



Universal Construction Company, Inc.

1615 Argentine Boulevard | Kansas City, KS 66105 | (913) 342-1150

Kansas City, KS. Public Schools/ USD 500
Wyandotte High School Improvements
Construction Manager's Addendum B
Date Issued: 2/29/2024

This Addendum shall amend any previously issued documents as indicated on this 1 page, and the below list of attachments. Bidders should acknowledge this Addendum on their Bid Form.

Attachments:

- 1) Replace in its entirety the "Owner's Documents – ITB, Instructions, Attachment A, and Attachment B" per the attached consisting of 7 Pages.
- 2) Incite Design Studio's Addendum No. 2 consisting of 20 pages.

CM Clarifications

- 1) All questions and correspondence regarding this Bid should be submitted to the District's Contact as listed in the Owner's Documents – ITB, Instructions, Attachment A, and Attachment B.

Scope of Work Clarifications: Make Revisions to the Scopes of Work as indicated below.

- 1) CM.002400.033 – SOW-033 Cast-In-Place Concrete revise as follows:
 - a) Add Paragraph 6.37 as follows: "Demo of Interior Concrete to accommodate new concrete including but not limited to D4/A1.95, Note D05 on A3/A1.90, Note D03 on C2/A1.92 and associated patching."
- 2) CM.002400.051 – SOW-051 Steel revise as follows:
 - a) Revise Paragraph 6.3 In its entirety as follows: "Provide steel tubes where required".
 - b) Add Paragraph 6.11 as follows: "Provide all stainless-steel handrail as required."
- 3) CM.002400.061 – SOW-061 Interior Demolition and General Trades revise as follows:
 - a) Revise Paragraph 6.10 in its entirety to read as follows: "Rework existing HM Frame to relocate mullions. The frame is preassembled and is required to be cut field welded/repaired to create new openings. If the frame cannot be reworked provide a new frame. Existing glass can be reused if it is able to be but field verify, if not provide new glass. Doors can be reused, but at least one door may need to be procured due to swing change."
 - b) Add Paragraph 6.15 as follows: "Provide stainless steel escutcheons where handrail brackets are removed from CMU Walls to cover holes. Field verify quantity as necessary."
 - c) Add Paragraph 7.5 as follows: "Demo of interior concrete per details D4/A1.95, Note D05 on A3/A1.90, Note D03 on C2/A1.92 is by others."
- 4) CM.002400.099 – SOW-099 Painting
 - a) Add Paragraph 6.4 in its entirety as follows: "Paint the entire frame and all four doors indicated to be reworked." Anticipate the frame will be new. The frame is very tall over 20' field verify height as required.
- 5) CM.002400.310 – SOW-310 Site Demo and Earthwork.
 - a) Add Paragraph 6.37 as follows: "At Front Entrance there is a piece of Granite that may need to be removed/cut flush to align with existing if this is the case this should be included in this Scope of Work. Reference attached pictures and or field verify as necessary."
- 6) CM.002400.321 – SOW-321 Asphalt Paving
 - a) Revise Paragraph 6.7 as follows: Change the word "deduct" to "add"

<End of CM Addendum B>



KANSAS CITY KANSAS PUBLIC SCHOOLS / USD 500

PURCHASING OFFICE | 2010 N. 59TH STREET | ROOM 370 \ KANSAS CITY, KS 66104

WEB SITE: WWW.KCKPS.ORG/PURCHASING

WYANDOTTE HIGH SCHOOL RENOVATIONS

BID No: 24-010

ISSUE DATE:

2/15/2024

Kansas City Kansas Public Schools will receive sealed bids, on this form at the Purchasing Office, 2010 N. 59th Street, Room 370, Kansas City, KS 66104 until **2:00PM, 3/12/2024**, at which time bids received will be publicly opened and read, all in accordance with bid instructions, specifications and/or bid conditions attached hereto or as shown below.

Contact/Technical Contact:

Wayne Correll, 913-279-2270, Wayne.Correll@kckps.org

BID INSTRUCTIONS:

FAXED BIDS WILL NOT BE ACCEPTED / EMAILED BIDS WILL NOT BE ACCEPTED.

Per attached specifications listed in this invitation to bid. Bidders must specify unit price on services/rates/deliverables on the Bid Form or bid may be determined to be non-responsive.

- Pricing shall be FOB Kansas City, KS (All freight and fuel charges must be included in the bid price).
- Award will be to ONE Contractor per each Scope of Work.
- The District reserves the right to reject any or all bids, to waive any informalities, irregularities or technical defects in bids, and unless otherwise specified by the District to accept any item or groups of items in the bid, as may be in the best interest of the District.
- Time (days, weeks, etc.) required for delivery is a significant consideration with respect to this award process. The time required for delivery must be indicated in the space provided or your bid may be found non-responsive and may not be considered.
- Bid shall include copies of pertinent warranty information pertaining to the product or service offered. The bidder agrees that equipment furnished under any resultant purchase order issued by Kansas City Kansas Public Schools shall be covered by commercial warranties the contractor gives to any customer for such supplies. All warranty information and certificates shall be furnished and become the property of the District upon delivery and acceptance of said items and/or the contractor must honor services and all rights and remedies stated in the warranties.
- All items are new manufacture unless otherwise specifically stated in this bid.
- All products must have passed the first line quality standard as set by the manufacturer and no seconds, blemished articles or items having defective workmanship are included.
- Bid may not be considered if a service charge, minimum dollar or minimum quantity order is applied.
- The outcome of this bid will be posted on the District’s Purchasing site www.kckps.org/purchasing under Awards Section and will include a bid tabulation/summary.
- Bidder shall acknowledge all addenda for this bid and include the form acknowledgements with their bid.

SUMMARY OF WORK:

It is the intent of the Kansas City Kansas Public Schools, Kansas City, Kansas to enter into an agreement for Site Improvements and Interior Renovations to Wyandotte High School. KCKPS reserves the right to increase or decrease the approximate amount at each site as needed.

Copies of the bid must be submitted in a sealed envelope with the Wyandotte High School Renovations on the envelope. Any bid form that does not include a separate dollar value for each item will be deemed non-responsive and will not be considered. Any proposal that lists, "\$0", or "no bid" in lieu of a dollar value will be deemed non-responsive and will not be considered.

All work will begin by June 3rd, 2024 and is to be completed prior to August 2nd, 2024.

PRE-BID MEETING

A pre-bid meeting will be held: 2/28/2024 @ 1:00PM

**Wyandotte High School – Meet at NW Corner of East Parking Lot
2501 Minnesota Ave.
Kansas City, Kansas 66102**

Travel to various sites for "walk-thru" will follow the pre-bid meeting. Attendance is recommended, but not mandatory.

Bid Security

Bid Bond: Bid security shall be submitted with each bid in the amount of five percent (5%) of the bid amount. No bids may be withdrawn for a period of sixty (60) days after opening of bids. Owner reserves the right to reject any and all bids and to waive informalities and irregularities.

Payment & Performance Bond: Bidder agrees to furnish a Payment & Performance Bond, in the amount of 100% (one hundred percent) of total contract value after receipt of contract, if the project value exceeds \$100,000 per [KSA 60-1111](#).

Prevailing Wage/Union

Prevailing Wage IS NOT required. There is no union labor requirement for this solicitation.

Time of Completion

Successful bidder shall begin the Work on receipt of the Notice to Proceed and shall complete the Work (Substantial Completion) no later than **August 2nd, 2024**.

Liquidated Damages

Completion of this project before August 2nd, 2024 is imperative. At the District's sole discretion, liquidated damages in the amount of Actual Damages per calendar day will be assessed against the Contract if the project is not completed by the date indicated.

Clean-Up

The Contractor will keep the premises free from accumulations of debris and waste materials caused by its

employees in performance of the work. At completion of the project, Contractor shall remove all crating, packaging, waste and debris from the building and the site, and all tools, scaffolding and surplus materials, and shall leave the building and site "broom clean" or its equivalent.

Permits, Codes and Ordinances

Each Contractor shall file and pay for required permits affecting its work (if applicable). Each contractor shall conform to applicable codes and ordinances, including OSHA requirements.

Damage to District Property

Contractor at its own expense shall promptly remedy and repair all damages or loss to any property caused in whole or part by its employees, subcontractor(s), supplier or anyone directly or indirectly employed by either of them, or by anyone for whose acts either of them may be liable.

No Smoking: The District adheres to the mandatory "No Smoking" policy on school premises and/or at school functions. All bidders shall comply with this "No Smoking" policy.

INCLEMENT WEATHER OR EMERGENCY

IF THERE IS A BUILDING CLOSING THE DAY OF THE OPENING OF PROPOSALS DUE TO INCLEMENT WEATHER OR AN EMERGENCY, THE OPENING OF PROPOSALS WILL OCCUR AT 2:00PM (CENTRAL) THE NEXT BUSINESS DAY THE DISTRICT IS OPEN.

ATTACHMENT A – USD 500 STANDARD TERMS AND CONDITIONS

1. SCOPE: The following terms and conditions shall prevail unless otherwise modified by U.S.D. 500 within this bid document. U.S.D. 500 reserves the right to reject any bid which takes exception to these terms and conditions.
2. DEFINITIONS AS USED HEREIN:
 - a. The term "bid request" means a solicitation of a formal sealed bid.
 - b. The term "bid" means the price offered by the bidder.
 - c. The term "bidder" means the offeror or Contractor.
 - d. The term "U.S.D. 500" means Unified School District No. 500.
 - e. The term "Board of Education" or "BOE" means the governing body of Unified School District No.500
3. COMPLETING BID: Bids must be submitted ONLY on the form provided in this bid document. All information must be legible. Any and all corrections and /or erasures must be initialed. Each bid sheet must be signed by the authorized bidder and required information must be provided.
4. CONFIDENTIALITY OF BID INFORMATION: Each bid must be sealed and submitted in or under cover of the enclosed envelope to provide confidentiality of the bid information prior to the bid opening. Supporting documents and/or descriptive literature may be submitted with the bid or in a separate envelope marked "Literature for Bid (Number)." Do NOT indicate bid prices on literature. All bids and supporting bid documents become public information after the bid opening and are available for inspection by the general public in accordance with the Kansas Open Records Act.
5. ACCURACY OF BID: Each bid is publicly opened and is made part of the public record of U.S.D. 500. Therefore, it is necessary that any and all information presented is accurate and/or will be that by which the bidder will complete the contract. If there is a discrepancy between the unit price and extended total, the unit price will prevail.
6. SUBMISSION OF BID: Bids are to be sealed and submitted to the Purchasing Department Office, 2010 North 59th Street, Room 370, Kansas City, Kansas, 66104, prior to the date and time indicated on the cover sheet.
7. ADDENDA: All changes in connection with this bid will be issued by the Purchasing Office in the form of a written addendum. Signed acknowledgement of receipt of each addendum must be submitted with the bid.
8. LATE BIDS AND MODIFICATION OR WITHDRAWALS: Bids received after the deadline designated in this bid document shall not be considered and shall be returned unopened.
9. BIDS BINDING: All bids submitted shall be binding upon the bidder if accepted by U.S.D. 500 within sixty (60) calendar days after the bid opening.
10. EQUIVALENT BIDS: When brand or trade names are used in the bid invitation, it is for the purpose of item identification and to establish standards for quality, style and features. Bids on equivalent items of substantially the same quality, style and features are invited unless items are marked "No Substitute." Equivalent bids must be accompanied by descriptive literature and/ or samples may be required and shall be supplied at no charge to the school district.
11. NEW MATERIALS, SUPPLIES AND EQUIPMENT: Unless otherwise specified, all materials, supplies or equipment offered by a bidder shall be new, unused, of recent manufacture, first class in every respect, and suitable for their intended purpose. All equipment shall be assembled and fully serviced, ready for operation when delivered.
12. WARRANTY: Supplies or services furnished as a result of this bid shall be covered by the most favorable commercial warranties, expressed or implied, that the bidder and/or manufacturer gives to any customer. The rights and remedies provided herein are in addition to and do not limit any rights afforded to U.S.D. 500 by any other clause of this bid reserves the right to request from bidders a separate manufacturer certification of all statements made in the Proposal.
13. METHOD OF AWARD AND NOTIFICATION: Bids will be analyzed and the award made to the lowest and best, responsive and responsible bidder(s) whose bid conforms to the specifications and whose bid is considered to be the best value in the opinion of U.S.D. 500.
14. U.S.D. 500 reserves the right to reject any or all bids and any part of a bid: to waive informalities, technical defects, and minor irregularities in bids received: and to award the bid on an item by item basis by specified groups of items or to consider bids submitted on an "all or nothing" basis if the bid is clearly designed as such or when it is determined to be in the best interest of U.S.D. 500.
15. The signed bid shall be considered an offer on the part of the bidder: such offer shall be deemed accepted upon the issuance by U.S.D. 500 of a Purchase Order or other contractual document.
16. DELIVERY TERMS: All deliveries shall be F.O.B. Destination and all freight charges shall be included in the bid price.
17. DAMAGED AND/OR LATE SHIPMENTS: U.S.D 500 has no obligation to accept damaged shipments and reserves the right to return at the Contractor's expense damaged merchandise even though the damage was not apparent or discovered until after receipt of the items. The Contractor is responsible to notify U.S.D. 500 Purchasing Office of any late or delayed shipments. U.S.D. 500 reserves the right to cancel all or any part of an order if the shipment is not made as promised.
18. CREDIT TERMS: Bidder shall indicate all discounts for full and/or prompt payment. Discounts shall be considered as a cost factor in the determination of award, except discounts offered for payment within less than ten (10) calendar days. Discounts offered shall be computed from date of receipt of correct invoice or receipt and acceptance of products, whichever is later.
19. SELLER'S INVOICE: Invoices shall be prepared and submitted in duplicate to address shown on the Purchase Order. Invoices shall contain the following information: Purchase Order number, contract number, item number, description of supplies or services, sizes, unit of measure, quantity, unit price and extended totals.
20. TAX EXEMPT: U.S.D. 500 is exempt from Federal, State and local taxes by KS-FZLEKBLQ. Sites of all transactions under the order(s) that shall be derived from this bid request shall be deemed to have been accomplished within the State of Kansas.
21. SAFETY: All practices, materials, supplies and equipment shall comply with the federal Occupational Safety and Health Act, as well as any pertinent Federal, State and/or local safety or environmental codes.
22. DISCLAIMER OR LIABILITY: U.S.D. 500 will not hold harmless or indemnify any bidder for any liability whatsoever.
23. TERMINATION RIGHTS: KCKPS shall have the right to terminate/cancel the Agreement for its convenience and without penalty upon thirty (30) days prior written notice to the Contractor.

24. **HOLD HARMLESS:** The Contractor agrees to protect, defend, indemnify and hold the Board of Education, its officers, employees and agents free and harmless from and against any and all losses, penalties, damages, settlements, costs, charges, professional fees or other expenses or liabilities or every kind and character arising out of or relating to any and all claims, liens, demands, obligations, actions, proceedings or causes of action of every kind and character in connection with or arising directly or indirectly out of this agreement and/or the performance hereof. Without limiting the generality of the foregoing, any and all such claims, etc., relating to personal injury, infringement of any patent trademark, copyright (or application for any thereof) or of any other tangible or intangible personal or property right, or actual or alleged violation of any applicable statute, ordinance, administrative order, rule or regulation, or decree of any court, shall be included in the indemnity hereunder. The Contractor further agrees to investigate, handle, respond to, provide defense for and defend any such claims, etc., at his/her sole expense and agrees to bear all other costs and expenses related thereto, even if such claim is groundless, false or fraudulent.

NO MUTUAL INDEMNIFICATION:

K.S.A.72-8201a: Contracts; indemnification or hold harmless provisions, void.

(a) It is the public policy of the state of Kansas that all contracts entered into by the board of education of a school district, or any officers or employees thereof acting on behalf of the board, provide that the school district and board of education shall be responsible solely for the district's or board's actions or failure to act under a contract.

(b) The board of education of a school district or any officers or employees thereof acting on behalf of the board shall not have the authority to enter into a contract under which the school district or board agrees to, or is required to, indemnify or hold harmless against damages, injury or death resulting from the actions or failure to act on the part of any party to a contract other than the board or district.

(c) The provisions of any contract entered into in violation of this section shall be contrary to the public policy of the state of Kansas and shall be void and unenforceable.

25. **INSURANCE:** Upon receipt of award, Contractor shall provide Certificate of Insurance as required within three (3) days after notification issued by the Purchasing Department.

A. The following general insurance requirements apply to any and all work under this contract by all Contractors and subcontractors of any tier.

- (1) Any and all insurance required by this contract with each and any and all insurance required by this contract shall be maintained during the entire length of this contract, including any extensions thereto, and until all work has been completed to the satisfaction of the Kansas City Kansas Public Schools. Any and all insurance must be on an occurrence basis.
- (2) No Contractor or subcontractor shall commence work under a contract until all insurance requirements contained within the solicitation have been complied with and until evidence of all insurance requirements in each and every contract with each and every subcontractor of any tier and shall require the same to comply with all such requirements.
- (3) The Kansas City Kansas Public Schools shall be covered as an Additional Insured under any and all insurance required by this contract. Confirmation of this shall appear on all certificates of insurance and on any and all applicable policies. The title of the awarded contract shall also appear on any and all applicable policies.
- (4) The Kansas City Kansas Public Schools shall be given no less than thirty (30) days' written notice of cancellation. The Kansas City Kansas Public Schools shall be given not less than thirty (30) days' prior written notice of material changes of any insurance required under this contract. The Kansas City Kansas Public Schools shall be given written notice of renewal of coverage not less than thirty (30) days prior to the expiration of any particular policy.
- (5) Each and every agent shall warrant when signing the certificate of insurance that he is acting as an authorized representative on behalf of the companies affording insurance coverage under the contract and that he is licensed by the State of Kansas to conduct insurance business in the State of Kansas and that the companies affording insurance coverage are currently licensed by the State of Kansas and are currently in good standing with the Commissioner of Insurance for the State of Kansas.
- (6) Any and all companies providing insurance required by this contract shall meet the minimum financial security requirements as set forth below. The rating for each company must be indicated on the certificate of insurance.

For all contracts, regardless of risk, companies providing insurance under this contract must have a current:

- (a) Best's Rating not less than A, and
- (b) Best's Financial Size Category not less than Class VII
- (7) In the event the Contractor neglects, refuses, or fails to provide insurance required by the contract documents, or if such insurance is canceled for any reason, Kansas City Kansas Public Schools shall have the right, but not the duty, to procure the same, and the cost thereof shall be deducted from monies then due or thereafter to become due to the Contractor or Kansas City Kansas Public Schools shall have the right to cancel the contract.

B. **Worker's Compensation and Employer's Liability Insurance**

The Contractor shall procure and maintain Worker's Compensation and Employer's Liability Insurance in the following limits. Such insurance is to cover each and every employee who is or may be engaged in work under this contract.

Worker's Compensation..... Statutory

Employer's Liability

- Bodily Injury by Accident..... \$1,000,000 each accident
- Bodily Injury by Disease..... \$1,000,000 each employee
- Bodily Injury by Disease..... \$1,000,000 policy limit

C. **Comprehensive General Liability Insurance**

The Contractor shall procure and maintain Comprehensive Insurance in an amount not less than \$1,000,000 for bodily injury and property damage combined single limit. The following specific extensions of coverage shall be provided and indicated on the certificate of insurance:

- (1) Comprehensive Form
- (2) Contractual Insurance

- (3) Personal Injury
- (4) Broad Form Property Damage
- (5) Premises – Operations
- (6) Completed Operations

This coverage shall cover the use of all equipment, hoists, and vehicles on the site(s) not covered by Automobile Liability under this contract. Policy coverage must be on an occurrence basis.

D. Automobile Liability Insurance

The Contractor shall procure and maintain Automobile Liability Insurance in an amount not less than \$1,000,000 for bodily injury and property damage combined single limit. The following extensions of coverage shall be provided and indicated on the certificate of insurance.

- (1) Comprehensive Form
- (2) Owned, Hired, Leased and non-owned vehicles

If the Contractor does not own any vehicles in the corporate name, non-owned vehicles coverage shall apply and must be endorsed on either the Contractor's personal automobile policy or the Comprehensive General Liability coverage required under this contract.

E. Commercial Crime insurance (when applicable)

The Contractor shall procure and maintain Commercial Crime/Fidelity insurance in an amount not less than \$1,000,000.00, including coverage for theft or loss of KCKPS property.

- 26. LAW GOVERNING: All contractual agreements shall be subject to, governed by, and construed according to the laws of the State of Kansas.
- 27. ANTI-DISCRIMINATION CLAUSE: No bidder on this request shall in any way, directly or indirectly, discriminate against any person because of age, race, color handicap, sex, national origin, or religious creed.
- 28. BID BOND/PERFORMANCE BOND (Applicable to Construction/Remodel/Repair Projects, Unless Waived by the District)
 - A. Each proposal must be accompanied by a certified or cashier's check, or a bid bond in the amount of five percent (5%) of the Contractor's total bid.
 - B. A Performance Bond and a Material and Labor Payment Bond in amounts equal to one hundred percent (100%) of the contract price shall be furnished by the successful bidder. Bonds shall be issued by a surety acceptable to the Board.
- 29. DISQUALIFICATION:
 - A. The Director of Purchasing may, at her/his sole discretion, disqualify a bidder for one or any combination of the following reasons:
 - 1. Bidder's product does not meet the specifications or bid conditions of the solicitation;
 - 2. Bidder's tendered bid is not received on the District's bid form;
 - 3. Bidder's tendered bid is not signed;
 - 4. Required bid bond is not furnished at time of bid opening;
 - 5. Failure to comply with bid instructions, terms and conditions that are judged to be essential to the competitive process and in the best interests of the District.
 - B. Disqualification of bidders on future bids may be considered for any one or combination of the following reasons:
 - 1. Refusal of the bidder to complete a contract or bid;
 - 2. Bidder's past history of late deliveries or partial/incomplete shipments,
 - 3. Bidder's products or services have proven unreliable, unworkable or have not accomplished the result requested in the District's specifications.
- 30. SUPPLIER DIVERSITY: The Kansas City Kansas Public Schools encourages supplier diversity and participation of MBE/WBE/DBE designated businesses. However, such participation will not result in any selection or scoring advantage in the bid evaluation process.

INCLEMENT WEATHER OR EMERGENCY

IF THERE IS A BUILDING CLOSING THE DAY OF THE OPENING OF PROPOSALS DUE TO INCLEMENT WEATHER OR AN EMERGENCY, THE OPENING OF PROPOSALS WILL OCCUR AT 2:00PM (CENTRAL) THE NEXT BUSINESS DAY THE DISTRICT IS OPEN.

ATTACHMENT B – CONTRACTUAL PROVISIONS ATTACHMENT

Important: This form contains mandatory contract provisions and must be attached to or incorporated in all copies of any contractual agreement. If it is attached to the vendor/contractor's standard contract form, then that form must be altered to contain the following provision:

"The Provisions found in Contractual Provisions Attachment (Form DA-146a, Rev. 06-12), which is attached hereto, are hereby incorporated in this contract and made a part thereof."

The parties agree that the following provisions are hereby incorporated into the contract to which it is attached and made a part thereof, said contract being the date of the Purchase Order issued.

1. **Terms Herein Controlling Provisions:** It is expressly agreed that the terms of each and every provision in this attachment shall prevail and control over the terms of any other conflicting provision in any other document relating to and a part of the contract in which this attachment is incorporated. Any terms that conflict or could be interpreted to conflict with this attachment are nullified.
2. **Kansas Law and Venue:** This contract shall be subject to, governed by, and construed according to the laws of the State of Kansas, and jurisdiction and venue of any suit in connection with this contract shall reside only in courts located in the State of Kansas.
3. **Termination Due to Lack of Funding Appropriation:** If, in the judgment of the Director of Accounts and Reports, Department of Administration, sufficient funds are not appropriated to continue the function performed in this agreement and for the payment of the charges hereunder, State may terminate this agreement at the end of its current fiscal year. State agrees to give written notice of termination to contractor at least thirty (30) days prior to the end of its current fiscal year, and shall give such notice for a greater period prior to the end of such fiscal year as may be provided in this contract, except that such notice shall not be required prior to ninety (90) days before the end of such fiscal year. Contractor shall have the right, at the end of such fiscal year, to take possession of any equipment provided State under the contract. State will pay to the contractor all regular contractual payments incurred through the end of such fiscal year, plus contractual charges incidental to the return of any such equipment. Upon termination of the agreement by State, title to any such equipment shall revert to contractor at the end of the State's current fiscal year. The termination of the contract pursuant to this paragraph shall not cause any penalty to be charged to the agency or the contractor.
4. **Disclaimer of Liability:** No provision of this contract will be given effect that attempts to require the State of Kansas or its agencies to defend, hold harmless, or indemnify any contractor or third party for any acts or omissions. The liability of the State of Kansas is defined under the Kansas Tort Claims Act (K.S.A. 75-6101 et seq.).
5. **Anti-Discrimination Clause:** The contractor agrees: (a) to comply with the Kansas Act Against Discrimination (K.S.A. 44-1001 et seq.) and the Kansas Age Discrimination in Employment Act (K.S.A. 44-1111 et seq.) and the applicable provisions of the Americans With Disabilities Act (42 U.S.C. 12101 et seq.) (ADA) and to not discriminate against any person because of race, religion, color, sex, disability, national origin or ancestry, or age in the admission or access to, or treatment or employment in, its programs or activities; (b) to include in all solicitations or advertisements for employees, the phrase "equal opportunity employer"; (c) to comply with the reporting requirements set out at K.S.A. 44-1031 and K.S.A. 44-1116; (d) to include those provisions in every subcontract or purchase order so that they are binding upon such subcontractor or vendor; (e) that a failure to comply with the reporting requirements of (c) above or if the contractor is found guilty of any violation of such acts by the Kansas Human Rights Commission, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration; (f) if it is determined that the contractor has violated applicable provisions of ADA, such violation shall constitute a breach of contract and the contract may be cancelled, terminated or suspended, in whole or in part, by the contracting state agency or the Kansas Department of Administration.

Contractor agrees to comply with all applicable state and federal anti-discrimination laws.

The provisions of this paragraph number 5 (with the exception of those provisions relating to the ADA) are not applicable to a contractor who employs fewer than four employees during the term of such contract or whose contracts with the contracting State agency cumulatively total \$5,000 or less during the fiscal year of such agency.

6. **Acceptance of Contract:** This contract shall not be considered accepted, approved or otherwise effective until the statutorily required approvals and certifications have been given.
7. **Arbitration, Damages, Warranties:** Notwithstanding any language to the contrary, no interpretation of this contract shall find that the State or its agencies have agreed to binding arbitration, or the payment of damages or penalties. Further, the State of Kansas and its agencies do not agree to pay attorney fees, costs, or late payment charges beyond those available under the Kansas Prompt Payment Act (K.S.A. 75-6403), and no provision will be given effect that attempts to exclude, modify, disclaim or otherwise attempt to limit any damages available to the State of Kansas or its agencies at law, including but not limited to the implied warranties of merchantability and fitness for a particular purpose.
8. **Representative's Authority to Contract:** By signing this contract, the representative of the contractor thereby represents that such person is duly authorized by the contractor to execute this contract on behalf of the contractor and that the contractor agrees to be bound by the provisions thereof.
9. **Responsibility for Taxes:** The State of Kansas and its agencies shall not be responsible for, nor indemnify a contractor for, any federal, state or local taxes which may be imposed or levied upon the subject matter of this contract.
10. **Insurance:** The State of Kansas and its agencies shall not be required to purchase any insurance against loss or damage to property or any other subject matter relating to this contract, nor shall this contract require them to establish a "self-insurance" fund to protect against any such loss or damage. Subject to the provisions of the Kansas Tort Claims Act (K.S.A. 75-6101 et seq.), the contractor shall bear the risk of any loss or damage to any property in which the contractor hold title.
11. **Information:** No provision of this contract shall be construed as limiting the Legislative Division of Post Audit from having access to information pursuant to K.S.A. 46-1101 et seq.
12. **The Eleventh Amendment:** "The Eleventh Amendment is an inherent and incumbent protection with the State of Kansas and need not be reserved, but prudence requires the State to reiterate that nothing related to this contract shall be deemed a waiver of the Eleventh Amendment."
13. **Campaign Contributions / Lobbying:** Funds provided through a grant award or contract shall not be given or received in exchange for the making of a campaign contribution. No part of the funds provided through this contract shall be used to influence or attempt to influence an officer or employee of any State of Kansas agency or a member of the Legislature regarding any pending legislation or the awarding, extension, continuation, renewal, amendment or modification of any government contract, grant, loan, or cooperative agreement.

ADDENDUM No. 2

Project: Wyandotte High School Renovation
Date 02/28/2024
Project Number 24-304

iDS – incite Design Studio, LLC
7200 W. 75th Street
Overland Park, KS 66204
(913) 381-4437

NOTICE TO BIDDERS: Amend the Project Manuals and Drawings to the above referenced project as follows:

DRAWINGS**GENERAL****ITEM NO. 1 - G1.00 – SHEET INDEX**

- a. Add sheet C21
- b. Revise sheet numbers C22-C27.

CIVIL**ITEM NO. 2 - C01 – COVER SHEET**

- a. A new sheet was added to the plan set.
- b. The quantities were updated for the new plans.

ITEM NO. 3 - C04 – DEMOLITION PLAN

- a. The west portion of demolition work was removed from the plans.

ITEM NO. 4 - C06 – UTILITY PLAN

- a. The proposed storm sewer was removed from the plans.
- b. The light poles and bollards on the west side were removed from the plans.

ITEM NO. 5 - C08 – PAVING PLAN

- a. The west side of the parking lot was removed from the plans.
- b. The parking lot no longer has a drive through lane and the parking lot now dead ends.
- c. The western ADA stalls were moved to the east.

ITEM NO. 6 - C11 – GRADING PLAN

- a. The grading was updated for the new parking layout.

ITEM NO. 7 - C13 – EROSION CONTROL PLAN

- a. The erosion control plan was updated for the new parking layout.

ITEM NO. 8 - C19 – RETAINING WALL PLAN & GEN. NOTES – DOCK

- a. A step in the retaining wall footing was added for the RCP.

ITEM NO. 9 - C21 – RETAIN WALL DETAILS 2 – DOCK

- a. Add sheet in its entirety.

ITEM NO. 10 - C22 – 311000 SITE CLEARING

- a. Revise sheet number.

ITEM NO. 11 - C23 – 312000 EARTH MOVING

- a. Revise sheet number.

ITEM NO. 12 - C24 – 321216 ASPHALT PAVING

- a. Revise sheet number

ITEM NO. 13 - C25 – 321313 CONCRETE PAVING

- a. Revise sheet number.

ITEM NO. 14 - C26 – 321373 CONCRETE PAVING JOINT SEALANTS

- a. Revise sheet number.

ITEM NO. 15 - C27 – 334100 STORM UTILITY DRAINAGE PIPING

- a. Revise sheet number.

ITEM NO. 16 - L01 – LANDSCAPE PLAN

- a. The landscaping plan was updated for the new parking layout.

ITEM NO. 17 - E01 – ELECTRICAL LIGHTING PHOTOMETRICS PLAN

- a. Lighting on the west side was removed from the plans.
- b. The photometrics were updated for the new parking lot layout.

ARCHITECTURAL

ITEM NO. 18 - AS1.00 – ARCHITECTURAL SITE PLAN - OVERALL

- a. Remove portion of new parking lot for existing conditions to remain.

*If you have any questions about the release of this addendum, please contact:

Anthony Winkelmann
(913) 381-4437
awinkelmann@incitedesignstudio.com

END OF ADDENDUM NO. 2

WYANDOTTE HIGH SCHOOL RENOVATION

UNIFIED PUBLIC SCHOOL DISTRICT #500

PERMIT SET
1/31/2024

DRAWING INDEX

GENERAL		ARCHITECTURAL	
G1.00	SHEET INDEX	AS1.10	ENTRY RAMP AND DETAILS
G1.01	SYMBOLS & ABBREVIATIONS	AS1.00	ARCHITECTURAL SITE PLAN - OVERALL
G2.00	CODE PLAN	A1.00	LOWER LEVEL FLOOR PLAN - OVERALL
G3.00	SPECIFICATIONS	A1.10	MAIN LEVEL FLOOR PLAN - OVERALL
		A1.90	PAC LIFT AND DETAILS
CIVIL		A1.91	EAST STAIRS AND DETAILS
C01	COVER SHEET	A1.92	GYM RAMP AND DETAILS
C02	EXISTING CONDITIONS PLAN	A1.93	SOUTH STAIRS AND DETAILS
C03	EXISTING CONDITIONS PLAN - DOCK	A1.95	PAC MAIN LEVEL SEATING AND STAGE LIFT
C04	DEMOLITION PLAN	A1.96	PAC BALCONY LEVEL SEATING ENLARGED PLAN
C05	DEMOLITION PLAN - DOCK	A1.97	GYM SEATING
C06	UTILITY PLAN		
C07	UTILITY PLAN - DOCK	ELECTRICAL	
C08	PAVING PLAN	E0.00	ELECTRICAL GENERAL NOTES, SYMBOLS AND SCHEDULES
C09	PAVING PLAN - DOCK	E0.01	ELECTRICAL SHEET SPECIFICATIONS
C10	JOINTING PLAN - DOCK	E0.02	ELECTRICAL SHEET SPECIFICATIONS
C11	GRADING PLAN	E1.00	LOWER LEVEL ELECTRICAL PLAN - OVERALL
C12	GRADING PLAN - DOCK	E1.10	MAIN LEVEL ELECTRICAL PLAN - OVERALL
C13	EROSION CONTROL PLAN	E2.00	LOWER LEVEL ENLARGED POWER PLANS
C14	EROSION CONTROL PLAN - DOCK	E2.10	MAIN LEVEL ENLARGED POWER PLANS
C15	UTILITY DETAILS	E3.00	ELECTRICAL PANEL SCHEDULES
C16	PAVING DETAILS		
C17	EROSION CONTROL DETAILS 1		
C18	EROSION CONTROL DETAILS 2		
C19	RETAINING WALL PLAN & GEN. NOTES - DOCK		
C20	RETAINING WALL DETAILS - DOCKS		
C21	RETAINING WALL DETAILS 2 - DOCK		
C22	311000 SITE CLEARING		
C23	312000 EARTH MOVING		
C24	321216 ASPHALT PAVING		
C25	321313 CONCRETE PAVING		
C26	321373 CONCRETE PAVING JOINT SEALANTS		
C27	334100 STORM UTILITY DRAINAGE PIPING		
L01	LANDSCAPE PLAN		
L02	LANDSCAPE DETAILS & NOTES		
E01	ELECTRICAL LIGHTING PHOTOMETRICS PLAN		

ARCHITECT



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CIVIL ENGINEER



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MEP ENGINEER



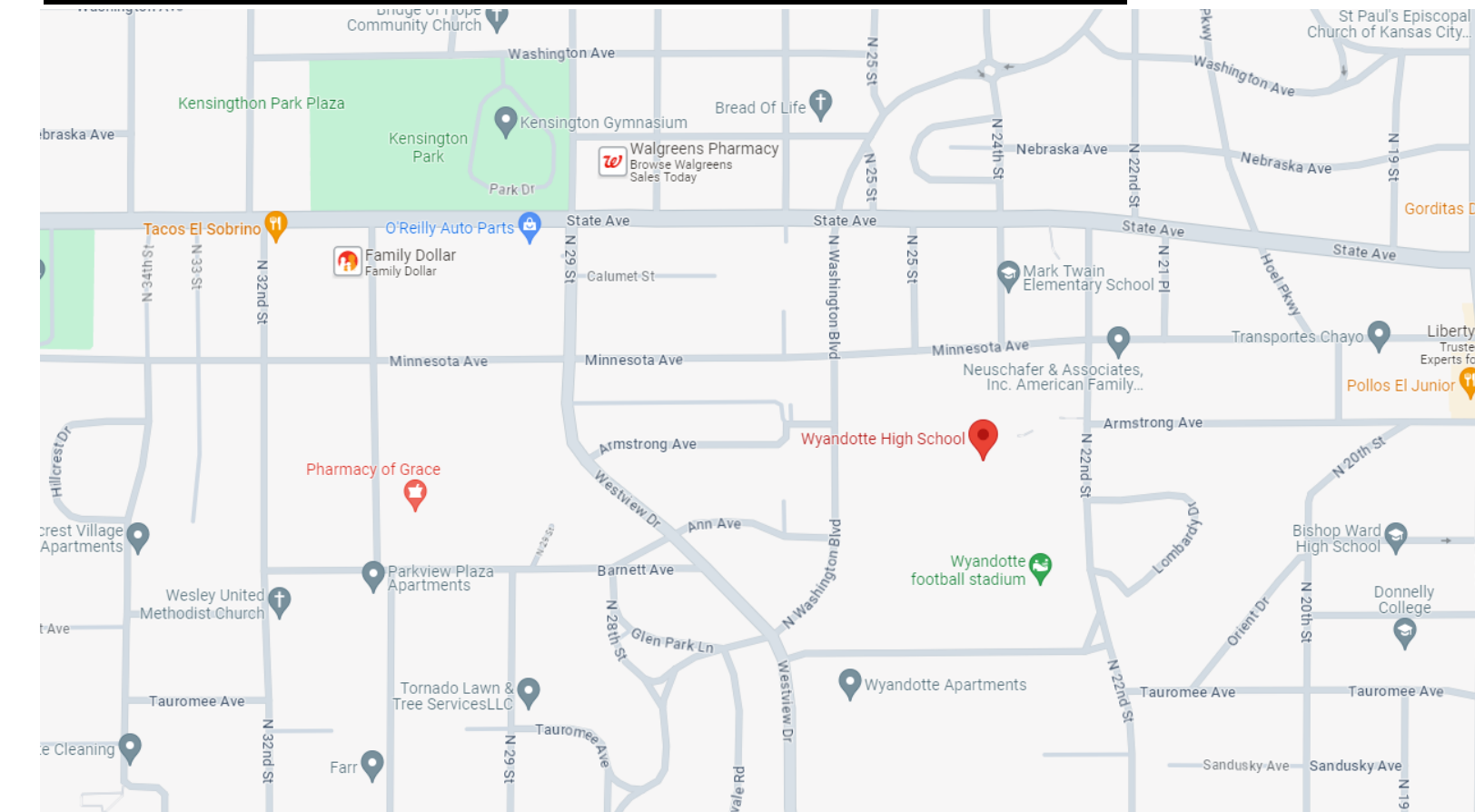
RTM ENGINEERING CONSULTANTS
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CONSTRUCTION MANAGER



UNIVERSAL CONSTRUCTION
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LOCATION: WYANDOTTE HIGH SCHOOL, 2501 MINNESOTA AVE, KANSAS CITY, KS 66102



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Licensed Architect
DUANE CASH



License
KS #7083

Cert. of Authority
A-543
INCITE DESIGN STUDIO, LLC

WYANDOTTE HIGH SCHOOL RENOVATION

2501 MINNESOTA AVENUE
KANSAS CITY, KS

Project Phase

PERMIT SET

Project Number
24-304
Issue Date
1/31/2024

Revision No.	Description	Date Issued
1	ADD #2	02/28/2024

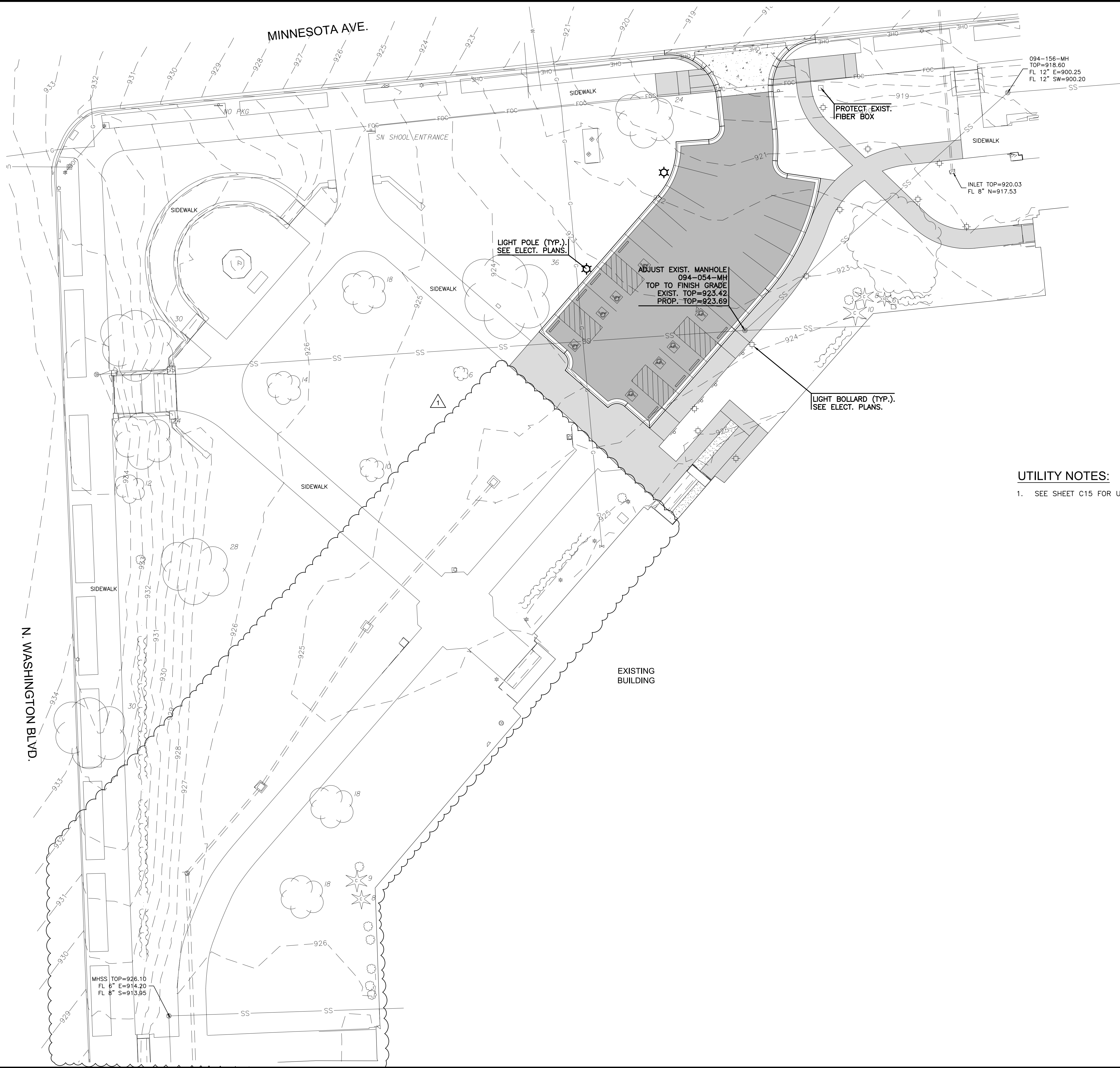
Area Plan

Sheet Name
SHEET INDEX

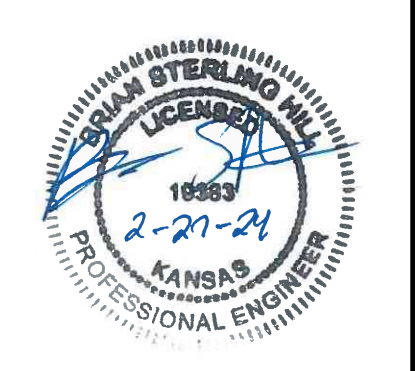
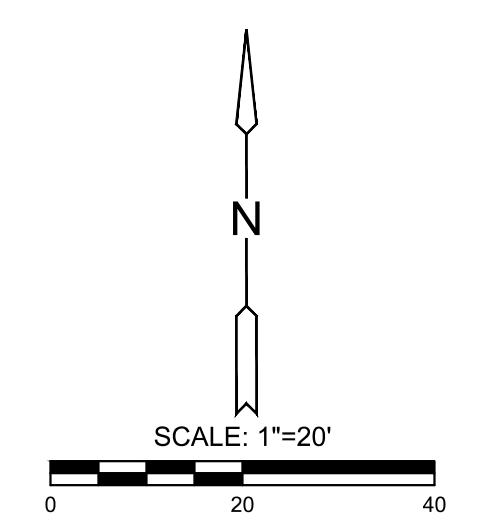
Sheet Number

G1.00

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UTILITY NOTES:
 1. SEE SHEET C15 FOR UTILITY DETAILS.

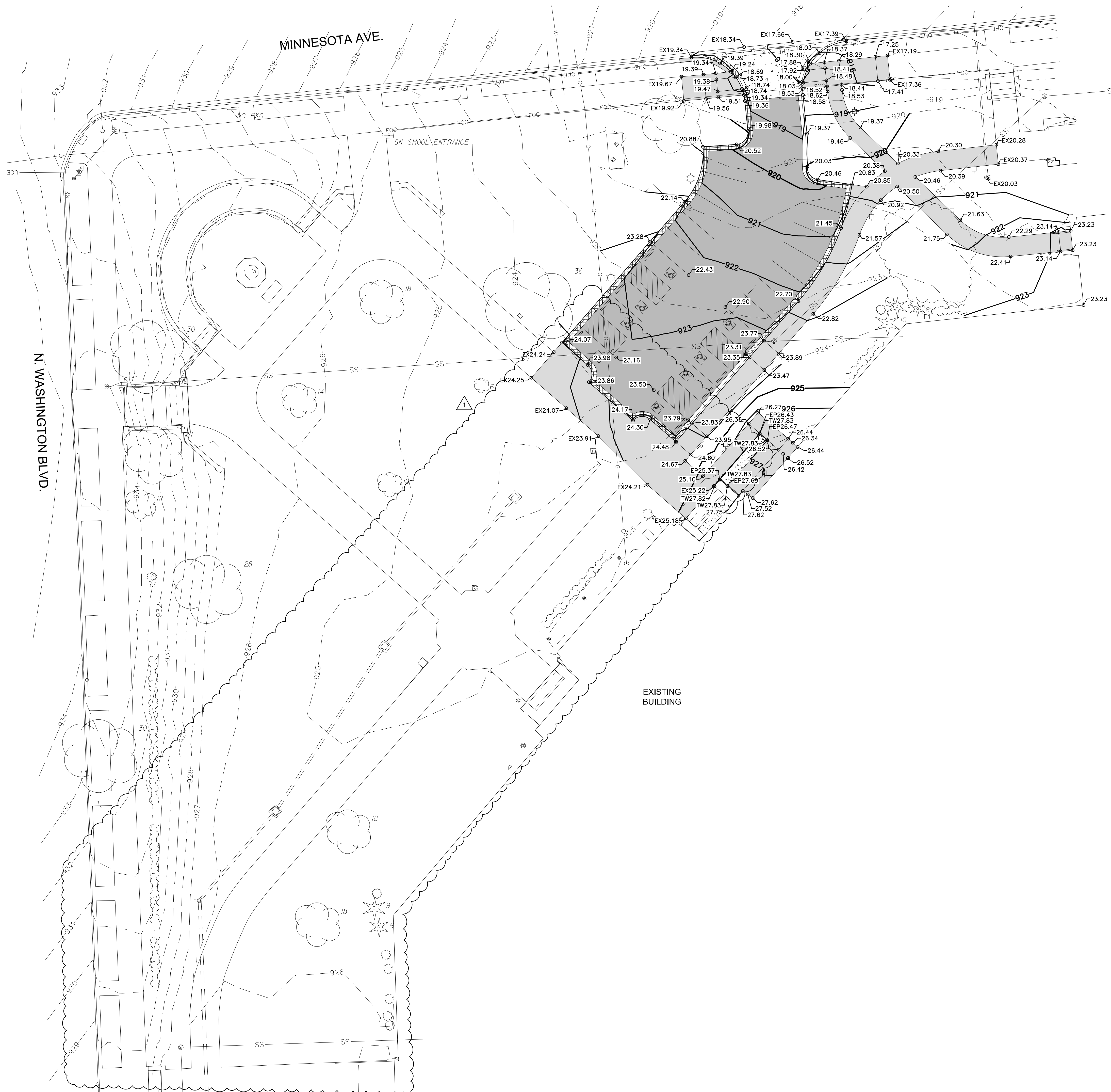


FINAL DEVELOPMENT PLANS/CONSTRUCTION DOCUMENTS FOR
WYANDOTTE HIGH SCHOOL IMPROVEMENTS
 2501 MINNESOTA AVE. KANSAS CITY, KS 66102

UTILITY PLAN		
PROJECT NO.	2202010801	
SCALE	1"=20'	
DRAWN	DESIGNED	CHECKED
SEK	JLB	BSH
NO.	REVISION	DATE
1	ADD #2	02-28-24
	CITY COMMENTS	02-27-24
	CONSTRUCTION DOCUMENTS	01-31-24
	FINAL DEVELOPMENT PLANS	01-26-24
SHEET NO. C06		

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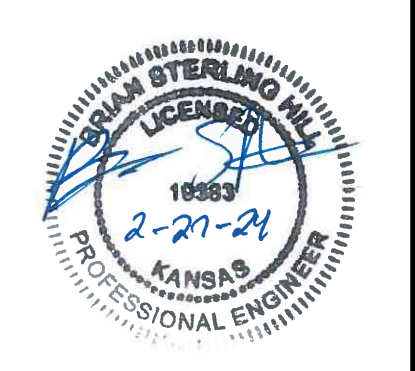


GRADING NOTES:

1. ALL SPOT ELEVATIONS REPRESENT FINISHED GRADE.
2. ALL CURB SPOT ELEVATIONS ARE TOP OF CURB UNLESS OTHERWISE NOTED.
3. SATISFACTORY SOIL AND FILL MATERIAL SHALL BE PROVIDED PER THE GEOTECHNICAL REPORT. SEE GEOTECHNICAL REPORT FOR MAXIMUM FILL LIFT THICKNESS.
4. CLEAR AND GRUB IMPROVEMENT AREA. REMOVE ALL ORGANIC AND TOPSOIL MATERIAL REGARDLESS OF SIZE AND DEPTH. ALL CLEARED AND EXCESS MATERIAL SHALL BECOME CONTRACTORS PROPERTY AND SHALL BE REMOVED FROM THE PROJECT SITE.
5. THE CONTRACTOR SHALL BE RESPONSIBLE TO DETERMINE EARTHWORK QUANTITIES. ALL IMPORT AND EXPORT OF SOIL MATERIAL SHALL BE THE RESPONSIBILITY OF THE CONTRACTOR AT HIS EXPENSE.
6. NOTIFY TESTING AGENCY WHEN EXCAVATIONS HAVE REACHED REQUIRED SUBGRADE. SUBGRADE SHALL BE PREPARED AND COMPACTED PER THE GEOTECHNICAL REPORT.
7. IF GEOTECHNICAL ENGINEER DETERMINES THAT UNSATISFACTORY SOIL IS PRESENT, CONTINUE EXCAVATION AND REPLACE WITH COMPACTED BACKFILL OR FILL MATERIAL AS DIRECTED.
8. SEE EARTH WORK SPECIFICATIONS FOR COMPACTION & PROOF-ROLLING REQUIREMENTS.
9. RECONSTRUCT SUBGRADES DAMAGED BY FREEZING TEMPERATURE, FROST, RAIN, ACCUMULATED WATER, OR CONSTRUCTION ACTIVITIES, WITHOUT ADDITIONAL COMPENSATION.
10. COMPACTED SUBGRADE AND AGGREGATE BASE UNDER PAVEMENTS SHALL EXTEND A MINIMUM OF 2' BEYOND THE EDGE OF PAVEMENT OR BACK OF CURB, WHICHEVER IS APPLICABLE.
11. ALL EXCESS SOIL AND WASTE MATERIAL SHALL BECOME THE CONTRACTORS PROPERTY AND SHALL BE REMOVED FROM THE SITE.

GRADING LEGEND

- 925** — PROPOSED MAJOR CONTOUR
- 926** — PROPOSED MINOR CONTOUR
- 00.00** — FINISH GRADE
- EX00.00** — EXISTING ELEVATION
- EP00.00** — EDGE OF PAVEMENT
- TW00.00** — TOP OF CAPSTONE ELEVATION



**FINAL DEVELOPMENT PLANS/CONSTRUCTION DOCUMENTS FOR
 WYANDOTTE HIGH SCHOOL IMPROVEMENTS**
 2501 MINNESOTA AVE. KANSAS CITY, KS 66102

GRADING PLAN		
PROJECT NO.	2202010801	
SCALE	1"=20'	
DRAWN	DESIGNED	CHECKED
SEK	JLB	BSH
NO.	REVISION	DATE
1	ADD #2	02-28-24
	CITY COMMENTS	02-27-24
	CONSTRUCTION DOCUMENTS	01-31-24
	FINAL DEVELOPMENT PLANS	01-26-24
SHEET NO. C11		

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EROSION CONTROL PLAN

PROJECT NO. 2202010801

SCALE 1"=20'

DRAWN: SEK DESIGNED: JLB CHECKED: BSH

NO.	REVISION	DATE
1	ADD #2	02-28-24
	CITY COMMENTS	02-27-24
	CONSTRUCTION DOCUMENTS	01-31-24
	FINAL DEVELOPMENT PLANS	01-26-24

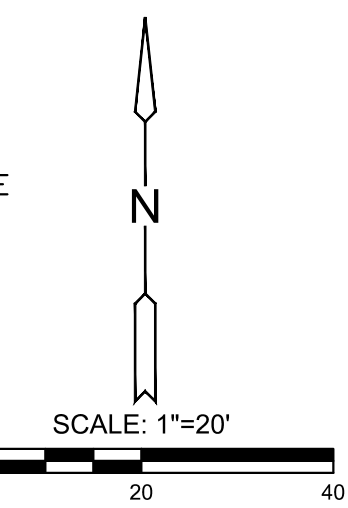
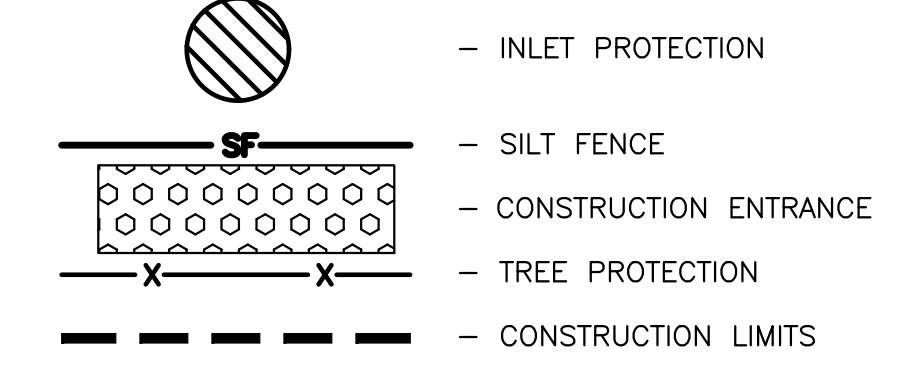
SHEET NO. C13



EROSION CONTROL NOTES:

- ALL WORK IN PUBLIC EASEMENTS AND RIGHT-OF-WAY AND ALL EROSION CONTROL WORK MUST COMPLY WITH THE LATEST EDITION OF THE TECHNICAL PROVISIONS & STANDARD DRAWINGS FOR ROADS AND SEWERS OF THE UNITED GOVERNMENT OF WYANDOTTE COUNTY/KANSAS CITY, KANSAS (THE UG). IF ANY OF THE GENERAL NOTES CONFLICT WITH THE TECHNICAL PROVISIONS AND STANDARD DRAWINGS FOR ROADS AND SEWERS OF THE UG, THE UG'S STANDARDS SHALL OVERRIDE.
- THE CONTRACTOR SHALL SEED, MULCH, OR OTHERWISE STABILIZE ANY DISTURBED AREA WHERE THE LAND DISTURBANCE ACTIVITY HAS CEASED FOR MORE THAN 14 DAYS. INITIAL STABILIZATION ACTIVITIES SHALL BE COMPLETED WITHIN 14 DAYS AFTER SOIL DISTURBING ACTIVITIES HAVE CEASED. ALL SEEDING ACTIVITY SHALL INCLUDE MULCHING OR EQUIVALENT SOIL STABILIZING BMP MEASURE OF THE DISTURBED AREA. THE CONTRACTOR SHALL PERFORM INSPECTIONS OF EROSION AND SEDIMENT CONTROL MEASURES AT LEAST ONCE PER WEEK AND WHENEVER A RAINFALL TOTAL OF 0.5 INCHES OR GREATER IS OBSERVED BASED ON A SINGLE MONITORING EVENT; OR BASED ON THE CUMULATIVE TOTAL OF TWO CONSECUTIVE MONITORING EVENTS WHEN THE RAINFALL TOTAL OF THE FIRST MONITORING EVENT IS LESS THAN 0.5 INCHES. THE CONTRACTOR SHALL MAINTAIN AN INSPECTION LOG INCLUDING THE INSPECTOR'S NAME, DATE OF INSPECTION, OBSERVATIONS AS TO THE EFFECTIVENESS OF THE EROSION AND SEDIMENT CONTROL MEASURES, ACTIONS NECESSARY TO CORRECT DEFICIENCIES WHEN DEFICIENCIES ARE CORRECTED, AND THE SIGNATURE OF THE PERSON PERFORMING THE INSPECTION. CONTRACTOR SHALL ADD EROSION CONTROL MEASURES AS NECESSARY TO CONTROL SEDIMENT RUNOFF FROM THE SITE, ADDITIONAL MEASURES SHALL BE AT THE CONTRACTORS EXPENSE.
- CONTRACTOR TO HAVE A COPY OF THE STORM WATER POLLUTION PREVENTION PLAN (SWPPP) ON SITE AT ALL TIMES. INSPECTION LOGS AND ANY CHANGES TO EROSION CONTROL MEASURES SHALL BE ADDED TO THE SWPPP.
- CONCRETE WASH OR RINSE WATER FROM CONCRETE MIXING EQUIPMENT, TOOLS AND/OR READY-MIX TRUCKS, TOOLS, ETC. MAY NOT BE DISCHARGED INTO OR BE ALLOWED TO RUN DIRECTLY INTO ANY EXISTING WATER BODY OR STORM INLET. ONE OR MORE LOCATIONS FOR CONCRETE WASH OUT WILL BE DESIGNATED ON SITE, SUCH THAT DISCHARGES DURING CONCRETE WASHOUT WILL BE CONTAINED IN A SMALL AREA WHERE WASTE CONCRETE CAN SOLIDIFY IN PLACE AND EXCESS WATER EVAPORATED OR INFILTRATED INTO THE GROUND.
- CHEMICALS OR MATERIALS CAPABLE OF CAUSING POLLUTION MAY ONLY BE STORED ONSITE IN THEIR ORIGINAL CONTAINER. MATERIALS STORED OUTSIDE MUST BE IN CLOSED AND SEALED WATER-PROOF CONTAINERS AND LOCATED OUTSIDE OF DRAINAGE WAYS OR AREAS SUBJECT TO FLOODING. LOCKS AND OTHER MEANS TO PREVENT OR REDUCE VANDALISM SHALL BE USED. SPILLS WILL BE REPORTED AS REQUIRED BY LAW AND IMMEDIATE ACTIONS TAKEN TO CONTAIN THEM.
- SEE SHEETS C17-C18 FOR EROSION CONTROL DETAILS.
- CONTRACTOR TO KEEP ALL SEDIMENT FROM EXISTING OR PROPOSED PAVEMENT.
- CONTRACTOR SHALL PROVIDE DUST CONTROL DURING CONSTRUCTION ACTIVITIES.
- CONTRACTOR TO COMPLY WITH ALL APPLICABLE REQUIREMENTS OF CITY, STATE, AND FEDERAL REGULATIONS FOR EROSION CONTROL.
- ALL DISTURBED AREAS SHALL BE SODDED UPON COMPLETION OF PROJECT. REFER TO FESCUE TURF NOTES ON SHEET L02 FOR INSTALLATION INSTRUCTIONS.
- GOOD HOUSEKEEPING, INCLUDING SPILL RESPONSE SHALL BE PERFORMED IN ACCORDANCE WITH THE KANSAS CITY CHAPTER OF THE AMERICAN PUBLIC WORKS ASSOCIATION STANDARD SPECIFICATIONS, SECTION 2150.
- THE CONTRACTOR SHALL INSTALL EROSION CONTROL DEVICES PRIOR TO STARTING ANY CONSTRUCTION ACTIVITY.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR PROVIDING ADDITIONAL EROSION CONTROL MEASURES OR MODIFICATIONS IF THE PLAN FAIL OR SUBSTANTIALLY CONTROL EROSION OR OFFSITE SEDIMENTATION.
- THE CONTRACTOR SHALL BE RESPONSIBLE FOR MAINTAINING EROSION CONTROL DEVICES AND REMOVING SEDIMENT UNTIL A MINIMUM OF 70% OF PERMANENT VEGETATION HAS BECOME STABILIZED AND ESTABLISHED. EROSION CONTROL DEVICES SHALL REMAIN IN PLACE UNTIL 70% ESTABLISHED VEGETATION IS MET, OR THE DURATION OF THE PROJECT, WHICHEVER IS THE LATER DATE.
- THE CONTRACTOR SHALL REPLACE DISTURBED AREAS WITH SOD AND SHALL BE INSTALLED WITHIN 14 DAYS AFTER PAVING COMPLETION AND FINAL TOPSOIL GRADING.
- TOTAL DISTURBED LAND AREA = 0.93 AC.
- THE CONTRACTOR SHALL PROVIDE ALL MATERIALS, TOOLS, EQUIPMENT, AND LABOR AS NECESSARY TO INSTALL AND MAINTAIN ADEQUATE EROSION CONTROL. KEEP THE STREETS CLEAN OF MUD AND DEBRIS, AND PREVENT SOIL FROM LEAVING THE PROJECT SITE. THE CONTRACTOR'S EROSION CONTROL MEASURES SHALL CONFORM TO THE UNITED GOVERNMENT OF WYANDOTTE COUNTY/KANSAS CITY, KS TECHNICAL PROVISIONS SPECIFICATIONS.

EROSION CONTROL LEGEND



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STRUCTURAL GENERAL NOTES

DESIGN CRITERIA

- PROJ. LOCATION: WYANDOTTE HIGH SCHOOL
2501 MINNESOTA AVENUE
KANSAS CITY, KS 66102
- BUILDING CODE: 2018 INTERNATIONAL BUILDING CODE (IBC)
- DESIGN CODES: ASCE/SEI 7-16 MINIMUM DESIGN LOADS FOR BUILDINGS & OTHER STRUCTURES
ACI 318-14 BUILDING CODE REQUIREMENTS FOR STRUCTURAL CONCRETE
- DESIGN SOIL VALUES & RETAINING WALL LOADS:

ACTIVE PRESSURE	35 PSF
PASSIVE PRESSURE	250 PSF/FT
SOIL DENSITY	110 PCF
SOIL REACTION MODULUS	250 PCI
SURCHARGE OVER TOE	100 PSF
RAILING ALLOWANCE	20 PLF
APPLIED WIND PRESSURE	20 PSF

GENERAL PROJECT REQUIREMENTS

- DO NOT SCALE PLANS FOR THE PURPOSE OF ESTABLISHING DIMENSIONS. DO NOT SCALE SECTIONS OR DETAILS AS THEY MAY BE DRAWN FOR A NON-SPECIFIC, TYPICAL CONDITION. WHERE REQUIRED DIMENSIONS CANNOT BE DETERMINED FROM THE INFORMATION PROVIDED OR THERE APPEARS TO BE A DISCREPANCY, NOTIFY THE ENGINEER FOR CLARIFICATION AND/OR CORRECTION.
- THE STRUCTURAL DRAWINGS REPRESENT THE STRUCTURES IN THE COMPLETED CONDITION AND DO NOT IMPLY A SPECIFIC METHOD OR SEQUENCE OF CONSTRUCTION UNLESS SPECIFICALLY NOTED. MEANS AND METHODS OF CONSTRUCTION ARE THE RESPONSIBILITY OF THE CONTRACTOR.
- ALL TEMPORARY SHORING AND/OR BRACING AS REQUIRED TO SAFELY CONSTRUCT THE STRUCTURE IS THE RESPONSIBILITY OF THE CONTRACTOR TO DESIGN, INSTALL, AND MAINTAIN. INSTALLED SHORING AND BRACING MUST REMAIN IN PLACE UNTIL SUPPORTED MEMBERS HAVE BEEN INSTALLED AND CONNECTIONS HAVE BEEN COMPLETED.
- THE CONTRACTOR WILL REVIEW, MAKE COMMENTS, AND APPROVE ALL SHOP DRAWINGS PRIOR TO SUBMITTAL, NOTING ALL CHANGES MADE THAT DO NOT COMPLY WITH THE CONSTRUCTION DOCUMENTS FOR THE ATTENTION OF THE ENGINEER.
- THE CONTRACTOR MUST VERIFY ALL DIMENSIONS AND ELEVATIONS OF EXISTING CONSTRUCTION THAT MAY AFFECT THE NEW CONSTRUCTION, WHETHER OR NOT NOTED ON DRAWINGS, AND REPORT DISCREPANCIES TO THE ENGINEER. EXISTING ABANDONED ELEMENTS THAT INTERFERE WITH NEW CONSTRUCTION SHALL BE REMOVED.

FOUNDATIONS & SOILS

- THE CONTRACTOR WILL ENGAGE A LICENSED GEOTECHNICAL ENGINEER TO CONDUCT A GEOTECHNICAL INVESTIGATION OF THE LOCATION OF THE NEW RETAINING WALL AND VERIFY SUBSURFACE CONDITIONS. IF THE EXISTING CONDITIONS DO NOT COMPLY WITH THE DESIGN ASSUMPTIONS NOTIFY THE ENGINEER IMMEDIATELY. THE GEOTECHNICAL ENGINEER MUST VERIFY THE FOLLOWING CONDITIONS:
 - ALLOWABLE NET SOIL BEARING PRESSURE OF 2,000 PSF FOR FOUNDATIONS IN UNDISTURBED SOILS AND/OR ENGINEERED FILLS USED FOR DESIGN IS APPROPRIATE.
 - TOTAL SETTLEMENT OF LESS THAN $\frac{3}{8}$ " AND DIFFERENTIAL SETTLEMENT OF LESS THAN $\frac{1}{2}$ " IS REASONABLY EXPECTED WITHOUT OVEREXCAVATION AND REPLACEMENT OF FILL.
 - NO DETRIMENTAL SHRINK/SWELL POTENTIAL OF SOILS EXISTS AND THE DEPTHS NOTED ARE ADEQUATE FOR THE SITE.
- SOIL SUPPORTED FOUNDATIONS HAVE BEEN DESIGNED TO BEAR ON UNDISTURBED SOIL OR APPROVED ENGINEERED FILL WITH AN ALLOWABLE NET BEARING PRESSURE OF 2,000 PSF.
- EARTH-RETAINING WALLS HAVE BEEN DESIGNED FOR THE LOADS AND CONDITIONS NOTED ABOVE.
- CAPACITY AND CONDITION OF THE RETAINING WALL FOUNDATION BEARING MATERIALS MUST BE VERIFIED WITH A GEOTECHNICAL INVESTIGATION MADE BY A LICENSED GEOTECHNICAL ENGINEER WITH RECOMMENDED AND REQUIRED ADJUSTMENTS MADE PRIOR TO POURING FOUNDATIONS.
- EARTH-RETAINING WALL CONTINUOUS SHALLOW FOOTINGS AND CONCRETE STAIR TRENCH FOOTINGS MAY HAVE EARTH-FORMED SIDES POURED TO THE DESIGN DIMENSIONS BUT NO MORE THAN 6" GREATER THAN THE DESIGN DIMENSIONS. EARTH-RETAINING WALLS AND CONCRETE STAIRS SUPPORT WALLS WILL BE FULLY FORMED AND POURED TO THE DESIGN DIMENSIONS.
- THE PROXIMITY OF UNDERGROUND UTILITIES AND UTILITY TRENCHES TO THE EARTH-RETAINING WALL SYSTEM, SHOULD THEY EXIST, MUST BE APPROVED BY THE GEOTECHNICAL ENGINEER FOR THE INTEGRITY OF THE BEARING MATERIAL.
- DO NOT BACKFILL EARTH-RETAINING WALLS UNTIL FINAL PAVING AND/OR ADEQUATE BRACING HAS BEEN INSTALLED. BACKFILL WILL BE PLACED AND COMPACTED IN ACCORDANCE WITH THE PROJECT SPECIFICATIONS.

CAST-IN-PLACE CONCRETE

- CAST-IN-PLACE CONCRETE MUST BE CONSTRUCTED IN CONFORMANCE WITH THE CURRENT "ACI MANUAL OF CONCRETE PRACTICE." CONCRETE CONSTRUCTION MUST SPECIFICALLY CONFORM TO ACI 301 AND BE CONSTRUCTED WITHIN THE TOLERANCES REQUIRED BY ACI 117. CONCRETE WILL BE MIXED, BATCHED, AND TRANSPORTED PER ASTM C94.
- NORMAL-WEIGHT CONCRETE MATERIAL MUST BE MADE WITH CLEAN, POTABLE WATER; CEMENT CONFORMING TO ASTM C150, TYPE I/II; FLY ASH, WHERE USED, CONFORMING TO ASTM C618 TYPE C OR F AND REPLACING UP TO A MAXIMUM OF 20% OF THE CEMENT; FINE & COARSE AGGREGATES CONFORMING TO ASTM C33 WITH COARSE AGGREGATES MEETING #57/#67 GRADATION REQUIREMENTS AND COARSE AGGREGATES MAKING UP NO LESS THAN 50% OF THE TOTAL AGGREGATES BY WEIGHT FOR THE COMBINED GRADATION.
- CONCRETE MUST HAVE A MINIMUM 28-DAY COMPRESSIVE STRENGTH OF 4,000 PSI, MAXIMUM WATER/CEMENT RATIO OF 0.45, AND 4% TO 7% AIR ENTRAINMENT.
- EXPOSED EDGES OF CONCRETE MUST BE CHAMFERED $\frac{3}{4}$ " INSIDE FORMS OR TOOLED TO A $\frac{3}{4}$ " RADIUS, UNLESS NOTED OTHERWISE ON THE DRAWINGS.
- NO ALUMINUM MAY BE EMBEDDED IN CONCRETE.

CONCRETE REINFORCEMENT

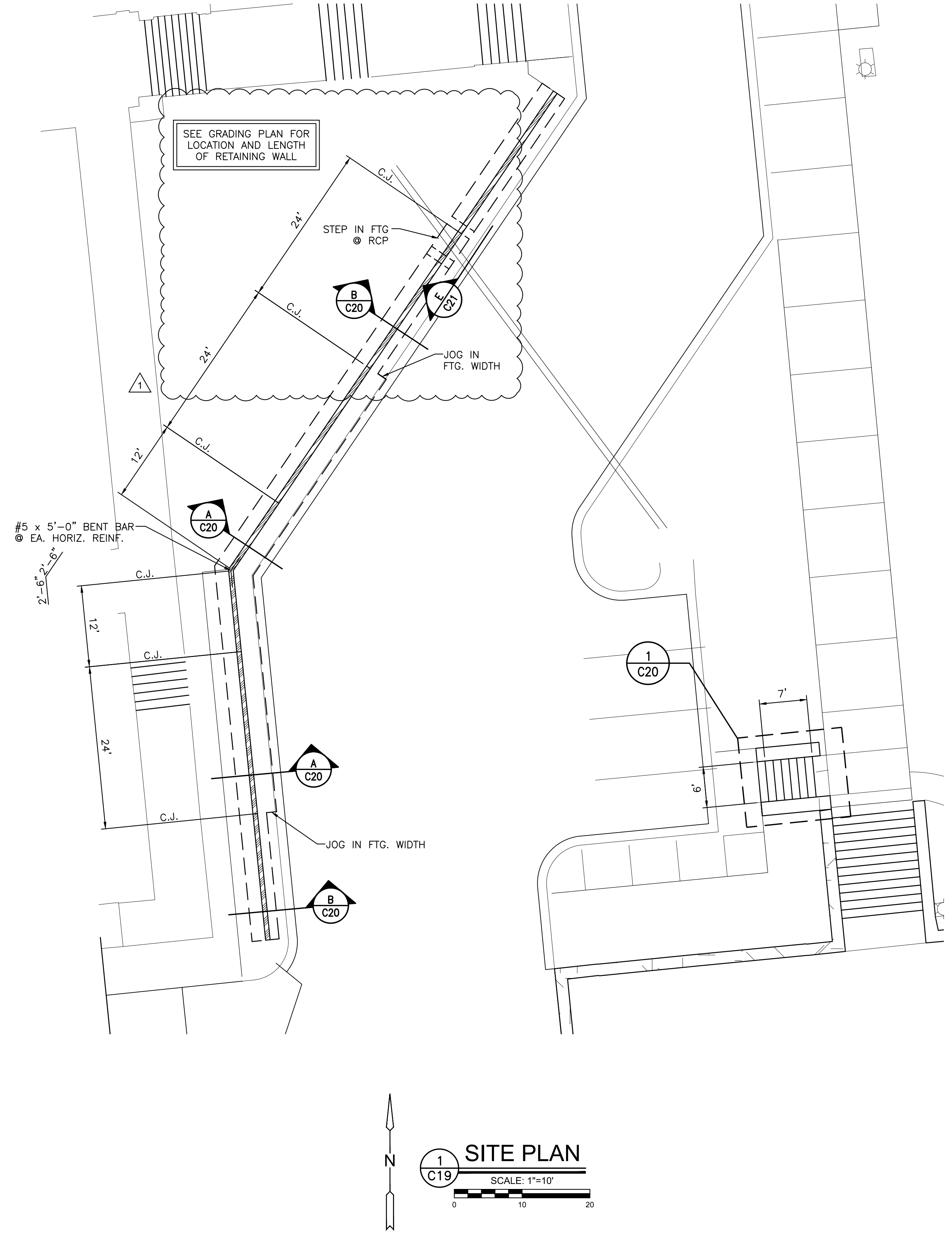
- REINFORCING BARS (REINF.) MUST CONFORM TO ASTM A615, GRADE 60 EXCEPT WHERE IT MAY BE SPECIFICALLY NOTED ON THE DRAWINGS AS 40 KSI MATERIAL FOR FIELD BENDING.
- WELDING OF REINF. IS PROHIBITED.
- REINF. MUST BE DETAILED IN ACCORDANCE WITH ACI 315.
- REINF. SHALL BE CONTINUOUS OR LAPPED THE GREATER OF 40 BAR DIAMETERS OR 24" AT A MINIMUM, UNLESS NOTED OTHERWISE ON THE DRAWINGS TO A GREATER OR LESSER EXTENT.
- REINF. WILL BE PLACED AND SUPPORTED ON BOLSTERS/CHAIRS TO THE DESIGN DIMENSIONS AND MAINTAIN THE REQUIRED COVERAGE AND CLEARANCE PER ACI AND CRSI, UNLESS STRICTER REQUIREMENTS ARE NOTED ON THE DRAWINGS.
- REINF. SHALL HAVE MINIMUM CLEAR COVERAGE AS LISTED, UNLESS NOTED OTHERWISE ON THE DRAWINGS:

CAST AGAINST EARTH (FROM BOTTOM OR SIDES)	3"
FORMED & EXPOSED TO SOIL, WEATHER, OR LIQUIDS	2"
- DO NOT CUT REINF. EXCEPT AS APPROVED BY THE ENGINEER.

STRUCTURAL TESTS, INSPECTIONS, AND QUALITY ASSURANCE

- STRUCTURAL TESTS AND INSPECTIONS TO BE PERFORMED PER THE REFERENCED BUILDING CODE, INCLUDING CHAPTER 17 (SPECIAL INSPECTIONS) WILL BE AS REQUIRED AND PROVIDED BY OWNER OR THE OWNER'S DESIGNATED REPRESENTATIVE.

SOILS:	IBC §1705.6 AND TBL. 1705.6
CONCRETE:	IBC §1705.3 AND TBL. 1705.3
- NOTIFY THE ENGINEER FOR OTHER SPECIFIC TESTS AND INSPECTIONS AS MAY BE REQUIRED PER THE OWNER'S REQUIREMENTS.



SITE PLAN
SCALE: 1"=10'



FINAL DEVELOPMENT PLANS/CONSTRUCTION DOCUMENTS FOR
WYANDOTTE HIGH SCHOOL IMPROVEMENTS
 2501 MINNESOTA AVE. KANSAS CITY, KS 66102

RETAINING WALL PLAN & GEN. NOTES - DOCK

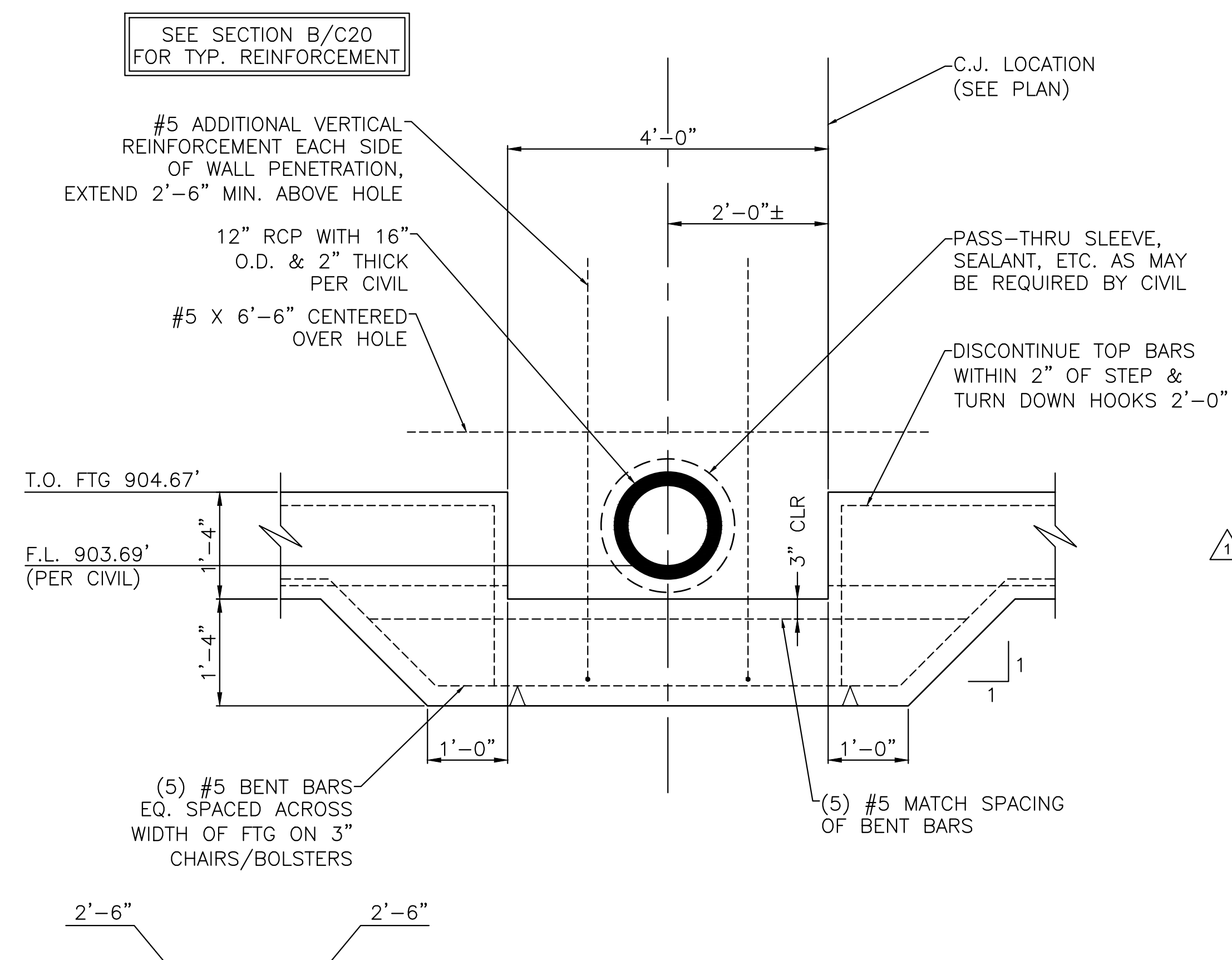
PROJECT NO.	2202010801	
SCALE	1"=10'	
DRAWN	DESIGNED	CHECKED
MAS	JAC	JAC

NO.	REVISION	DATE
1	ADD #2	02-28-24
	CITY COMMENTS	02-27-24
	CONSTRUCTION DOCUMENTS	01-31-2024
	FINAL DEVELOPMENT PLANS	01-26-24

SHEET NO. **C19**

P:\PROJECTS\2202010801\DOCK\WYANDOTTE_HS DOCK\DRIVE\2202010801\CAD\SHS\186 CIVIL\CD\2202010801-05-03.DWG

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STEPPED FOOTING DETAIL @ RCP
SCALE: 3/4" = 1'-0"

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RETAINING WALL DETAILS 2 - DOCK		
PROJECT NO.	2202010801	
SCALE	N/A	
DRAWN	DESIGNED	CHECKED
SEK	JAC	JAC
NO.	REVISION	DATE
1	ADD #2	02.27.24
CITY COMMENTS		
SHEET NO. C21		

P:\PROJECTS\2022\2202010801_KCOPS_WYANDOTTE HIGH SCHOOL PARKING\00 220801 CAD\STAFF\505 CIVIL\FDPS\220801-05-0200-PDF.DWG

Section 311000 – SITE CLEARING

PART 1 – GENERAL

- 1) RELATED DOCUMENTS
 - a. Drawings and general provision of the Contract including, General and Supplementary Conditions and Division 01 Specification Sections, apply to this section.
- 2) SUMMARY
 - a. Section Includes
 - Protecting existing vegetation to remain.
 - Removing existing vegetation.
 - Clearing and grubbing.
 - Stripping and stockpiling topsoil.
 - Removing above – and below – grade site improvements.
 - Temporary erosion – and sedimentation – control measures.
- 3) DEFINITIONS
 - b. Subsoil: All soil beneath the topsoil layer of the soil profile, and typified by the lack of organic matter and soil organisms.
 - c. Surface Soil: Soil that is present at the top layer of the existing soil profile at the Project site. In undisturbed areas, the surface soil is typically topsoil; but in disturbed areas such as urban environments, the surface soil can be subsoil.
 - d. Topsoil: Top layer of the soil profile consisting of existing native surface topsoil or existing in-place surface soil and is the zone where plant roots grow. Its appearance is generally friable, pervious, and black or a darker shade of brown, gray, or red than underlying subsoil; reasonably free of subsoil, clay lumps, gravel, and other objects more than 2 inches in diameter; and free of subsoil and weeds, roots, toxic materials, or other nonsoil materials.
 - e. Plant-Protection Zone: Area surrounding individual trees, groups of trees, shrubs, or other vegetation to be protected during construction, and indicated on Drawings.
 - f. Tree-Protection Zone: Area surrounding individual trees or groups of trees to be protected during construction, and indicated on Drawings.
 - g. Vegetation: Trees, shrubs, groundcovers, grass, and other plants.
- 4) MATERIAL OWNERSHIP
 - a. Except for stripped topsoil and other materials indicated to be stockpiled or otherwise remain Owner's property, cleared materials shall become Contractor's property and shall be removed from Project site. All stripped topsoil shall remain onsite and be distributed onsite per the Construction Manager's direction. See Earth Moving specification for soil material instruction.
- 5) SUBMITTALS
 - a. Existing Conditions: Documentation of existing trees and plantings, adjoining construction, and site improvements that establishes preconstruction conditions that might be misconstrued as damage caused by site clearing.
 - Use sufficiently detailed photographs or videotape.
 - Include plans and notations to indicate specific wounds and damage conditions of each tree or other plants designated to remain.
 - b. Record Drawings: Identifying and accurately showing locations of capped utilities and other subsurface structural, electrical, and mechanical conditions.
- 6) PROJECT CONDITIONS
 - a. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during site-clearing operations.
 - Do not close or obstruct streets, walks, or other adjacent occupied or used facilities without permission from Owner and authorities having jurisdiction.
 - Provide alternate routes around closed or obstructed traffic ways if required by Owner or authorities having jurisdiction.
 - b. Salvageable Improvements: Carefully remove items indicated to be salvaged and store on Owner's premises.
 - c. Utility Locator Service: Notify utility locator service and appropriate City and County agencies for area where Project is located before site clearing.
 - d. Do not commence site clearing operations until temporary erosion– and sedimentation–control and plant–protection measures are in place.
 - e. Protect existing trees as indicated on drawings.
 - f. The following practices are prohibited within protection zones:
 - Storage of construction materials, debris, or excavated material.
 - Parking vehicles or equipment.
 - Foot traffic.
 - Erection of sheds or structures.
 - Impoundment of water.
 - Excavation or other digging unless otherwise indicated.
 - Attachment of signs to or wrapping materials around trees or plants unless otherwise indicated.
 - Sediment encroachment.
 - g. Do not direct vehicle or equipment exhaust towards protection zones.
 - h. Prohibit heat sources, flames, ignition sources, and smoking within or near protection zones.
 - i. Soil Stripping, Handling, and Stockpiling: Perform only when the topsoil is dry or slightly moist.

PART 2 – PRODUCTS

7) MATERIALS

- a. Satisfactory Soil Material: Requirements for satisfactory soil material shall be provided by the Geotechnical Engineer.
 - Obtain approved borrow soil material off-site when satisfactory soil material is not available on-site. Coordinate with Geotechnical engineer for acceptable soil material.

PART 3 – EXECUTION

8) PREPARATION

- a. Protect and maintain benchmarks and survey control points from disturbance during construction.
- b. Locate and clearly identify trees, shrubs, and other vegetation to remain.
 - Protect existing site improvements to remain from damage during construction.
 - Restore damaged improvements to their original condition, as acceptable to Owner.

9) TEMPORARY EROSION AND SEDIMENTATION CONTROL

- a. Provide temporary erosion– and sedimentation–control measures to prevent soil erosion and discharge of soil-bearing water runoff or airborne dust to adjacent properties and walkways, according to erosion– and sedimentation–control Drawings and requirements of authorities having jurisdiction.
- b. Verify that flows of water redirected from construction areas or generated by construction activity do not enter or cross protection zones.
- c. Inspect, maintain, and repair erosion– and sedimentation–control measures during construction until permanent vegetation has been established.
- d. Contractor to keep inspection logs of erosion control measures and update provided Storm Water Pollution Prevention Plan (SWPPP).

10) TREE AND PLANT PROTECTION

- a. General: Protect trees and plants remaining on-site according to requirements in Division 01 Section "Temporary Tree and Plant Protection."
- b. Contractor to protect existing trees onsite as indicated on drawings.
- c. Repair or replace trees, shrubs, and other vegetation indicated to remain or be relocated that are damaged by construction operations, as indicated on drawings.
- d. For trees to be removed, remove entire root ball, all root and organic materials.

11) EXISTING UTILITIES

- a. Contractor to arrange for disconnecting and sealing indicated utilities that serve existing structures before site clearing, when requested by Contractor.
 - Utility service shall be maintained to the existing school building during construction of the proposed building. Contractor shall coordinate with utility service providers to provide temporary service to the existing building as necessary. See demolition notes on drawings.
- b. Locate, identify, and disconnect utilities indicated to be abandoned in place.
- c. Interrupting Existing Utilities: Do not interrupt utilities serving facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary utility services according to requirements indicated:
 - Do not proceed with utility interruptions without Construction Managers and Owners written permission.

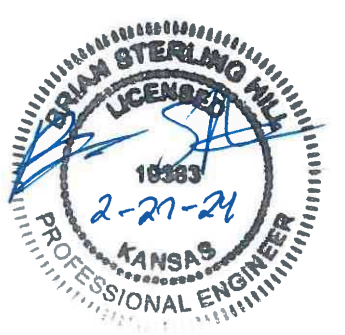
12) CLEARING AND GRUBBING

- a. Remove obstructions, trees, shrubs, and other vegetation to permit installation of new construction.
- b. Fill depressions caused by clearing and grubbing operations with satisfactory soil material unless further excavation or earthwork is indicated.
 - Place fill material in horizontal layers not exceeding a loose depth of 8 inches, and compact each layer to a density per geotechnical representative requirements.

13) TOPSOIL STRIPPING

- a. Remove sod and grass before stripping topsoil.
- b. Strip topsoil in a manner to prevent intermingling with underlying subsoil or other waste materials.
 - Remove subsoil and nonsoil materials from topsoil, including clay lumps, gravel, and other

- objects more than 2 inches in diameter; trash, debris, weeds, roots, and other waste materials.
 - Geotechnical engineer to monitor stripping operations to observe that all unsuitable materials have been removed.
 - c. Stockpile topsoil away from edge of excavations without intermixing with subsoil. Grade and shape stockpiles to drain surface water. Cover to prevent windblown dust and erosion by water.
 - Do not stockpile topsoil within protection zones.
 - Dispose of surplus topsoil. Surplus topsoil is that which exceeds quantity indicated to be stockpiled or reused.
 - Stockpile surplus topsoil to allow for respreading deeper topsoil.
 - d. Remove all topsoil and all organic material from proposed building footprint and pavement areas. Excavate as deep as necessary to ensure all organic material has been removed.
- 14) SITE IMPROVEMENTS
- a. Remove existing above– and below–grade improvements as indicated from the site. See demolition notes on drawings.
 - b. Remove slabs, paving, curbs, gutters, and aggregate base as indicated.
 - Unless existing full–depth joints coincide with line of demolition, neatly saw–cut along line of existing pavement to remain before removing adjacent existing pavement. Saw–cut faces vertically.
 - Paint cut ends of steel reinforcement in concrete to remain with two coats of antirust coating, following coating manufacturer's written instructions. Keep paint off surfaces that will remain exposed.
- 15) DISPOSAL OF SURPLUS AND WASTE MATERIALS
- a. Remove surplus unsuitable soil material, unsuitable topsoil, obstructions, demolished materials, and waste materials including trash and debris, and legally dispose of them off Owner's property.
 - b. Separate recyclable materials produced during site clearing from other nonrecyclable materials. Store or stockpile without intermixing with other materials and transport them to recycling facilities. Do not interfere with other Project work.



FINAL DEVELOPMENT PLANS/CONSTRUCTION DOCUMENTS FOR

WYANDOTTE HIGH SCHOOL IMPROVEMENTS

2501 MINNESOTA AVE. KANSAS CITY, KS 66102

311000 SITE CLEARING	
PROJECT NO.	2202010801
SCALE	N.T.S.
DRAWN	JLB
DESIGNED	SEK
CHECKED	BSH
NO.	REVISION
DATE	
SHEET NO. C22	

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SECTION 312000 – EARTH MOVING

PART 1 – GENERAL

- 1) RELATED DOCUMENTS
a. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
2) SUMMARY
a. Section includes:
• Excavating and backfilling trenches for utilities and pits for buried utility structures.
• Preparing subgrade for pavements and grass areas.
• General earthwork and excavation.
b. Related sections:
• Section 311000 "Site Clearing" for site stripping, grubbing, stripping and stockpiling topsoil, and removal of above- and below-grade improvements and utilities.
3) UNCLASSIFIED SITE
a. All site work for this project is considered "unclassified." The term "unclassified" excavation shall be defined as meaning the site contractor bears the entire risk of the soil quantities and/or types (e.g. rock, clay, peat, silt, shale, etc.) encountered above the bottom of required excavations and over-excavated / treated soils areas.
4) DEFINITIONS
a. Backfill: Soil material or controlled low-strength material used to fill an excavation.
b. Bedding Course: Aggregate layer placed over the excavated subgrade in a trench before laying pipe.
5) SUBMITTALS
a. Product Data: For each type of the following manufactured products required:
• Geotextiles.
• Controlled low-strength material, including design mixture.
• Warning tapes.
b. Qualification Data: For qualified testing agency.
c. Material Test Reports: For each on-site and borrow soil material proposed for fill and backfill according to Geotechnical Engineer requirements.
d. Preexcavation Photographs or Videotape: Show existing conditions of adjoining construction and site improvements, including finish surfaces, that might be misconstrued as damage caused by earth moving operations.
7) QUALITY ASSURANCE
a. Geotechnical Testing Agency Qualifications: Qualified according to ASTM E 329 and ASTM D 3740 for testing indicated.
b. Preexcavation Conference: Conduct conference at Project site.
8) PROJECT CONDITIONS
a. Traffic: Minimize interference with adjoining roads, streets, walks, and other adjacent occupied or used facilities during earth moving operations.
b. Improvements on Adjoining Property: Authority for performing earth moving indicated on property adjoining Owner's property will be obtained by Owner before award of Contract.
c. Utility Locator Service: Notify utility locator service and City and County agencies for area where Project is located before beginning earth moving operations.
d. Do not commence earth moving operations until temporary erosion- and sedimentation-control measures, are in place.

PART 2 – PRODUCTS

- 9) SOIL MATERIALS
a. General: Provide borrow soil materials when sufficient satisfactory soil materials are not available from excavations.
b. Satisfactory Soils: Soil Classification Groups GW, GP, GM, SW, SP, and SM according to ASTM D2487, or a combination of these groups; free of rock or gravel larger than 3 inches in any dimension, debris, waste, frozen materials, vegetation, and other deleterious matter.
c. Unsatisfactory Soils: Soil Classification Groups GC, SC, CL, ML, OL, CH, MH, OH, and PT according to ASTM D2487, or a combination of these groups.
d. Bedding Course: Naturally or artificially graded mixture of natural stone or crushed gravel, crushed stone, and natural or crushed sand; ASTM D 2940; except with 100 percent passing a 1-inch sieve and not more than 8 percent passing a No. 200 sieve.
e. Sub-drainage Aggregate: Naturally or artificially graded mixture of natural stone, clean with no fines. Aggregate range shall be 1/2' to 3/4".
10) GEOTEXTILES
a. Separation Geotextile: Woven geotextile fabric, manufactured for separation applications, made from polyolefins or polyesters; with elongation less than 50 percent; complying with AASHTO M 288 and the following, measured per test methods referenced:
• Survivability: Class 3; AASHTO M 288.
• Grab Tensile Strength: 120 lbf; ASTM D 4632.
• Sewn Seam Strength: 222 lbf; ASTM D 4632.
• Tear Strength: 50 lbf; ASTM D 4533.
• Puncture Strength: 90 lbf; ASTM D 4833.
• Apparent Opening Size: No. 70 sieve, maximum; ASTM D 4751.
• Permittivity: 1.7 second-1, minimum; ASTM D 4491.
• UV Stability: 70 percent after 500 hours' exposure; ASTM D 4355.
11) ACCESSORIES
a. Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility; colored as follows:
• Red: Electric.
• Yellow: Gas, oil, steam, and dangerous materials.
• Orange: Telephone and other communications.
• Blue: Water systems.
• Green: Sewer systems.
b. Detectable Warning Tape: Acid- and alkali-resistant, polyethylene film warning tape manufactured for marking and identifying underground utilities, a minimum of 6 inches wide and 4 mils thick, continuously inscribed with a description of the utility, with metallic core encased in a protective jacket for corrosion protection, detectable by metal detector when tape is buried up to 30 inches deep; colored as follows:
• Red: Electric.
• Yellow: Gas, oil, steam, and dangerous materials.
• Orange: Telephone and other communications.
• Blue: Water systems.
• Green: Sewer systems.

PART 3 – EXECUTION

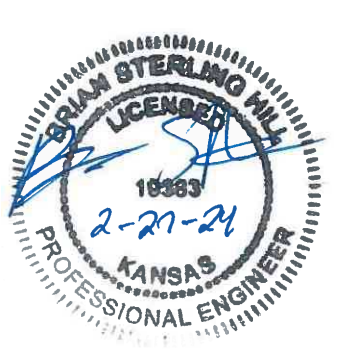
- 12) PREPARATION
a. Protect structures, utilities, sidewalks, pavements, and other facilities from damage caused by

- settlement, lateral movement, undermining, washout, and other hazards created by earth moving operations.
b. Protect and maintain erosion and sedimentation controls during earth moving operations.
c. Protect subgrades and foundation soils from freezing temperatures and frost. Remove temporary protection before placing subsequent materials.
13) DEWATERING
a. Prevent surface water and ground water from entering excavations, from ponding on prepared subgrades, and from flooding Project site and surrounding area.
b. Protect subgrades from softening, undermining, washout, and damage by rain or water accumulation.
• Reroute surface water runoff away from excavated areas. Do not allow water to accumulate in excavations. Do not use excavated trenches as temporary drainage ditches.
14) EXPLOSIVES
a. Explosives: Do not use explosives.
15) EXCAVATION, GENERAL
a. Unclassified Excavation: Excavate to subgrade elevations regardless of the character of surface and subsurface conditions encountered. Unclassified excavated materials may include rock, soil materials, and obstructions. No changes to the Contract Sum or the Contract Time will be authorized for rock excavation or removal of obstructions. If excavated materials intended for fill and backfill include unsatisfactory soil materials and rock, replace with satisfactory soil materials as determined by the Geotechnical Engineer.
16) EXCAVATION FOR WALKS AND PAVEMENTS
a. Evaluate surfaces under future walks and pavements to indicated lines, cross sections, elevations, and subgrades, and excavate unsuitable materials as recommended by the geotechnical engineer.
17) EXCAVATION FOR UTILITY TRENCHES
a. Excavate trenches to indicated gradients, lines, depths, and elevations.
• Beyond building perimeter, excavate trenches to allow installation of top of pipe below frost line.
b. Excavate trenches to uniform widths to provide the following clearance on each side of pipe or conduit: Excavate trench walls vertically from trench bottom to 12 inches higher than top of pipe or conduit unless otherwise indicated.
• Clearance: As indicated on plans.
18) PAVEMENT SUBGRADE INSPECTION
a. Notify testing agency when excavations have reached required subgrade.
b. If Geotech Engineer determines that unsatisfactory soil is present, continue excavation and replace with compacted backfill or fill material as directed.
c. Proof-roll subgrade below proposed pavements with a pneumatic-tired and loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades. Proof-roll within two days of paving operations.
• Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to 3 mph.
• Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by the Geotechnical Engineer, and replace with compacted backfill or fill as directed to the proper moisture content and density.
• After proof rolling and repairing deep subgrade deficiencies, the entire subgrade should be scarified to a depth of 8 inches and uniformly compacted to at least 95% of the standard proctor maximum dry density to provide a uniform subgrade for pavement construction. Moisture content and density of subgrade to be checked within two days prior to the commencement of paving operations.
d. Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, without additional compensation.
e. Authorized additional excavation and replacement / stabilization of soils will be paid for according to Contract provisions for unit prices and allowances for work necessary below the bottom of required excavations only.
f. Subgrades under pavements and building pads shall be free of all organic material.
19) STORAGE OF SOIL MATERIALS
a. Stockpile borrow soil materials and excavated satisfactory soil materials without intermixing. Place, grade, and shape stockpiles to drain surface water. Cover to prevent windblown dust.
• Stockpile soil materials away from edge of excavations. Do not store within drip line of remaining trees.
20) BACKFILL
a. Place and compact backfill in excavations promptly, but not before completing the following:
• Construction below finish grade including, where applicable, subdrainage, damproofing, waterproofing, and perimeter insulation.
• Surveying locations of underground utilities for Record Documents.
• Testing and inspecting underground utilities.
• Removing concrete formwork.
• Removing trash and debris.
• Removing temporary shoring and bracing, and sheeting.
• Installing permanent or temporary horizontal bracing on horizontally supported walls.
b. Place backfill on subgrades free of mud, frost, snow, or ice.
c. Backfill tree root ball excavations with structural fill as defined in the Grading Notes in the plans. Areas under pavements or building pads shall be compacted to 95% standard density. All other areas shall be compacted to 90% standard density.
21) UTILITY TRENCH BACKFILL
a. Place backfill on subgrades free of mud, frost, snow, or ice.
b. Place and compact bedding course on trench bottoms and where indicated. Shape bedding course to provide continuous support for bells, joints, and barrels of pipes and for joints, fittings, and bodies of conduits.
c. Install warning tape directly above utilities, 12 inches below finished grade, except 6 inches below subgrade under pavements and slabs.
d. Install a clay plug around pipes within 5' of the building face to prevent water migration through the trench into the building. Plug material should consist of clay compacted at a water content at or above the soils optimum water content.
e. Utility trenches should be backfilled per the requirements of the plan details.
22) SOIL FILL
a. Plow, scarify, bench, or break up sloped surfaces steeper than 1 vertical to 4 horizontal so fill material will bond with existing material.
b. Place and compact fill material in 9 inch loose lifts and compacted to at least 95% of the materials max dry density and moisture control as recommended by the geotechnical testing representative.
c. Place soil fill on subgrades free of mud, frost, snow, or ice.
d. The exposed grade prior to fill being placed shall be scarified to a minimum depth of 12" and the moisture content should be adjusted to within the range recommended for structural fill. The material should then be proof-rolled and compacted per the project requirements.
e. Bench existing slopes of 5:1 or greater where fill is to be placed.
23) SOIL MOISTURE CONTROL
a. Uniformly moisten or aerate subgrade and each subsequent fill or backfill soil layer before compaction as recommended by the geotechnical testing representative.
• Do not place backfill or fill soil material on surfaces that are muddy, frozen, or contain frost or ice.
• Remove and replace, or scarify and air dry, otherwise satisfactory soil material not meeting moisture requirements.
24) COMPACTION OF SOIL BACKFILLS AND FILLS
a. Place backfill and fill soil materials in layers not more than 8 inches in loose depth for material compacted by heavy compaction equipment, and not more than 4 inches in loose depth for material compacted by hand-operated tampers.
b. Place backfill and fill soil materials evenly on all sides of structures to required elevations, and uniformly along the full length of each structure.
c. Compact soil materials to requirements determined by Geotechnical Engineer.
d. Utility trenches – compaction testing to be performed every 200 cubic yards at backfill or each lift within 200 linear feet of trench, whichever is less.
25) BUILDING PAD PREPARATION
a. Prepare low-volume change material, capillary barrier, and vapor barrier for the building pad. The LVC shall consist of the following section from the bottom: 8" of structural fill material (geotechnical engineer to determine material), 12" of KDOT AB-3 aggregate, and 4" capillary barrier.
b. Moisture condition and compact native soils below the LVC zone as necessary per onsite geotechnical representative.
c. Proof-roll subgrade below proposed building pads with a pneumatic-tired and loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades. Proof-roll within two days of

- building pad construction.
• Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to 3 mph.
• Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by the Geotechnical Engineer, and replace with compacted backfill or fill as directed to the proper moisture content and density.
• After proof rolling and repairing deep subgrade deficiencies, the entire subgrade should be scarified and uniformly compacted to at least 95% of the standard proctor maximum dry density to provide a uniform subgrade for building pad construction. Moisture content and density of subgrade to be checked within two days prior to the commencement of building pad construction.
d. Authorized additional excavation and replacement / stabilization of soils will be paid for according to Contract provisions for unit prices and allowances for work necessary below the bottom of required excavations / low volume change material only.
26) GRADING
a. General: Uniformly grade areas to a smooth surface, free of irregular surface changes. Comply with compaction requirements and grade to cross sections, lines, and elevations indicated.
• Provide a smooth transition between adjacent existing grades and new grades.
• Cut out soft spots, fill low spots, and trim high spots to comply with required surface tolerances.
b. Slope grades to direct water away from buildings and to prevent ponding. Finish subgrades to required elevations within the following tolerances:
• Turf or Unpaved Areas: Plus or minus 1 inch.
• Walks: Plus or minus 1/4 inch.
• Pavements: Plus or minus 1/4 inch.
27) FIELD QUALITY CONTROL
a. Special Inspections: Owner will engage a qualified special inspector to perform the following special inspections:
• Determine prior to placement of fill that site has been prepared in compliance with requirements.
• Determine that fill material and maximum lift thickness comply with requirements.
• Determine, at the required frequency, that in-place density of compacted fill complies with requirements.
b. Testing Agency: Owner will engage a qualified geotechnical engineering testing agency to perform tests and inspections.
c. Allow testing agency to inspect and test subgrades and each fill or backfill layer. Proceed with subsequent earth moving only after test results for previously completed work comply with requirements.
d. When testing agency reports that subgrades, fills, or backfills have not achieved degree of compaction specified, scarify or moisten or aerate, or remove and replace soil materials to depth required; recompact and retest until specified compaction is obtained.
28) PROTECTION
a. Protecting Graded Areas: Protect newly graded areas from traffic, freezing, and erosion. Keep free of trash and debris.
b. Install erosion control measures as indicated on the plans. Install additional measures as necessary to prevent erosion or damage to erosion control measures.
c. Repair and reestablish grades to specified tolerances where completed or partially completed surfaces become eroded, rutted, settled, or where they lose compaction due to subsequent construction operations or weather conditions.
• Scarify or remove and replace soil material to depth as directed by Architect; reshape and recompact.
d. Where settling occurs before Project correction period elapses, remove finished surfacing, backfill with additional soil material, compact, and reconstruct surfacing.
• Restore appearance, quality, and condition of finished surfacing to match adjacent work, and eliminate evidence of restoration to greatest extent possible.
29) DISPOSAL OF SURPLUS AND WASTE MATERIALS
a. Transport surplus satisfactory soil offsite. Stockpile / spread topsoil per contract documents prior to soil removal from site.
• Remove waste materials, including unsatisfactory soil, trash, and debris, and legally dispose of them off Owner's property.



Overland Park, KS • 913.317.9390



FINAL DEVELOPMENT PLANS/CONSTRUCTION DOCUMENTS FOR
WYANDOTTE HIGH SCHOOL IMPROVEMENTS
2501 MINNESOTA AVE., KANSAS CITY, KS 66102

312000
EARTH MOVING

PROJECT NO.
2202010801

SCALE
N.T.S.

DRAWN DESIGNED CHECKED
JLB SEK BSH

1 ADD #2 02-28-24
CITY COMMENTS 02-27-24
CONSTRUCTION DOCUMENTS 01-31-24

NO. REVISION DATE

SHEET NO.
C23

P:\PROJECTS\2022\2202010801_KCOPS_WYANDOTTE HIGH SCHOOL PARKING\00 220801 CAD\DWG\220801-45-500-PPF.DWG

SECTION 321216 - ASPHALT PAVING

PART 1 - GENERAL

- 1) RELATED DOCUMENTS
a. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
2) SUMMARY
a. Section Includes:
• Hot-mix asphalt paving.
b. Related Sections:
• Section 312000 "Earth Moving" for aggregate subbase and base courses.
• Division 32 Sections for other paving installed as part of crosswalks in asphalt pavement areas.
3) DEFINITION
a. Hot-Mix Asphalt Paving Terminology: Refer to ASTM D 8 for definitions of terms.
4) SUBMITTALS
a. Product Data: For each type of product indicated. Include technical data and tested physical and performance properties.
• Job-Mix Designs: For each job mix proposed for the Work.
b. Material Certificates: For each paving material, from manufacturer. Certifying that each material complies with or exceeds specified requirements.
c. Material Test Reports: For each paving material.
5) QUALITY ASSURANCE
a. Manufacturer Qualifications: A paving-mix manufacturer registered with a history of successful performance.
b. Installer Qualifications: Engage an experienced installer who is trained and approved for installations required for this Project.
c. Testing Agency Qualifications: Qualified according to ASTM D 3666 for testing indicated.
d. Regulatory Requirements: Comply with materials, workmanship, and other applicable requirements of the pavement specifications called out in the geotechnical report for asphalt paving work.
e. Preinstallation Conference: Conduct conference at a site acceptable to the Construction Manager.
• Review methods and procedures related to hot-mix asphalt paving including, but not limited to, the following:
1. Review proposed sources of paving materials, including capabilities and location of plant that will manufacture hot-mix asphalt.
2. Review condition of subgrade and preparatory work.
3. Review requirements for protecting paving work, including restriction of traffic during installation period and for remainder of construction period.
4. Review and finalize construction schedule and verify availability of materials, Installer's personnel, equipment, and facilities needed to make progress and avoid delays.
6) DELIVERY, STORAGE, AND HANDLING
a. Deliver pavement-marking materials to Project site in original packages with seals unbroken and bearing manufacturer's labels containing brand name and type of material, date of manufacture, and directions for storage.
7) PROJECT 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:
• Tack Coat: Minimum surface temperature of 50 deg F.
• Slurry Coat: Comply with weather limitations in ASTM D 3910.
• Asphalt Base Course: Minimum surface temperature of 40 deg F and rising at time of placement.
• Asphalt Surface Course: Minimum surface temperature of 50 deg F at time of placement and when base is dry.

PART 2 - PRODUCTS

- 8) MATERIALS AND MIXES
a. General: All work on the site as herein called for shall be done in accord with the American Public Works Association (APWA), Kansas City Metropolitan Chapter, Division II, "Construction and Materials Specifications for Paving", Section 2200, latest edition. The work herein required is not of the magnitude of work described in the aforesaid Standard Specification, therefore only applicable limitations will be enforced. However, this is not a relaxing of the requirements for the quality of the work. When work is obviously substandard, necessary tests will be made for compliance to the specifications. Work found to be in noncompliance with the specification shall be removed and replaced at the expense of the Contractor, including the costs of all tests.
• Use locally available materials and gradations that exhibit a satisfactory record of previous installations.
b. Base Course Mix: Conform to requirements for mix designations APWA Type 1-01, per section 2205 of referenced APWA Specifications. Recycled content per APWA specifications allowed.
c. Surface Course Mix: Conform to requirements for mix designation APWA Type 3-01, per Section 2205 of referenced APWA Specifications. Recycled content per APWA specifications allowed.
d. Marking Paint: Alkyd-resin type, ready-mixed complying with AASHTO M248, Type I.
• Colors: White.
9) ASPHALT-AGGREGATE MIXTURE
a. Provide plant-mixed, hot-laid asphalt-aggregate mixture complying with ASTM D 3515 and as recommended by local paving authorities to suit project conditions.

PART 3 - EXECUTION

- 10) EXAMINATION
a. Verify that subgrade is dry and in suitable condition to begin paving.
b. Proof-roll subgrade below proposed pavements with a pneumatic-tired and loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons to identify soft pockets and areas of excess yielding. Do not proof-roll wet or saturated subgrades. Proof-roll within two days of paving operations.
• Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. Limit vehicle speed to 3 mph.
• Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by the Geotechnical Engineer, and replace with compacted backfill or fill as directed to the proper moisture content and density.
• After proof rolling and repairing deep subgrade deficiencies, the entire subgrade should be scarified to a depth of 8 inches and uniformly compacted to at least 95% of the standard proctor maximum dry density to provide a uniform subgrade for pavement construction. Moisture content and density of subgrade to be checked within two days prior to the commencement of paving operations.
• Reconstruct subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, without additional compensation.
c. Proceed with paving only after unsatisfactory conditions have been corrected.
11) 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.
• Allow tack coat to cure undisturbed before applying hot-mix asphalt paving.
• Avoid smearing or staining adjoining surfaces, appurtenances, and surroundings. Remove spillages and clean affected surfaces.
12) HOT-MIX ASPHALT PLACING
a. Machine place hot-mix asphalt on prepared surface, spread uniformly, and strike off. Place asphalt mix by hand to areas inaccessible to equipment in a manner that prevents segregation of mix. Place each course to required grade, cross section, and thickness when compacted.
• Place hot-mix asphalt base course in number of lifts and thicknesses indicated.
• Place hot-mix asphalt surface course in single lift.
• Spread mix at minimum temperature required by the mix design and outside temperature.
• Begin applying mix along centerline of crown for crowned sections and on high side of one-way slopes unless otherwise indicated.
• 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 wide unless infill edge strips of a lesser width are required.
• After first strip has been placed and rolled, place succeeding strips and extend rolling to overlap previous strips. Complete a section of asphalt base course before placing asphalt surface course.
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.

13) 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.
• Clean contact surfaces and apply tack coat to joints.
• Offset longitudinal joints, in successive courses, a minimum of 6 inches.
• Offset transverse joints, in successive courses, a minimum of 24 inches.
• Construct transverse joints at each point where paver ends a day's work and resumes work at a subsequent time.
• Compact joints as soon as hot-mix asphalt will bear roller weight without excessive displacement.
• Compact asphalt at joints to a density within 2 percent of specified course density.

14) 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.
• Complete compaction before mix temperature cools to 185 deg F.
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:
• Average Density: 96 percent of reference laboratory density according to ASTM D 6927, but not less than 94 percent nor greater than 100 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. Repairs: Remove paved areas that are defective or contaminated with foreign materials and replace with fresh, hot-mix asphalt. Compact by rolling to specified density and surface smoothness.
g. Protection: After final rolling, do not permit vehicular traffic on pavement until it has cooled and hardened.
h. Erect barricades to protect paving from traffic until mixture has cooled enough not to become marked.

15) PAVEMENT MARKING

- a. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Architect.
b. Allow paving to age for 5 days before starting pavement marking.
c. Sweep and clean surface to eliminate loose material and dust.
d. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils.

16) INSTALLATION TOLERANCES

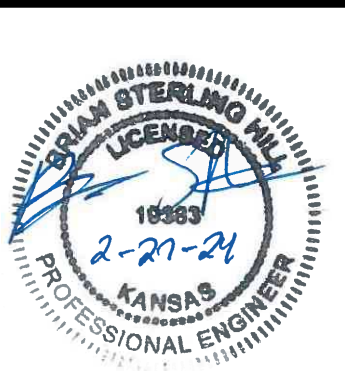
- a. Pavement Thickness: Compact each course to produce the thickness indicated within the following tolerances:
• Base Course: Plus or minus 1/4 inch.
• Surface Course: Plus 1/4 inch, no minus.
b. Pavement Surface Smoothness: Compact each course to produce a surface smoothness within the following tolerances as determined by using a 10-foot straightedge applied transversely or longitudinally to paved areas:
• Base Course: 1/4 inch.
• Surface Course: 1/8 inch.
• Crowned Surfaces: Test with crowned template centered and at right angle to crown. Maximum allowable variance from template is 1/4 inch.

17) 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. In-Place Density: Testing agency will take samples of uncompacted paving mixtures and compacted pavement according to ASTM standards.
• Reference maximum theoretical density will be determined by averaging results from four samples of hot-mix asphalt-paving mixture delivered daily to site, prepared according to ASTM D 2041, and compacted according to job-mix specifications.
• In-place density of compacted pavement will be determined by testing core samples according to ASTM D 1188 or ASTM D 2726.
1. One core sample will be taken for every 1000 sq. yd. or less of installed pavement, with no fewer than 3 cores taken.
2. Field density of in-place compacted pavement may also be determined by nuclear method according to ASTM D 2950 and correlated with ASTM D 1188 or ASTM D 2726.
e. Replace and compact hot-mix asphalt where core tests were taken.
f. Remove and replace or install additional hot-mix asphalt where test results or measurements indicate that it does not comply with specified requirements.

18) DISPOSAL

- a. Except for material indicated to be recycled, remove excavated materials from Project site and legally dispose of them in an EPA-approved landfill.
• Do not allow milled materials to accumulate on-site.



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FINAL DEVELOPMENT PLANS/CONSTRUCTION DOCUMENTS FOR

WYANDOTTE HIGH SCHOOL IMPROVEMENTS

2501 MINNESOTA AVE. KANSAS CITY, KS 66102

Table with project details: 321216 ASPHALT PAVING, PROJECT NO. 2202010801, SCALE N.T.S., DRAWN JLB, DESIGNED SEK, CHECKED BSH, SHEET NO. C24

SECTION 321313 -- CONCRETE PAVING

PART 1 -- GENERAL

1) RELATED DOCUMENTS

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

2) SUMMARY

- a. Section Includes: Curbs and gutters, Walks, Driveways, Pavement. b. Related Sections: Section 321373 "Concrete Paving Joint Sealants" for joint sealants in expansion and contraction joints within concrete paving and in joints between concrete paving and asphalt paving or adjacent construction.

3) DEFINITIONS

- a. Cementitious Materials: Portland cement alone or in combination with one or more of blended hydraulic cement, fly ash and other pozzolans, and ground granulated blast-furnace slag.

4) SUBMITTALS

- a. Product Data: For each type of product indicated. b. Other Action Submittals: Cementitious materials, Steel reinforcement and reinforcement accessories, Admixtures, Curing compounds, Applied finish materials, Bonding agent or epoxy adhesive, Joint fillers. c. Material Test Reports: For each of the following: Aggregates. Include service-record data indicating absence of deleterious expansion of concrete due to alkali-aggregate reactivity. d. Field quality-control reports.

5) QUALITY ASSURANCE

- a. Detectable Warning Installer Qualifications: An employer of workers trained and approved by manufacturer of brick paving systems. b. Ready-Mix-Concrete Manufacturer Qualifications: A firm experienced in manufacturing ready-mixed concrete products and that complies with ASTM C 94/C 94M requirements for production facilities and equipment. c. Testing Agency Qualifications: Qualified according to ASTM C 1077 and ASTM E 329 for testing indicated. d. Concrete Testing Service: Engage a qualified testing agency to perform material evaluation tests and to design concrete mixtures. e. ACI Publications: Comply with ACI 301 unless otherwise indicated. f. Preinstallation Conference: Conduct conference at Project site.

6) PROJECT CONDITIONS

- a. Traffic Control: Maintain access for vehicular and pedestrian traffic as required for other construction activities.

PART 2 -- PRODUCTS

7) FORMS

- a. Form Materials: Plywood, metal, metal-framed plywood, or other approved panel-type materials to provide full-depth, continuous, straight, and smooth exposed surfaces. b. Form-Release Agent: Commercially formulated form-release agent that will not bond with, stain, or adversely affect concrete surfaces and that will not impair subsequent treatments of concrete surfaces.

8) STEEL REINFORCEMENT

- a. Plain-Steel Welded Wire Reinforcement: ASTM A 185/A 185M, fabricated from steel wire into flat sheets. b. Reinforcing Bars: ASTM A 615/A 615M, Grade 60; deformed. c. Joint Dowel Bars: ASTM A 615/A 615M, Grade 60 plain-steel bars. d. Tie Bars: ASTM A 615/A 615M, Grade 60, deformed.

9) CONCRETE MATERIALS

- a. Cementitious Material: Use the following cementitious materials, of same type, brand, and source throughout Project: Portland Cement: ASTM C 150, gray or white portland cement type I. Fly Ash: ASTM C 618, Class C. Blended Hydraulic Cement: ASTM C 595, Type IS, portland blast-furnace slag or Type IP, portland-pozzolan cement. b. Normal-Weight Aggregates: Aggregates shall be in accordance with KCMMB-4K specifications. c. Water: Potable and complying with ASTM C 94/C 94M. d. Air-Entraining Admixture: ASTM C 260. e. Chemical Admixtures: Admixtures certified by manufacturer to be compatible with other admixtures and to contain not more than 0.1 percent water-soluble chloride ions by mass of cementitious material.

10) CURING MATERIALS

- a. Absorbent Cover: AASHTO M 182, Class 3, burlap cloth made from jute or kenaf, weighing approximately 9 oz./sq. yd. dry. b. Moisture-Retaining Cover: ASTM C 171, polyethylene film or white burlap-polyethylene sheet. c. Water: Potable. d. Evaporation Retarder: Waterborne, monomolecular, film forming, manufactured for application to fresh concrete. e. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating. f. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following: Axim Italcementi Group, Inc.; Caltex CIMFILM, BASF Construction Chemicals, LLC; Confilm, ChemMasters; Spray-Film, Conspic by Dayton Superior; Aquafil, Dayton Superior Corporation; Sure Film (J-74), Edoco by Dayton Superior; BurkeFilm, Euclid Chemical Company (The), an RPM company; Eucobar, Kaufman Products, Inc.; VaporAid, Lambert Corporation; LAMBDO SKIN, L&M Construction Chemicals, Inc.; E-CON, Meadows, W. R., Inc.; EVAPRE, Metacrete Industries; Waterhold, Nox-Crete Products Group; MONOFILM, Sika Corporation, Inc.; SikaFilm, SpecChem, LLC; Spec Film, Symons by Dayton Superior; Finishing Aid, TK Products, Division of Sierra Corporation; TK-2120 TRI-FILM, Uretek; PRO-FILM, Vexcon Chemicals Inc.; Certi-Vex EnvioAssist. g. Clear, Waterborne, Membrane-Forming Curing Compound: ASTM C 309, Type 1, Class B, dissipating. h. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following: Anti-Hydro International, Inc.; A-H Curing Compound #2 DR WB, ChemMasters; Safe-Cure Clear, Conspic by Dayton Superior; D.O.T. Resin Cure, DSSCC Clear Resin Cure, Dayton Superior Corporation; Day-Chem Rez Cure (J-11-W), Edoco by Dayton Superior; DSSCC Clear Resin Cure, Resin Emulsion Cure V.O.C. (Type I), Euclid Chemical Company (The), an RPM company; Kurez W VOX, Kaufman Products, Inc.; ThinFilm 420, Lambert Corporation; AQUA KURE - CLEAR, L&M Construction Chemicals, Inc.; L&M CURE R.

- 10. Meadows, W. R., Inc.; 1100-CLEAR SERIES. 11. Nox-Crete Products Group; Resin Cure E. 12. SpecChem, LLC; PavCure Rez. 13. Symons by Dayton Superior; Resi-Chem Clear. 14. Tamms Industries, Inc., Euclid Chemical Company (The); TAMMSCURE WB 30C. 15. TK Products, Division of Sierra Corporation. 16. Vexcon Chemicals Inc.; Certi-Vex EnvioCure 100.

11) RELATED MATERIALS

- a. Joint Fillers: ASTM D 1751, asphalt-saturated cellulosic fiber or ASTM D 1752, cork or self-expanding cork in preformed strips. b. Epoxy Bonding Adhesive: ASTM C 881/C 881M, two-component epoxy resin capable of humid curing and bonding to many surfaces; of class suitable for application temperature, of grade complying with requirements, and of the following types: Types IV and V, load bearing, for bonding hardened or freshly mixed concrete to hardened concrete. c. Chemical Surface Retarder: Water-soluble, liquid, set retarder with color dye, for horizontal concrete surface application, capable of temporarily delaying final hardening of concrete to a depth of 1/8 to 1/4 inch. d. Products: Subject to compliance with requirements, available products that may be incorporated into the Work include, but are not limited to, the following: ChemMasters; Expose, Conspic by Dayton Superior; Delay S, Dayton Superior Corporation; Sure Etch (J-73), Edoco by Dayton Superior; True Etch Surface Retarder, Euclid Chemical Company (The), an RPM company; Surface Retarder Formula S, Kaufman Products, Inc.; Expose, Meadows, W. R., Inc.; TOP-STOP, Metacrete Industries; Surfurd, Nox-Crete Products Group; CRETE-NOX TA, Scaffield, L. M. Company; LITHOTEX Top Surface Retarder, Sika Corporation, Inc.; Rugosol-S, SpecChem, LLC; Spec Etch, TK Products, Division of Sierra Corporation; TK-6000 Concrete Surface Retarder, Unitek; TOP-ETCH Surface Retarder, Vexcon Chemicals Inc.; Certi-Vex Envioset

12) WHEEL STOPS

- e. Wheel Stops: Precast, air-entrained concrete, 3000-psi minimum compressive strength, 4-1/2 inches high by 9 inches wide by 72 inches long. Provide chamfered corners and drainage slots on underside and holes for anchoring to substrate. Dowels: Galvanized steel, 3/4 inch in diameter, 10-inch minimum length.

13) CONCRETE CURBS

- a. Curbs to comply with the plan details.

14) CONCRETE MIXTURES

- a. Prepare design mixtures, proportioned according to ACI 301, for each type and strength of normal-weight concrete, and as determined by either laboratory trial mixtures or field experience. Use ASTM C150, Type 1 -- portland cement. Aggregates per KCMMB-4K specifications. b. See concrete requirements in geotechnical report. c. Use a qualified independent testing agency for preparing and reporting proposed concrete design mixtures for the trial batch method. d. When automatic machine placement is used, determine design mixtures and obtain laboratory test results that meet or exceed requirements. e. Proportion mixtures to provide normal-weight concrete with the following properties: Compressive Strength (28 Days): 4000 psi, Maximum Water-Cementitious Materials Ratio at Point of Placement: 0.45, Slump Limit: 4 inches plus or minus 1 inch for paving and 2. plus or minus one inch for curbs and gutters. f. Add air-entraining admixture at manufacturer's prescribed rate to result in normal-weight concrete at point of placement having an air content as follows: Air Content: 6 percent plus or minus 1 percent. g. Limit water-soluble, chloride-ion content in hardened concrete to 0.15 percent by weight of cement. h. Chemical Admixtures: Use admixtures according to manufacturer's written instructions. i. Use water-reducing and retarding admixture when required by high temperatures, low humidity, or other adverse placement conditions. j. Cementitious Materials: Limit percentage by weight of cementitious materials other than portland cement according to ACI 301 requirements as follows: Fly Ash or Pozzolan: 25 percent, Ground Granulated Blast-Furnace Slag: 50 percent, Combined Fly Ash or Pozzolan, and Ground Granulated Blast-Furnace Slag: 50 percent, with fly ash or pozzolan not exceeding 25 percent.

15) CONCRETE MIXING

- a. Ready-Mixed Concrete: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M, and ASTM C 1116/C 1116M. b. Project-Site Mixing: Measure, batch, and mix concrete materials and concrete according to ASTM C 94/C 94M. c. For concrete batches of 1 cu. yd. or smaller, continue mixing at least 1-1/2 minutes, but not more than 5 minutes after ingredients are in mixer, before any part of batch is released. d. For concrete batches larger than 1 cu. yd., increase mixing time by 15 seconds for each additional 1 cu. yd. Provide batch tickets for each batch discharged and used in the Work, indicating Project identification name and number, date, mixture type, mixing time, quantity, and amount of water added.

PART 3 -- EXECUTION

16) EXAMINATION

- a. Notify testing agency when excavations have reached required subgrade. b. Proof-roll subgrade below proposed pavements with a pneumatic-tired and loaded 10-wheel, tandem-axle dump truck weighing not less than 15 tons to identify soft pockets and areas of excess yielding. c. Completely proof-roll subgrade in one direction, repeating proof-rolling in direction perpendicular to first direction. d. Excavate soft spots, unsatisfactory soils, and areas of excessive pumping or rutting, as determined by the Geotechnical Engineer, and replace with compacted backfill or fill as directed to the proper moisture content and density. e. After proof rolling and repairing deep subgrade deficiencies, the entire subgrade should be scarified to a depth of 8 inches and uniformly compacted to at least 95% of the standard proctor maximum dry density to provide a uniform subgrade for pavement construction. f. Soil treatment. g. Reconstructed subgrades damaged by freezing temperatures, frost, rain, accumulated water, or construction activities, without additional compensation. h. Proceed with paving only after unsatisfactory conditions have been corrected.

17) PREPARATION

- a. Remove loose material from compacted subbase surface immediately before placing concrete.

18) EDGE FORMS AND SCREED CONSTRUCTION

- a. Set, brace, and secure edge forms, bulkheads, and intermediate screed guides to required lines, grades, and elevations. b. Clean forms after each use and coat with form-release agent to ensure separation from concrete without damage.

19) STEEL REINFORCEMENT

- a. General: Comply with CRSI's "Manual of Standard Practice" for fabricating, placing, and supporting reinforcement. b. Clean reinforcement of loose rust and mill scale, earth, ice, or other bond-reducing materials. c. Arrange, space, and securely tie bars and bar supports to hold reinforcement in position during concrete placement. d. Install welded wire reinforcement in lengths as long as practicable. e. Epoxy-Coated Reinforcement: Use epoxy-coated steel wire ties to fasten epoxy-coated reinforcement. f. Install fabricated bar mats in lengths as long as practicable. g. Straighten bends, kinks, and other irregularities, or replace units as required before placement. h. Embed keys at least 1-1/2 inches into concrete.

20) JOINTS

- a. General: Form construction, isolation, and contraction joints and tool edges true to line, with faces perpendicular to surface plane of concrete. b. Construction Joints: Set construction joints at side and end terminations of paving and at locations where paving operations are stopped for more than one-half hour unless paving terminates at isolation joints. c. Isolation Joints: Form isolation joints of preformed joint-filler strips abutting concrete curbs, catch basins, manholes, inlets, structures, other fixed objects, and where indicated.

- Locate expansion joints at intervals of 50 feet unless otherwise indicated. • Extend joint fillers full width and depth of joint. • Terminate joint filler not less than 1/2 inch or more than 1 inch below finished surface if joint sealant is indicated. • Place top of joint filler flush with finished concrete surface if joint sealant is not indicated. • Furnish joint fillers in one-piece lengths. • During concrete placement, protect top edge of joint filler with metal, plastic, or other temporary preformed cap. • Remove protective cap after concrete has been placed on both sides of joint. • Contraction Joints: Form weakened-plane contraction joints, sectioning concrete into areas as indicated. • Grooved Joints: Form contraction joints after initial floating by grooving and finishing each edge of joint with grooving tool to a 1/4-inch radius. • Sowed Joints: Form contraction joints with power saws equipped with shatterproof abrasive or diamond-tipped blades. • Doweled Contraction Joints: Install dowel bars and support assemblies at joints where indicated. • Edging: After initial floating, tool edges of paving, gutters, curbs, and joints in concrete with an edging tool to a 1/4-inch radius. • Consolidate concrete according to ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping. • Consolidate concrete along face of forms and adjacent to transverse joints with an internal vibrator. • Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleed water appears on the surface. • Curbs and Gutters: Use design mixture for automatic machine placement. • Slip-Form Paving: Use design mixture for automatic machine placement. • Compact subbase and prepare subgrade of sufficient width to prevent displacement of slip-form paving machine during operations. • Cold-Weather Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing, or low temperatures. • Hot-Weather Placement: Comply with ACI 301 and as follows when hot-weather conditions exist: Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. • Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete. • Fog-spray forms and subgrade just before placing concrete. • General: Do not add water to concrete surfaces during finishing operations. • Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. • Burlap Finish: Drag a seamless strip of damp burlap across float-finished concrete, perpendicular to line of traffic, to provide a uniform, gritty texture. • Medium-to-Fine-Textured Broom Finish: Draw a soft-bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.

21) CONCRETE PLACEMENT

- a. Before placing concrete, inspect and complete formwork installation, steel reinforcement, and items to be embedded or cast-in. b. Remove snow, ice, or frost from subbase surface and steel reinforcement before placing concrete. c. Moisture subbase to provide a uniform dampened condition at time concrete is placed. d. Do not add water to concrete during delivery or at Project site. e. Deposit and spread concrete in a continuous operation between transverse joints. f. Consolidate concrete according to ACI 301 by mechanical vibrating equipment supplemented by hand spading, rodding, or tamping. g. Screen paving surface with a straightedge and strike off. h. Commence initial floating using bull floats or darbies to impart an open-textured and uniform surface plane before excess moisture or bleed water appears on the surface. i. Curbs and Gutters: Use design mixture for automatic machine placement. j. Slip-Form Paving: Use design mixture for automatic machine placement. k. Cold-Weather Placement: Protect concrete work from physical damage or reduced strength that could be caused by frost, freezing, or low temperatures. l. Hot-Weather Placement: Comply with ACI 301 and as follows when hot-weather conditions exist: Cool ingredients before mixing to maintain concrete temperature below 90 deg F at time of placement. • Cover steel reinforcement with water-soaked burlap so steel temperature will not exceed ambient air temperature immediately before embedding in concrete. • Fog-spray forms and subgrade just before placing concrete. • General: Do not add water to concrete surfaces during finishing operations. • Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. • Burlap Finish: Drag a seamless strip of damp burlap across float-finished concrete, perpendicular to line of traffic, to provide a uniform, gritty texture. • Medium-to-Fine-Textured Broom Finish: Draw a soft-bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.

22) FLOAT FINISHING

- a. General: Do not add water to concrete surfaces during finishing operations. b. Float Finish: Begin the second floating operation when bleed-water sheen has disappeared and concrete surface has stiffened sufficiently to permit operations. c. Burlap Finish: Drag a seamless strip of damp burlap across float-finished concrete, perpendicular to line of traffic, to provide a uniform, gritty texture. d. Medium-to-Fine-Textured Broom Finish: Draw a soft-bristle broom across float-finished concrete surface perpendicular to line of traffic to provide a uniform, fine-line texture.

23) CONCRETE PROTECTION AND CURING

- a. General: Protect freshly placed concrete from premature drying and excessive cold or hot temperatures. b. Comply with ACI 306.1 for cold-weather protection. c. Evaporation Retarder: Apply evaporation retarder to concrete surfaces if hot, dry, or windy conditions cause moisture loss approaching 0.2 lb./sq. ft. x h before and during finishing operations. d. Begin curing after finishing concrete but not before water has disappeared from concrete surface. e. Curing Methods: Cure concrete by moisture curing, moisture-retaining-cover curing, curing compound or a combination of these as follows: Moisture Curing: Keep surfaces continuously moist for not less than seven days with the following materials: 1. Water 2. Continuous water-fog spray. 3. Absorbent cover, water saturated and kept continuously wet. f. Moisture-Retaining-Cover Curing: Cover concrete surfaces with moisture-retaining cover, placed in widest practicable width, with sides and ends lapped at least 12 inches and sealed by waterproof tape or adhesive. g. Curing Compound: Apply uniformly in continuous operation by power spray or roller according to manufacturer's written instructions. h. Recast areas that have been subjected to heavy rainfall within three hours after initial application. i. Maintain continuity of coating, and repair damage during curing period.

24) PAVING TOLERANCES

- a. Comply with tolerances in ACI 117 and as follows: Elevation: 1/4 inch, Thickness: Plus 3/8 inch, minus 1/4 inch, Surface: Gap below 10-foot-long, unlevelled straightedge not to exceed 1/2 inch, Alignment of Tie-Bar End Relative to Line Perpendicular to Paving Edge: 1/2 inch per 12 inches of tie bar, Lateral Alignment and Spacing of Dowels: 1 inch, Vertical Alignment of Dowels: 1/4 inch, Alignment of Dowel-Bar End Relative to Line Perpendicular to Paving Edge: 1/4 inch per 12 inches of dowel, Joint Spacing: 3 inches, Contraction Joint Depth: Plus 1/4 inch, no minus, Joint Width: Plus 1/8 inch, no minus.

25) CONCRETE CURBS

- a. Install curbs per plan details.

26) PAVEMENT MARKING

- a. Do not apply pavement-marking paint until layout, colors, and placement have been verified with Architect. b. Allow paving to age for 30 days before starting pavement marking. c. Sweep and clean surface to eliminate loose material and dust. d. Apply paint with mechanical equipment to produce pavement markings, of dimensions indicated, with uniform, straight edges. e. Apply at manufacturer's recommended rates to provide a minimum wet film thickness of 15 mils.

27) FIELD QUALITY CONTROL

- a. Testing Agency: Owner will engage a qualified testing agency to perform tests and inspections. b. Testing Services: Testing of composite samples of fresh concrete obtained according to ASTM C 172 shall be performed according to the following requirements outlined by the geotechnical representative.

28) REPAIRS AND PROTECTION

- 28) Remove and replace concrete paving that is broken, damaged, or defective or that does not comply with requirements in this Section. Remove work in complete sections from joint to joint unless otherwise approved by Architect.

- 30) Drill test cores, where directed by Architect, when necessary to determine magnitude of cracks or defective areas. Fill drilled core holes in satisfactory paving areas with portland cement concrete bonded to paving with epoxy adhesive.

- 31) Protect concrete paving from damage. Exclude traffic from paving for at least 14 days after placement. When construction traffic is permitted, maintain paving as clean as possible by removing surface stains and spillage of materials as they occur.

- 32) Maintain concrete paving free of stains, discoloration, dirt, and other foreign material. Sweep paving not more than two days before date scheduled for Substantial Completion inspections.



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FINAL DEVELOPMENT PLANS/CONSTRUCTION DOCUMENTS FOR WYANDOTTE HIGH SCHOOL IMPROVEMENTS 2501 MINNESOTA AVE. KANSAS CITY, KS 66102

321313 CONCRETE PAVING

PROJECT NO. 2202010801

SCALE N.T.S.

DRAWN DESIGNED CHECKED JLB SEK BSH

Table with columns: NO., REVISION, DATE

SHEET NO. C25

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SECTION 334100 – STORM UTILITY DRAINAGE PIPING

PART 1 – GENERAL

- 1) RELATED DOCUMENTS
 - a. Drawings and general provisions of the Contract, including General and Supplementary Conditions and Division 01 Specification Sections, apply to this Section.
- 2) SUMMARY
 - a. Section Includes:
 - Pipe and fittings.
 - Cleanouts.
 - Stormwater inlets.
 - Manholes / Junction Boxes.
- 3) SUBMITTALS
 - a. Product Data: For each type of product indicated.
 - b. Shop Drawings:
 - Trench Drain: Include elevations, sections, details, frames, covers, and depths.
 - Drain Basin: Include elevations, details, covers, and depths.
 - Concrete Structures: Include elevations, sections, details, frames, covers, and depths.
 - End Sections: Product specifications and grate protection.
- 4) DELIVERY, STORAGE, AND HANDLING
 - a. Do not store plastic manholes, pipe, and fittings in direct sunlight.
 - b. Protect pipe, pipe fittings, and seals from dirt and damage.
 - c. Handle manholes according to manufacturer's written rigging instructions.
 - d. Handle stormwater inlets according to manufacturer's written rigging instructions.
- 5) PROJECT CONDITIONS
 - a. Interruption of Existing Storm Drainage Service: Do not interrupt service to facilities occupied by Owner or others unless permitted under the following conditions and then only after arranging to provide temporary service according to requirements indicated:
 - Notify Construction Manager and Owner no fewer than two days in advance of proposed interruption of service.

PART 2 – PRODUCTS

- 6) PE PIPE AND FITTINGS
 - a. HDPE Dual-Wall Pipe and Fittings NPS 3 to NPS 10: AASHTO M 252M, Type S, with smooth waterway for coupling joints.
 - Sointight Couplings: AASHTO M 252M, corrugated, matching tube and fittings.
 - b. HDPE Dual-Wall Pipe and Fittings NPS 12 to NPS 60: AASHTO M 294M, Type S, with smooth waterway for coupling joints.
 - Sointight Couplings: AASHTO M 294M, corrugated, matching pipe and fittings.
- 7) PVC PIPE AND FITTINGS
 - a. Pipe: ASTM D1785 Schedule 40 PVC, with plain ends for solvent-cemented joints.
 - b. PVC pipe to be used as riser pipe for building downspouts below grade.
- 8) CONCRETE PIPE AND FITTINGS
 - a. Reinforced-Concrete Sewer Pipe and Fittings conforming to ASTM C76.
 - Bell-and-spigot ends with gasketed joints. O-ring gaskets shall be synthetic rubber and shall conform to ASTM C361 and ASTM C443.
 - Class III, Wall B.
- 9) CLEANOUTS
 - a. Plastic Cleanouts:
 - Manufacturers: Subject to compliance with requirements available manufacturers offering products that may be incorporated into the Work include, but are not limited to, the following:
 1. Canplas LLC.
 2. IPS Corporation.
 3. NDS Inc.
 4. Plastic Oddities; a division of Diverse Corporate Technologies, Inc.
 5. Sioux Chief Manufacturing Company, Inc.
 6. Zurn Light Commercial Products Operation; Zurn Plumbing Products Group.
 - Description: PVC body with PVC threaded plug. Include PVC sewer pipe fitting and riser to cleanout of same material as sewer piping.
- 10) PVC DRAIN BASINS
 - a. Drain basins shall be manufactured from PVC pipe stock conforming to ASTM D1784 cell class 12454. Structure and pipe connections shall be watertight conforming to ASTM D3212.
 - Frames and grates shall be ductile iron and shall meet loading requirements shown.
- 11) STORMWATER INLETS / MANHOLES / JUNCTION BOXES
 - a. Curb inlets, manholes, and junction boxes per plan details.
- 12) PIPE OUTLETS
 - a. Install concrete toe wall on pipe end section and turf reinforcement mat at pipe end sections. See plans for location and details.
 - b. Pipe outfalls shall have HDPE or CMP pre-manufactured end sections.
 - c. HDPE end sections shall conform to ASTM D3530 minimum cell classification 213320C. End sections shall have a toe plate to cast into a concrete toe wall.
 - d. Corrugated metal end sections shall be fabricated from galvanized base metal, conform to ASTM A 760/A, and meet CMP pipe manufacturer design standards. End sections shall have a toe plate to cast into a concrete toe wall.
- 13) CONCRETE
 - a. General: Cast-in-place concrete according to ACI 318, and the following:
 - Cement: ASTM C 150, Type II.
 - Fine Aggregate: ASTM C 33, sand.
 - Coarse Aggregate: ASTM C 33, crushed gravel.
 - Water: Potable.
 - b. Portland Cement Design Mix: 4000 psi minimum, with 0.45 maximum water/cementitious materials ratio.
 - Reinforcing Fabric: ASTM A 185/A 185M, steel, welded wire fabric, plain.
 - Reinforcing Bars: ASTM A 615/A 615M, Grade 60 deformed steel.

PART 3 – EXECUTION

- 15) EARTHWORK
 - a. Excavation, trenching, and backfilling are specified in Section 312000 "Earth Moving."
- 16) PIPING INSTALLATION
 - a. General Locations and Arrangements: Drawing plans and details indicate general location and arrangement of underground storm drainage piping. Location and arrangement of piping layout take into account design considerations. Install piping as indicated, to extent practical. Where specific installation is not indicated, follow piping manufacturer's written instructions.
 - b. Install piping beginning at low point, true to grades and alignment indicated with unbroken continuity of invert. Place bell ends of piping facing upstream. Install gaskets, seals, sleeves, and couplings according to manufacturer's written instructions for use of lubricants, cements, and other installation requirements.
 - c. Install proper size increasers, reducers, and couplings where different sizes or materials of pipes and fittings are connected. Reducing size of piping in direction of flow is prohibited.
 - d. When installing pipe under streets or other obstructions that cannot be disturbed, use pipe-jacking process of microtunneling.
 - e. Install gravity-flow, nonpressure drainage piping according to the following:
 - Install piping pitched down in direction of flow.
 - Install PE corrugated sewer piping according to ASTM D 2321.
 - Install PVC sewer piping according to ASTM D 2321 and ASTM F 1668.
 - Install reinforced-concrete sewer piping according to ASTM C 1479 and ACPA's "Concrete Pipe Installation Manual."
- 17) PIPE JOINT CONSTRUCTION
 - a. Join gravity-flow, nonpressure drainage piping according to the following:
 - Join corrugated PE piping according to ASTM D 3212 for push-on joints.
 - Join PVC cellular-core piping according to ASTM D 2321 and ASTM F 891 for solvent-cemented joints.
 - Join reinforced-concrete sewer piping according to ACPA's "Concrete Pipe Installation Manual" for rubber-gasketed joints.
 - Join dissimilar pipe materials with nonpressure-type flexible couplings.
- 18) CLEANOUT INSTALLATION
 - a. Install cleanouts and riser extensions from sewer pipes to cleanouts at grade. Install piping so cleanouts open in direction of flow in sewer pipe.
 - Use Light-Duty, top-loading classification cleanouts in earth or unpaved foot-traffic areas.
 - Use Heavy-Duty, top-loading classification cleanouts in vehicle-traffic service areas.
 - b. Set cleanout frames and covers in concrete pavement and roads with tops flush with pavement surface.
- 19) PVC DRAIN BASINS
 - a. PVC drain basins shall be installed per ASTM D2321 and manufacturer specifications.
- 20) TRENCH DRAIN

- a. Install trench drain per manufacturer specifications.
- 21) CONNECTIONS
 - a. Connect nonpressure, gravity-flow drainage piping in building's storm building drains specified in Section 221413 "Storm Drainage Piping."
 - b. Make connections to piping.
 - Use commercially manufactured wye fittings for piping branch connections unless a structure is indicated.
 - Make connections to structures by cutting into existing unit and creating an opening large enough to allow 3 inches of concrete to be packed around entering connection. Cut end of connection pipe passing through pipe or structure wall to conform to shape of and be flush with inside wall unless otherwise indicated. On outside of pipe, manhole, or structure wall, encase entering connection in 6 inches of concrete for minimum length of 12 inches to provide additional support of collar from connection to undisturbed ground.
 1. Use concrete that will attain a minimum 28-day compressive strength of 3000 psi unless otherwise indicated.
 2. Use epoxy-bonding compound as interface between new and existing concrete and piping materials.
 - Protect existing piping, manholes, and structures to prevent concrete or debris from entering while making tap connections. Remove debris or other extraneous material that may accumulate.
- 22) IDENTIFICATION
 - a. Materials and their installation are specified in Division 31 Section "Earth Moving." Arrange for installation of green warning tape directly over piping and at outside edge of underground structures.
 - Use warning tape or detectable warning tape over ferrous piping.
 - Use detectable warning tape over nonferrous piping and over edges of underground structures.
- 23) FIELD QUALITY CONTROL
 - a. Inspect interior of piping to determine whether line displacement or other damage has occurred. Inspect after approximately 24 inches of backfill is in place, and again at completion of Project.
 - Submit separate reports for each system inspection.
 - Defects requiring correction include the following:
 1. Alignment: Less than full diameter of inside of pipe is visible between structures.
 2. Deflection: Flexible piping with deflection that prevents passage of ball or cylinder of size not less than 92.5 percent of piping diameter.
 3. Damage: Crushed, broken, cracked, or otherwise damaged piping.
 4. Infiltration: Water leakage into piping.
 5. Exfiltration: Water leakage from or around piping.
 - Replace defective piping using new materials, and repeat inspections until defects are within allowances specified.
 - Reinspect and repeat procedure until results are satisfactory.
 - b. Test new piping systems, and parts of existing systems that have been altered, extended, or repaired, for leaks and defects.
 - Do not enclose, cover, or put into service before inspection and approval.
 - Test completed piping systems according to requirements of authorities having jurisdiction.
 - Schedule tests and inspections by authorities having jurisdiction with at least 24 hours' advance notice.
 - Submit separate report for each test.
 - Gravity-Flow Storm Drainage Piping: Test according to requirements of authorities having jurisdiction, UNI-B-6, and the following:
 1. Exception: Piping with soiltight joints unless required by authorities having jurisdiction.
 2. Option: Test plastic piping according to ASTM F 1417.
 3. Option: Test concrete piping according to ASTM C 924.
 - c. Leaks and loss in test pressure constitute defects that must be repaired.
 - d. Replace leaking piping using new materials, and repeat testing until leakage is within allowances specified.
- 24) CLEANING
 - a. Clean interior of piping of dirt and superfluous materials. Flush with water.



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FINAL DEVELOPMENT PLANS/CONSTRUCTION DOCUMENTS FOR

WYANDOTTE HIGH SCHOOL IMPROVEMENTS

2501 MINNESOTA AVE. KANSAS CITY, KS 66102

334100
STORM UTILITY
DRAINAGE PIPING

PROJECT NO. 2202010801

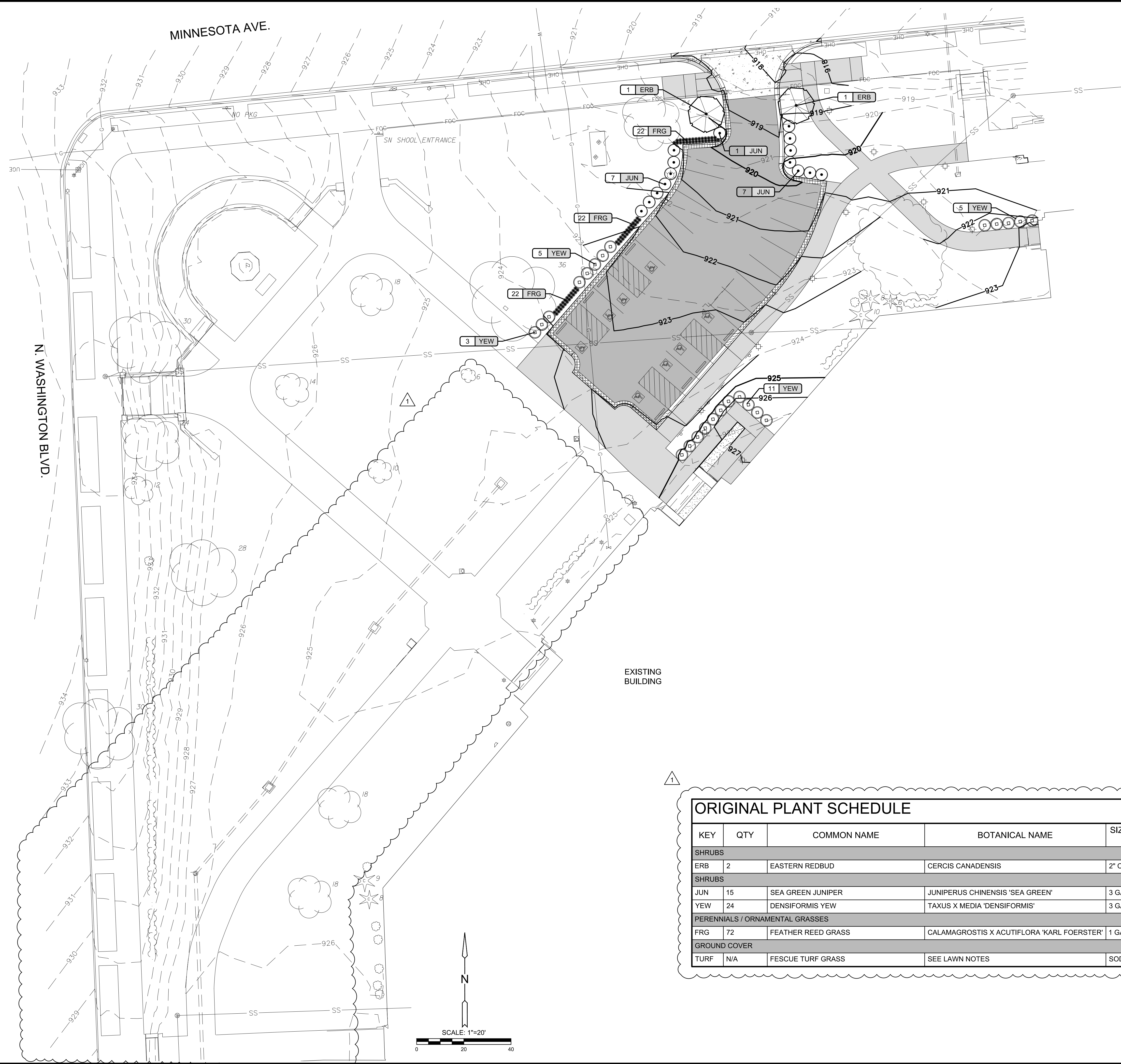
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DRAWN	DESIGNED	CHECKED
JLB	SEK	BSH

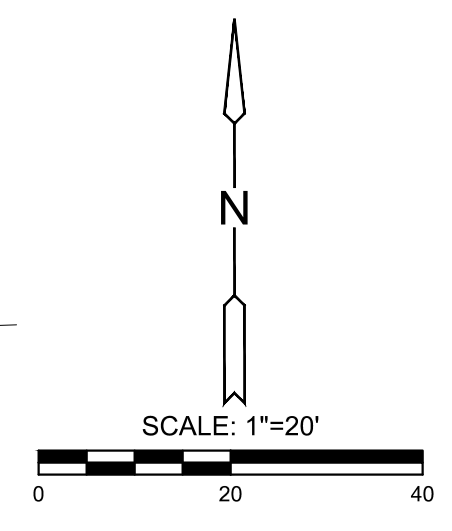
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	CITY COMMENTS	02-27-24
	CONSTRUCTION DOCUMENTS	01-31-24

NO.	REVISION	DATE
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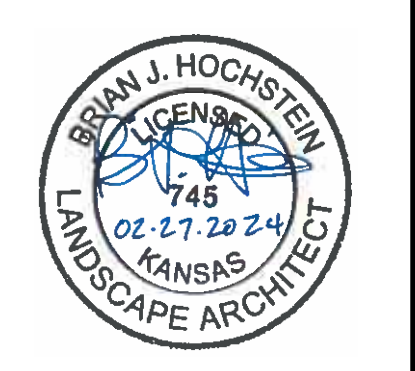
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ORIGINAL PLANT SCHEDULE				
KEY	QTY	COMMON NAME	BOTANICAL NAME	SIZE & METHOD OF HANDLING
SHRUBS				
ERB	2	EASTERN REDBUD	CERCIS CANADENSIS	2" CAL.
SHRUBS				
JUN	15	SEA GREEN JUNIPER	JUNIPERUS CHINENSIS 'SEA GREEN'	3 GAL.
YEW	24	DENSIFORMIS YEW	TAXUS X MEDIA 'DENSIFORMIS'	3 GAL.
PERENNIALS / ORNAMENTAL GRASSES				
FRG	72	FEATHER REED GRASS	CALAMAGROSTIS X ACUTIFLORA 'KARL FOERSTER'	1 GALLON
GROUND COVER				
TURF	N/A	FESCUE TURF GRASS	SEE LAWN NOTES	SOD



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FINAL DEVELOPMENT PLANS/CONSTRUCTION DOCUMENTS FOR
WYANDOTTE HIGH SCHOOL IMPROVEMENTS
 2501 MINNESOTA AVE. KANSAS CITY, KS 66102

LANDSCAPE PLAN

PROJECT NO. 2202010801

SCALE 1"=20'

DRAWN DESIGNED CHECKED
 BJH BJH BJH

1	ADD #2	02.28.24
	CITY COMMENTS	02.27.24
	CONSTRUCTION DOCUMENTS	01.31.2024
	FINAL DEVELOPMENT PLANS	01.26.24

SHEET NO. L01

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FINAL DEVELOPMENT PLANS/CONSTRUCTION DOCUMENTS FOR
WYANDOTTE HIGH SCHOOL IMPROVEMENTS
2501 MINNESOTA AVE. KANSAS CITY, KS 66102

ELECTRICAL LIGHTING PHOTOMETRICS PLAN

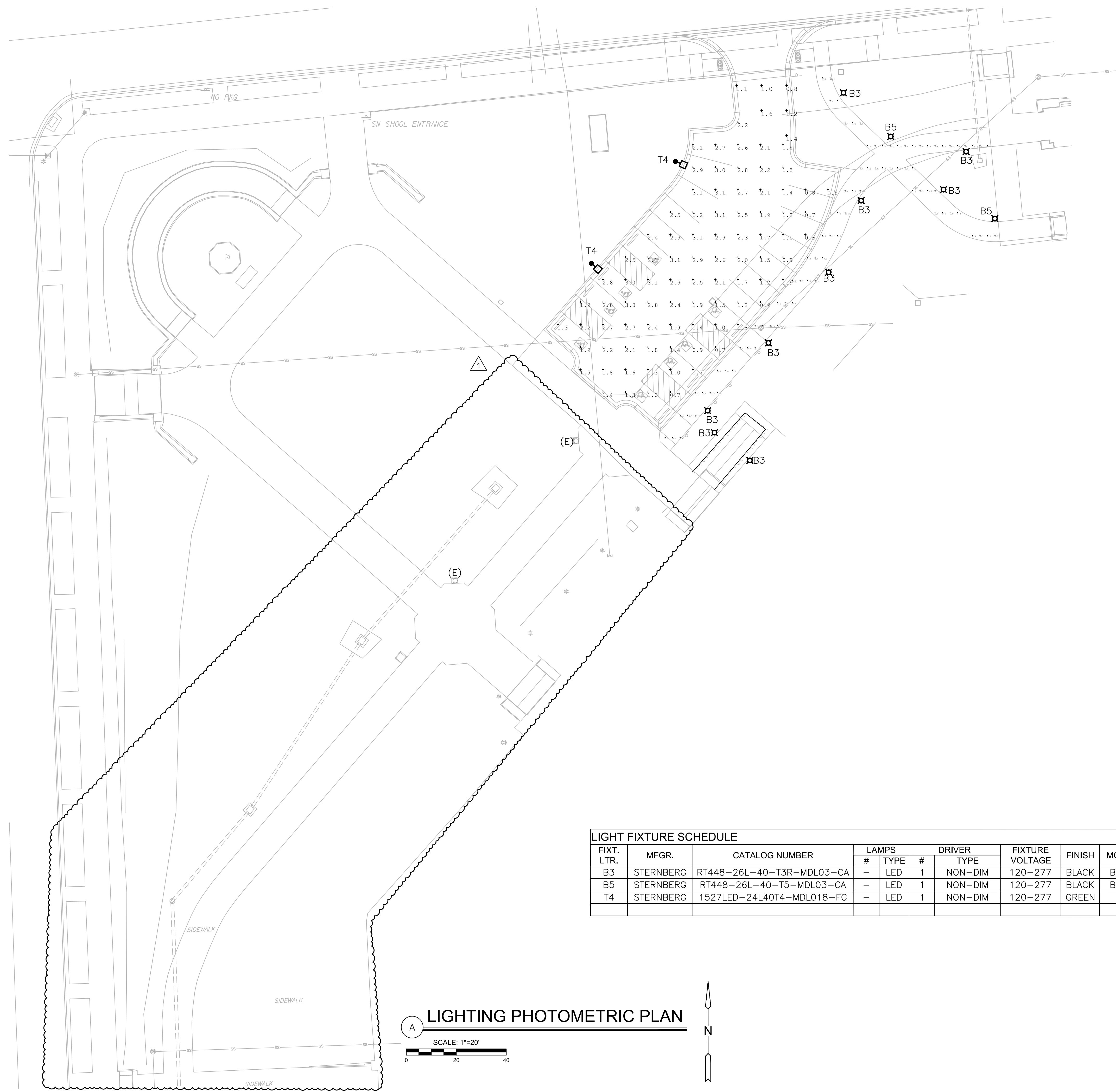
PROJECT NO. 2202010801

SCALE AS NOTED

DRAWN	DESIGNED	CHECKED
JAC	GAKH	GAKH

NO.	REVISION	DATE
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	CITY COMMENTS	02.27.24
	CONSTRUCTION DOCUMENTS	02.01.24
	FINAL DEVELOPMENT PLANS	01.26.24

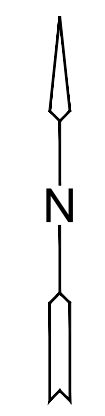
SHEET NO. E01



LIGHT FIXTURE SCHEDULE													
FIXT. LTR.	MFG.	CATALOG NUMBER	LAMPS		DRIVER		FIXTURE VOLTAGE	FINISH	MOUNTING	MOUNTING HEIGHT	FIXTURE VA	REMARKS/DESCRIPTION	NOTES
			#	TYPE	#	TYPE							
B3	STERNBERG	RT448-26L-40-T3R-MDL03-CA	-	LED	1	NON-DIM	120-277	BLACK	BOLLARD	4'-0"	31	TYPE 3R LED BOLLARD	
B5	STERNBERG	RT448-26L-40-T5-MDL03-CA	-	LED	1	NON-DIM	120-277	BLACK	BOLLARD	4'-0"	31	TYPE 5 LED BOLLARD	
T4	STERNBERG	1527LED-24L40T4-MDL018-FG	-	LED	1	NON-DIM	120-277	GREEN	POLE	25'-0"	118	TYPE 4 LED SITE AREA	

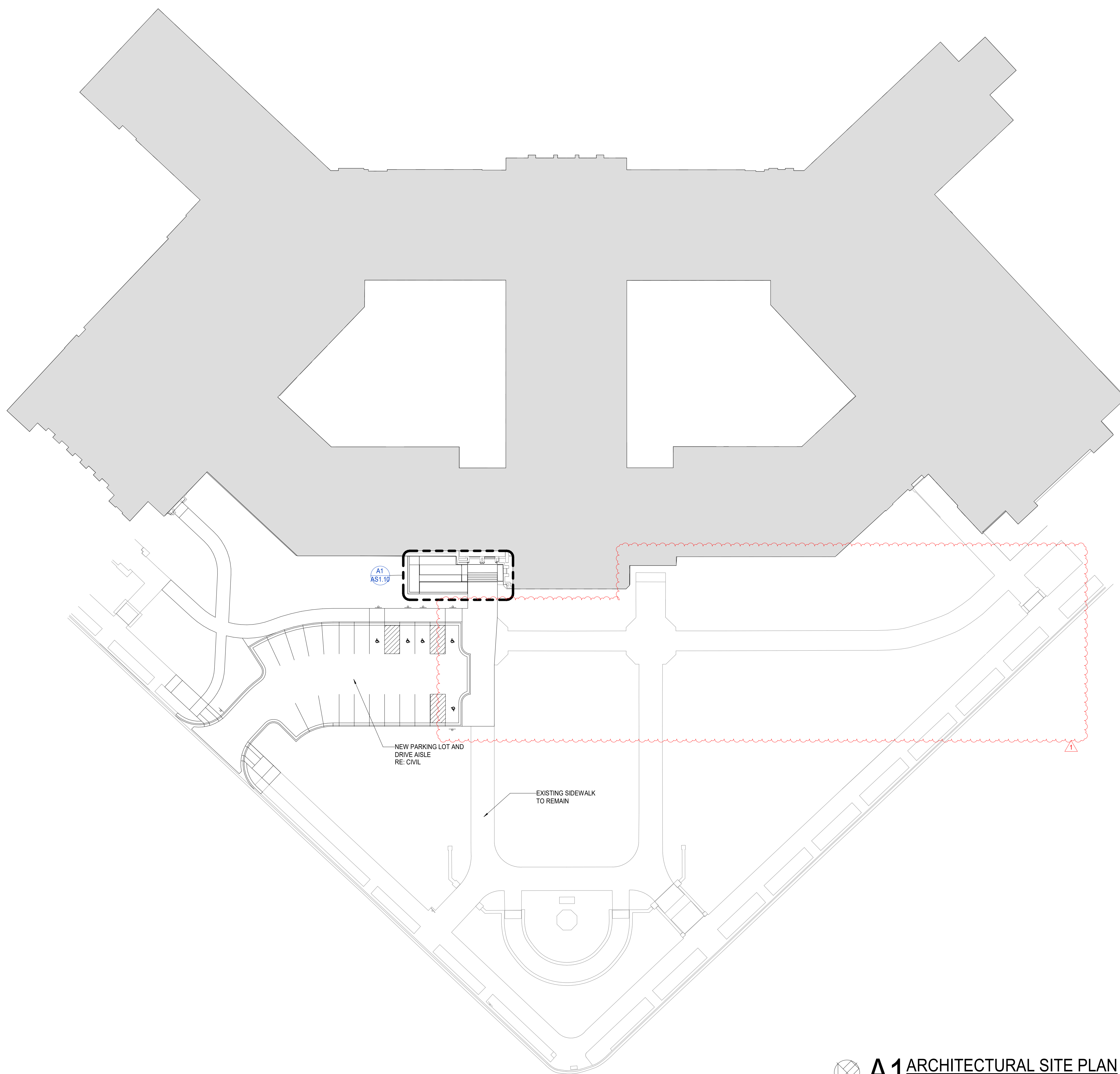
LIGHTING PHOTOMETRIC PLAN

SCALE: 1"=20'



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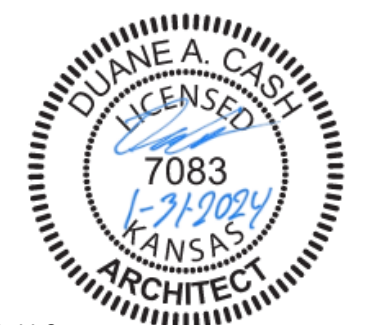
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License
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Cert. of Authority
A-543
INCITE DESIGN STUDIO, LLC

WYANDOTTE HIGH SCHOOL RENOVATION

2501 MINNESOTA AVENUE
KANSAS CITY, KS

Project Phase
PERMIT SET

Project Number
24-304

Issue Date
1/31/2024

Revision No.	Description	Date Issued
1	ADD #2	02/28/2024

Area Plan

Sheet Name
ARCHITECTURAL SITE PLAN
- OVERALL

Sheet Number
AS1.00

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