING TRACK |
| | 6" CRUSHER DUST |
| | CONCRETE PAD |

NORTH

0 20 40 80

SCALE: 1"=40'

FORESITE DESIGN, INC.
ATHLETIC FACILITY PLANNING \ SITE PLANNING
CONSULTING \ LANDSCAPE ARCHITECTURE
3269 COOLIDGE HWY BERKLEY MI 48072
248.547.7767

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| ISSUED FOR | DATE |
|---|---|
| ADDENDUM 3 | FEBRUARY 21, 2025 |
| ADDENDUM 2 | FEBRUARY 12, 2025 |
| ADDENDUM 1 | FEBRUARY 7, 2025 |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

SHEET TITLE
DIMENSION PLAN
AREA B

DATE
JANUARY 24, 2025

SHEET NUMBER
L 508
23-625.00

## NOTES

1. NOTES AND LEGEND SHALL APPLY TO ALL SHEETS AND ALL SITES
2. CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND MAKE EVERY EFFORT TO LOCATE EXISTING UNDERGROUND UTILITIES. THIS SHALL INCLUDE CONSULTING WITH ALL LOCAL UTILITY COMPANIES AND USING A SIGNAL LOCATOR PRIOR TO ENCAVATION. ANY AND ALL REPAIRS SHALL BE COMPLETED WITHIN 48 HRS. OR THE OWNER SHALL HAVE THE REPAIR WORK COMPLETED AT THE CONTRACTORS EXPENSE.
3. TOPSOIL AND SEED ALL AREAS DISTURBED AND NOT OTHERWISE DEVELOPED. ALL WORK I.E. DEMOLITION AND REMOVALS, DRAINAGE WORK, STONE AND ASPHALT, FENCING, TRACK SURFACE, ETC. SHALL BE COMPLETED BY DATE AS NOTED IN CONTRACT DOCUMENTS. ALL LAWN AREAS SHALL SLOPE TO DRAINAGE STRUCTURES.
4. ALL CONTOURS AND SPOT GRADES REFER TO FINISH GRADE OF LAWN, ASPHALT, OR CONCRETE. DO NOT FACTOR IN THE ALL-WEATHER SURFACE OR ACRYLIC COATING DEPTH.

## IRRIGATION NOTES:

1. IRRIGATION HEAD AND PIPING LAYOUT IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL FIELD VERIFY, PROVIDE HEAD TO HEAD COVERAGE WITH CONSIDERATION OF PROPOSED SITE GRADING AND ROUTE IRRIGATION MAIN AND LATERAL LINES FOR MOST ECONOMICAL USE. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE UNLESS NOTED OTHERWISE.
2. WATER SOURCE, POINT OF CONNECTION, CONTROLLER, BOOSTER PUMP AND BACKFLOW PREVENTER SHALL BE FIELD VERIFIED PRIOR TO INSTALLATION OF ANY IRRIGATION COMPONENTS.
3. WATER SOURCE IS LOCATED NEAR PROPOSED BUILDING. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR PROVIDING NEW CONTROLLER, VFD, BACKFLOW PREVENTER AND BOOSTER PUMP FOR A COMPLETE CONNECTION.
4. ELECTRICAL FOR CONTROLLER SUPPLIED BY OTHERS. ALL PLUMBING AND ELECTRICAL SHALL BE INSTALLED ACCORDING TO STATE AND LOCAL CODES.
5. COORDINATE PIPE ROUTING WITH REGARDS TO ALL EXISTING OR PROPOSED STORM, ELECTRICAL, SANITARY, WATER OR TECHNOLOGY LINES.
6. COORDINATE MOUNTING LOCATION OF IRRIGATION CONTROLLER WITH BUILDING TRADES.

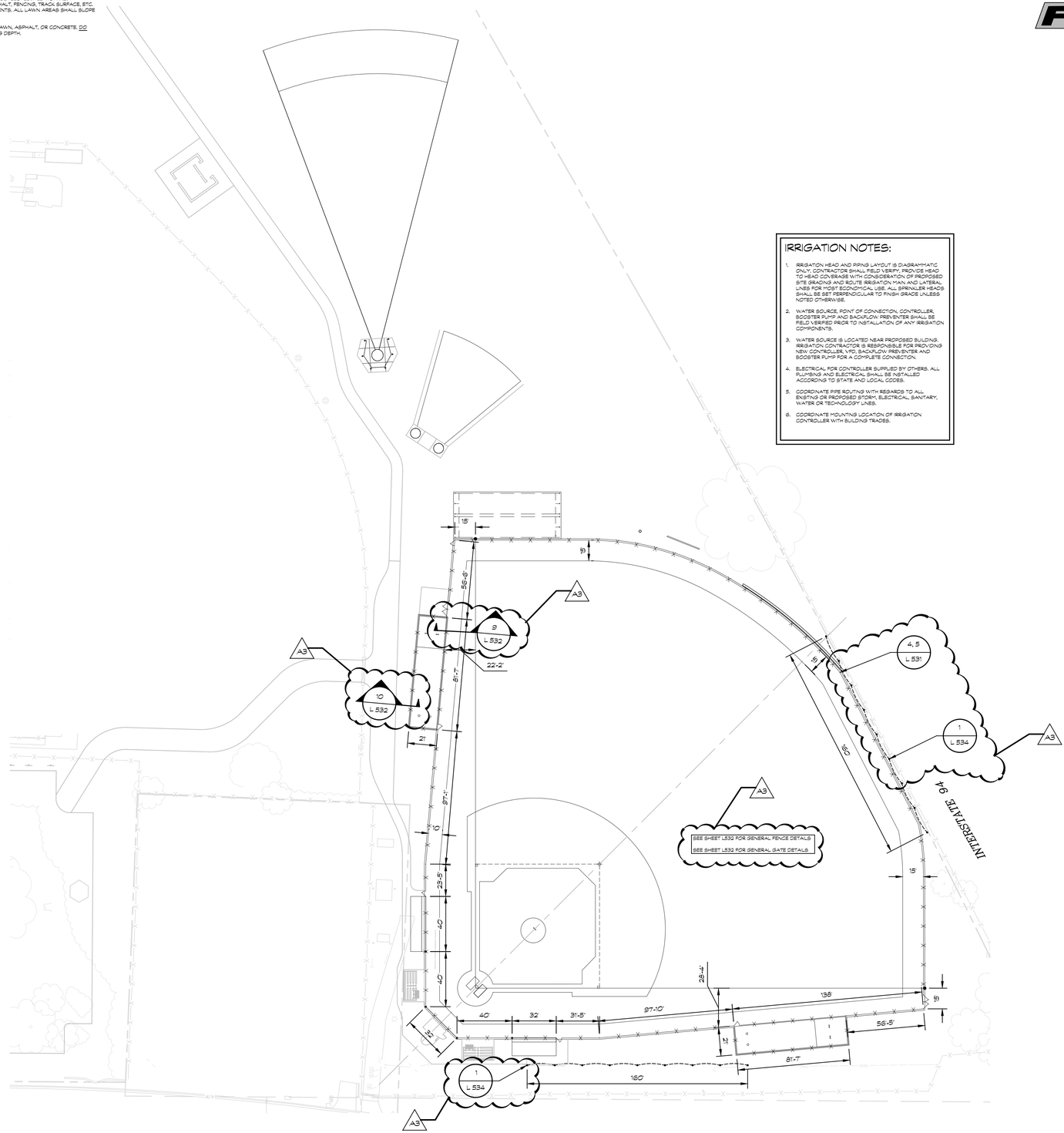
## LEGEND

| EXISTING | PROPOSED |
|---|---|
| SPOT ELEVATION | SPOT GRADE |
| AS-BUILT SPOT ELEVATION | TW XXXXXX TOP OF WALL ELEVATION |
| FENCE | TC XXXXXX TOP OF CURB ELEVATION |
| DRAINAGE STRUCTURE | ME = XXXXXX MATCH EXISTING ELEVATION |
| STORM DRAIN | TT XXXXXX TOP OF TRENCH ELEVATION |
| LIGHT POLE | DRAINAGE SWALE |
| ELECTRICAL | |
| WATER | DRAINAGE STRUCTURE |
| TELEPHONE | STORM DRAIN |
| IRRIGATION | FLAT DRAIN |
| PROPERTY | 4" PERFORATED DRAINTILE |
| SANITARY | 6" PERFORATED DRAINTILE |
| GAS | 8" PERFORATED DRAINTILE |
| | LIGHT POLE |
| | ELECTRICAL |
| | WATER |
| | TELEPHONE |
| | IRRIGATION |
| | LIMITS OF CONSTRUCTION |
| | DEMOLITION |
| | SYNTHETIC TURF |
| | SOD OVER 4" IMPORTED SANDY LOAM TOPSOIL |
| | SEED CLAY INFIELD MIX TOP DRESSING |
| | NON-REINFORCED CONCRETE OVER COMPACTED SAND BASE |
| | WARNING TRACK |
| | 6" CRUSHER DUST |
| | CONCRETE PAD |
| | TOPSOIL AND SEED |

NORTH

0 20 40 80

SCALE: 1:40




FORESITE DESIGN, INC.
ATHLETIC FACILITY PLANNING \ SITE PLANNING
CONSULTING \ LANDSCAPE ARCHITECTURE
3269 COOLIDGE HWY BERKLEY MI 48072
248.547.7767

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| ISSUED FOR | DATE |
|---|---|
| ADDENDUM 3 | FEBRUARY 21, 2025 |
| ADDENDUM 2 | FEBRUARY 12, 2025 |
| ADDENDUM 1 | FEBRUARY 7, 2025 |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS

Kalamazoo, Michigan

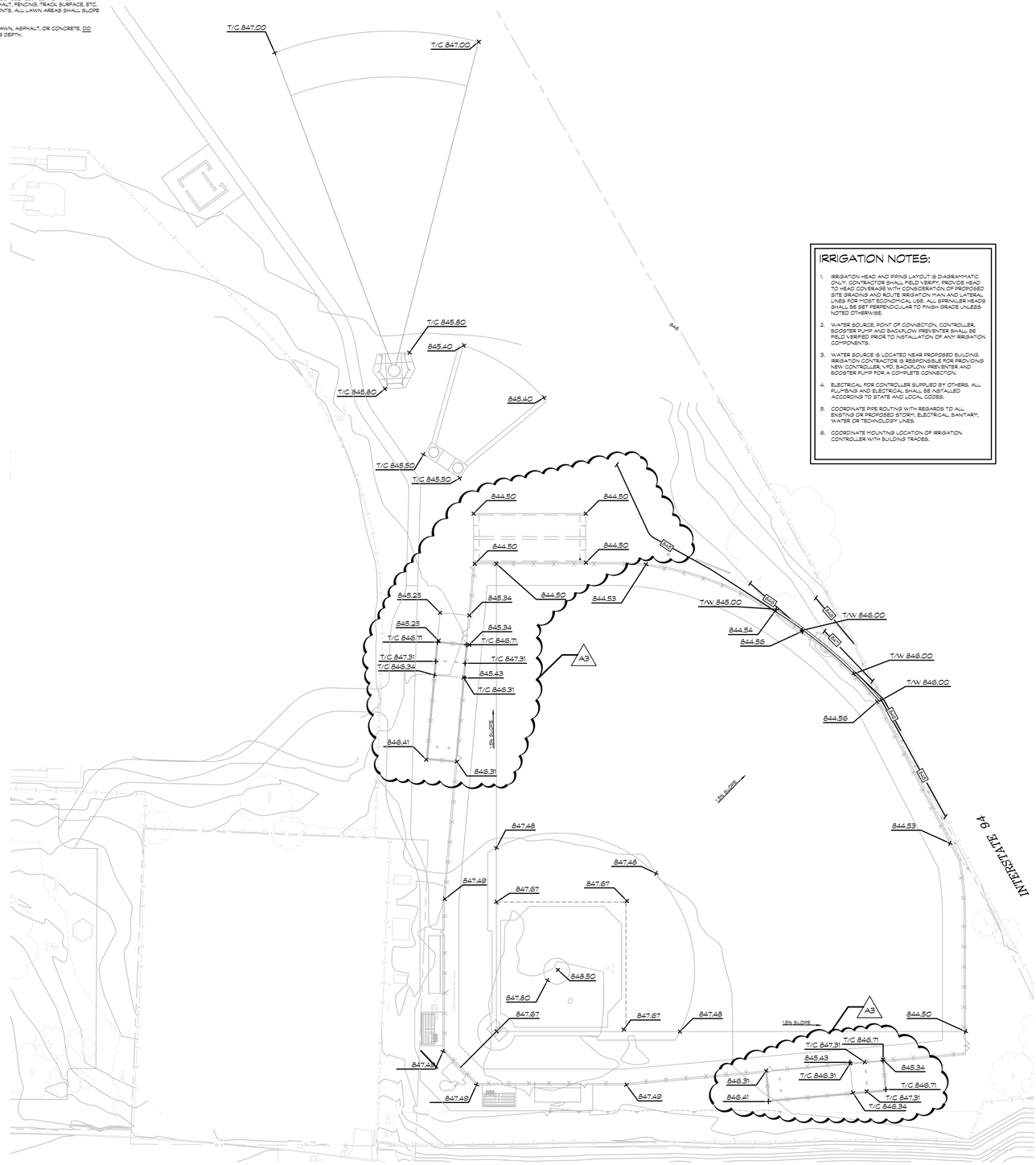
DATE
JANUARY 24, 2025

SHEET TITLE
FENCE PLAN
AREA B

SHEET NUMBER
L 509
23-625.00

## NOTES

1. NOTES AND LEGEND SHALL APPLY TO ALL SHEETS AND ALL SITES
2. CONTRACTOR SHALL BE SOLELY RESPONSIBLE AND MAKE EVERY EFFORT TO LOCATE EXISTING UNDERGROUND UTILITIES. THIS SHALL INCLUDE CONSULTING WITH ALL LOCAL UTILITY COMPANIES AND USING A SIGNAL LOCATOR PRIOR TO ENCAVATION. ANY AND ALL REPAIRS SHALL BE COMPLETED WITHIN 48 HRS. OR THE OWNER SHALL HAVE THE REPAIR WORK COMPLETED AT THE CONTRACTORS EXPENSE.
3. TOPSOIL AND SEED ALL AREAS DISTURBED AND NOT OTHERWISE DEVELOPED. ALL WORK I.E. DEMOLITION AND REMOVALS, DRAINAGE WORK, STONE AND ASPHALT, FENCING, TRACK SURFACE, ETC. SHALL BE COMPLETED BY DATE AS NOTED IN CONTRACT DOCUMENTS. ALL LAWN AREAS SHALL SLOPE TO DRAINAGE STRUCTURES.
4. ALL CONTOURS AND SPOT GRADES REFER TO FINISH GRADE OF LAWN, ASPHALT, OR CONCRETE. DO NOT FACTOR IN THE ALL-WEATHER SURFACE OR ACRYLIC COATING DEPTH.




## IRRIGATION NOTES:

1. IRRIGATION HEAD AND PIPING LAYOUT IS DIAGRAMMATIC ONLY. CONTRACTOR SHALL FIELD VERIFY, PROVIDE HEAD TO HEAD COVERAGE WITH CONSIDERATION OF PROPOSED SITE GRADING AND ROUTE IRRIGATION MAIN AND LATERAL LINES FOR MOST ECONOMICAL USE. ALL SPRINKLER HEADS SHALL BE SET PERPENDICULAR TO FINISH GRADE UNLESS NOTED OTHERWISE.
2. WATER SOURCE, POINT OF CONNECTION, CONTROLLER, BOOSTER PUMP AND BACKFLOW PREVENTER SHALL BE FIELD VERIFIED PRIOR TO INSTALLATION OF ANY IRRIGATION COMPONENTS.
3. WATER SOURCE IS LOCATED NEAR PROPOSED BUILDING. IRRIGATION CONTRACTOR IS RESPONSIBLE FOR PROVIDING NEW CONTROLLER, VFD, BACKFLOW PREVENTER AND BOOSTER PUMP FOR A COMPLETE CONNECTION.
4. ELECTRICAL FOR CONTROLLER SUPPLIED BY OTHERS. ALL PLUMBING AND ELECTRICAL SHALL BE INSTALLED ACCORDING TO STATE AND LOCAL CODES.
5. COORDINATE PIPE ROUTING WITH REGARDS TO ALL EXISTING OR PROPOSED STORM, ELECTRICAL, SANITARY, WATER OR TECHNOLOGY LINES.
6. COORDINATE MOUNTING LOCATION OF IRRIGATION CONTROLLER WITH BUILDING TRADES.

## LEGEND

| EXISTING | PROPOSED |
|---|---|
| SPOT ELEVATION | SPOT GRADE |
| AS-BUILT SPOT ELEVATION | TOP OF WALL ELEVATION |
| FENCE | TOP OF CURB ELEVATION |
| DRAINAGE STRUCTURE | MATCH EXISTING ELEVATION |
| STORM DRAIN | TOP OF TRENCH ELEVATION |
| LIGHT POLE | DRAINAGE SWALE |
| ELECTRICAL | |
| WATER | DRAINAGE STRUCTURE |
| TELEPHONE | STORM DRAIN |
| IRRIGATION | FLAT DRAIN |
| PROPERTY | 4" PERFORATED DRAINTILE |
| SANITARY | 6" PERFORATED DRAINTILE |
| GAS | 8" PERFORATED DRAINTILE |
| | LIGHT POLE |
| | ELECTRICAL |
| | WATER |
| | TELEPHONE |
| | IRRIGATION |
| | LIMITS OF CONSTRUCTION |
| | DEMOLITION |
| | SYNTHETIC TURF |
| | SOD OVER 4" IMPORTED SANDY LOAM TOPSOIL |
| | SEED CLAY INFIELD MIX TOP DRESSING |
| | NON-REINFORCED CONCRETE OVER COMPACTED SAND BASE |
| | WARNING TRACK |
| | 6" CRUSHER DUST |
| | CONCRETE PAD |
| | TOPSOIL AND SEED |

NORTH

0 20 40 80

SCALE: 1"=40'

FORESITE DESIGN, INC.
ATHLETIC FACILITY PLANNING \ SITE PLANNING
CONSULTING \ LANDSCAPE ARCHITECTURE
3269 COOLIDGE HWY BERKLEY MI 48072
248.547.7767

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| ISSUED FOR | DATE |
|---|---|
| ADDENDUM 3 | FEBRUARY 21, 2025 |
| ADDENDUM 2 | FEBRUARY 12, 2025 |
| ADDENDUM 1 | FEBRUARY 7, 2025 |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

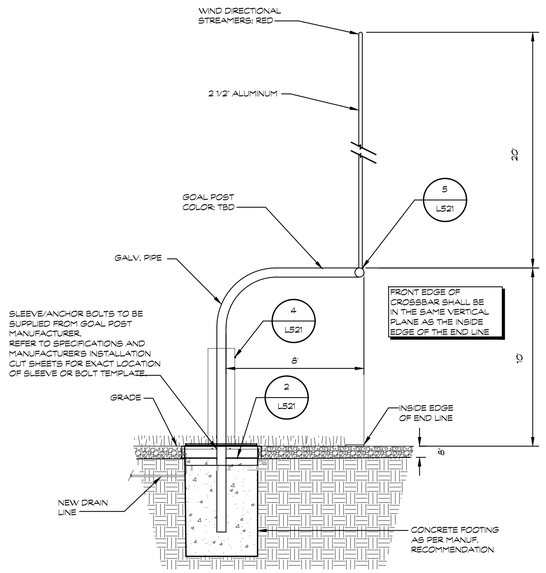
OWNER
KALAMAZOO PUBLIC SCHOOLS

Kalamazoo, Michigan

SHEET TITLE
GRAING PLAN
AREA B

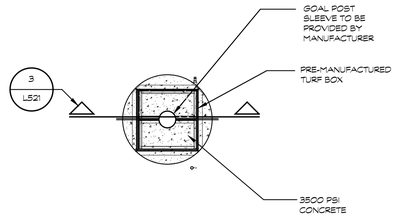
DATE
JANUARY 24, 2025

SHEET NUMBER
L 510
23-625.00



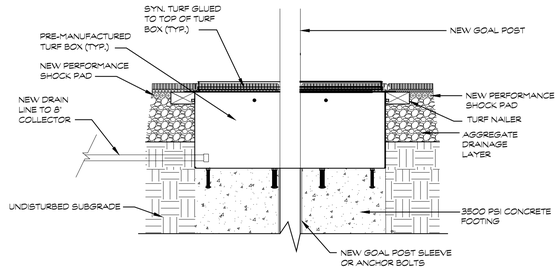

1 FOOTBALL GOAL POST FOUNDATION

SCALE 1/4"=1'-0"



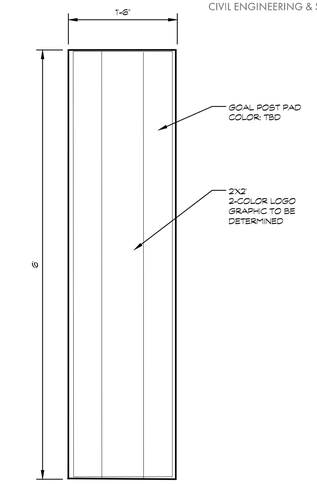

2 GOAL POST FOOTING/TURF DETAIL

1/8"=1'-0"



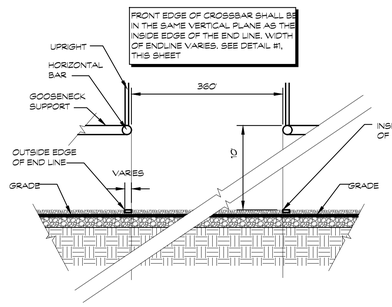

3 GOAL POST FOOTING/TURF DETAIL

SCALE 1"=1'-0"



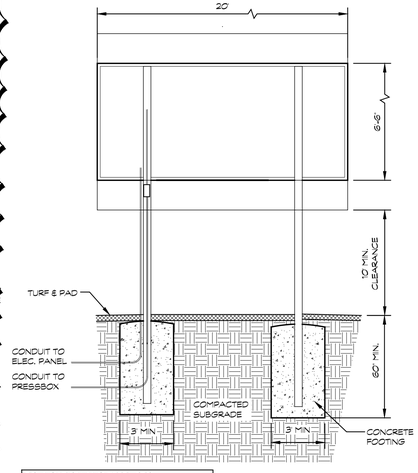

4 FOOTBALL GOAL POST PAD

SCALE 1"=1'-0"




5 HORIZONTAL BAR ORIENTATION

SCALE 1/4"=1'-0"

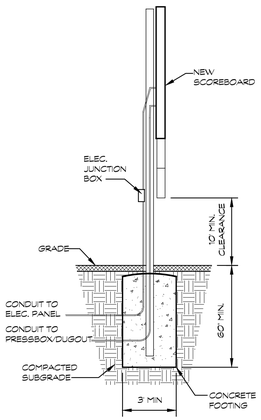


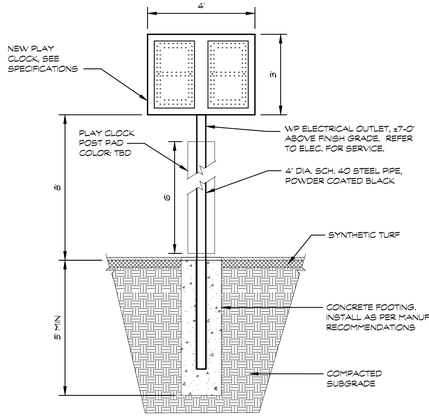

FOUNDATION AND STEEL PER MANUFACTURER'S DELEGATED DESIGN BASED ON SITE CONDITIONS. REFER TO SOIL REPORT.

SEE ELECTRICAL DWGS FOR INFORMATION RELATED TO POWER

6 SCOREBOARD DETAIL

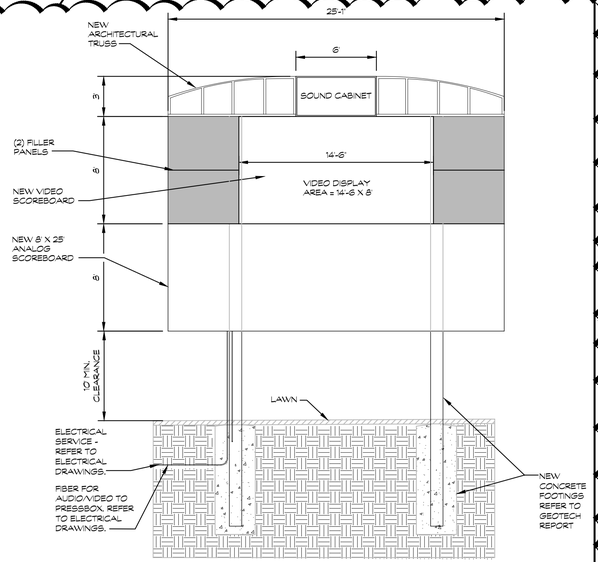
BASEBALL SCALE 1/4"=1'-0"




7 GAME CLOCK DETAIL

SCALE 3/8"=1'-0"




8 SCOREBOARD ELEVATION DETAIL

STADIUM SCALE 3/16"=1'-0"

FORESITE DESIGN, INC.
ATHLETIC FACILITY PLANNING \ SITE PLANNING
CONSULTING \ LANDSCAPE ARCHITECTURE
3269 COOLIDGE HWY BERKLEY MI 48072
248.547.7787

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| ISSUED FOR | DATE |
|---|---|
| ADDENDUM 3 | FEBRUARY 21, 2025 |
| ADDENDUM 2 | FEBRUARY 12, 2025 |
| ADDENDUM 1 | FEBRUARY 7, 2025 |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

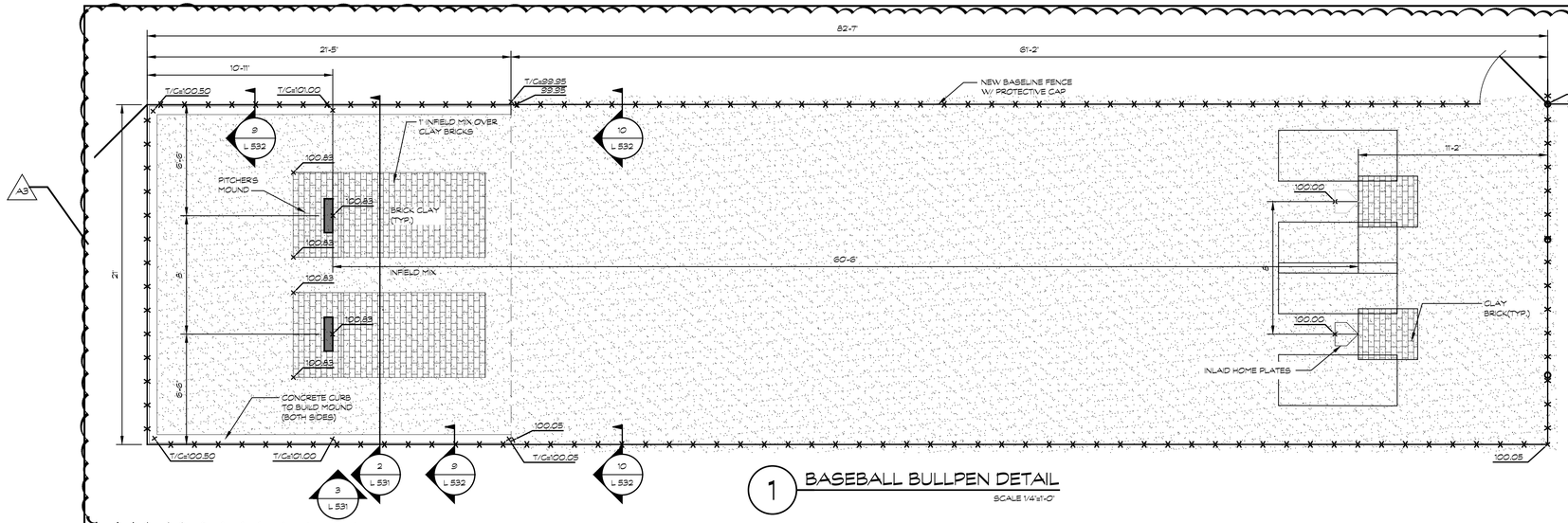
OWNER
KALAMAZOO PUBLIC SCHOOLS

Kalamazoo, Michigan

DATE
JANUARY 24, 2025

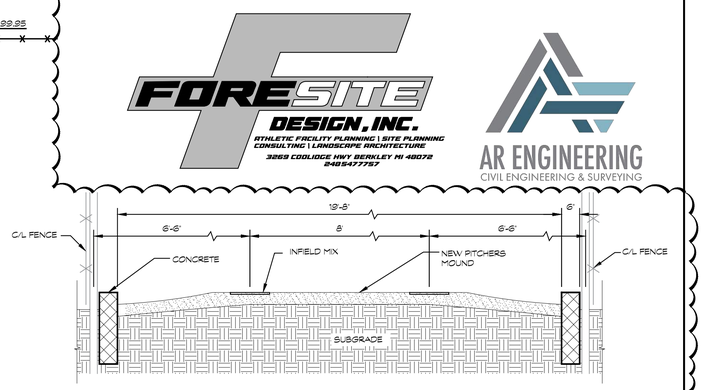
SHEET TITLE
SITE DETAILS

SHEET NUMBER
L 521
23-625.00



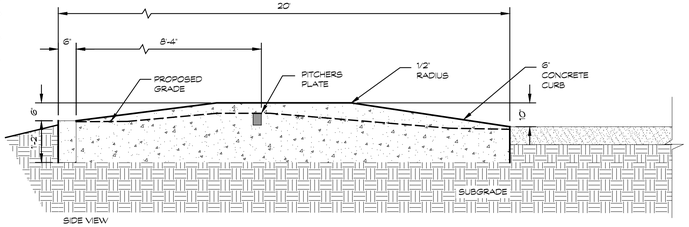

1 BASEBALL BULLPEN DETAIL

SCALE 1/4"=1'-0"



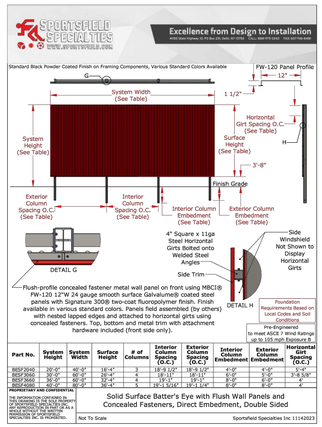

2 PITCHING MOUND CROSS SECTION

BASEBALL SCALE 1/2"=1'-0"



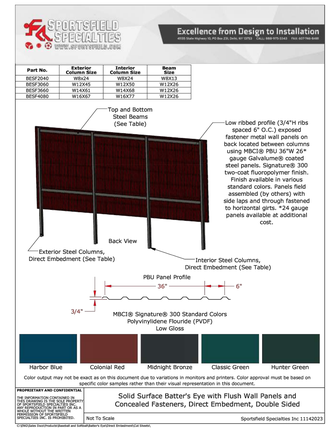

3 PITCHING MOUND SIDE ELEVATION

BASEBALL NOT TO SCALE



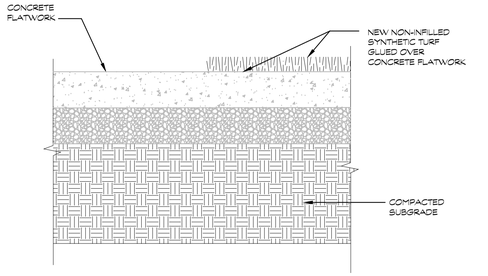

4 BATTER'S EYE DETAIL

ALTERNATE BID NTS



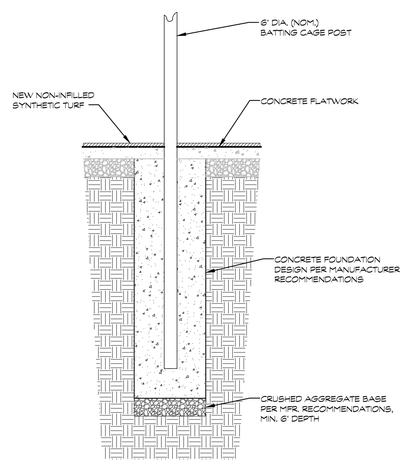

5 BATER'S EYE DETAIL

ALTERNATE BID NTS



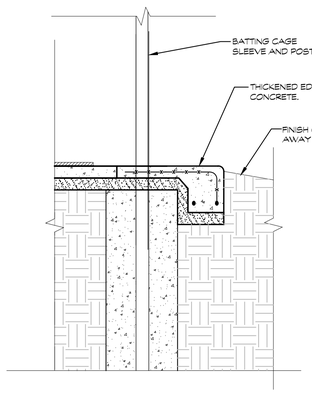

6 TURF SECTION

SCALE 1-1/2"=1'-0"



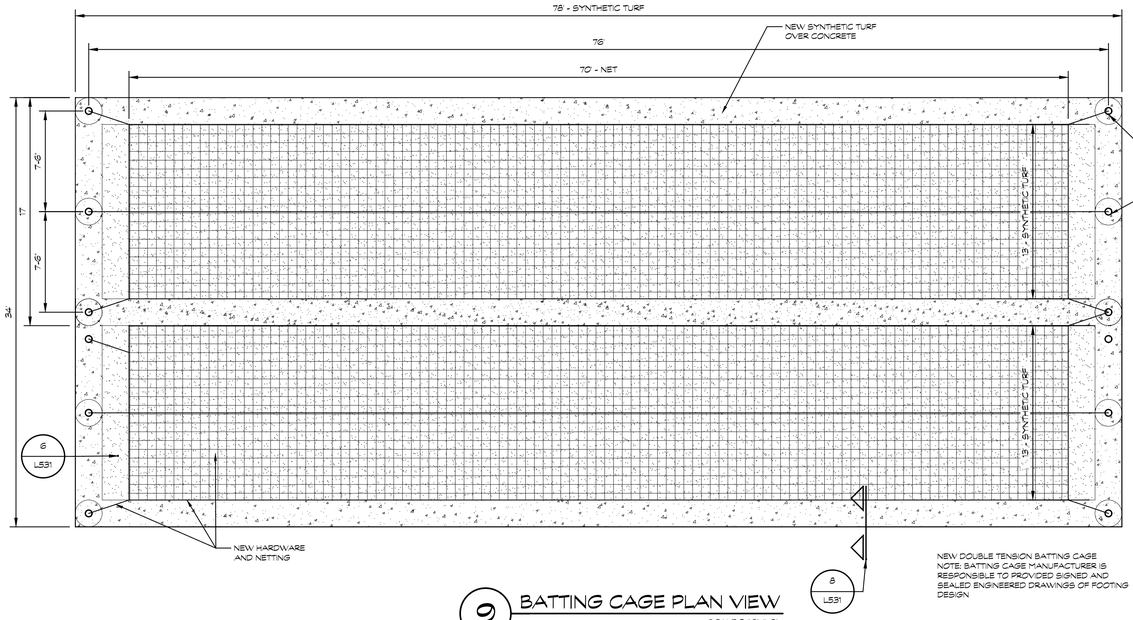

7 BATTING CAGE FOOTING

SCALE 1/2"=1'-0"




8 BATTING CAGE EDGE

SCALE 1/2"=1'-0"




9 BATTING CAGE PLAN VIEW

SCALE 3/16"=1'-0"

FORESITE DESIGN, INC.
ATHLETIC FACILITY PLANNING | SITE PLANNING CONSULTING | LANDSCAPE ARCHITECTURE
3269 COOLIDGE HWY BERKLEY MI 48072
2485477757

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| ISSUED FOR | DATE |
|---|---|
| ADDENDUM 3 | FEBRUARY 21, 2025 |
| ADDENDUM 2 | FEBRUARY 12, 2025 |
| ADDENDUM 1 | FEBRUARY 7, 2025 |

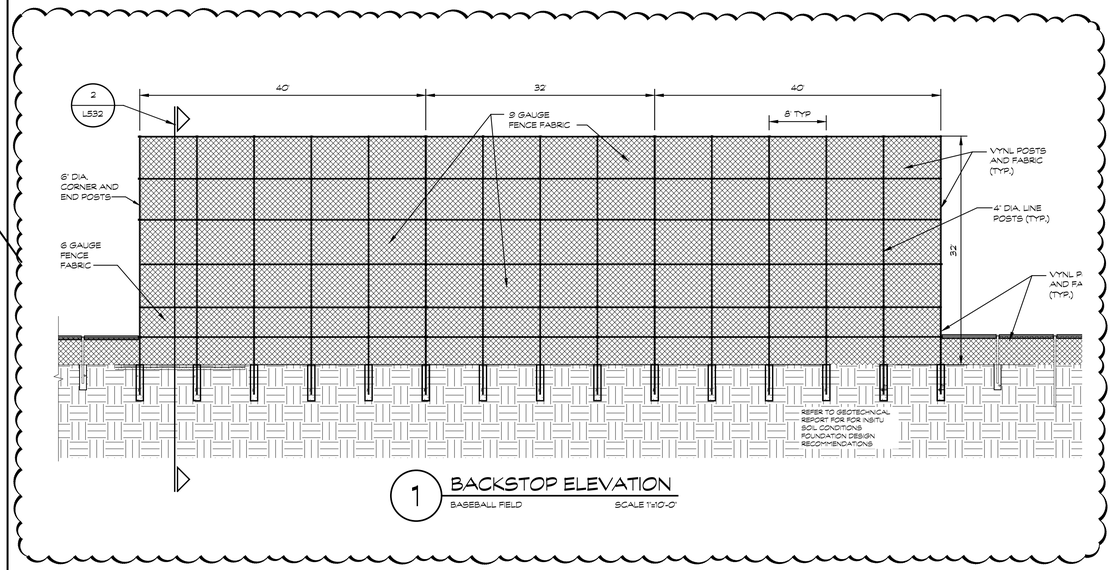
PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

DATE
JANUARY 24, 2025

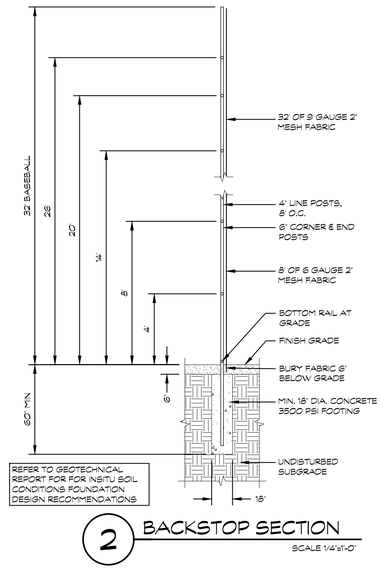
SHEET TITLE
BULLPEN DETAILS

SHEET NUMBER
L 531
23-625.00



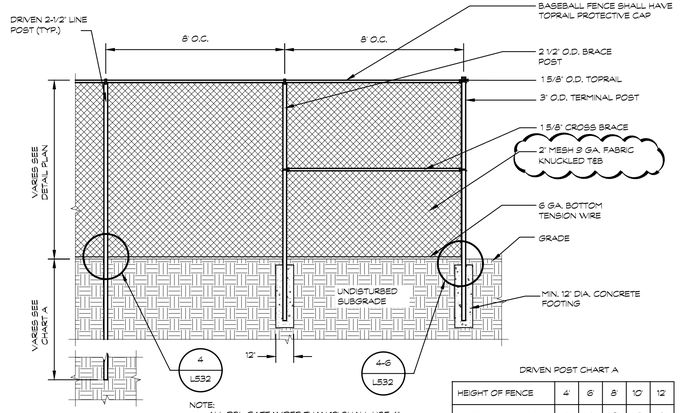

1 BACKSTOP ELEVATION

BASEBALL FIELD SCALE 1/16"=1'-0"




2 BACKSTOP SECTION

SCALE 1/4"=1'-0"



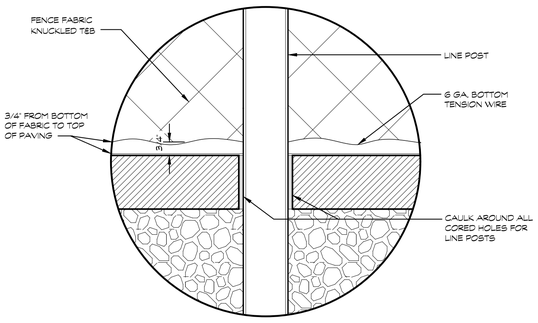

NOTE:
- ALL DBL GATE WIDER THAN 12' SHALL USE 4" SUPPORT POSTS
- ALL FENCE 8' AND HIGHER SHALL HAVE AN INTERMEDIATE RAIL

DRIVEN POST CHART A

| HEIGHT OF FENCE | 4' | 6' | 8' | 10' | 12' |
|---|---|---|---|---|---|
| POST BELOW GRADE | 4' | 5' | 6' | 7' | 8' |

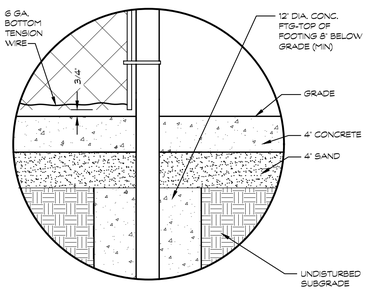
3 FENCE ELEVATION

SCALE 1/4"=1'-0"



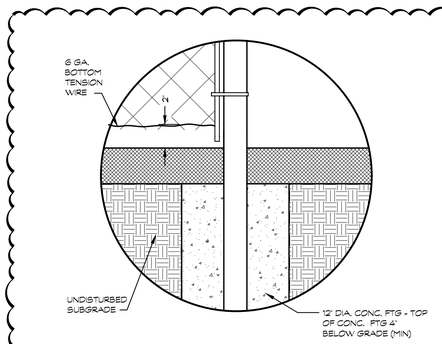

4 FENCE POST CAULKING

SCALE 3"=1'-0"



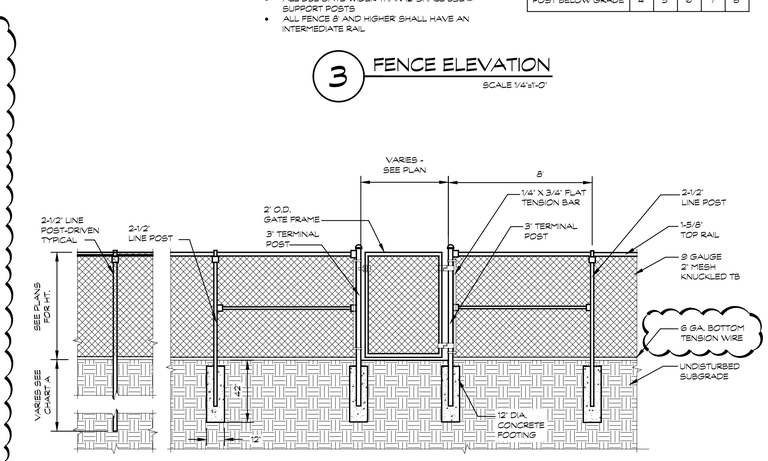

5 FENCE CONCRETE DETAIL

SCALE 1/4"=1'-0"



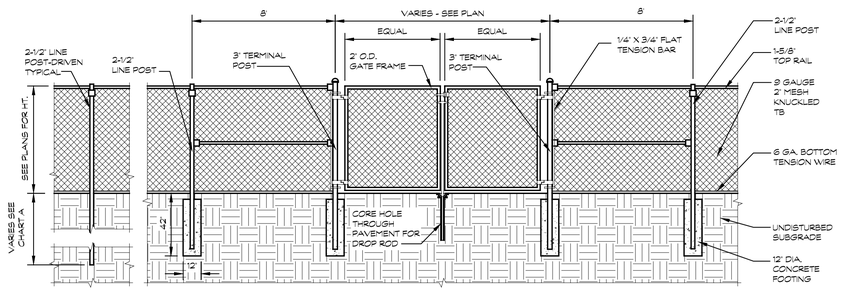

6 FENCE POST IN INFIELD MIX DETAIL

SCALE 1/4"=1'-0"



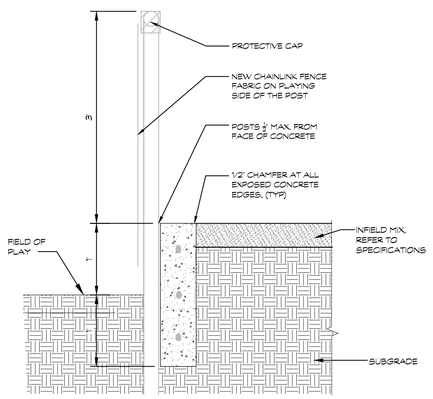

7 PEDESTRIAN GATE

SCALE 1/4"=1'-0"



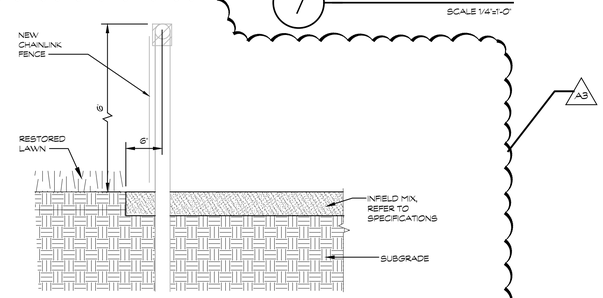

8 DOUBLE GATE

SCALE 1/4"=1'-0"




9 CONCRETE SECTION PITCHING MOUND

SCALE 1"=1'-0"




10 FENCE SECTION BULLPEN

SCALE 1"=1'-0"

FORESITE DESIGN, INC.
ATHLETIC FACILITY PLANNING \ SITE PLANNING
CONSULTING \ LANDSCAPE ARCHITECTURE
3269 COOLIDGE HWY BERKLEY MI 48072
248.547.7757

AR ENGINEERING
CIVIL ENGINEERING & SURVEYING

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| ISSUED FOR | DATE |
|---|---|
| ADDENDUM 3 | FEBRUARY 21, 2025 |
| ADDENDUM 2 | FEBRUARY 12, 2025 |
| ADDENDUM 1 | FEBRUARY 7, 2025 |

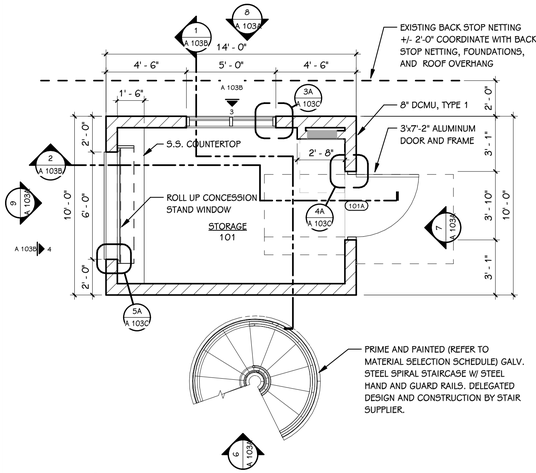
PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

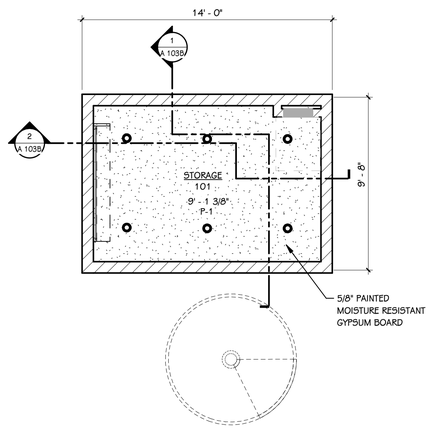
DATE
JANUARY 24, 2025

SHEET TITLE
FENCE DETAILS

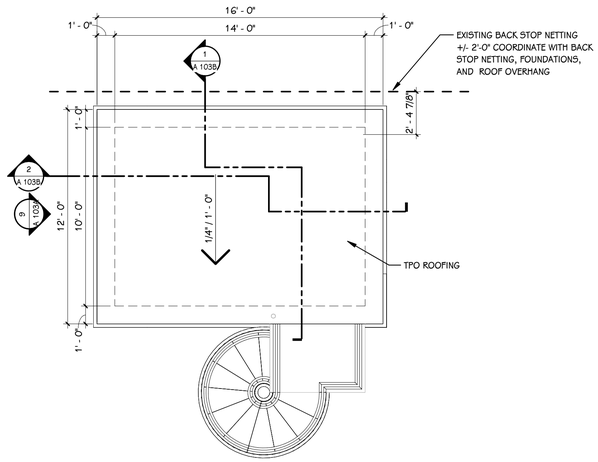
SHEET NUMBER
L 532
23-625.00



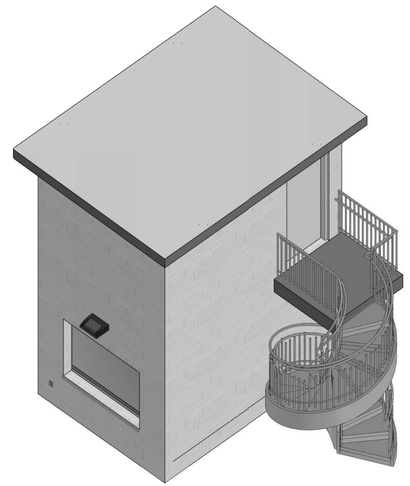

## FIRST FLOOR PLAN - PRESS BOX
1/4" = 1'-0"




## FIRST FLOOR REFLECTED CEILING PLAN - PRESS BOX
1/4" = 1'-0"

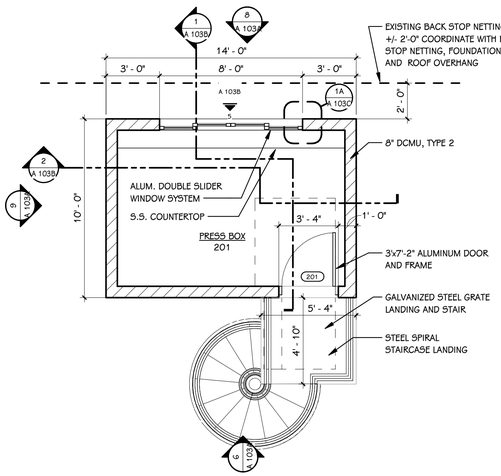



## ROOF PLAN - PRESS BOX
1/4" = 1'-0"

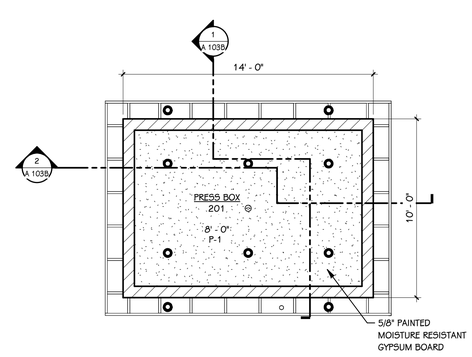


## 3D ISOMETRIC - PRESSBOX

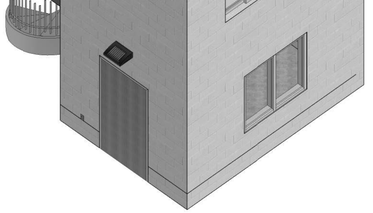
NOTE:
THE PRESSBOX WILL BE BUILD IN TWO LOCATIONS
LOCATION 1 - AT THE NEW BASEBALL FIELD
LOCATION 2 - AT THE EXISTING SOFTBALL FIELD - NOTE THE SOFTBALL FIELD PRESSBOX ORIENTATION WILL BE AS SHOWN ON THE CIVIL DRAWINGS (MIRRORED)



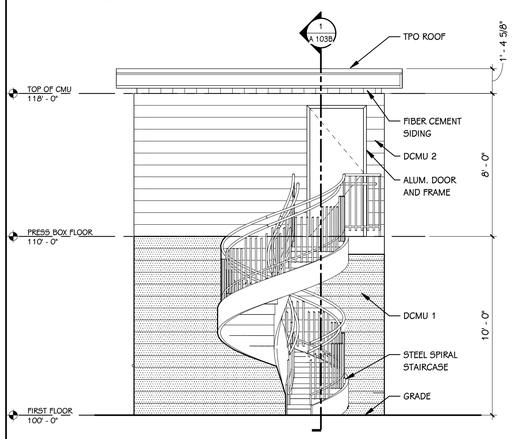

## SECOND FLOOR PLAN - PRESS BOX
1/4" = 1'-0"



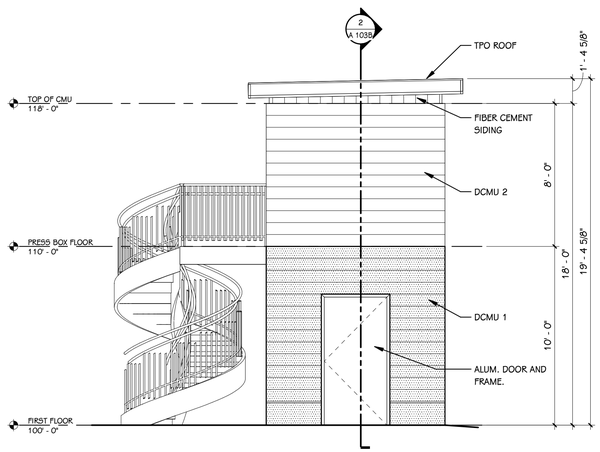

## SECOND FLOOR REFLECTED CEILING PLAN - PRESS BOX
1/4" = 1'-0"



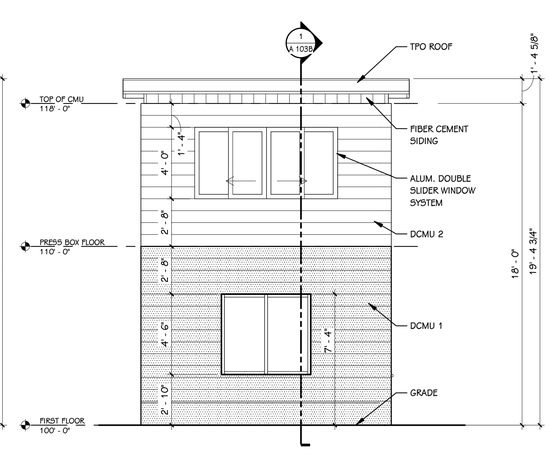
## 3D ISOMETRIC - PRESSBOX



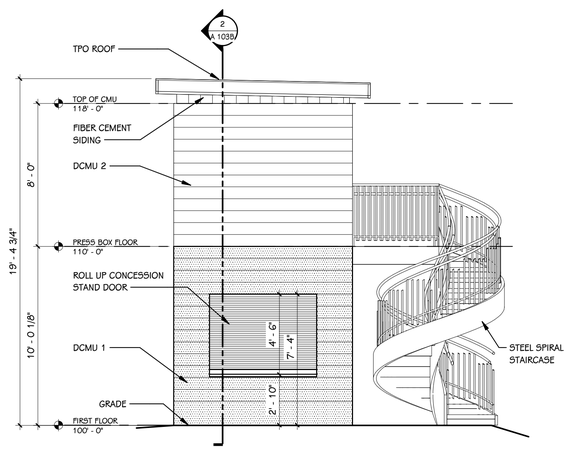

## EXTERIOR ELEVATION - NORTH
1/4" = 1'-0"




## EXTERIOR ELEVATION - WEST
1/4" = 1'-0"




## EXTERIOR ELEVATION - SOUTH
1/4" = 1'-0"




## EXTERIOR ELEVATION - EAST
1/4" = 1'-0"

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| | |
|---|---|
| ADDENDUM #3 | 02-21-2025 |
| ISSUED FOR | DATE |

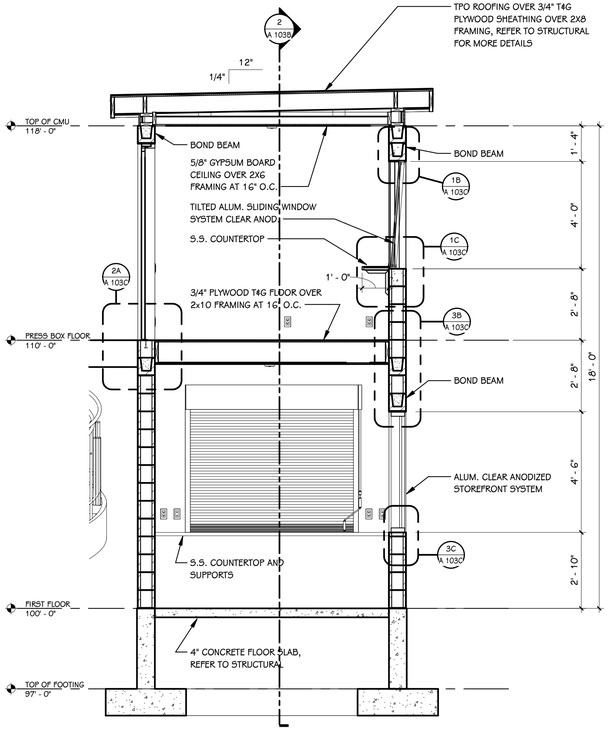
PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

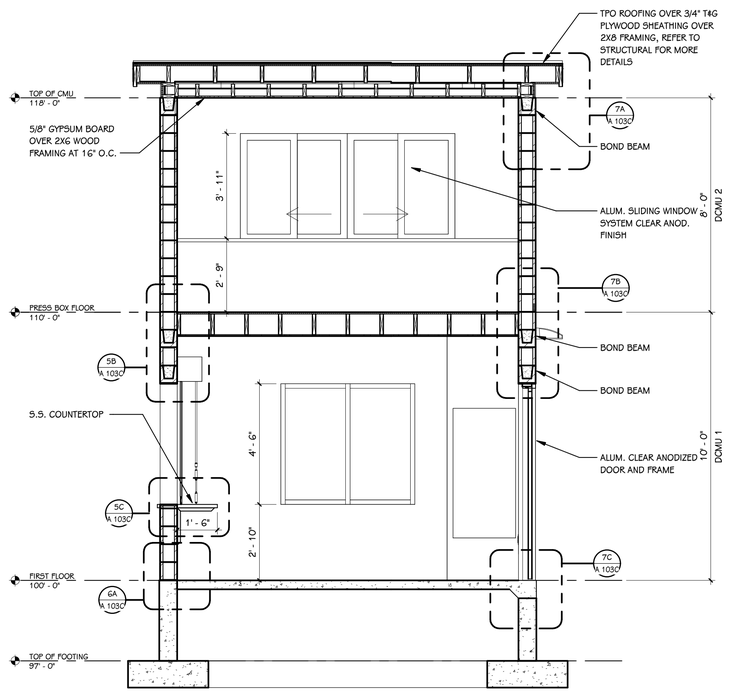
SHEET TITLE
PRESS BOX FLOOR PLANS, REFLECTED CEILING PLANS, AND ROOF PLANS

DATE
JANUARY 24, 2025

SHEET NUMBER
A 103A
23-625.00




1 BUILDING SECTION
A 103B
3/8" = 1'-0"




2 BUILDING SECTION
A 103B
3/8" = 1'-0"

NOTE:
THE PRESSBOX WILL BE BUILD IN TWO LOCATIONS
LOCATION 1 - AT THE NEW BASEBALL FIELD
LOCATION 2 - AT THE EXISTING SOFTBALL FIELD - NOTE THE SOFTBALL FIELD PRESSBOX ORIENTATION WILL BE AS SHOWN ON THE CIVIL DRAWINGS (MIRRORED)

## DOOR SCHEDULE - FIRST FLOOR TOILET ROOM

| NUMBER | | ROOM NAME | FIRE RATING | | DOOR | | | SIZE | | FRAME | | | DETAILS | | | GLASS | ACCESS CONTROLS | | | | | HDWR. SET | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DOOR | ROOM | | DOOR | FRAME | TYPE | MAT | FIN | WIDTH | HEIGHT | ELEV | MAT | FIN | HEAD | JAMB | SILL | | A-PHONE | BARRIER-FREE | CARD READER | ELEC. LOCK HDWR. | MAG HOLD | | |
| 103 | 103 | WOMEN | - | - | L | AL | ANOD | 3' - 0" | 7' - 2" | 1 | AL | ANOD | 4/A101B | 5/A101B | - | - | No | No | No | No | No | 1.0 | - |
| 104 | 104 | MEN | - | - | L | AL | ANOD | 3' - 0" | 7' - 2" | 1 | AL | ANOD | 4/A101B | 5/A101B | - | - | No | No | No | No | No | 1.0 | - |
| 105 | 105 | JANITOR | - | - | L | AL | ANOD | 3' - 0" | 7' - 2" | 1 | AL | ANOD | 4/A101B | 5/A101B | - | - | No | No | No | No | No | 1.0 | - |

## DOOR SCHEDULE - FIRST FLOOR DUGOUT

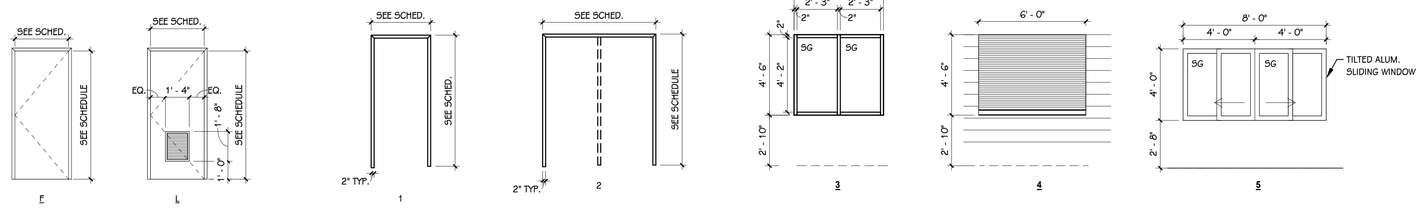
| NUMBER | | ROOM NAME | FIRE RATING | | DOOR | | | SIZE | | FRAME | | | DETAILS | | | GLASS | ACCESS CONTROLS | | | | | HDWR. SET | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DOOR | ROOM | | DOOR | FRAME | TYPE | MAT | FIN | WIDTH | HEIGHT | ELEV | MAT | FIN | HEAD | JAMB | SILL | | A-PHONE | BARRIER-FREE | CARD READER | ELEC. LOCK HDWR. | MAG HOLD | | |
| 102 | 102 | STORAGE | - | - | F | AL | ANOD | 3' - 0" | 7' - 2" | 1 | AL | ANOD | 3/A102B | 4/A102B | - | - | No | No | No | No | No | 2 | - |

## DOOR SCHEDULE - FIRST FLOOR PRESS BOX

| NUMBER | | ROOM NAME | FIRE RATING | | DOOR | | | SIZE | | FRAME | | | DETAILS | | | GLASS | ACCESS CONTROLS | | | | | HDWR. SET | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DOOR | ROOM | | DOOR | FRAME | TYPE | MAT | FIN | WIDTH | HEIGHT | ELEV | MAT | FIN | HEAD | JAMB | SILL | | A-PHONE | BARRIER-FREE | CARD READER | ELEC. LOCK HDWR. | MAG HOLD | | |
| 101A | 101 | STORAGE | NA | NA | F | AL | ANOD | 3' - 6" | 7' - 2" | 1 | AL | ANOD | 7B/A102A | 4A/A102A | 7C/A102A | - | No | No | No | No | No | 1 | - |
| 101B | 101 | STORAGE | NA | NA | OHC | AL | PREFIN | 6' - 0" | 4' - 6" | 4 | AL | PREFIN | 5B/A102A | 5A/A102A | 5C/A102A | - | No | No | No | No | No | - | OVERHEAD COILING DOOR |

## DOOR SCHEDULE - SECOND FLOOR PRESS BOX

| NUMBER | | ROOM NAME | FIRE RATING | | DOOR | | | SIZE | | FRAME | | | DETAILS | | | GLASS | ACCESS CONTROLS | | | | | HDWR. SET | REMARKS |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| DOOR | ROOM | | DOOR | FRAME | TYPE | MAT | FIN | WIDTH | HEIGHT | ELEV | MAT | FIN | HEAD | JAMB | SILL | | A-PHONE | BARRIER-FREE | CARD READER | ELEC. LOCK HDWR. | MAG HOLD | | |
| 201 | 201 | PRESS BOX | - | - | F | AL | ANOD | 3' - 0" | 7' - 2" | 1 | AL | ANOD | 7B/A102A | 4A/A102A | 2A/A102A | - | No | No | No | No | No | 1 | - |




TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


ADDENDUM #3 02-21-2025
ISSUED FOR DATE

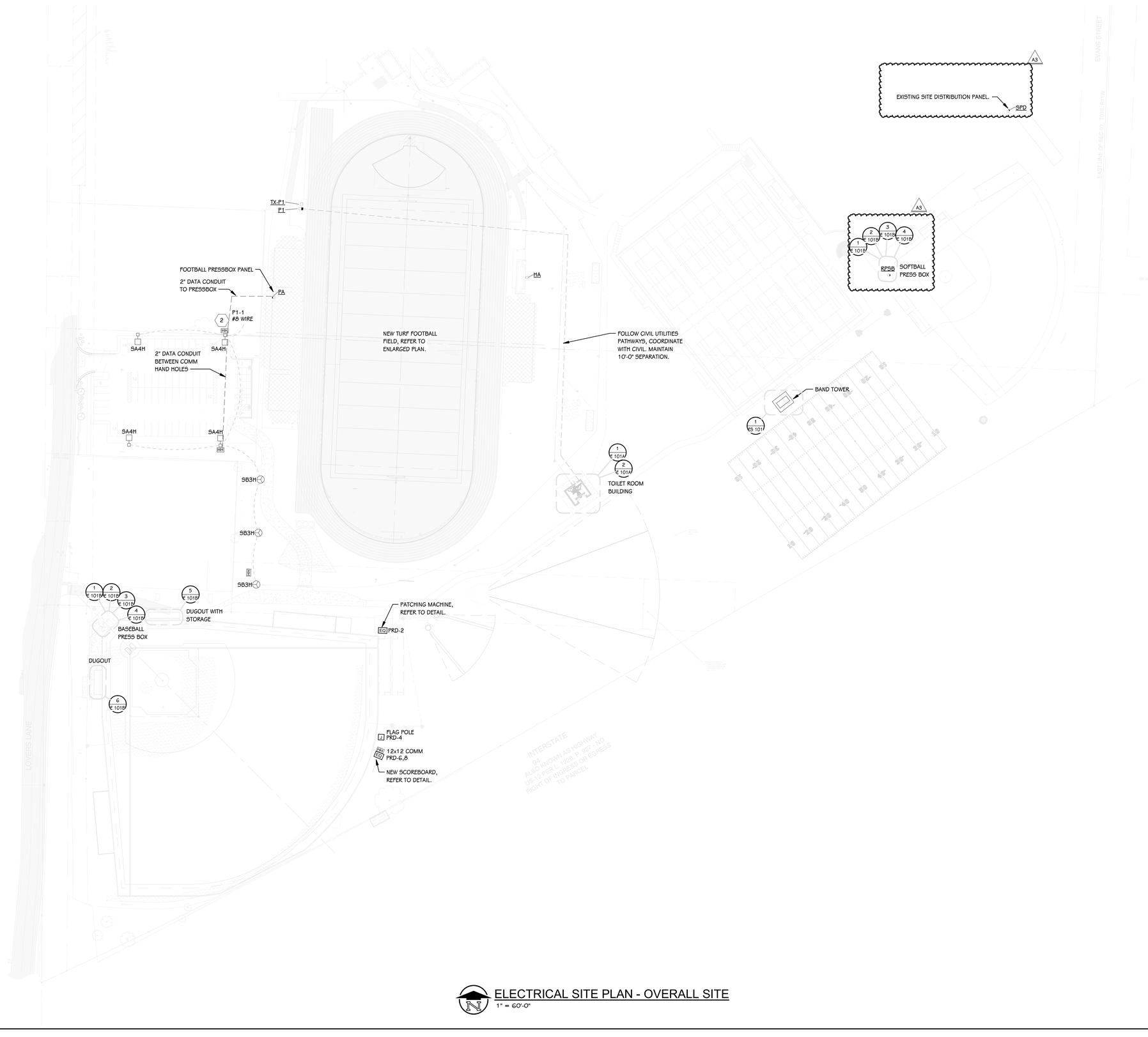
PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

DATE
JANUARY 24, 2025

SHEET TITLE
DOOR SCHEDULE AND DETAILS

SHEET NUMBER
A 103B
23-625.00




ELECTRICAL SITE PLAN - OVERALL SITE
1" = 60'-0"

## ELECTRICAL - SITE - GENERAL NOTES

1 WIRE UPSIZING IS NOTED WHERE APPROPRIATE TO ACCOMMODATE FOR VOLTAGE DROP. WIRE SIZES SHALL BE #10 UNLESS OTHERWISE NOTED.

2 WIRE UPSIZING SHOWN IS ONLY ACCURATE FOR THE WIRING CONFIGURATION SHOWN. CONTRACTOR SHALL ENSURE THAT ALL VOLTAGE DROP REQUIREMENTS ARE MET IF WIRING CONFIGURATION CHANGES.

3 PROVIDE TRENCHING AND DIRECTIONAL BORING AS REQUIRED FOR ALL ELECTRICAL SITE WORK. REFER TO SITE / CIVIL UTILITY PLAN, CALL MISS DIG, AND RADAR SITE PRIOR TO ANY SITE TRENCHING OR DIRECTIONAL BORING.

4 ALL CONDUITS SHALL ENTER/EXIT THE BUILDING BELOW GRADE. CUT AND PATCH AS REQUIRED. NO EXPOSED CONDUIT SHALL BE ALLOWED.

5 ALL CONDUITS FOR COMMUNICATIONS AND FUTURE POWER SHALL HAVE PULL STRING.

6 COORDINATE ALL GROUND BOX LOCATIONS WITH OWNER'S ATHLETIC TEAM PRIOR TO INSTALLATION. COORDINATE ALL LOW VOLTAGE CONDUIT PATHWAYS WITH OWNERS TECHNOLOGY GROUP PRIOR TO INSTALLATION.

7 COORDINATE ALL GROUND BOX LOCATIONS WITH SITE CIVIL TRENCH DRAINS. COORDINATE ALL CONDUIT PATHWAYS WITH SITE CIVIL UNDERDRAIN SYSTEM. ADJUST PATHWAYS, CONDUIT DEPTH, LOCATION OF GROUND BOXES IN FIELD AS REQUIRED. PROVIDE DETAILED AS-BUILT DRAWINGS.

8 CONDUIT ROUTING SHOW IN DIAGRAMMATICAL. MAINTAIN MINIMUM 12" SEPARATION BETWEEN LOW VOLTAGE CONDUIT AND LINE VOLTAGE CONDUITS.

## KEYED NOTES - ELECTRICAL - SITE - CONSTRUCTION

1 REMOVE ELECTRICAL CONNECTION TO EXISTING SCOREBOARD ALONG WITH ALL ASSOCIATED CONDUIT AND WIRE BACK TO SOURCE. RETAIN ANY CODE COMPLIANT CONDUIT ENTERING / EXITING THE ELECTRICAL ROOM.

2 PROVIDE CARLON LOW VOLTAGE BOX IN POLE BASE, REFER TO DETAIL. PROVIDE 10"X10" HAND HOLE AT BASE OF POLE EACH POLE WITH CARLON BOX. PROVIDE 2" CONDUIT FROM HAND HOLD BACK TO PRESSBOX.

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| | |
|---|---|
| ADDENDUM #3 | 02-21-2025 |
| ADDENDUM #1 | 02-07-2025 |

ISSUED FOR DATE

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

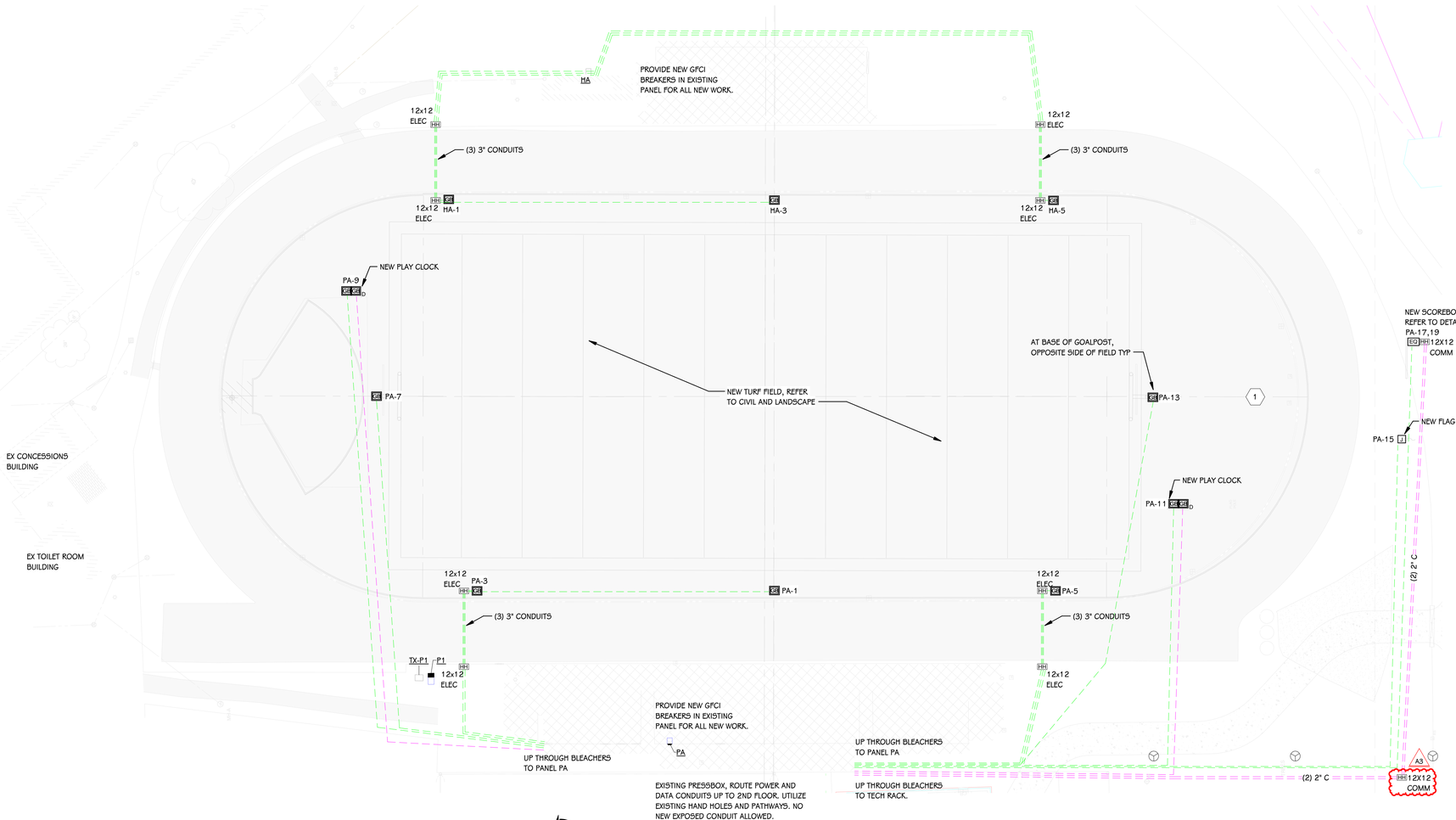
SHEET TITLE
ELECTRICAL SITE PLAN - OVERALL SITE

DATE
JANUARY 24, 2025

SHEET NUMBER
ES100
23-625.00

2" DATA CONDUIT W/ PULL ROPE UNLESS NOTED OTHERWISE.

1" POWER CONDUIT UNLESS NOTED OTHERWISE.




ELECTRICAL SITE PLAN - ENLARGED FOOTBALL FIELD

1" = 30'-0"

## ELECTRICAL - SITE - GENERAL NOTES

1 WIRE UPSIZING IS NOTED WHERE APPROPRIATE TO ACCOMMODATE FOR VOLTAGE DROP. WIRE SIZES SHALL BE #10 UNLESS OTHERWISE NOTED.

2 WIRE UPSIZING SHOWN IS ONLY ACCURATE FOR THE WIRING CONFIGURATION SHOWN. CONTRACTOR SHALL ENSURE THAT ALL VOLTAGE DROP REQUIREMENTS ARE MET IF WIRING CONFIGURATION CHANGES.

3 PROVIDE TRENCHING AND DIRECTIONAL BORING AS REQUIRED FOR ALL ELECTRICAL SITE WORK. REFER TO SITE / CIVIL UTILITY PLAN, CALL MISS DIG, AND RADAR SITE PRIOR TO ANY SITE TRENCHING OR DIRECTIONAL BORING.

4 ALL CONDUITS SHALL ENTER/EXIT THE BUILDING BELOW GRADE. CUT AND PATCH AS REQUIRED. NO EXPOSED CONDUIT SHALL BE ALLOWED.

5 ALL CONDUITS FOR COMMUNICATIONS AND FUTURE POWER SHALL HAVE PULL STRING.

6 COORDINATE ALL GROUND BOX LOCATIONS WITH OWNER'S ATHLETIC TEAM PRIOR TO INSTALLATION. COORDINATE ALL LOW VOLTAGE CONDUIT PATHWAYS WITH OWNERS TECHNOLOGY GROUP PRIOR TO INSTALLATION.

7 COORDINATE ALL GROUND BOX LOCATIONS WITH SITE CIVIL TRENCH DRAINS. COORDINATE ALL CONDUIT PATHWAYS WITH SITE CIVIL UNDERDRAIN SYSTEM. ADJUST PATHWAYS, CONDUIT DEPTH, LOCATION OF GROUND BOXES IN FIELD AS REQUIRED. PROVIDE DETAILED AS-BUILT DRAWINGS.

8 CONDUIT ROUTING SHOW IN DIAGRAMMATICAL. MAINTAIN MINIMUM 12" SEPARATION BETWEEN LOW VOLTAGE CONDUIT AND LINE VOLTAGE CONDUITS.

## KEYED NOTES - ELECTRICAL - SITE - CONSTRUCTION

1 REMOVE ELECTRICAL CONNECTION TO EXISTING SCOREBOARD ALONG WITH ALL ASSOCIATED CONDUIT AND WIRE BACK TO SOURCE. RETAIN ANY CODE COMPLIANT CONDUIT ENTERING / EXITING THE ELECTRICAL ROOM.

2 PROVIDE CARLON LOW VOLTAGE BOX IN POLE BASE, REFER TO DETAIL. PROVIDE 10"X10" HAND HOLE AT BASE OF POLE EACH POLE WITH CARLON BOX. PROVIDE 2" CONDUIT FROM HAND HOLD BACK TO PRESSBOX.

**THIS DRAWING SHEET IS INTENDED TO BE PLOTTED IN COLOR. IF THIS TEXT APPEARS IN BLACK AND WHITE, IT IS PLOTTED INCORRECTLY. DISCARD AND OBTAIN AN ACCURATE DRAWING**


TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM



| | |
|---|---|
| ADDENDUM #3 | 02-21-2025 |
| ADDENDUM #1 | 02-07-2025 |

ISSUED FOR — DATE

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

SHEET TITLE
ELECTRICAL SITE PLAN - ENLARGED FOOTBALL FIELD

DATE
JANUARY 24, 2025

SHEET NUMBER
ES102
23-625.00

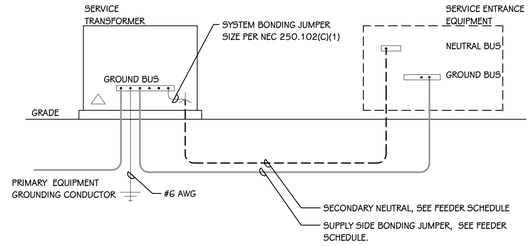
## SITE LIGHT FIXTURE SCHEDULE

| TYPE | DESCRIPTION | MOUNTING | WATTS | MANUFACTURER | NOTES |
|---|---|---|---|---|---|
| 5A4H | AREA SITE LIGHT | 25' ROUND TAPERED AL POLE | 218 VA | LITHONIA #DSX1LED-P8-40K-80CRI-T4M-MVOLT-(MTG)-nLIGHT AIR-(COLOR)-H5<br>OR EQUAL BY CREE EDGE<br>OR EQUAL BY COOPER McGRAW EDISON GALN | 1, 2 |
| 5B3H | AREA PATHWAY LIGHT | 15' ROUND TAPERED AL POLE | 70 VA | BEGA # 84 147-40K-(FINISH)<br>OR EQUAL BY KIM LIGHTING<br>OR EQUAL BY STERNBERG SLG60 | 1, 2 |

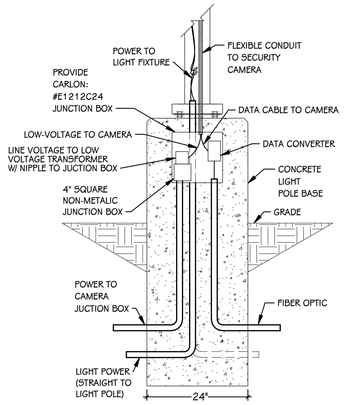
1 ALL LED FIXTURES TO HAVE WARRANTY TO MEET OR EXCEED WARRANTY INCLUDED IN BASIS OF DESIGN. FIXTURES LISTED AS EQUALS SHALL MEET DELIVERED LUMENS, CRI, EFFICACY AND OPTIONS OF THAT SPECIFIED. REFER TO SPECIFICATIONS 265100 AND 265600 FOR ADDITIONAL REQUIREMENTS.

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

NOTE:
ALL GROUNDING CONDUCTORS SHOWN ARE COPPER, ALUMINUM GROUNDING AND BONDING CONDUCTORS ARE NOT ALLOWED.

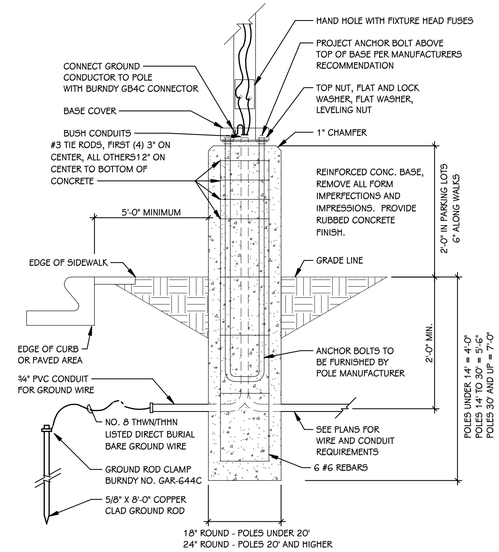



GROUNDING DETAIL - PRIMARY SERVICE
SCALE: NONE

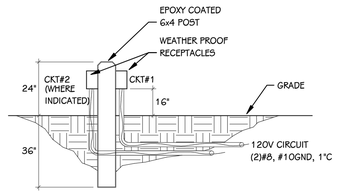



NOTE: REFER TO LIGHTING POLE BASE DETAIL FOR MORE REQUIREMENTS

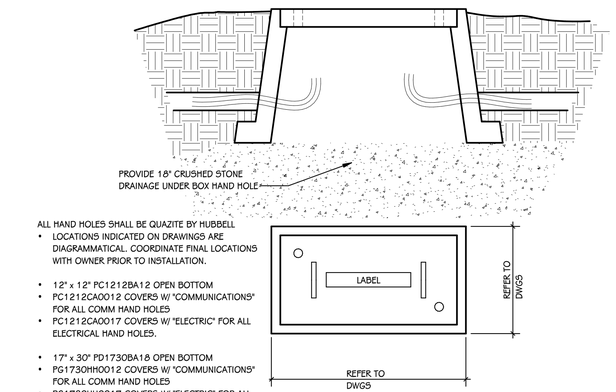
CAMERA JUNCTION BOX IN LIGHT POLE
SCALE: NONE




LIGHTING POLE BASE DETAIL
SCALE: NONE



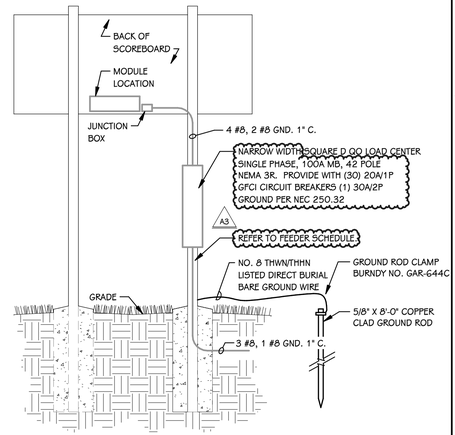

PITCHING MACHINE CONNECTION DETAIL
SCALE: NONE




ALL HAND HOLES SHALL BE QUAZITE BY HUBBELL

- LOCATIONS INDICATED ON DRAWINGS ARE DIAGRAMMATICAL. COORDINATE FINAL LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
- 12" x 12" PC1212BA12 OPEN BOTTOM
- PC1212CA0012 COVERS W/ "COMMUNICATIONS" FOR ALL COMM HAND HOLES
- PC1212CA0017 COVERS W/ "ELECTRIC" FOR ALL ELECTRICAL HAND HOLES.
- 17" x 30" PD1730BA18 OPEN BOTTOM
- PG1730HH0012 COVERS W/ "COMMUNICATIONS" FOR ALL COMM HAND HOLES
- PG1730HH0017 COVERS W/ "ELECTRIC" FOR ALL ELECTRICAL HAND HOLES.

HAND HOLE DETAIL
SCALE: NONE




SCOREBOARD REAR ELEVATION
SCALE: NONE

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| | |
|---|---|
| ADDENDUM #3 | 02-21-2025 |
| ADDENDUM #1 | 02-07-2025 |
| ISSUED FOR | DATE |

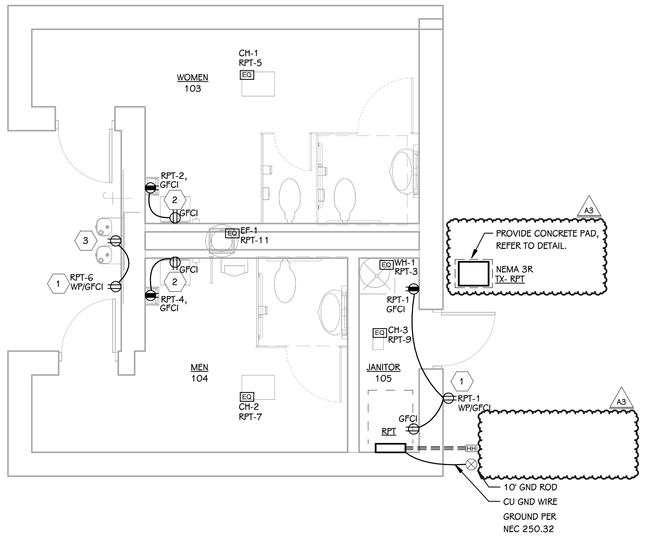
PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

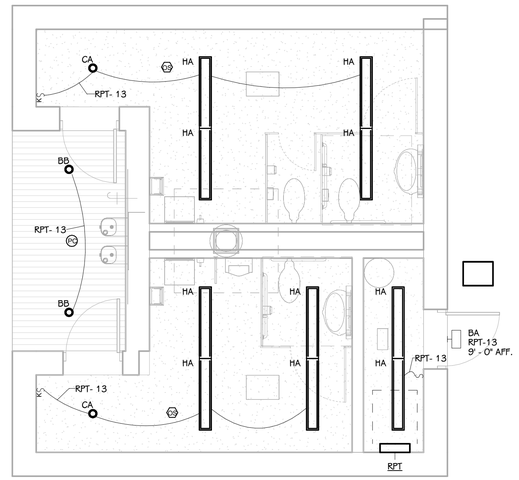
SHEET TITLE
ELECTRICAL SITE DETAILS

DATE
JANUARY 24, 2025

SHEET NUMBER
ES103
23-625.00




1 E 101A TOILET ROOM BUILDING - POWER PLAN
1/4" = 1'-0"




2 E 101A TOILET ROOM BUILDING - LIGHTING PLAN
1/4" = 1'-0"

**KEYED NOTES - ELECTRICAL - POWER**

1 RECESS BACKBOX AND PROVIDE INTERMATIC LOW-PROFILE EXTRA-DUTY PLASTIC IN-USE WEATHERPROOF COVER, SINGLE-GANG MODEL #WP7000X. COLOR TO MATCH PAINT. COORDINATE INSTALLATION WITH MASON. FOR DUGOUT OUTLETS, COORDINATE MOUNTING HEIGHT WITH SEATING PRIOR TO INSTALLATION.

2 CONCEAL SINK SENSOR RECEPTACLES BEHIND LAV SHIELD. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF UNDER SINK RECEPTACLES WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION. FEED FROM LOAD SIDE OF ABOVE COUNTER GFCI RECEPTACLE.

3 FEED RECEPTACLE FROM LOAD SIDE OF ADJACENT GFCI RECEPTACLE.

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


ADDENDUM #3 02-21-2025

ISSUED FOR DATE

PROJECT TITLE
LOY NORRIX HIGH
SCHOOL ATHLETICS
PROJECT

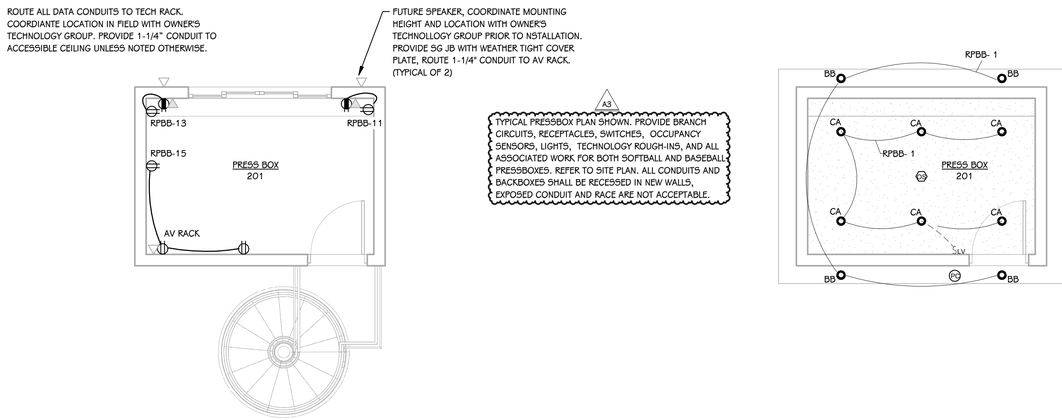
OWNER
KALAMAZOO PUBLIC
SCHOOLS

Kalamazoo, Michigan

SHEET TITLE
ELECTRICAL PLANS - TOILET ROOM
BUILDING

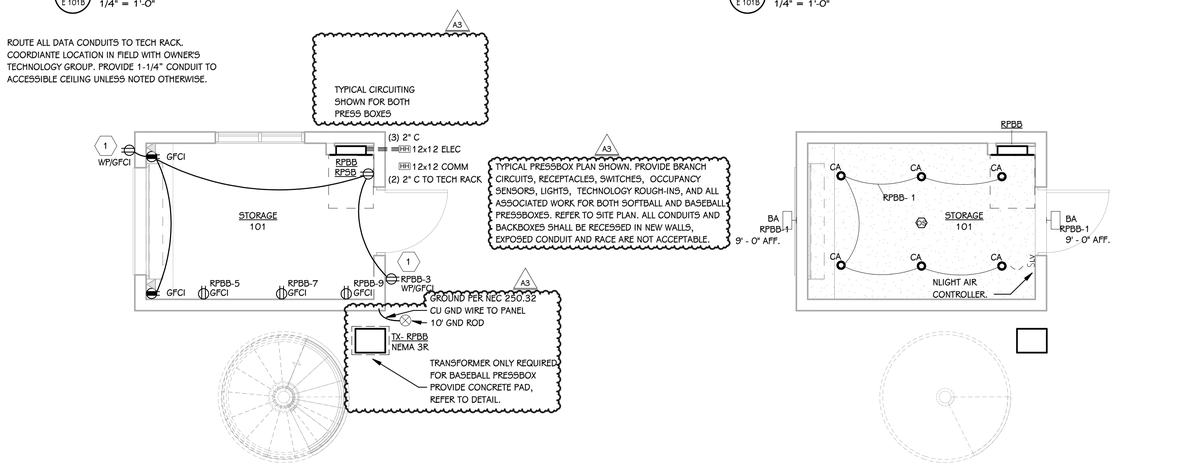
DATE
JANUARY 24, 2025

SHEET NUMBER
E 101A
23-625.00



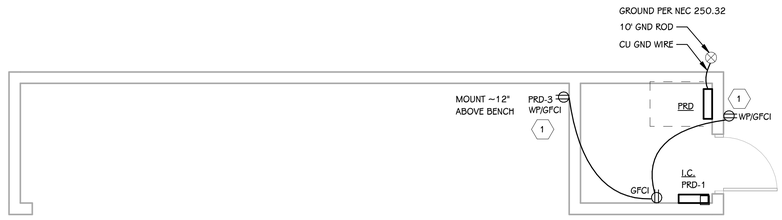

1 / E 101B — PRESS BOX - SECOND FLOOR POWER PLAN
1/4" = 1'-0"

2 / E 101B — PRESS BOX - SECOND FLOOR LIGHTING PLAN
1/4" = 1'-0"




3 / E 101B — PRESS BOX - FIRST FLOOR POWER PLAN
1/4" = 1'-0"

4 / E 101B — PRESS BOX - FIRST FLOOR LIGHTING PLAN
1/4" = 1'-0"




5 / E 101B — DUGOUT POWER PLAN - WITH STORAGE
1/4" = 1'-0"


6 / E 101B — DUGOUT POWER PLAN
1/4" = 1'-0"

## KEYED NOTES - ELECTRICAL - POWER

1 RECESS BACKBOX AND PROVIDE INTERMATIC LOW-PROFILE EXTRA-DUTY PLASTIC IN-USE WEATHERPROOF COVER, SINGLE-GANG MODEL #WP7000X. COLOR TO MATCH PAINT. COORDINATE INSTALLATION WITH MASON. FOR DUGOUT OUTLETS, COORDINATE MOUNTING HEIGHT WITH SEATING PRIOR TO INSTALLATION.

2 CONCEAL SINK SENSOR RECEPTACLES BEHIND LAV SHIELD. COORDINATE EXACT LOCATION AND MOUNTING HEIGHT OF UNDER SINK RECEPTACLES WITH MECHANICAL CONTRACTOR PRIOR TO INSTALLATION. FEED FROM LOAD SIDE OF ABOVE COUNTER GFCI RECEPTACLE.

3 FEED RECEPTACLE FROM LOAD SIDE OF ADJACENT GFCI RECEPTACLE.

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


ADDENDUM #3 02-21-2025

ISSUED FOR DATE

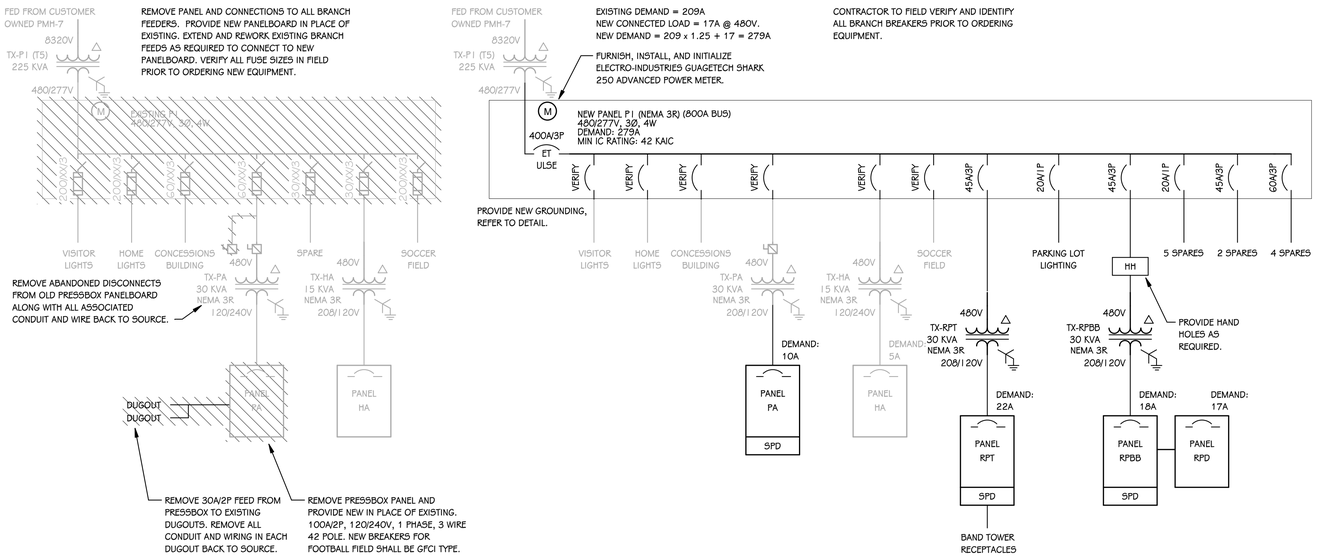
PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

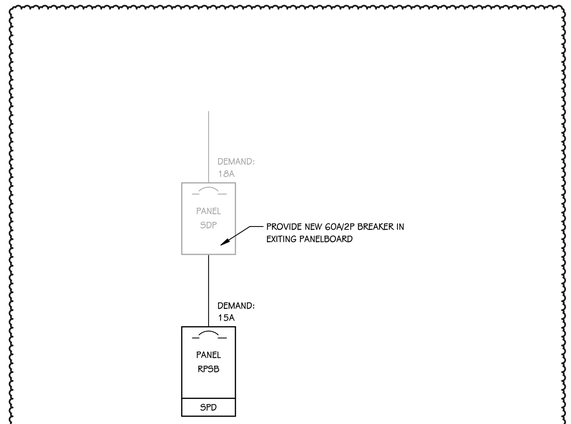
SHEET TITLE
ELECTRICAL PLANS - PRESS BOX BUILDING AND DUGOUTS

DATE
JANUARY 24, 2025

SHEET NUMBER
E 101B
23-625.00




ELECTRICAL ONE-LINE DIAGRAM - FOOTBALL AND BASEBALL




PARTIAL ELECTRICAL ONE-LINE DIAGRAM - SOFTBALL

## ELECTRICAL FEEDER SCHEDULE

| DESCRIPTION | FED FROM | CURRENT (FLA) | BREAKER / POLES | FEEDER # OF SETS | FEEDER WIRE | FEEDER GROUND | FEEDER EMT | FEED VOLT DROP % | NOTES |
|---|---|---|---|---|---|---|---|---|---|
| 480 V | | | | | | | | | |
| TX- RPBB | P1 | 8 A | 45 A / 3 | 1 SET | 3 #1 | #8 GND. | 1 1/2" | 0.14% | 1, 3 |
| TX- RPT | P1 | 11 A | 45 A / 3 | 1 SET | 3 #1 | #8 GND. | 1 1/2" | 0.22% | 1, 3 |
| 208 V | | | | | | | | | |
| RPBB | TX- RPBB | 18 A | 100 A / 3 | 1 SET | 4 #1 | #6 G.E.C. | 2" | 0.61% | 1, 2 |
| RPT | TX- RPT | 25 A | 100 A / 3 | 1 SET | 4 #2/0 | #4 GND. | 2" | 1.60% | 1, 2 |
| 208 V | | | | | | | | | |
| POWER - SCOREBOARD | PRD | 7 A | 40 A / 2 | 1 SET | 3 #6 | #10 GND. | 3/4" | 0.73% | 1, 3 |
| POWER - SCOREBOARD FOOTBALL | PA | 3 A | 100 A / 2 | 1 SET | 3 #2/0 | #6 GND. | 2" | 0.43% | 1, 3 |
| PRD | RPBB | 17 A | 60 A / 2 | 1 SET | 3 #4 | #10 GND. | 1 1/4" | 0.50% | 1, 3 |
| RPSB | SPD | 15 A | 60 A / 2 | 1 SET | 3 #4 | #8 GND. | 1 1/4" | 1.07% | 1, 3 |

A3

ELECTRICAL PANEL FEEDER SCHEDULE NOTES:

1 CONDUIT SIZES BASED ON EMT AND COPPER CONDUCTORS (UNLESS OTHERWISE INDICATED WITH AN "AL" FOR ALUMINUM). UPSIZE AS REQUIRED WHERE PVC OR GALVANIZED IS USED OR REQUIRED PER SPECIFICATIONS.

2 G.E.C. = GROUNDING ELECTRODE CONDUCTOR FOR SEPARATELY DERIVED SYSTEM (PER 9ET, USE EQUIVALENT CMIL AND GEC FROM 250.66)

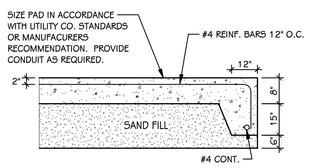
3 GND. = EQUIPMENT GROUNDING CONDUCTOR (E.G.C.)

## LIGHT FIXTURE SCHEDULE

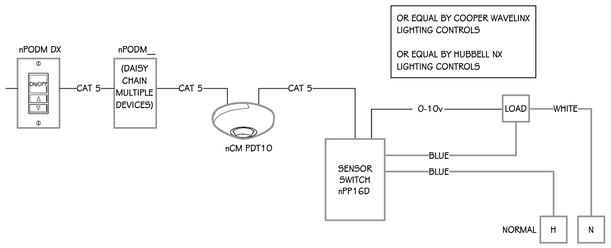
| TYPE | DESCRIPTION | MOUNTING | COLOR TEMP | DRIVER | MANUFACTURER | NOTES |
|---|---|---|---|---|---|---|
| BA | WALL PACK | WALL | 4000K | 0-10V | LITHONIA #DSXW1LED-20C-530-40K-TFTM-MVOLT-(COLOR)<br>OR EQUAL BY CREE EDGE<br>OR EQUAL BY GWS-9A1-C-740-U-T4FT- COLOR (XXX) | 1, 2 |
| BB | 6" DOWNLIGHT | RECESSED | 4000K | 0-10V | KENALL #HADLG-FF-5BR-24L-40K8-W-FW-G-RIGG-DV-DIM1<br>OR EQUAL BY PRESCOLITE<br>OR EQUAL BY ALPHABET LIGHTING | 1, 2 |
| CA | 6" DOWNLIGHT | RECESSED | 4000K | 0-10V | KENALL #HADLG-FF-5BR-24L-40K8-W-FW-G-RIGG-DV-DIM1<br>OR EQUAL BY PRESCOLITE<br>OR EQUAL BY ALPHABET LIGHTING | 1, 2 |
| HA | HIGH ABUSE SURFACE WRAP, 4' - 0" LONG | SURFACE | 4000K | 0-10V | KENALL #MLHA8-48-F-(COLOR)-PP-45L40K-DV-DL-FS-PH<br>OR EQUAL BY NEW STAR<br>OR EQUAL BY FAIL SAFE | 1, 2 |

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

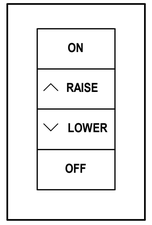
2 THE MOUNTING DESCRIPTION IS GENERAL. REFER TO SHOP DRAWINGS AND MANUFACTURER'S INSTALLATION INSTRUCTIONS FOR SPECIFIC MOUNTING DETAILS.




OUTDOOR TRANSFORMER PAD
SCALE: NONE




OCCUPANCY SENSOR WIRING DIAGRAM
SCALE: NONE




SINGLE ZONE DIMMING CONTROLLER
SCALE: NONE

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| | |
|---|---|
| ADDENDUM #3 | 02-21-2025 |
| ADDENDUM #1 | 02-07-2025 |
| ISSUED FOR | DATE |

PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

SHEET TITLE
ELECTRICAL ONE-LINE DIAGRAM AND DETAILS

DATE
JANUARY 24, 2025

SHEET NUMBER
E 401
23-625.00

## PANELBOARD "PANEL RPT" LOAD SCHEDULE

**PANEL:** RPT | **MOUNTING:** SURFACE | **VOLTAGE:** 208/120V, 3PH, 4W
**LOCATION:** JANITOR 105 / Level 1 | **AMPS:** 100 A MB | **FED FROM:** TX- RPT
**ADDED ACCESSORIES:** SPD | **FEED-THRU LUGS...** | **A.I.C. VALUE:** 18 KAIC

| | CIRCUIT DESCRIPTION | TRIP (A) | POLES | A (VA) | | B (VA) | | C (VA) | | POLES | TRIP (A) | CIRCUIT DESCRIPTION | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | RECEPTACLE - JC, EXTERIOR | 20 | 1 | 540 | 360 | | | | | 1 | 20 | RECEPTACLE - WOMEN'S | 2 |
| 3 | HVAC - WH-1 | 20 | 1 | | | 1500 | 360 | | | 1 | 20 | RECEPTACLE - MEN'S | 4 |
| 5 | HVAC - CH-1 WOMEN'S | 20 | 1 | | | | | 1500 | 360 | 1 | 20 | RECEPTACLE - ELEC WATER COOLER | 6 |
| 7 | HVAC - CH-2, MEN'S | 20 | 1 | 1500 | 540 | | | | | 1 | 20 | RECEPTACLE - BAND TOWER | 8 |
| 9 | HVAC - CH-3, JC | 20 | 1 | | | 1500 | 0 | | | 1 | 20 | SPARE | 10 |
| 11 | HVAC - EF-1 | 20 | 1 | | | | | 250 | 0 | 1 | 20 | SPARE | 12 |
| 13 | LIGHTING - TOILET ROOM BUILDING | 20 | 1 | 552 | 0 | | | | | 1 | 20 | SPARE | 14 |
| 15 | SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | 16 |
| 17 | SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | 18 |
| 19 | SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | 20 |
| 21 | SPARE | 20 | 1 | | | 0 | 0 | | | 1 | 20 | SPARE | 22 |
| 23 | SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | 24 |
| 25 | SURGE PROTECTIVE DEVICE (SPD) | 20 | 3 | 0 | 0 | | | | | 1 | 20 | SPARE | 26 |
| 27 | -- | -- | -- | | | 0 | 0 | | | 1 | 20 | SPARE | 28 |
| 29 | -- | -- | -- | | | | | 0 | 0 | 1 | 20 | SPARE | 30 |
| | **TOTAL LOAD:** | | | 3492 VA | | 3360 VA | | 2110 VA | | | | | |
| | **ADDITIONAL FEED THRU LUGS LOAD (IF APPLICABLE):** | | | 0 VA | | 0 VA | | 0 VA | | | | | |
| | **TOTAL AMPS:** | | | 31 A | | 30 A | | 18 A | | | | | |

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANEL TOTALS | |
|---|---|---|---|---|---|
| HVAC - | 6250 VA | 100.00% | 6250 VA | | |
| LIGHTING - | 552 VA | 100.00% | 552 VA | **TOTAL CONNECTED LOAD:** | 8962 VA |
| RECEPTACLE - | 2160 VA | 100.00% | 2160 VA | **TOTAL ESTIMATED DEMAND:** | 8962 VA |
| | | | | **TOTAL CONNECTED LOAD (A):** | 25 A |
| | | | | **TOTAL ESTIMATED DEMAND...** | 25 A |

**NOTES:**

A3

## PANELBOARD "PANEL RPSB" LOAD SCHEDULE

**PANEL:** RPSB | **MOUNTING:** FLUSH | **VOLTAGE:** 120/208V, 1PH, 3W
**LOCATION:** Level 1 | **AMPS:** 60 A MB | **FED FROM:** SPD
**ADDED ACCESSORIES:** SPD | **FEED-THRU LUGS...** | **A.I.C. VALUE:** 10 KAIC

| | CIRCUIT DESCRIPTION | TRIP (A) | POLES | A (VA) | | B (VA) | | POLES | TRIP (A) | CIRCUIT DESCRIPTION | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LIGHTING - PRESS BOX | 20 | 1 | 294 | 0 | | | 1 | 20 | SPARE | 2 |
| 3 | RECEPTACLE - LOWER LEVEL, COUNTER,... | 20 | 1 | | | 900 | 0 | 1 | 20 | SPARE | 4 |
| 5 | RECEPTACLE - LOWER LEVEL, 1 | 20 | 1 | 180 | 0 | | | 1 | 20 | SPARE | 6 |
| 7 | RECEPTACLE - LOWER LEVEL, 2 | 20 | 1 | | | 180 | 0 | 1 | 20 | SPARE | 8 |
| 9 | RECEPTACLE - LOWER LEVEL, 3 | 20 | 1 | 360 | 0 | | | 1 | 20 | SPARE | 10 |
| 11 | RECEPTACLE - UPPER COUNTER, RIGHT | 20 | 1 | | | 360 | 0 | 1 | 20 | SPARE | 12 |
| 13 | RECEPTACLE - UPPER COUNTER, LEFT | 20 | 1 | 360 | 0 | | | 1 | 20 | SPARE | 14 |
| 15 | RECEPTACLE - UPPER LEVEL | 20 | 1 | | | 540 | 0 | 1 | 20 | SPARE | 16 |
| 17 | SPARE | 20 | 1 | 0 | 0 | | | 1 | 20 | SPARE | 18 |
| 19 | SPARE | 20 | 1 | | | 0 | 0 | 1 | 20 | SPARE | 20 |
| 21 | SPARE | 20 | 1 | 0 | 0 | | | 1 | 20 | SPARE | 22 |
| 23 | SPARE | 20 | 1 | | | 0 | 0 | 1 | 20 | SPARE | 24 |
| 25 | SPARE | 20 | 1 | 0 | 0 | | | 1 | 20 | SPARE | 26 |
| 27 | SURGE PROTECTIVE DEVICE (SDP) | 20 | 2 | | | 0 | 0 | 1 | 20 | SPARE | 28 |
| 29 | -- | -- | -- | 0 | 0 | | | 1 | 20 | SPARE | 30 |
| | **TOTAL LOAD:** | | | 1194 VA | | 1980 VA | | | | | |
| | **ADDITIONAL FEED THRU LUGS LOAD (IF APPLICABLE):** | | | 0 VA | | 0 VA | | | | | |
| | **TOTAL AMPS:** | | | 11 A | | 18 A | | | | | |

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANEL TOTALS | |
|---|---|---|---|---|---|
| Spare | 3174 VA | 100.00% | 3174 VA | | |
| | | | | **TOTAL CONNECTED LOAD:** | 3174 VA |
| | | | | **TOTAL ESTIMATED DEMAND:** | 3174 VA |
| | | | | **TOTAL CONNECTED LOAD (A):** | 15 A |
| | | | | **TOTAL ESTIMATED DEMAND...** | 15 A |

**NOTES:**

## PANELBOARD "PANEL RPBB" LOAD SCHEDULE

**PANEL:** RPBB | **MOUNTING:** FLUSH | **VOLTAGE:** 208/120V, 3PH, 4W
**LOCATION:** STORAGE 101 / Level 1 | **AMPS:** 100 A MB | **FED FROM:** TX- RPBB
**ADDED ACCESSORIES:** SPD | **FEED-THRU LUGS...** | **A.I.C. VALUE:** 10 KAIC

| | CIRCUIT DESCRIPTION | TRIP (A) | POLES | A | | B | | C | | POLES | TRIP (A) | CIRCUIT DESCRIPTION | |
|---|---|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | LIGHTING - PRESS BOX | 20 | 1 | 294 | 0 | | | | | 1 | 20 | SPARE | 2 |
| 3 | RECEPTACLE - LOWER LEVEL, COUNTER,... | 20 | 1 | | | 900 | 0 | | | 1 | 20 | SPARE | 4 |
| 5 | RECEPTACLE - LOWER LEVEL, 1 | 20 | 1 | | | | | 180 | 0 | 1 | 20 | SPARE | 6 |
| 7 | RECEPTACLE - LOWER LEVEL, 2 | 20 | 1 | 180 | 0 | | | | | 1 | 20 | SPARE | 8 |
| 9 | RECEPTACLE - LOWER LEVEL, 3 | 20 | 1 | | | 180 | 0 | | | 1 | 20 | SPARE | 10 |
| 11 | RECEPTACLE - UPPER COUNTER, RIGHT | 20 | 1 | | | | | 360 | 0 | 1 | 20 | SPARE | 12 |
| 13 | RECEPTACLE - UPPER COUNTER, LEFT | 20 | 1 | 360 | 0 | | | | | 1 | 20 | SPARE | 14 |
| 15 | RECEPTACLE - UPPER LEVEL | 20 | 1 | | | 540 | 0 | | | 1 | 20 | SPARE | 16 |
| 17 | SPARE | 20 | 1 | | | | | 0 | 0 | 1 | 20 | SPARE | 18 |
| 19 | SPARE | 20 | 1 | 0 | 0 | | | | | 1 | 20 | SPARE | 20 |
| 21 | PRD | 60 | 2 | | | 1790 | 0 | | | 1 | 20 | SPARE | 22 |
| 23 | -- | -- | -- | | | | | 1790 | 0 | 1 | 20 | SPARE | 24 |
| 25 | SURGE PROTECTIVE DEVICE (SPD) | 30 | 3 | 0 | 0 | | | | | 1 | 20 | SPARE | 26 |
| 27 | -- | -- | -- | | | 0 | 0 | | | 1 | 20 | SPARE | 28 |
| 29 | -- | -- | -- | | | | | 0 | 0 | 1 | 20 | SPARE | 30 |
| | **TOTAL LOAD:** | | | 834 VA | | 3410 VA | | 2330 VA | | | | | |
| | **ADDITIONAL FEED THRU LUGS LOAD (IF APPLICABLE):** | | | 0 VA | | 0 VA | | 0 VA | | | | | |
| | **TOTAL AMPS:** | | | 7 A | | 30 A | | 21 A | | | | | |

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANEL TOTALS | |
|---|---|---|---|---|---|
| LIGHTING - | 294 VA | 100.00% | 294 VA | | |
| POWER - | 2500 VA | 100.00% | 2500 VA | **TOTAL CONNECTED LOAD:** | 6574 VA |
| RECEPTACLE - | 3780 VA | 100.00% | 3780 VA | **TOTAL ESTIMATED DEMAND:** | 6574 VA |
| | | | | **TOTAL CONNECTED LOAD (A):** | 18 A |
| | | | | **TOTAL ESTIMATED DEMAND...** | 18 A |

**NOTES:**

## PANELBOARD "PANEL PRD" LOAD SCHEDULE

**PANEL:** PRD | **MOUNTING:** SURFACE | **VOLTAGE:** 120/208V, 1PH, 3W
**LOCATION:** STORAGE 102 / Level 1 | **AMPS:** 60 A MB | **FED FROM:** RPBB
**ADDED ACCESSORIES:** SPD | **FEED-THRU LUGS...** | **A.I.C. VALUE:** 10 KAIC

| | CIRCUIT DESCRIPTION | TRIP (A) | POLES | B (VA) | | C (VA) | | POLES | TRIP (A) | CIRCUIT DESCRIPTION | |
|---|---|---|---|---|---|---|---|---|---|---|---|
| 1 | POWER - IRRIGATION CONTROLLER | 20 | 1 | 500 | 180 | | | 1 | 20 | RECEPTACLE - PITCHING MACHINE | 2 |
| 3 | RECEPTACLE - DUGOUT & STORAGE RM | 20 | 1 | | | 540 | 500 | 1 | 20 | POWER - FLAG POLE | 4 |
| 5 | RECEPTACLE - DUGOUT | 20 | 1 | 360 | 750 | | | 2 | 40 | POWER - SCOREBOARD | 6 |
| 7 | SPARE | 20 | 1 | | | 0 | 750 | -- | -- | -- | 8 |
| 9 | SPARE | 20 | 1 | 0 | 0 | | | 1 | 20 | SPARE | 10 |
| 11 | SPARE | 20 | 1 | | | 0 | 0 | 1 | 20 | SPARE | 12 |
| | **TOTAL LOAD:** | | | 1790 VA | | 1790 VA | | | | | |
| | **ADDITIONAL FEED THRU LUGS LOAD (IF APPLICABLE):** | | | 0 VA | | 0 VA | | | | | |
| | **TOTAL AMPS:** | | | 17 A | | 17 A | | | | | |

| LOAD CLASSIFICATION | CONNECTED LOAD | DEMAND FACTOR | ESTIMATED DEMAND | PANEL TOTALS | |
|---|---|---|---|---|---|
| POWER - | 2500 VA | 100.00% | 2500 VA | | |
| RECEPTACLE - | 1080 VA | 100.00% | 1080 VA | **TOTAL CONNECTED LOAD:** | 3580 VA |
| | | | | **TOTAL ESTIMATED DEMAND:** | 3580 VA |
| | | | | **TOTAL CONNECTED LOAD (A):** | 17 A |
| | | | | **TOTAL ESTIMATED DEMAND...** | 17 A |

**NOTES:**

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


| ISSUED FOR | DATE |
|---|---|
| ADDENDUM #3 | 02-21-2025 |
| ADDENDUM #1 | 02-07-2025 |

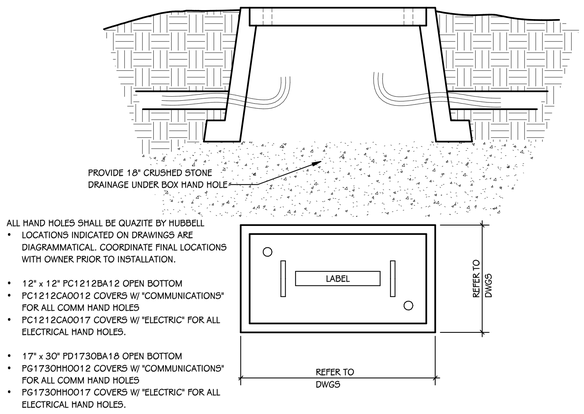
PROJECT TITLE
LOY NORRIX HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

DATE
JANUARY 24, 2025

SHEET TITLE
ELECTRICAL PANEL LOAD SHEETS

SHEET NUMBER
E501
A3
23-625.00

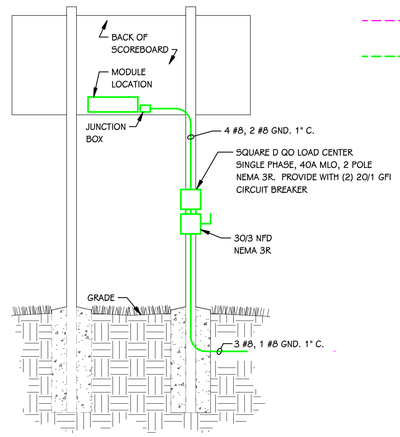



ALL HAND HOLES SHALL BE QUAZITE BY HUBBELL

- LOCATIONS INDICATED ON DRAWINGS ARE DIAGRAMMATICAL. COORDINATE FINAL LOCATIONS WITH OWNER PRIOR TO INSTALLATION.
- 12" x 12" PC1212BA12 OPEN BOTTOM
- PC1212CA0012 COVERS W/ "COMMUNICATIONS" FOR ALL COMM HAND HOLES
- PC1212CA0017 COVERS W/ "ELECTRIC" FOR ALL ELECTRICAL HAND HOLES.
- 17" x 30" PD1730BA18 OPEN BOTTOM
- PG1730HH0012 COVERS W/ "COMMUNICATIONS" FOR ALL COMM HAND HOLES
- PG1730HH0017 COVERS W/ "ELECTRIC" FOR ALL ELECTRICAL HAND HOLES.

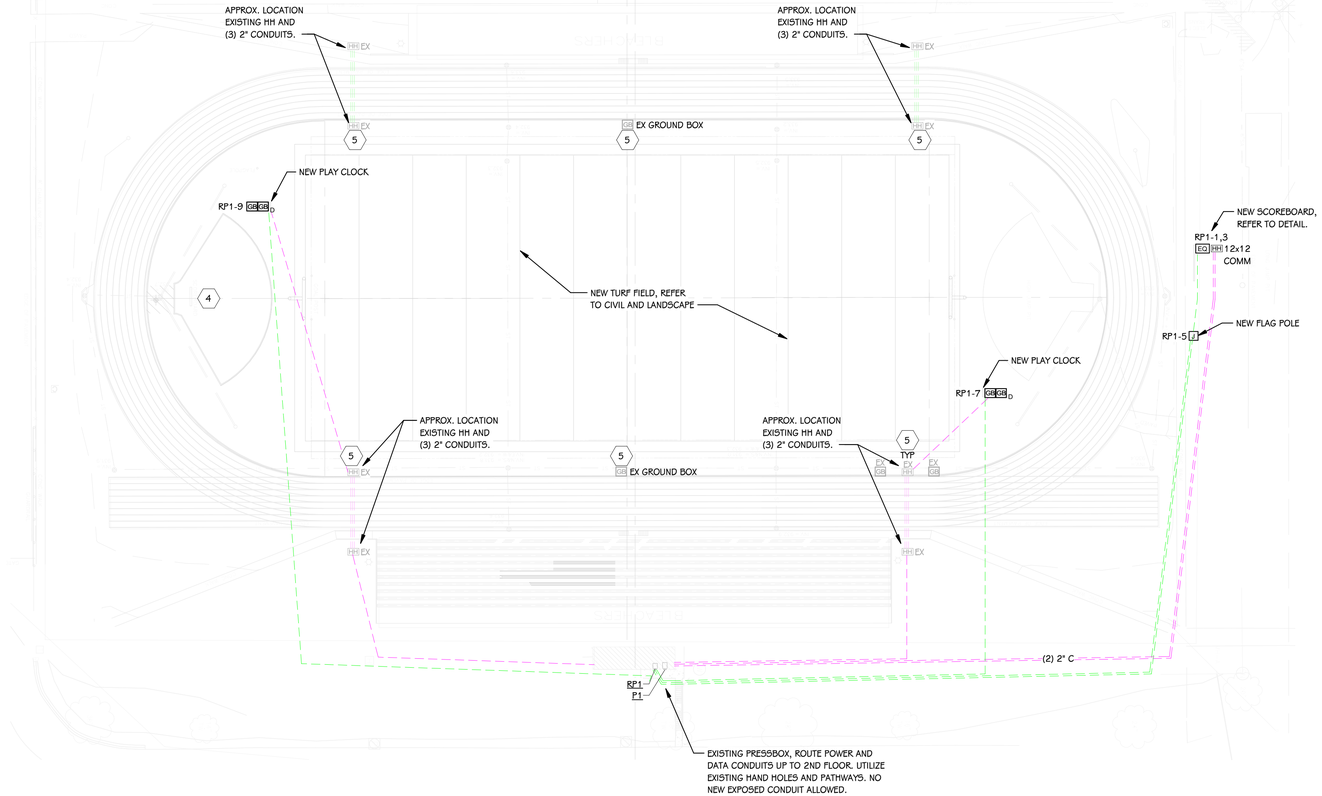
## HAND HOLE DETAIL

SCALE: NONE




## SCOREBOARD REAR ELEVATION

SCALE: NONE




## ELECTRICAL SITE PLAN - FOOTBALL FIELD

1" = 40'-0"

### ELECTRICAL - SITE - GENERAL NOTES

1 WIRE UPSIZING IS NOTED WHERE APPROPRIATE TO ACCOMMODATE FOR VOLTAGE DROP. WIRE SIZES SHALL BE #10 UNLESS OTHERWISE NOTED.

2 WIRE UPSIZING SHOWN IS ONLY ACCURATE FOR THE WIRING CONFIGURATION SHOWN. CONTRACTOR SHALL ENSURE THAT ALL VOLTAGE DROP REQUIREMENTS ARE MET IF WIRING CONFIGURATION CHANGES.

3 PROVIDE TRENCHING AND DIRECTIONAL BORING AS REQUIRED FOR ALL ELECTRICAL SITE WORK. REFER TO SITE / CIVIL UTILITY PLAN, CALL MISS DIG, AND RADAR SITE PRIOR TO ANY SITE TRENCHING OR DIRECTIONAL BORING.

4 ALL CONDUITS SHALL ENTER/EXIT THE BUILDING BELOW GRADE. CUT AND PATCH AS REQUIRED. NO EXPOSED CONDUIT SHALL BE ALLOWED.

5 ALL CONDUITS FOR COMMUNICATIONS AND FUTURE POWER SHALL HAVE PULL STRING.

6 COORDINATE ALL GROUND BOX LOCATIONS WITH OWNER'S athletic TEAM PRIOR TO INSTALLATION. COORDINATE ALL LOW VOLTAGE CONDUIT PATHWAYS WITH OWNERS TECHNOLOGY GROUP PRIOR TO INSTALLATION.

7 COORDINATE ALL GROUND BOX LOCATIONS WITH SITE CIVIL TRENCH DRAINS. COORDINATE ALL CONDUIT PATHWAYS WITH SITE CIVIL UNDERDRAIN SYSTEM. ADJUST PATHWAYS, CONDUIT DEPTH, LOCATION OF GROUND BOXES IN FIELD AS REQUIRED. PROVIDE DETAILED AS-BUILT DRAWINGS.

8 CONDUIT ROUTING SHOW IN DIAGRAMMATICAL. MAINTAIN MINIMUM 12" SEPARATION BETWEEN LOW VOLTAGE CONDUIT AND LINE VOLTAGE CONDUITS.

### ELECTRICAL - SITE - KEYED NOTES

1 FOR EACH PRESS BOX, INTERCEPT EXISTING BANK OF 10 CONDUITS FOR POWER AND SOUND SYSTEM. CUT BACK, REWORK AS REQUIRED, AND EXTEND CONDUITS TO NEW PRESS BOX. PROVIDE ALL NEW WIRING BACK TO PANEL, NO SPLICES OR JUNCTION BOXES SHALL BE ALLOWED BETWEEN PANEL AND PRESS BOX.

2 RECESS BACKBOX AND PROVIDE INTERMATIC LOW-PROFILE EXTRA-DUTY PLASTIC IN-USE WEATHERPROOF COVER, SINGLE-GANG MODEL #WP7000X. COLOR TO MATCH PAINT. COORDINATE INSTALLATION WITH MASON.

3 PROVIDE NEW 20A/1P BREAKER IN EXISTING PANELBOARD. STUB CONDUIT OUT OF BUILDING AT 24" ABOVE GRADE WITH LB, TRENCH OR DIRECTIONALLY BORE TO NEW BAND TOWER LOCATION. INSTALL RECEPTACLES ON BAND TOWER, COORDINATE FINAL LOCATION IN FIELD WITH OWNER PRIOR TO INSTALLATION. REFER TO DETIAL.

4 REMOVE ELECTRICAL CONNECTION TO EXISTING SCOREBOARD ALONG WITH ALL ASSOCIATED CONDUIT AND WIRE BACK TO SOURCE. RETAIN ANY CODE COMPLIANT CONDUIT ENTERING / EXITING THE ELECTRICAL ROOM.

5 REINSTALL EXISTING GROUND BOXES IN NEW TURF FIELD. RAISE TO NEW FIELD ELEVATION; REWORK CONDUIT AS REQUIRED.

1

KALAMAZOO CENTRAL HIGH SCHOOL

NOTE:
THE THIS SHEET IS FOR REFERENCE ONLY AS PART OF THE ADDENDUM ITEM FOR SCOREBOARD EQUIPMENT PURCHASE AND INSTALL ONLY

**THIS DRAWING SHEET IS INTENDED TO BE PLOTTED IN COLOR. IF THIS TEXT APPEARS IN BLACK AND WHITE, IT IS PLOTTED INCORRECTLY. DISCARD AND OBTAIN AN ACCURATE DRAWING**

TowerPinkster
Architecture · Engineering · Interiors
TOWERPINKSTER.COM


ISSUED FOR | DATE

PROJECT TITLE
KALAMAZOO CENTRAL HIGH SCHOOL ATHLETICS PROJECT

OWNER
KALAMAZOO PUBLIC SCHOOLS
Kalamazoo, Michigan

SHEET TITLE
ELECTRICAL SITE PLAN - FOOTBALL FIELD

DATE
DECEMBER 20, 2024

SHEET NUMBER
ES 104
23623.00